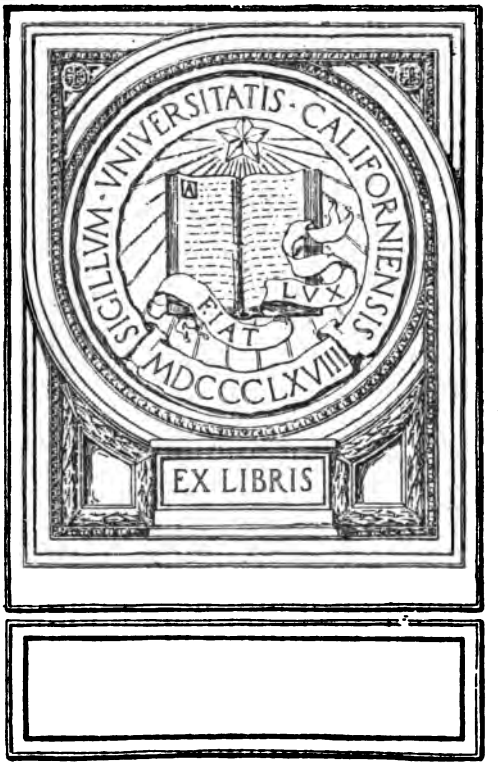

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UNIV. OF CALIFORNIA

A

PICTORIAL HAND-BOOK

OF

MODERN GEOGRAPHY,

ON A POPULAR PLAN,

COMPILED FROM THE BEST AUTHORITIES, ENGLISH AND FOREIGN, AND COMPLETED TO THE PRESENT TIME;

WITH

NUMEROUS TABLES AND A GENERAL INDEX.

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BY

HENRY G. BOHN, F.R.G.S., F.L.S., F.R.S.L., F.H.S.,

HON. MEMBER OF THE INSTITUTE OF GENOA.

ILLUSTRATED BY 150 ENGRAVINGS ON WOOD, AND 51 ACCURATE MAPS ENGRAVED ON STEEL.

LONDON:
HENRY G. BOHN, YORK STREET, COVENT GARDEN.
1861.

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PREFACE.

THE marked features of the present Manual of Geography will be seen at the first glance. The fifty-one highly finished Maps printed from steel and completed to the present time,* to say nothing of the numerous pictorial illustrations, are in themselves of sufficient value, as a hand-atlas, to give this volume a pre-eminence over its compeers in at least one department. In respect to the other departments, no labour has been spared to condense all that has been deemed essential, instructive, or amusing; and to exhibit this in a lucid form, a methodical table of contents, tables of kingdoms, analytical head lines, and a complete general index have been adjoined. No English manual of geography, and I have examined all that have been published during the last twenty years, has hitherto presented so systematic an arrangement in all its parts; indeed, some are mere farragos of confusion. To me, drilled in the exacting school of bibliography, a book of mixed contents without means of reference is an unmixed punishment, and no doubt is so to readers in general.

This volume has been dragging its slow length through the press for more than two years, during which period several political changes have occurred; these have been met by what printers technically term cancels; but to

* Mr. Weller, F.R.G.S., nephew of the late Sidney Hall, and his worthy successor, has superintended all the maps.

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the last moment of publishing, the political division of the Italian States remains a perplexity, and cannot be definitely dealt with in the present edition. It is as yet uncertain whether the Pope is to be detemporalized and become something like the spiritual Emperor of Japan, or whether he is to retain Rome and its immediate suburbs under the protection of France; whether Venetia is by force or purchase to be wrested out of the hands of Austria (the country of my paternal ancestors); and what is to become of Francis II., whom the last throes of despair have made a hero.

The materials out of which this volume has been mainly compiled are, Malte Brun and Balbi's System of Universal Geography, with the additions of Mr. James Laurie. This is certainly the most comprehensive and complete volume of its kind now before the English public, and, excepting that it does not give the recent political changes, or the latest census of population, leaves little to add or improve. But all other Modern Geographies—which are legion—and several Gazetteers, and especially Keith Johnston's (by far the best of its kind), have been diligently and usefully consulted. In this operation I have frequently been amazed at the extraordinary discrepancies which accreditied authorities present in respect to measurements and population. Indeed, there are no two uniformly alike, even where published simultaneously. Take, for example, the population of VALPARAISO, as given in the latest editions of established school books:

DIFFERENT STATEMENTS OF THE POPULATION OF VALPARAISO.

Clyde, pub. in 1860	Ewing.	Cornwell.	Sullivan.	Stewart.	Maunder.	Anderson.	Keith.
	Mangnall	20,000 Milner.	Goldsmith E.Hughes.	Jo. Guy.	W. Hughes Johns.	Bohn.	Johnston.
10,000	15,000	25,000	30,000	40,000	50,000	72,000	75,000

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Again, as regards the population of LIMA; Clyde, in following Stewart, gives 100,000 inhabitants; Goldsmith, as revised by E. Hughes, 45,000 (following, it would appear, the old edition of Johnston's Gazetteer); Maunder, just re-edited by Wm. Hughes, 54,000; Johns, 54,098 (following Malte Brun); Sullivan and Milner, 55,000; Ewing and Hartley, 60,000; Cornwell, Jos. Guy, Pinnock, Anderson, Mangnall, Butler, Staunton, Keith Johnston, and many others, 70,000, which number, on the authority of local information, I have adopted. Equally conflicting is the testimony as to the breadth of the FALLS OF NIAGARA, so often described, but seldom twice alike. After due enquiry, I have stated them to be 1000 feet on the American side, and upwards of 1800 on the Canadian side. Stewart makes the American fall 1,140 feet, and the Canadian 2,100; while Guy, going to the other extreme, gives only 350 to the former, and 600 to the latter. Clyde has 750 feet for the American fall, and 2,100 feet for the Canadian. Keith Johnston, who is followed by Mangnall, Anderson, Goldsmith as edited by E. Hughes, and most others, gives relatively 600 and 1,800 feet. In regard to the height of the two falls, the variations of different geographers range within 15 feet, that is between 149 and 165.

It would be easy to fill a dozen pages with such discrepancies, but these few are sufficient to show the uncertainty of population-estimates where no official census has been taken, and are alleged in extenuation, lest, after all my watchfulness and research, it should be found, that in the matter of figures I am sometimes at variance with an accepted authority.

It now remains to explain why I am my own editor, when it would manifestly have been more profitable to me, as the head of a large establishment, to have allocated the

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task to others. It is this: I had for more than two years been looking out for a competent person to write up to the series of maps, already engraved, and in conjunction with them, to revise and complete Roberts's edition of Pinnock's Geography, a book of mine, formerly very popular, and still in demand; but for a long time I could find no one of recognised ability who was not already engaged to other publishers. At length I met with a gentleman well practised in many departments of literature, including Geography, and to him I committed the task. But we differed so much in the details, especially in the matter of tables, which he repudiated, that after I had worked with him more than half through the book, I was left to finish it myself; and now it is done, I am not sorry for the necessity imposed on me. Geography was one of my earliest affections, and I well remember that the first book I bought out of my own pocket after I left school, was a quarto Guthrie, in which I used to revel with so much delight, that a great portion was retained in my memory.

Half a century has not palled my appetite for what I still consider the most agreeable of pursuits, and I hope I shall not be found deficient in my endeavours to eliminate into a small compass what I have culled from a large mass.

I cannot conclude this preface without returning thanks to Mr. Wm. Westgarth, of Melbourne, for the care with which he has examined and corrected the portion relating to Australia; and to several other gentlemen, whose names I am not at liberty to mention, for their occasional assistance; and especially to a distinguished member of the Arctic expedition for his revision of my sketch of the Polar Regions.

HENRY G. BOHN.

TWICKENHAM,
Dec. 6, 1860.

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ERRATA.

Page 35, the *fucus natans* is the *Sargassum bacciferum.*
„ 49, line 6, for 1559, read 1659.
„ 72, „ 7, for *islands*, read *highlands.*
„ 79, „ 9 from bottom, for *York*, read *Leeds.*
„ 101, „ 10, for *last*, read *first.*
„ „ „ 20, for *lentils*, read *lintels.*
„ 121, „ 16, for 1745, read 1746.
„ 131, bottom line, for *Carran*, read *Cavan.*
„ 132, last line but one, for *Dery* read *Dery.*
„ 134, line 7, for *Island*, read *Ireland.*
„ 138, „ 9 from bottom, for *post*, read *port.*
„ 144, „ 5, for *and*, read *are.*
„ 145, „ 5 from bottom, for 1783, read 1782.
„ 146, „ 11, dele *Fernando Po,* which now belongs to Spain.
„ 150, „ 8, for *at*, read *by.*
„ 153, „ 15, for *rather more than a million*, read 1,700,000.
„ 157, „ 21, for 102, read 101.
„ „ „ 6 from bottom, read 1346.
„ 163, „ 2 from top, read *despoblado.*
„ 165 „ 14, for 1509, read 1519.
„ 169, „ 11, dele *and* from *and an area.*

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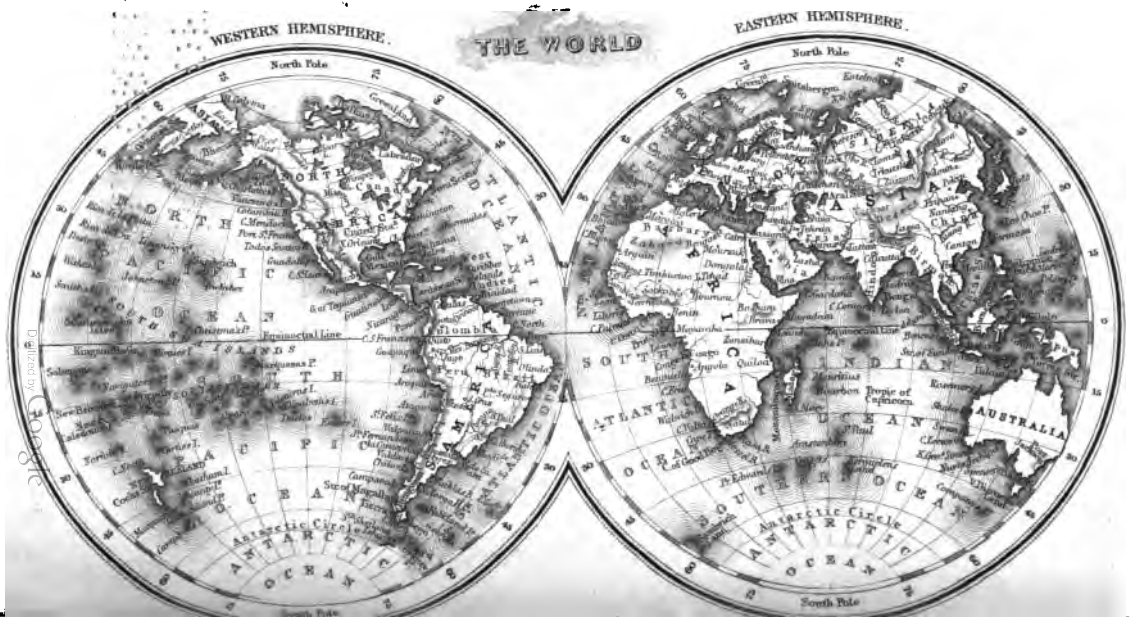
THE WORLD
WESTERN HEMISPHERE.
EASTERN HEMISPHERE.
North Pole
South Pole
Equinoctial Line
Antarctic Circle
NORTH AMERICA
SOUTH AMERICA
EUROPE
ASIA
AFRICA
INDIA
AUSTRALIA
ATLANTIC OCEAN
PACIFIC OCEAN
INDIAN OCEAN
SOUTHERN OCEAN
ANTARCTIC OCEAN

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ELEMENTS

OF

MODERN GEOGRAPHY.

INTRODUCTION.

1. GEOGRAPHY, a term derived from two Greek words, *ge*, "the earth," and *grapho*, "I write," is the name of that science which describes and delineates the surface of the earth. When viewed comprehensively, three great divisions of the subject are recognized, mathematical, physical, and political. 2. MATHEMATICAL GEOGRAPHY treats of the planetary character and relations of our terrestrial habitation, with the methods devised for representing the superficies, and defining the position of places. 3. PHYSICAL GEOGRAPHY examines the natural conditions and appearances of the surface, solid, fluid, and aëriform, with the innumerable living beings which cover it, vegetable and animal. 4. POLITICAL

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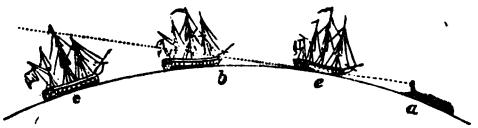
GEOGRAPHY refers to the distribution of the surface into territories by man, as Empires, Kingdoms, or States; and includes an account of their occupation, population, and resources, forms of government and religious worship, progress in knowledge and the arts of civilized life. 5. In the first of these divisions, geography is connected with Astronomy and the Mathematics; in the second, with Natural Philosophy and Natural History; in the third, with History and Political Economy. To the latter branch this volume is mainly devoted, while a cursory glance is cast upon the two former in the present chapter.



MATHEMATICAL GEOGRAPHY.

6. Though the earth appears to us a flat plane, it is in reality a globe, but of such immense size that its roundness is not immediately apparent. The proofs of this are, among others, that it is constantly circumnavigated, so that a ship by steering in a general direction, eastward or westward, arrives again at the point of departure; that it throws a circular shadow upon the moon during an eclipse; that the masts of vessels at a distance are visible when the hulls are hidden by the convexity of the water; and that as we travel from north to south, or from south to north, new stars gradually appear in the direction in which we are advancing, and disappear in that part of the heavens from which we are receding.

7. The first voyage round the world, was accomplished under Fernando Magellan, who sailed from the port of San Lucar, in Spain, September 20, 1519, passed through the strait which separates the mainland of South America from Tierra del Fuego, and crossed the Pacific Ocean to the Philippine Islands. There he lost his life, in a skirmish with the natives; but the survivors of the expedition found their way by the Cape of Good Hope to the port from

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whence they started, arriving September 6, 1522, after having been absent very nearly three years.

8. It may seem to the popular mind incompatible with the idea of the globular form that vast mountains rise from the general surface, and tower far above the clouds, many of whose summits must for ever remain inaccessible to the foot of man. But this impression will be effectually removed by a moment's reflection upon the small proportion which the grandest of these elevations bears to the earth's magnitude. It is so insignificant, that a thin strip of paper, or a grain of sand on an ordinary artificial globe, would represent the proportionate height of the loftiest of the Himalayan mountains. Hence it is, that in lunar eclipses the shadow of the earth projected on the moon is always terminated by a perfectly smooth line, showing that the inequalities of the surface are altogether unimportant in relation to its own bulk, and no more affect its general outline, than the roughnesses on the rind of an orange affect its shape.

9. Although a spherical body, the earth is not a perfect sphere, but has the form which geometers describe as an oblate spheroid, being more convex towards the equator, and flattened towards the poles. The polar diameter, that is, a line passing through the centre from north to south, is about 7899 miles; and the equatorial diameter, a line passing through the centre from east to west, about 7925 miles. Thus there is a difference between the two diameters of twenty-six miles, which gives a flattening of thirteen miles at each pole. This result may be artificially illustrated by twirling with rapidity a ball of any yielding material round a spit, thrust through it as an axis, when a bulging at the outer circumference will take place, causing the ball to lose its original sphericity. The bulging is the effect of the centrifugal force, or the tendency to fly off from the centre, engendered by the axical rotation; and it is inferred, that the earth was in a soft and yielding state when this particular conformation was impressed upon it. Using round numbers, our globe has a *mean* diameter of 7912 miles; a circumference at the equator of 25,000 miles; and a superficial area of 197,000,000 of square miles. A gaseous envelope or atmosphere invests every part of the surface, which performs in a variety of ways the most important functions in the

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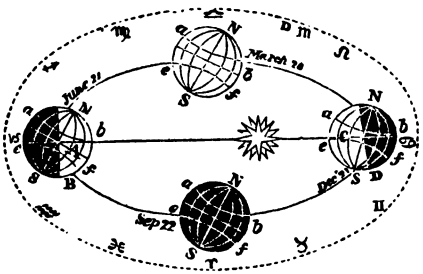
economy of nature, while essential to the life of a great portion of organic beings.



10. The earth rotates from west to east upon its axis, which is an imaginary straight line, passing through the centre from north to south, to the opposite extremities of which, or the points where it intersects the surface, we apply the names of the north and the south poles. This is called its *diurnal motion*, because it marks the period of the day, being performed in the space of twenty-four hours. Proof of this motion is derived from the form of the earth, just adverted to, which is exactly that which would be impressed upon a sphere of yielding material by rotation; from experiments on falling bodies, which, when dropped from a considerable height, are always found to descend a little to the east of the vertical—a fact which cannot otherwise be accounted for; and especially from the simple, natural, and reasonable explanation which it gives to the apparent diurnal revolution of the heavens. An important end is gained by it, for it is by the rotation that the axis is kept steadily in one position.

11. By this diurnal movement, the terrestrial surface is alternately exposed to and withdrawn from the presence of the sun, thereby causing the succession of day and night, light and darkness, with the absorption and radiation of heat.

12. But besides revolving upon its axis, the earth has a motion of translation in space, moving round the sun, as the common centre of the planetary system. This is called its *annual revolution*, because it determines the period of the

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year, 365 days, 5 hours, 48 minutes, and 49 seconds, in which it is accomplished.

13. It is owing to these two motions, the diurnal and the annual, combined with the fact that the earth's axis is invariably maintained in a slanting or oblique position, to the extent of 23° 28′ from the perpendicular, that the several parts of the surface of the globe receive different amounts of light and heat in different parts of its orbit. Hence the phenomenon of changing seasons. Alternately, through nearly half the year, the north and south poles are inclined to and from the grand luminary, the source of light and heat, causing those differences in the length of the days and nights, and in the altitude of the solar orb above the horizon upon which seasonal vicissitudes mainly depend.

14. Other bodies besides the earth revolve round the sun, and constitute with it the solar universe, which, as at present known, includes the following primary members, stated in order of succession from the luminary:—1. Mercury; 2. Venus; 3. the Earth; 4. Mars; 5. Planetoids; 6. Jupiter; 7. Saturn; 8. Uranus; 9. Neptune.

15. In early times, these bodies, or those of them that were then known, received the name of planets, signifying "wanderers," as they are distinguished by obvious movements, and were supposed erroneously to wander irregularly over the heavens. They correspond generally in being spheroids more or less flattened at the poles, rotating also on their own axes, moving in slightly elliptical orbits, and possessing atmospheres; but they differ greatly in position, magnitude, and periodic times.

16. The planetoids, fifty-five of which have up to the present date been discovered, are exceptionally minute; and are hence supposed by some to be simply the fragments of a large orb, which once occupied their mean position. They are regarded as a kind of limit in the system, dividing the planets into two groups, an inner and an outer, in many respects dissimilar. Thus the members of the inner group, Mercury, Venus, the Earth, and Mars, are comparatively small, and have striking mutual analogies, while those of the outer group, Jupiter, Saturn, Uranus, and Neptune, are much larger, revolve more slowly, rotate more rapidly, and have all several moons attached to them.

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17. The solar system is surrounded on all sides, but at an enormous distance, by a host of stars, which exist in inappreciable numbers, and are called "fixed," because they appear invariably to maintain the same relative positions. Several of these bodies are of great service to mariners at sea, and travellers in unexplored countries. Thus, a tolerably bright star in the constellation of the Little Bear, is known by the name of the Pole Star, because being in the immediate vicinity of the north celestial pole, it is generally referred to as the readiest practical means of marking that important point. It is also often called the Lode Star, meaning the leading or guiding star, in allusion to this office. Two principal stars in the constellation of the Great Bear, conveniently direct the eye to the pole-star, as they very nearly point to it, and are hence styled the Pointers.

18. Nine stars, suitably situated with reference to the moon's path in the heavens, have their lunar distances calculated for every three hours, for three years in advance, and registered according to Greenwich time in the Nautical Almanac, in order to enable mariners to find their longitude at sea. They are *a* Arietis, Aldebaran, Pollux, *a* Aquilæ, *a* Pegasi, Regulus, Spica Virginis, Antares, and Fomalhaut.

19. In order to facilitate description, explain phenomena, and indicate the position of places upon the earth's surface, a number of artificial lines or circles are drawn round it. Each circle is divided into 360 equal parts, called degrees, marked with a cipher, thus °: each degree is divided into 60 equal parts, called minutes, marked with a dash, thus ′; and each minute is divided into 60 equal parts, called seconds, marked with two dashes, thus ″. The length of a degree on a great circle, or one drawn round the globe in the line of its greatest circumference, is about 69½ English miles.

20. An imaginary great circle passing round the earth, east and west, everywhere equidistant from the poles, called the EQUATOR, divides the globe into two equal parts, or hemispheres, northern and southern. It is also called the *equinoctial line*, because when the sun, in his apparent annual path in the heavens, is directly over it, at two opposite periods of the year, in spring and autumn, the

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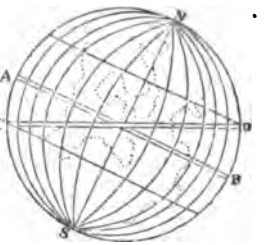
days and nights are of an equal length in all parts of the world.

21. Great circles passing round the earth, north and south, cutting the equator at right angles, and drawn through both poles, are called MERIDIANS, and divide the globe into eastern and western hemispheres. Though only a few are described on an artificial globe, yet every place is supposed to have a meridian of its own. This is that half of a meridian circle which passes through the place from pole to pole; and it is noon at that place when the sun is on the meridian. Hence the name, from *meridies*, mid-day. The sun is then at his greatest elevation in the sky for the day; and is said to have attained his meridian altitude. It follows that all places which are directly north and south of each other, or on the same meridian, have their noon and midnight at the same moment.



A B Equator. C D Ecliptic. N S Poles.

22. Another great circle, the ECLIPTIC, defines the course which the sun appears annually to describe among the stars, though really it is the track which the earth pursues in its orbit round the sun. It is called the ecliptic, because eclipses only can occur when the moon is in, or very near this circle. It cuts the equator or equinoctial obliquely at two opposite points, and passes $23\frac{1}{2}°$ to the northward and southward of it, the amount of the obliquity. The ecliptic is divided into twelve equal parts, which are called signs, and named after the constellations, or groups of stars, through which the sun appears successively to pass, as Aries, Taurus, Gemini, Cancer, &c. Traced on the terrestrial surface, it represents in its course the several parallels at which the solar orb is vertical during the year, or the yearly course of the sun's verticality.

23. Small circles drawn round the globe, north and south of the equator, at the distance of $23\frac{1}{2}°$ from it, equal to the obliquity of the ecliptic, are called the northern and southern TROPICS, or the tropics of Cancer and Capricorn. They mark the limits at which the sun appears to stop and then return

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southward or northward towards the equator. The word tropic is derived from the Greek *trepo*, "I turn;" and the sun enters the signs Cancer and Capricorn coincidently with gaining his greatest northern and southern declination. Two small circles, at an equal distance from the poles, $23\frac{1}{2}°$, are known as the POLAR CIRCLES, or the Arctic and Antarctic. They further mark the extent and limit of the solar influence at certain seasons in relation to those regions. When at the northern tropic, in June, the sun's rays extend $23\frac{1}{2}°$ beyond the north pole, but are not visible at all through the same extent around the south pole. When at the southern tropic, in December, the same space around the south pole basks in the sunlight, while the corresponding region in the opposite hemisphere is wrapped in darkness.

24. The surface of the earth is divided by the tropics and the polar circles into five *zones* or belts, characterised by differences of temperature and denominated accordingly. One of these extends from the tropic of Cancer to the tropic of Capricorn, a space 47° in breadth, equal to about 3200 miles. Every place within it, twice in the year, has the sun at mid-day directly over the heads of its inhabitants; and receives constantly the solar rays in a direction very little oblique. It is hence a highly heated region, and has obtained the name of the TORRID ZONE (from *torridus*, hot). Two other zones, one in each hemisphere, comprehend the spaces between the tropics and the polar circles, each of which is 43° in breadth, equal to about 3000 miles. In these regions, the sun is never seen directly over head; the heat is less intense; and consequently they are styled the north and south *temperate* zones. The two remaining zones are enclosed by the polar circles, and include all the surface within $23\frac{1}{2}°$ of each pole, equal to about 1600 miles. Owing to being deprived entirely of the sun's presence through a considerable part of the year, and always receiving the solar rays very obliquely, they are largely covered with permanent ice and snow, and have therefore appropriately received the name of *frigid* or frozen zones.

25. It was formerly usual with geographers to distinguish the inhabitants of the earth according to the direction in which they received the rays of the sun at mid-day, as shown by the projection of their shadows.

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Dwellers in the torrid zone, having the sun at different times of the year north and south of them, have their shadows directed alternately towards both poles; and are shadowless twice in the year at high noon, the sun being vertical to them. Those who dwell in the two temperate zones always project their shadows in opposite directions, as the sun is always north or south of them, according to the hemisphere they occupy. But inhabitants of the frigid zones, to whom, at one time of the year, the sun nêver sets, see the luminary make a complete circuit round the heavens, during each revolution of the earth upon its axis, and hence project their shadows in all directions.

26. The position of places on the earth is defined by their LATITUDE and LONGITUDE. The *latitude* is the distance from the equator, expressed in degrees, minutes, and seconds, reckoned on a meridian. It is said to be northern and southern, according as the place is in the northern or southern hemisphere. Thus Greenwich Observatory is in north latitude 51° 28′ 38″; and the one at the Cape of Good Hope, in 33° 36′ 3″ south. But it is obvious that the latitude merely, is an insufficient indication, since there must be an entire circle of places on the earth at an equal distance from the equator. Thus Edinburgh and Moscow are on the same parallel of latitude.

27. Another problem has therefore to be determined, that of the *longitude*. This is the distance of a place from any selected meridian, measured in degrees on the equator. Ptolemy, the ancient geographer, fixed his first meridian at the Fortunate islands, now the Canaries, because they formed the most western limit of the countries known in his time; and, as their extent from east to west was more considerable than from north to south, the former direction received the name of longitude or length, the latter that of latitude or breadth, terms which now bear a general application. The Dutch fixed their first meridian at the Peak of Teneriffe, a mountain situated in the island of that name, once esteemed the highest in the world. Gerard Mercator, in the sixteenth century, chose the meridian which passes through the island of Del Corvo, one of the Azores, because in his time it was the line on which the magnetic needle suffered no variation. Most nations now

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reckon from the meridian passing through their own capital, or an adjoining observatory; the English from Greenwich; the French from Paris; and the Americans frequently from Washington. Longitude, being usually reckoned east and west from the prime meridian, cannot be more than 180°, as the entire circumference is 360°.

28. Passing from the equator to the poles, the length of degrees of longitude continually diminishes, because the earth's circumference, as described by a parallel of latitude, decreases; and the meridians approach each other till they converge in the polar points. The artificial globe renders this very sensible to the eye. At the equator, the length of a degree of longitude is very nearly 69½ miles; at the tropics, about 63 miles; at London, and in a corresponding southern latitude, 43 miles; in the north of Scotland, 36½ miles; and at the polar circles, 27 miles. Hence in the instance of two places agreeing in latitude, if we wish to deduce the distance between them in miles, from their difference in longitude, we must refer to the number of miles which belong to a degree of longitude in that latitude, and calculate accordingly. But it would be a great error to take the difference of longitude in degrees, of two places situated on the same parallel, as always the measure of their *shortest* distance. The following is a striking example: Petersburg is almost under the same latitude as the isle of Kodiak, in Russian America; the difference of longitude is about 180°, equivalent under that parallel to 6300 miles; but the shortest distance between the two places, counted on a meridian that is almost common to them, is 60° of lat., equivalent to 4200 miles. It is true, that to pass from the one place to the other in the direction of the meridian, it would be necessary to cross the polar ice.

29. Owing to the earth accomplishing a complete revolution upon its axis in twenty-four hours, the sun appears to perform a circuit round it in that space of time; and as 360° are thus described in twenty-four hours, 15° are passed through in one hour, and 1° in four minutes. Hence places differing in their longitude 1°, 15°, or 30°, and so on, differ in their time four minutes, one hour, and two hours; and if we know the difference of time between any two places, we can estimate their difference in longitude. As the earth revolves from west to east, places to the eastward of us receive the light of the sun, and lose it sooner than we do, that is, have

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sunrise, noon, and sunset sooner; and places to the westward of us have sunrise, noon, and sunset later. Thus, if a good chronometer, taken out by the seaman from Greenwich, points to 12 o'clock, or noon, when he arrives at New York, while the time at that place is 7h. 4m. in the early morning, the difference is 4h. 56m., equal to 74° of longitude, which must be west of Greenwich, as the New York time is later. The eastern and western limits of the United Kingdom are 12° apart in longitude, equal to a difference of 48 minutes of time; and by that space the fishermen of Suffolk hail the sunbeams before they are caught by the inhabitants of Ireland's western isles.

30. The most correct representation of the earth is an artificial globe, on which its grand divisions of land and water are laid down, with lines of latitude and longitude, the tropics and polar circles, the equator and ecliptic. But large globes are costly and inconvenient instruments, while small ones are incapable of exhibiting the details which are often required. It becomes necessary, therefore, to have recourse to maps, which give a representation of the earth and its different parts on a flat surface, though such delineations are inevitably imperfect, since it is impossible truly to depict a spherical body on a plane. Maps are either general or special. The former include the whole world, or some large division of it, as Europe or Africa. In maps of the world, it is common to adopt two circular surfaces, each representing a hemisphere; and as the eye is usually supposed to be at the equator, the hemispheres are eastern and western, one of the meridians being the boundary between them. This is the meridian of 20° W. and 160° E., because it very nearly divides the Old World, or that known to the ancients, Europe, Asia, and Africa, from the New World, or the two Americas, of which the civilised nations were entirely ignorant prior to the close of the fifteenth century. Special maps are those devoted to particular countries and states, as England or France, or to some considerable province. When only a small extent of country is embraced, and minute details are given, as roads, canals, villages, and battle-fields, such maps are topographical. Delineations of the water surface only, or chiefly, indicating currents, soundings, anchorages, rocks, shoals, lighthouses, and other features of importance in navigation, are generally called charts.

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PHYSICAL GEOGRAPHY.

31. The surface of the earth consists of land and water, but in very unequal proportions. A glance at any globe, or map of the world, renders this inequality apparent; and it immediately arrests attention as a very striking feature, when large representations of the superficies are viewed, such as the Great Globe, in Leicester Square, London. Though exact calculation is impossible, owing to our ignorance of the inhospitable regions around both the poles, the estimate is justified by present data, that reckoning the entire surface of the globe at 197,000,000 of square miles, as much as 145,000,000 are occupied by the waters of the ocean, leaving only 52,000,000 for the area of the dry land. This is very nearly in the proportion of three-fourths fluid to one-fourth solid. It is an equally obvious and striking feature of the surface, that the two components are very irregularly distributed, for about three-fourths of the land lie north of the equator, and only one-fourth to the south.

32. Maps of the world on the polar projection, in which

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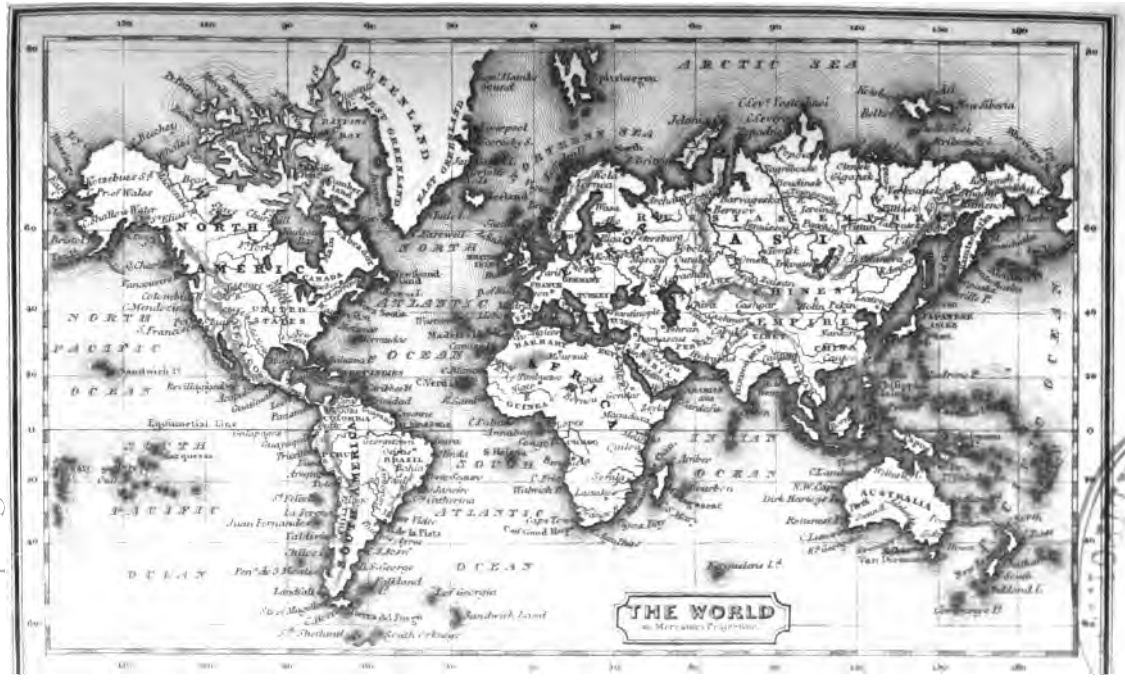

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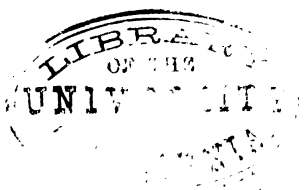

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the eye is supposed to be at one of the poles, while the equator is the boundary of the picture, instantly make us sensible of the immensely greater extent of land in the northern than in the southern hemisphere. In the former, there is little difference in the relative extent of the land and water; but in the latter, in the space from the equator to the antarctic circle, comprehending an area of about 90,000,000 of square miles, nearly 77,000,000 are water.

33. But it is possible so to divide the surface of the globe, that one half shall be so far solid, and the other half so far fluid, as to be properly designated land and water hemispheres; and it is of interest to remark, that the central point of the land hemisphere falls within the limits of the United Kingdom, close to Falmouth, in Cornwall. It comprises all Europe and Asia, all Africa and America, except the slender peninsula of Malacca, and the tapering extremity of South America. In the opposite water hemisphere the land is wholly insular, with the exception of the sites named, and would be insignificant in extent, were it not for Australia. Thus the great commercial cities of modern times, London, Liverpool, Glasgow, Havre, Hamburgh, Bremen, and Amsterdam, are centrally situated with reference to the land of the world, and therefore admirably placed for commerce with all countries.

34. The principal masses of the land are distinguished as *continents*, a word signifying that which is connected together and continuous. Smaller tracts, surrounded by water, are termed *islands*, meaning that which is detached. There is no natural distinction between the two, except extent, since the continents have everywhere an ocean boundary. Where a sea is studded with groups of islands, it is described as an *archipelago*, a word of doubtful etymology, first applied to the sea between Greece and Asia Minor. A portion of land, continental or insular, nearly enclosed by water, is called a *peninsula*, that is, almost an island; and a strip of land connecting two larger masses has the name of an *isthmus*, a neck or narrow passage. Points of land projecting into the water are variously known as *promontories, capes*, and *headlands*.

35. The vast connected body of water on the face of the globe is styled the *ocean*, a word adopted from the

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Greek, of somewhat doubtful acceptation, applied also to five principal divisions of the grand expanse. Smaller portions penetrating the land, are styled *seas*, *gulfs*, and *bays*. Passages connecting together two seas, or seas and gulfs with the ocean, are denoted as *straits* and *channels*; and where the sea stretches inland, to meet the waters of some large river, it is said to form an *estuary* or *firth*.

36. Small indentations of the land are spoken of as *inlets*, *creeks*, and *coves*, many of which are natural harbours, affording protection to shipping. The word *shore* is applied to the line of the land which is washed by the waves, while all the land near it is designated a *littoral*, *coast*, or *seaboard*. Flowing waters on the land, are either *brooks*, *streams*, or *rivers*, according to their size; and sheets of water, more or less stagnant, collected in inland basins, have the name of *lakes*.

37. There are, properly speaking, but two *continents*, eastern and western, in relation to the meridian of 20° W., though it is common to apply the term to their principal divisions. The former, including Europe, Asia, and Africa, is the great continent, and has an area more than twice the extent of the latter, which comprises North and South America. Some geographers give a continental rank to Australia; but it is much more appropriate to regard it in connection with the large islands and archipelagoes of the Pacific ocean, as forming a sixth leading division of the land of the globe, under the name of Oceania. Their respective areas are as follow, stated approximately:—

		Square Miles.	
E. Continent . . .	Europe . . .	3,800,000	
	Asia	17,500,000	. 32,800,000
	Africa	11,500,000	
W. Continent . .	N. America .	8,500,000	
	S. America .	6,500,000	. 15,000,000
	Oceania		4,000,000
		Total,	51,800,000

38. While the two continents thus differ widely in extent, they are in striking contrast as to their general contour. In the eastern, the land stretches out chiefly in the direction of

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the circles of latitude, so that its line of greatest length is nearly parallel to the equator; in the western, the direction is opposite, or at right angles to the equator, the line of greatest extent closely coinciding with the circles of longitude. In minuter details a difference appears, for with the exception of Africa, the coasts of the great eastern mass are much more irregular or indented than those of the western. Europe and Asia exhibit large and deep openings in almost every part to the advances of the sea, while no irregularity of consequence marks one entire side of America, except at California, and the other side has also immense tracts perfectly unbroken.

39. But there are points of resemblance, some of which are very remarkable. Thus, both continents have tapering extremities to the southward, and considerable breadth to the northward, while the disposition to assume the triangular form is strongly developed in large masses of land. North and South America, Africa, and some of the principal limbs of Asia and Europe, as Arabia, India, and Turkey, make a close approach to this shape. With few exceptions also, the prevailing direction of the peninsulas, large and small, in both worlds, is to the south. The chief instances to the contrary are the minor projections of Jutland in Europe, and of Yucatan in Central America, which are northerly. Nothing is known which can account for this curious uniformity.

40. The *insular* tracts or ISLANDS, when of considerable extent, are miniature representations of the great land masses, just as well furnished for the sustenance of life. But a vast number, of small size, are simply the summits of submarine mountains projecting above the surface of the ocean, bare of soil, devoid of streams, and only tenanted by sea-fowl. Two classes of islands may be distinguished, the continental or elongated, and the oceanic or round. The former are those which are adjacent to some main shore, and appear to be continuations of it, with the intermediate parts submerged, as they correspond with it in geological structure, and forms of life. They have generally an elongated contour, occur in a series or chain, the prevailing direction of which agrees with that of the adjoining continental coast. The most conspicuous examples are on the east and south-

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east of Asia; comprehending the great chains of the Indian Archipelago, with the Philippine, Japanese, and Kurile isles.

41. The second class of islands, the oceanic or round, are those which generally occur at a distance from the continental areas, in the open ocean, and are often arranged in clusters, one or two principal members being centrally situated. They are of volcanic or coralline formation. The Marquesas, Friendly, Society, and Sandwich islands in the Pacific ocean, belong to this division, with the Azores and Canaries in the Atlantic. Oceanic islands also occur singly, and some are remarkably solitary. Thus St. Helena is 1200 miles from the nearest continental coast, and 680 miles from Ascension island, the nearest point of land, while Ascension island is 520 miles from its next neighbour, the isle of St. Matthew. The formation of new islands by volcanic agency is an event of the current epoch, of which there have been several examples.

42. The most remarkable features of the land, common to continents and islands, are the prominences of the surface, known by the name of HILLS and MOUNTAINS. The former term defines elevations up to 1000 feet above the level of the sea, from which heights are estimated: the latter applies to those which exceed that range. These inequalities give a beautiful or grand aspect to the superficies, and are the effect and evidence of convulsive movements. Mountains are found in almost every country of the globe; and, in every degree of development, they exhibit striking and picturesque varieties. The loftiest points generally consist of naked rock, the outline of which is determined by its composition. In some instances, they shoot up in the form of enormous crystals, whose sharp angles appear supported by each other; in others, vast masses crowned with rounded summits rise into the air with quiet majesty. Rounded heads, like the tops of nails, characterise calcareous mountains; angular points distinguish the slates and quartziferous schists; a series of peaks like a saw, denotes dolomites, a species of magnesian limestone; capricious twistings and crumplings are distinctive of serpentines and trachytes; tabular-looking, altar-like escarpments appear in the oolites; a smooth, flowing outline belongs to the

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chalk; the terrace arrangement is common with basalts and porphyries; and conical forms are generally assumed by volcanoes.

43. Humboldt has noticed a remarkable difference in the height at which certain rocks occur in the eastern and western worlds. Thus granite, which is supposed to lie at the base of all other formations, shrouded from the observation of man by layers of enormous thickness, composes the highest points of the Alps, but is not found above the elevation of 12,000 feet in the Andes, while the newest whinstone, which in Europe only appears in low eminences, or at the base of those of great magnitude, covers the tops of some of the grandest Andean heights.

44. It is very rarely the case that mountains of considerable elevation occur solitary, or remote from other masses. The examples of this are chiefly active or recent volcanoes, as Mount Egmont in New Zealand, and the Peak of Teneriffe. It is seldom also that we meet with a mere group of elevations without external connection. In general the bases of a series of adjoining mountains run into each other, forming a chain, the length of which greatly exceeds the breadth, and is variously linear, angular, or curved. But a chain is not a single range of projections. Sometimes, as in the case of the Andes, two grand ranges run parallel to each other for thousands of miles, or there are three ranges, the middle one being the loftiest, and branches diverge from the main mass at different angles, which again send off spurs in various directions.

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45. A chain has commonly low heights at its extremities, and the boldest development occurs towards the central parts of its course, while the branches are the highest at the points of divergence. Though curving, winding, and making angles, it is observable that mountain chains generally correspond in their prevailing direction to the line of greatest length in the continent, or district in which they are situated. This is very apparent in the instance of the Andes and its North American prolongations, which form a nearly unbroken line of highlands, traversing the New World in the direction of its greatest extent, through a space of upwards of 10,000 miles.

46. In the Old World, a mountain zone stretches from the south-west coast of Europe, and follows the line of greatest length, comprehending the ranges of Spain, the Pyrenees, Alps, Balkan, Taurus, Caucasus, Hindoo-Koosh, Himalaya, Kuenlun, Thian Chan, Altai, and Aldan mountains—many systems, but clearly one series—terminating at Behring's Strait, on the north-east of Asia. In like manner, the secondary chains of the Scandinavian Alps, the Apennines, and the Ghauts of India, follow the direction of their repective peninsulas.

47. In almost every instance, a principal chain has one side very steep, while on the other there is a very gradual slope. Thus the Alps are much more rapid in their descent on the Italian side, than on that of Switzerland; the Scandinavian masses are steepest towards the west and north-west; the Pyrenees towards the south; and so likewise are the Sierra-Morena, in the south of Spain, and the Alpuxarras, near Granada; while the mountains of the Asturias are the reverse. Atlas and Lebanon present their bold and craggy declivities towards the Mediterranean; and the two mountain chains that border the northern and the southern coasts of Asia Minor, present very abrupt faces towards the Black Sea and the Mediterranean, while their opposite or inland sides merge more gently into high table-lands. The western Ghauts, on which the table-land of the Deccan rests, have precipitous declivities directly towards the west, and long and gentle slopes towards the east. The Himalaya chain rises up boldly from the plains of Bengal, and is much less abrupt on the opposite side; and the Andes present their steepest front to the Pacific ocean.

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48. Between the parallel ranges of a chain there are generally longitudinal VALLEYS, corresponding in direction to their course, often of great depth, and the beds of rivers descending from the high lands, fed by the snows on their summits. The canton of the Valais in Switzerland is a striking example, extending nearly a hundred miles between the Pennine and Bernese Alps, traversed through its entire length by the Rhone. By transverse valleys, or those which intersect a chain at right angles, communication is maintained from side to side. These are often narrow, gloomy, and frightful defiles, overhung with rocks, and flanked with tremendous precipices, the summit level of which is frequently at a very great elevation. Admitting of intercommunication, they are styled *passes* and *gates*, the latter term specially applying to them, as capable of being closed to transit by a very slender military force. The Anglo-Americans use the more homely, but naturally expressive phrases of *gaps* and *notches*. The highest pass in Europe is that of Mont Cervin, a mule path in the Pennine Alps, to the east of the mountain, 11,106 feet; but the highest carriage-road is the pass of Monte Stelvio, in the Rhætian Alps, 9,174 feet, a little way down the valley of the Adige. Passes in the Himalaya range in the ascent from 15,000 to 20,000 feet. Being much frequented, as the only routes between India and Thibet, life is annually lost in them upon a fearful scale, owing to the debility caused by the extreme rarefaction of the atmosphere, the intense cold, and the fall of fragments of rock, with masses of snow and ice.

49. Elevations attaining a certain height, which varies with the latitude, become *Nevadas*, or snow-mountains, and have their upper regions permanently clothed with it. Travelling from the equator to the poles at the sea-level, no diminution of temperature will be sensible till after a considerable distance has been traversed; but it rapidly decreases on a vertical ascent in the atmosphere, owing to the rarefaction of the air, till we come to a point where water ceases to exist in the liquid state. This is the line of constant congelation or perpetual snow. In the warm zone, towards the equator, this line is reached at the height of from 16,000 to 20,000 feet. From thence towards the poles it

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gradually lowers, though with some irregularity due to local circumstances, till at the level of the sea, about latitude 80°, in the northern hemisphere, the whole surface is a mass of ice and snow. Thus in high latitudes, comparatively inferior elevations, as those of Scandinavia, are snow-mountains, while in low latitudes, very commanding ones are not; and only the loftiest ranges, like the Andes and Himalaya, rise above the inferior limit of constant frost. The height of the snow-line in the extreme north of Europe is about 2,400 feet; in the south of Norway, 5000; in the Alps, 8,800; and in the Himalaya from 13,000 to 16,000 feet.

50. Accumulating on the tops and the steep declivities of mountains, immense masses of snow are frequently precipitated into the subjacent valleys, detaching fragments of rock in their descent, rooting up forests, filling the beds of streams, thereby occasioning floods, and sometimes burying farmhouses, hospices, and entire villages. These falls or *avalanches*, as they are called, are not merely destructive to life and property immediately in their path, but the air suddenly compressed by the velocity of their descent, rushes off with the force of a hurricane, and makes havoc of every object in its way.

51. In countries where the difference of seasons is somewhat strongly marked, there are necessarily two inferior limits of congelation, the lower one for winter and the higher one for summer; and the interval between them is the remarkable region of GLACIERS. In summer, the snows collected in the lower zone during winter are gently thawed, and when the winter returns, they are refrozen. The operation continued through a series of ages, has produced those enormous masses of ice, which are such remarkable appendages to the snow-mountains, and bear much the same relation to them as icicles to a snow-covered roof. The best known glacial formations are those of the Alps. The Andes, within the tropics, though extensively clothed with permanent snow, have no glaciers, chiefly owing to the comparatively trifling change of the annual temperature.

52. The distribution and heights of mountains have been intelligently regulated with reference to the convenience of man, though nothing appears at first sight to be more

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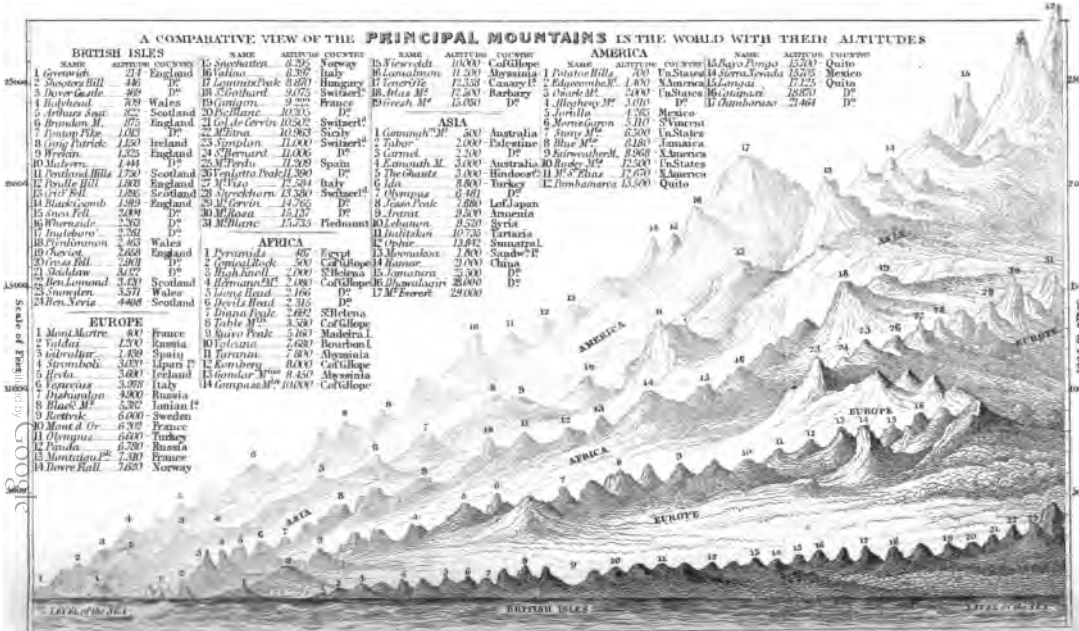
A COMPARATIVE VIEW OF THE PRINCIPAL MOUNTAINS IN THE WORLD WITH THEIR ALTITUDES
BRITISH ISLES
NAME ALTITUDE COUNTRY
1 Greenwich 213 England
2 Shooters Hill 436 D°
3 Dover Castle 469 D°
4 Hollyhead 720 Wales
5 Arthurs Seat 822 Scotland
6 Brandon M. 875 England
7 Tinnop Pike 1083 D°
8 Croag Patrick 1150 Ireland
9 Wrekin 1325 England
10 Malvern 1444 D°
11 Penlomd Hills 1750 Scotland
12 Peadle Hill 1803 England
13 Criffel 1896 Scotland
14 Blackcomb 1989 England
15 Snowfell 2084 D°
16 Whernside 2363 D°
17 Ingleboro' 2362 D°
18 Pyrhnawyn 2.893 Wales
19 Skeviot 2.958 England
20 Cross Fell 2901 D°
21 Skiddaw 3022 D°
22 Ben Lomond 3.240 Scotland
23 Snowden 3.571 Wales
24 Ben Nevis 4406 Scotland
EUROPE
1 Mont Martre 400 France
2 Valdai 1370 Russia
3 Gibraltar 1.439 Spain
4 Stromboli 3.030 Lipari I.s
5 Hecla 3.400 Iceland
6 Vesuvius 3.368 Italy
7 Duhgualgo 4.900 Russia
8 Blanc M.t 5.282 Ionian I.s
9 Rottvik 6.000 Sweden
10 Mont d'Or 6.302 France
11 Olympus 6.600 Turkey
12 Panda 6.780 Russia
13 Montagnet.s 7.300 France
14 Dovre Fall 7.620 Norway
15 Snehattan 8.396 Norway
16 Vellino 8.397 Italy
17 Lomnitz Peak 8.620 Hungary
18 S.t Gothard 9.075 Switzerl.d
19 Gantgan 9.999 France
20 Piedlanc 10.305 D°
21 Col de Gervin 10.502 Switzerl.d
22 M.t Etna 10.963 Sicily
23 Simplon 11.100 Switzerl.d
24 S.t Bernard 11.006 D°
25 M.t Perdu 11.309 Spain
26 Finsteto Peak 11.390 D°
27 M.t Viso 12.584 Italy
28 Strockhorn 13.380 Switzerl.d
29 M.t Gervin 14.766 D°
30 M.t Rosa 15.157 D°
31 M.t Blanc 15.735 Piedmont
AFRICA
1 Pyramids 487 Egypt
2 Conical Rock 500 C.d'Gdope
3 High Land 2.000 S.t Helena
4 Pic Teneriffe 12.180 C.d'Gdope
5 Long Head 2.166 D°
6 Devils Head 2.315 D°
7 Diana Peak 2.402 S.t Helena
8 Table M.n 3.550 C.d'Gdope
9 Pico Peak 5.160 Madeira I.
10 Volcano 6.630 Bourbon I.
11 Teneriffe 7.600 Abyssinia
12 Kombery 8.000 C.d'Gdope
13 Gendar M.ns 8.450 Abyssinia
14 Compass M.s 10.000 C.d'Gdope
ASIA
NAME ALTITUDE COUNTRY
1 Cannagh M.n 300 Australia
2 Tabor 2.000 Palestine
3 Carmel 2.200 D°
4 Lamouth M. 3.000 Australia
5 The Chauts 3.000 Hindostan
6 Ida 8.000 Turkey
7 Olympus 9.481 D°
8 Jean Peak 9.880 I.s Japan
9 Ararat 9.500 Armenia
10 Lebanon 9.520 Syria
11 Bolitzkan 10.750 Tartaria
12 Ophar 13.842 Sumatra I.
13 Meonalloa 17.800 Sandw.h I.s
14 Hanor 21.000 China
15 Jamatora 25.500 D°
16 Dhawalagiri 28.000 D°
17 M.t Everest 29.000
AMERICA
NAME ALTITUDE COUNTRY
1 Potatoe Hills 700 Un.States
2 Edgecombe M.t 1.400 N.America
3 Ozark M.s 2.000 Un.States
4 Alleghany M.s 3.000 D°
5 Jorullo 4.265 Mexico
6 Morne Garon 5.310 S.t Vincent
7 Stony M.s 6.500 Un.States
8 Blue M.s 8.181 Jamaica
9 Fairweather H. 8.968 N.America
10 Rocky M.s 12.500 Un.States
11 M.t S.t Elias 17.670 N.America
12 Tombamarca 15.500 Quito
13 Bayo Pongo 15.500 Quito
14 Sierra Sevada 15.015 Mexico
15 Langui 17.325 Quito
16 Cotopaxi 18.850 D°
17 Chimborazo 21.464 D°
AMERICA
EUROPE
AFRICA
EUROPE
ASIA
EUROPE
BRITISH ISLES
Scale of Feet
25000
20000
15000
10000
5000
Sea Level

capricious and arbitrary. If the main mass of the Andes had been raised to the height of its projecting cones, the nations living on the opposite sides would have been as effectually severed as if a perpendicular wall of brass had been raised between them, towering above the clouds. Such towns as Arica, and La Paz, Mendoza, and Santiago, which are within a journey of three days across the range, would have been practically as far apart as if the Atlantic had rolled between them, owing to the impossibility of communicating, except by going round the chain at its extremities. In like manner, had the mean height of the Alps corresponded to that of the Andes, the passage of Hannibal and Napoleon across the former would never have adorned the page of history, nor, indeed, would there have been any passes from Germany to Italy practicable for man or beast. Supposing also the Scandinavian highlands as lofty as the Alps, the inhabitants of Norway and Sweden could only have visited each other by sea. Thus the reliefs of the surface may have a boldness in the warmer regions, compatible with human intercourse, which they could not have in the colder, without becoming insurmountable barriers; and hence as the line of eternal frost lowers from the equator to the pole, there is, generally speaking, a corresponding lowering in the elevation of mountains in the same direction.

53. The greatest heights are not, however, found at the equator, but in the neighbourhood of the tropics; and at opposite tropics in the eastern and western hemispheres. The New World has for its culminating point the volcano of Aconcagua, in Chili, not far south of the tropic of Capricorn, which rises 22,296 feet above the sea. The highest point of the Old World, and of the globe, is one of the Himalayas, not far north of the tropic of Cancer. This was long supposed to be Dhwalagiri, 26,862 feet; and then Kunchinjinga, 28,117; but in the year 1857, a loftier mass was found, 29,000 feet, nearly due north of Calcutta, which having no fixed name, received that of Mount Everest, in honour of a former surveyor-general in India. The elevation is nearly five miles and a half above the level of the sea.

54. It would be very erroneous to regard mountain chains as elevations rising on one side, and at once declining to the

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same level on the other. So far from this being the case, the more important are the ramparts or escarpments of extensive regions of high ground, which are variously denominated TABLE-LANDS, and PLATEAUX. These districts often present surfaces varied with hill and vale, lake and river, and are sometimes traversed by ridges of considerable elevation, but their prevailing character is that of a mass of land highly raised above the sea, with comparatively level areas, the whole forming a kind of platform for mountainous projections. The entire central part of Spain, embracing nearly half the peninsula, is elevated from 2000 to 3000 feet; and it is nearly surrounded by mountains, while intersected by ridges, so as to be divided into a series of lofty plains. But this is a very inferior example, when compared with the plateaux of Mexico, Quito, and Bolivia, which are widely expanded areas, respectively at the height of 7,500, 10,000, and 13,000 feet. Of course, viewed from such elevations, the great cones of Popocatepetl and Cotopaxi, rising from these lofty basements, appear vastly shorn of their absolute height.

55. But Central, properly styled High Asia, contains the most numerous, elevated, and extensive tracts of generally protuberant ground upon the surface of the globe, of which the Himalaya on the south, the Bolor-tagh on the west, the Altai on the north, and the almost unknown chains

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CALIFORN

of China on the east, are the marginal walls. The height of the enclosed region varies from 4000 to 15,000, and even 17,000 feet. Plateaux or table-lands have much more effect than chains of mountains in raising the height of continental areas, supposing all the uplands to be equally diffused. Thus, it is calculated, that the Pyrenees, if pulverised, and distributed over the surface of Europe, would only raise its height about six feet, and the Alps twenty-two feet, while the effect of the plateau of Spain would be equal to thirty-six feet.

56. The peculiar class of mountains termed *Volcanoes*, present exhibitions of igneous action; and hence their name, derived from Vulcanus, the imaginary god of fire in the old mythology. They have generally a conical form, with a caldron-like hollow at the summit, called a crater or cup, from which flames, smoke, ashes, stones, hot water, and molten mineral masses are discharged. About 400 have been described by geographers, many of which are classed as extinct, for, while retaining their original form, or incontestable remains of it, no notice of an eruption has been preserved by history or tradition. Others are intermittent, and may be dormant for centuries after a tremendous outburst, while several are in a

state of constant activity, more or less intense, as Stromboli, "the great lighthouse of the Mediterranean."

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57. The volcanoes of the Old World are chiefly on islands; those of the New are for the most part continental. The loftiest and most powerful are seated on the western shores of America, extending from the Rocky Mountains to Tierra del Fuego, the "land of fire;" and run through the long suite of islands on the eastern coast of Asia. The island of Java has a greater number, forty-three, than any other part of the globe of the same extent.

58. A volcanic erruption is generally announced by tremors of the ground, loud moaning or bellowing noises, and smoke issuing from the top of the mountain, or the crater. The smoke increases, thickens, and ascends as a black column. The summit of this column, yielding to its own weight, sinks down, becomes rounded, and appears, in awful picturesqueness, like the head of a pine tree, having the lower part for its trunk. At other times, the scene opens with more brilliancy. A stream of fire, piercing though a mass of clouds, is seen like a pillar of flame, resting upon the ground, and threatening to set the sky in a blaze. The environing smoke sometimes conceals it for a moment, and lightnings appear to flash from the midst of it. Ashes, dross, and burning stones, are then thrown out in diverging lines, like the sparks of fireworks, with torrents of water, which roll hissing over the heated rocks. This, however, is still only preliminary. A fluid, burning mass rises from the bottom of the crater, similar to metal when in fusion. This overflows, runs down the sides of the mountain, and descends to its base. There it sometimes stops, but generally it widens, and advances like a river, devastating whatever it meets with. Equal ravages may ensue, although the liquid matter, called *lava*, does not issue exactly from the top of the mountain. It is sometimes too weighty and compact to be elevated to the summit, in which case it occasions ruptures in the side of the mountain, through which the fiery torrent gushes forth.

59. Volcanoes are obviously channels of communication between the unknown interior of the globe and the atmosphere. They admit of the escape of forces, of obscure origin but tremendous energy, which, without such vents, would effect their own disengagement, by rending asunder the thinner portion of the earth's crust; and thus act the part of safety-valves to the terrestrial system.

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60. LOWLANDS divide the solid parts of the earth's surface with the highlands. Though far less striking features, they are much more important, as the scenes where vital forms, both vegetable and animal, are specially developed, the sites of the highest culture, the greatest cities, and the most numerous population. These districts differ remarkably from each other; and some periodically change their character in a striking manner, being verdant pastures and parched wastes, at different times of the year. But they agree in being very slightly elevated above the sea, in some instances even descending below its level. The general designation of *plains* is applied to them, which, geographically, means a surface, which may gently wave or prominently undulate, be studded with low hills and traversed with shallow valleys, but is level as a whole when compared with mountainous regions.

61. More than two-thirds of the surface of Europe is one immense plain, extending from the banks of the Seine to the Ural range and the Caspian Sea, very slightly differing from a flat, and dipping at both extremities, in Holland and at the Caspian, below the level of the ocean. Great lowland tracts have a variety of local names derived from characteristic features, as *Steppes*, in European and Asiatic Russia, bare of trees; *Deserts*, in Asia and Africa, vast spaces of sand, gravel, stones, and bare rock, interspersed with a few fertile spots, where there is water; *Prairies* and *Savannahs*, in the basin of the Mississippi, meadows, dry or damp; *Llanos*, on the borders of the Orinoco, level fields; *Silvas*, on the banks of the Amazon, forest plains; and *Pampas*, or flats, in the basin of La Plata.

Passing from the solid to the fluid portions of the surface, we have to notice the inland waters, consisting of rivers and lakes; and the all-engirdling ocean.

62. A considerable body of water flowing in a natural channel through the land is a RIVER, formed by the collection of smaller bodies, as streams, brooks, and rills, the whole of which constitute a river-system. The entire country, the drainage of which is thus conducted to a common watercourse, is the basin of the river or its hydrographical region; and the line of country separating different basins, the drainage of which is carried off in dif-

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ferent, and sometimes opposite directions, is the water-shed or parting.

63. Rivers have their ultimate sources in springs, lakes, or the snows and glaciers of mountains. It is often interesting to visit the head-spring in some highland solitude, and compare the tiny stream that ripples from it, over which childhood may leap, with the mighty volume of water, under which form it finally joins the ocean. Most rivers follow a very winding course, owing to the mobility of water, and the obstacles it encounters, so that the distance along the channel is greatly in excess of the direct distance from source to termination. This is a most useful provision, since it extends the means of irrigation and intercommunication to a wider area of country, and prevents the current from acquiring that velocity which would impede navigation, or render it altogether impossible. 64. A current is formed in the first instance by the weight of water, or its tendency to descend an inclined plane; and in general, it is only in the immediate neighbourhood of their sources that the beds of rivers have any marked inclination. But when once an impulse is communicated, the simple pressure of the superior on the lower portions of the mass, will push it over ground that has little or no descent at all, with a rapidity proportioned to the volume of the water. Many rivers hence flow with very powerful currents through comparatively level districts, as the Amazon, which has only a fall of 12 feet in the last 700 miles of its course, or $\frac{1}{4}$th of an inch per mile, and yet enters the ocean with such power, that its fresh water is distinguishable at a great distance from the shore.

65. The most striking feature in the course of rivers is the formation of cataracts, when the mass of water falls over a precipice or ledge of rock, and reaches suddenly a much lower level, of which the Falls of Niagara are a most magnificent and celebrated example. Rapids are formed where a river flows down a steep but gradual descent.

66. Periodical floodings or overflowings are common to all rivers whose sources and hydrographical basins are within the tropics, or in their neighbourhood, arising from the regular and abundant rains which seasonally fall, almost without interruption, in the equatorial regions. Others rise and fall daily in the lower parts of their

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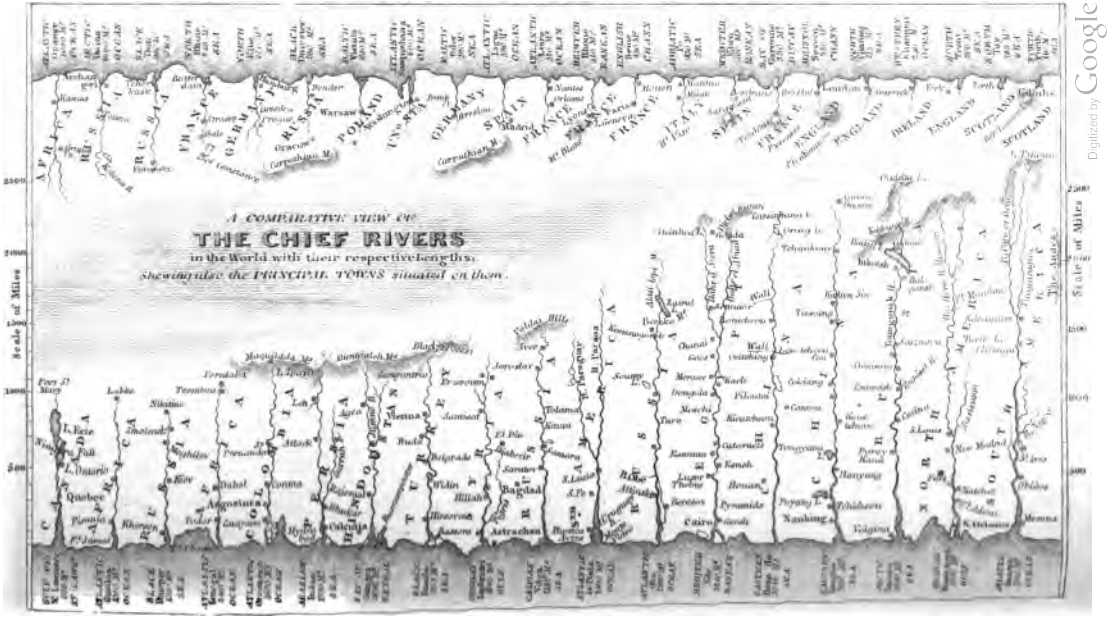

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course, owing to the influx and ebb of the tidal wave; and streams that flow from snow-mountains swell daily as the

Rapids of Kalabshi, in Nubia

heat increases, and diminish as it declines. Rivers have been termed the arteries of social life; and though it is far from being true, that civilization has always been developed where they occur, the converse of the proposition is undeniable, that no nation ever made much independent progress apart from them. The grandest river-systems are in the western world, where the Amazon has the precedence as to its volume of water, and the Mississippi-Missouri in the length of its course.

67. Inland sheets of water, or *lakes*, of varying extent, are frequently nothing more than expansions of rivers, which spread themselves over slightly depressed level areas, in their course, or fill up deep, inclosed hollows, from which the superabundance effects its exit generally at an opposite extremity, and resumes the stream-like aspect. The great lakes of Canada have been formed in this manner by the river St. Lawrence; and likewise the beautiful lakes of Geneva and Constance respectively by the Rhone and the Rhine. Expanses of this description are the most numerous and extensive in the higher latitudes, covering immense spaces in North America, Sweden, Finland, and northern Russia.

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68. Other lakes receive rivers, but have no apparent outlet, being maintained at the same general level by excessive evaporation. The water in these cases is almost always either pungently salt or brackish. The Caspian Sea, which

The Dead Sea.

receives the Volga, Ural, and other streams, is the grand example of this class, and by far the largest inland sheet of water on the face of the globe; but the Dead Sea is the most remarkable, owing to its great depression below the level of the ocean, the lifelessness of its depths, and its intense saline impregnation. Several lakes occur into which no stream flows, though one is discharged, the supply being kept up by rains, melted snow, and subaqueous springs; and some of very small size, occupying generally the craters of extinct volcanoes, have neither affluent nor outlet.

69. The great body of fluid styled the *ocean*, though artificially divided into different basins, is really a continuous mass, which fills a vast irregular hollow of the earth's solid crust, encompasses the dry land on every side, and far surpasses it in extent. Its billows roll in every variety of climate, and experience every temperature, from

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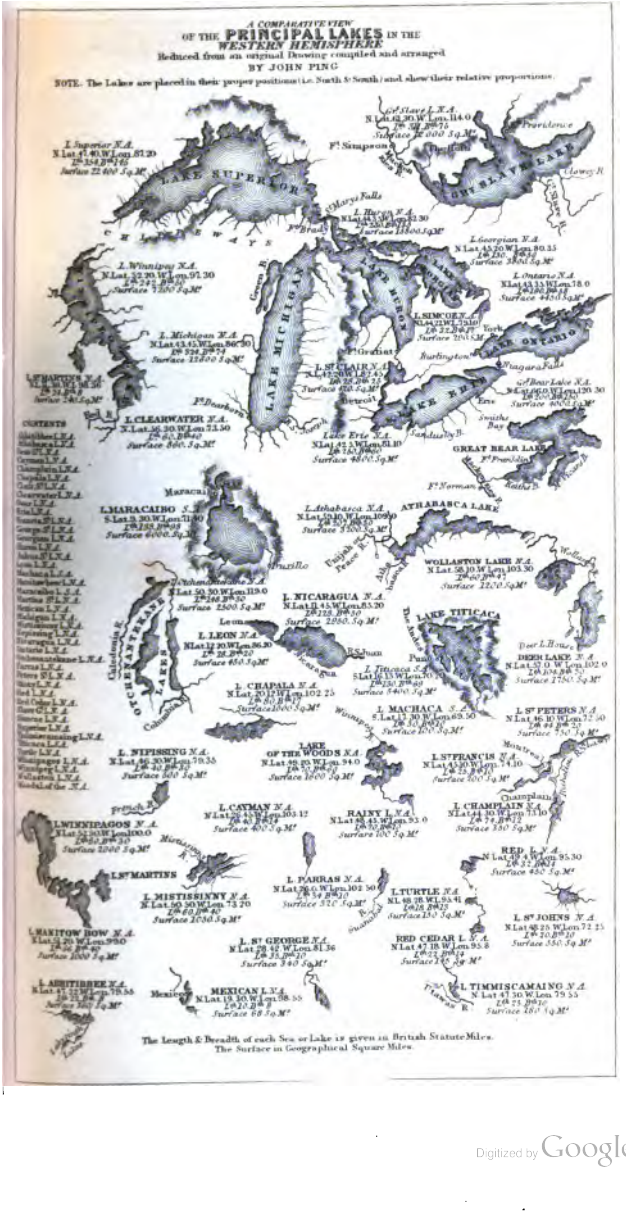
A COMPARATIVE VIEW
OF THE **PRINCIPAL LAKES** IN THE
WESTERN HEMISPHERE
Reduced from an original Drawing compiled and arranged
BY JOHN PING

NOTE. The Lakes are placed in their proper positions (i.e. North & South) and shew their relative proportions.



The Length & Breadth of each Sea or Lake is given in British Statute Miles.
The Surface in Geographical Square Miles.

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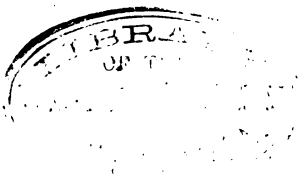

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that of summer heat within the tropics, to the cold which solidifies the surface towards the poles, and converts it into a pavement of ice. Within their range, the most opposite phenomena co-exist—the calm and the storm—the pleasant voyage and the foundering vessel—the song of joy, and the despairing cry of some "swimmer in his agony." Owing to its amplitude, the ocean is never still, and never silent, day or night. At one time, in some land-locked bay, it may murmur not, and show no ripple, but seem the very image of quietude; yet it is certain, that at a thousand points elsewhere, impelled and vexed by the winds, the surface is tossing in wild confusion, heaving in magnificent waves, and dashing with tremendous uproar upon many a coast.

70. Though constantly receiving vast accessions of water from the dry-land—the broad Amazon, the mighty Mississippi, the historic Nile, the rapid Ganges, and a thousand streams beside—the ocean enlarges not its volume, nor is it now a jot wider than when men began timidly to put forth their frail barks upon its surface. On the other hand, while by a marvellously subtle and powerful process its waters are constantly evaporated, they are not lessened thereby in depth or area. The fluid taken up into the atmosphere as invisible vapour, is there condensed into clouds, and either directly returned in the form of rain to its native bed, or mediately by the agency of springs, rills, streams, and rivers. Thus perpetual waste and perpetual renewal mutually correct each other; and, owing to the nice balance maintained between the two processes, the great waters know nothing of expansion or contraction—of increase or decrease.

71. It is hence only as to superficial appearances that instability can be truly ascribed to the ocean. A rapidly-shifting aspect—smooth and rough, gentle and threatening, shining and sombre, in the course of a few hours—renders it a common and an appropriate emblem of the mutation of human life. But it is really one of the most stable of natural objects, far more persistent in its features than the dry land. The rains, the torrents, and the atmosphere, wear, disintegrate, and plant wrinkles upon the face of the mountains. The fell lightning splinters the hardest rocks; and they are rent asunder by the expansive power of congela-

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tion. The stupendous earthquake opens wide fissures in the ground, removes old landmarks, and deranges the scenery of plain and valley; while the volcano pours over field and vineyard a flood of lava from its fiery throat, or overwhelms them with a shower of ashes. But no such imprints of age and injury appear upon the face of the waters, though so yielding as to be ruffled by the slightest breeze, displaced by the foot of man, even by the breath of his nostrils. Evaporated by heat, solidified by cold, and undulating under the lunar and solar attraction, the great deep maintains its integrity unimpaired. Ravaged by the tempest, and ploughed by the fleets of nations, the disturbance they occasion passes away, without a trace of permanent impression being left to tell of the fury of the storm, or the power of the armament.

72. The ocean is a grand and grave mystery. Its prime characteristic—the saltness of the water—baffles all human investigation. We know that it is everywhere pungent and bitter to the taste, though to a varying extent at the surface, owing to the unequal quantity of fresh water received by different parts from the rains, the rivers, and the melting of the polar ice and snow. A rainless expanse,

Shores of the Red Sea.

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like the Red Sea, is salter than the ocean generally; and one receiving a multitude of streams, like the Baltic, is much fresher.

73. Chemistry can accurately determine the nature and amount of the saline impregnation; but a limit is here put to human researches. If challenged to account for the peculiar property, science is dumb, or speaks only to confess its ignorance. The explanatory theories proposed respecting vast beds of rock salt at the bottom, and saline particles carried down by streams from the land, give no satisfaction to the mind as unsustained by evidence, besides being manifestly inadequate to solve the problem. It can only be said, that the ocean was created, and has continued, and ever will continue while it exists, in this saline condition, in the same manner as the atmosphere was created, not a simple body, but a compound of two or three gases.

74. Nor is the design of the arrangement scarcely more obvious than the cause. The sea is not salt to preserve its waters from corruption — an old imagination — for they speedily become offensive in the holds of vessels. We only know with certainty that the saline property renders the water more buoyant, and thus facilitates navigation; and that a lesser area is frozen, for salt water requires a lower temperature in order to be congealed than fresh. The solid constituents of sea water, of which chloride of sodium, or common salt, is by far the most important, amount to about 3½ per cent. of its weight, or nearly half an ounce to the pound. Taking this to be the average amount, and assuming the average depth of the ocean to be two miles, it has been computed, that if all the salts were precipitated, and spread out equally over the land, they would cover to the thickness of one mile an area of seven millions of square miles, equal to nearly twice the superficial extent of Europe.

75. The depth of the ocean, like the height of the land, is very irregular, for its bed has inequalities similar to those which mark the habitable surface, hills, valleys, plains, table-lands, and high precipitous mountains, the tops of which in many instances just peep above the waves. Off a low, sandy shore, the water is generally shallow for a considerable distance, but it has commonly great depth close to a rocky, towering coast. The greatest depth hitherto

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ascertained, upon which perfect reliance may be placed, is in the north Atlantic, directly south of the Great Banks of Newfoundland, amounting to 25,000 feet, equal to nearly $4\frac{3}{4}$ miles. From the bottom of this abyss to the top of the highest mountain, the distance in a vertical line is about $10\frac{1}{4}$ miles. But how deep the ocean really may be, remains for the cannon-ball and sounding twine to decide.

76. The deep sea is known to sailors as the "blue water," owing to its ultramarine hue; but various colours distinguish particular parts, dependent upon local circumstances. Thus, in the Gulf of Guinea, the water is white; black around the Maldive islands; green to the west of the Azores and Canaries; yellowish between China and Japan; while purple, red, and rose tints are observed in the Levant, the Red Sea, the Vermilion Sea, off California, and other places. These appearances are permanent, and arise from a variety of causes, as the presence of differently coloured animalcules in immense swarms, the infusion of earthy substances brought down by rivers, the character of the submarine stratum, and the existence of marine vegetation at or near the surface.

77. Three great varieties of movement distinguish the ocean, resulting from independent causes, but mixing with and modifying each other—*wind-waves*, *tidal-waves*, and *currents*.

78. The waters in contact with the atmosphere are disturbed more or less by the agitations of the air. The zephyr wrinkles their surface; a high wind produces perceptible undulations, which under a breeze increase into waves; these, during a storm or hurricane, rise into foaming billows, and form long and lofty ridges when their development is not impeded, and the winds blow in the same direction for a considerable length of time. The height of waves, the manner in which they expand and break, their velocity and their extent, depend upon the depth of the sea and the size of the basin, as well as the force of the wind. Off the Cape of Good Hope, formerly called the Cape of Storms, and Cape Horn, the largest and highest waves are raised. But they rarely extend more than forty feet from the base to the summit, or twenty feet above and below the general level of the water, and the commotion is compara-

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tively superficial, except in long-continued gales, when the depths are troubled.

79. *Tidal-waves* are those alternate risings and subsidings of the surface, by which portions of the shores, to a varying extent, are successively flooded and left dry. They are caused by the attractive forces of the sun and moon, especially of the latter, and are strengthened or weakened according as the relative position of the two bodies enables them to act in concert or in opposition. At new and full moon the forces act together, or in the same line of attraction, and the highest, or *spring* tides are produced. But when the moon is in the intermediate points of her orbit, the first and third quarters, the lunar and solar attractions oppose each other, and the lowest, or *neap* tides take place. There are two tidal waves in the course of rather more than twenty-four hours, and consequently two periods of high water and low water in the interval. It has been ascertained that the broad expanse of unobstructed ocean in the south temperate zone, is the cradle of tidal action, and the centre from which it radiates. A great wave being there raised, displaces a contiguous mass of fluid, and thus propagates itself by impulse with immense velocity on all sides from the scene of its origin. But there is no actual transference of water, only an alternate rise and fall of the surface, except in the neighbourhood of land, where stream tides are produced, occasionally of great power.

80. *Currents* are true marine streams, conveying the ocean water from one region or hemisphere to another. They differ widely in magnitude, direction, force, and temperature, and are set in motion by a great variety of causes, as winds and tides, unequal evaporation, the expansive and contracting influence of heat and cold, with the rotation of the earth. The drift ice, which annually descends from the frigid to the temperate zones, proves the existence of a current from the poles in the general direction of the equator. But by far the most remarkable example is known as the Gulf Stream, from the place of its origin. Lieutenant Maury, its most recent illustrator, thus graphically refers to it:—"There is a river in the ocean. In the severent droughts it never fails, and in the mightiest floods it never overflows. Its banks and its bottom are of cold water, while its current is of

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warm. The Gulf of Mexico is its fountain, and its mouth is in the Arctic Seas. There is in the world no such majestic flow of waters. Its current is more rapid than the Mississippi or the Amazon, and its volume more than a thousand times greater." These marine streams exert a very important influence. They obviously contribute, among other results, to equalise temperature, by transporting the warm water of the tropics towards the poles to mitigate the cold, and conveying the cold water of the poles towards the tropics to moderate the heat.

The GREAT OCEAN is divided into five basins, or minor oceans, an arrangement favoured by its irregular distribution, though there is frequently no natural line of separation. These, with their principal branches, are as follow:

I.

		Branches.
NORTHERN BASIN, or ARCTIC OCEAN.	Extends around the north pole, and is bounded by the northern shores of America, Europe, and Asia, and by the Arctic circle in the spaces between the continents.	Baffin's Bay. White Sea. Gulf of Kara. Gulf of Obi.

II.

SOUTHERN BASIN, or ANTARCTIC OCEAN.	Extends from the antarctic circle around the south pole.	Unknown.

III.

WESTERN BASIN, or ATLANTIC OCEAN.	Bounded on the west by America; east by Europe and Africa; north by the arctic, and south by the antarctic circle—divided by the equator into the North and South Atlantic.	Baltic with its Gulfs. North Sea. Mediterranean. Black Sea. Hudson's Bay. Gulf of Mexico. Caribbean Sea.

IV.

EASTERN BASIN, or PACIFIC OCEAN.	Inclosed between America on the east; Asia, the Sunda Isles, and Australia on the west; the arctic circle on the north; the antarctic on the south—divided by the equator into the North and South Pacific.	Sea of China. Yellow Sea. Sea of Japan. Sea of Okhotsk. Sea of Kamschatka. Behring's Strait. Gulf of California. Bay of Panama.

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V.

		Branches.
South-Eastern Basin, or Indian Ocean.	Bounded by Africa on the west; the Sunda Isles and Australia on the east; southern Asia on the north; and the antarctic circle on the south.	Red Sea. Arabian Sea. Persian Gulf. Bay of Bengal.

81. The last three are the important basins. The Atlantic Ocean is the best known, being the highway of the world's commerce, constantly traversed by fleets of merchantmen, in which thousands of lives and millions of property are embarked. It rolls in a deep, longitudinal valley, the opposite sides of which exhibit corresponding projections and recesses, as if capable of interlocking. The breadth varies from 800 miles between Norway and Greenland, to 1500 near the equator, and to 3600 miles, where the greatest expansion occurs between the African coast and Florida. The surface, including the inland seas, has an area of about 30,000,000 of square miles, with a coast-line of 55,000 miles, the larger proportion of which is on the eastern, or the European and African side. North of the equator, a very considerable space is occupied by a species of marine plant, (*fucus natans,*) closely matted together, forming the 'Grassy Sea' of the English, the *Kroos Zee*, or 'Sea of Duck-weed,' of the Dutch, and the *Mar del Sargasso*, or 'Sea of lentiles,' of the Portuguese and Spanish. A well-defined region of the weed extends along the meridian of 40° W. and between the latitudes 20° and 45° N., bearing the name of the 'Fucus Bank of Corvo and Flores,' from the two most western islands of the Azores, which are situated not far from it. Nothing is known of the real origin of the accumulation; but it affords food and shelter to a multitude of marine animals. The Atlantic was first crossed under Christopher Columbus, who sailed from the port of Palos, in Spain, August 3, 1492; caught sight of the first land, St. Salvador, one of the Bahamas, on the 11th or 12th of October; and returned to port again, March 15, 1493.

82. The Indian Ocean is of somewhat smaller extent, occupying an area of 23,000,000 of square miles; and is chiefly remarkable for its hurricanes and monsoons. It

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was first entered by rounding the Cape of Good Hope, by Vasco di Gama, in 1497, who crossed it to the coast of Malabar.

83. The PACIFIC OCEAN has nearly twice the extent of the other two, covering about 90,000,000 square miles, more than half the surface of the globe. The first European to gaze upon its waters was Nunez de Balboa, in 1513, who saw them from the mountain tops near Panama; but it was first navigated by Magellan—who originated the name, for which there is no natural reason, owing to favourable weather having rendered his voyage easy and pleasant. Besides its vastness, this ocean is remarkable for the multitude of islands with which certain portions of it are crowded, the number of which is not known at all, even approximately.

84. Both the liquid and solid parts of the terrestrial surface are everywhere surrounded by a mass of invisible gaseous matter, called the *atmosphere*, which forms an important branch of physical geography, owing to its relations to light, heat, water, and the vital functions. It consists of dry air, mainly composed of nitrogen and oxygen, with which a very varying quantity of aqueous vapour is mechanically mixed. The height of this aerial envelope, in the lower stratum of which we live, is unknown. But it is certain, that being in a high degree elastic, by far the greater portion of it is near the earth's surface; for in ascending high mountains, travellers have found the air so rarefied, as to diminish very sensibly the intensity of sound, render respiration difficult, produce a loss of physical strength, and compel them to retire to a lower level.

85. In briefly alluding to the leading phenomena of the atmosphere, the motions that take place in it, which we denominate WINDS—so striking and varied in their action, so useful and necessary, though occasionally calamitous—require notice. Winds arise, as one of the prime causes, from the great expansibility of the air by heat, combined with the fact, that different parts of the earth are very unequally heated. If a small part of the earth's surface is suddenly and considerably heated above the temperature of the surrounding portions, the column of superincumbent air will be correspondently heated, and thereby greatly expanded. It follows, that, as the air is fluid the column at the top

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will manifestly flow over the adjoining colder strata, producing a wind in the upper regions of the atmosphere, blowing away from the heated spot. But in the lower regions, the surrounding colder and heavier air will rush in to supply the comparative void created, producing a wind at the earth's surface in the opposite direction, or towards the heated district.

86. Permanent breezes blow within the tropics, known as the trade winds, from N.E. in the northern hemisphere, and S.E. in the southern, which are occasioned by the prevailing heat at the equator, combined with the fact of the earth's rotation.

87. Periodical winds, as the MONSOONS of the Indian Ocean, nearly semi-annual, are in part a modification of the trade winds, and in part result from the unequal effect of the solar heat on the land and the sea. The latter is the sole cause of the diurnal land and sea breezes. A mass of land being much more affected by the presence or absence of the sun than a body of water, the air over the land is overheated by day, and underheated during the night, as compared with the air over the water. Hence, in every latitude, but most sensibly within the tropics, a refreshing breeze from the sea blows by day; and is succeeded by an opposite current, a breeze from the land, on the approach of evening, and during the remainder of the night.

88. *Variable winds*, often blowing from almost all points of the compass in a brief interval, are characteristic of mean and high latitudes. *Storm winds*, variously termed hurricanes, tornadoes, and tyfoons, sometimes marking their path with desolation, arise from very considerable disturbance in the equilibrium of the atmosphere, occasioned chiefly by a rapid condensation of aqueous vapour. They have a rotary as well as a progressive motion; and are huge aerial eddies or whirlwinds, supposed to be produced by the meeting of opposite currents. The winds perform a grand and important part in the economy of nature. They moderate extremes of heat and cold; diffuse the productions of the vegetable kingdom by the transport of seeds and pollen; drift the clouds to districts which would otherwise be rainless; and by renewing and purifying the air, contribute to its salubrity.

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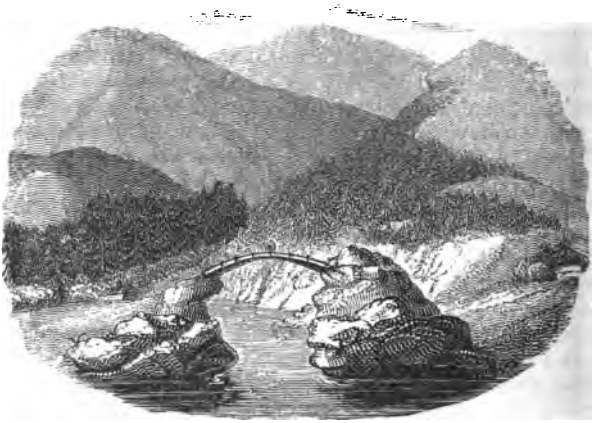
89. The moisture in the air, or the vaporous atmosphere, is exhaled by solar heat from the oceans, seas, lakes, rivers, and moist ground. It becomes visible in the form of clouds, when condensed by cold, and is precipitated as rain, snow, or hail, according to the temperature of the upper regions. The distribution of RAIN upon the earth's surface is very unequal, for the annual supply often ranges from twenty inches to several feet within comparatively short distances, while there are absolutely rainless regions, and many others where a shower is rare. The largest quantity descends in the torrid zone, because heat, the cause of vapour, is there the greatest. It diminishes generally as we recede from the equator to the poles; but the number of rainy days increases. The reason of this is, that while the fall in extra-tropical countries is somewhat equably distributed throughout the year, it is confined to a particular season in equatorial regions, and descends in perfect torrents.



Norway side of the Scandinavian Alps.

90. Maritime districts have in general more copious rains than those in the interior of continents, owing to the supply of humidity being the greatest in the vicinity of the sea. The quantity of rain is commonly greater on high grounds than at the level of the sea; but it is sometimes in excess on one

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side of a mountain chain, while a vast reduction occurs on the other.

91. Nowhere is this better exemplified than in Norway and Sweden, divided by the Scandinavian Alps. At Bergen, on the Norwegian coast, there fall annually 82.12 inches, or more than at any other city in Europe, and more than the amount at many places within the tropics. The clouds brought from the Atlantic by the prevailing south-west winds are arrested by the mountains and confined in the fiords, where they accumulate, and lose their moisture, as it were, by mechanical compression, so that the sea-winds discharge nearly all the water held in suspension in passing the mountains. Hence it frequently rains for entire days in Norway, while only a few drops fall in Sweden, on the opposite side of the chain.

92. Those conditions of the atmosphere of which we are sensible, especially its temperature, humidity, and motion, constitute what is termed CLIMATE, which remarkably varies in different regions of the globe. The leading causes which determine it in any particular country are as follow:— 1. The latitude, or geographical position in relation to the equator; for in proportion as we recede from that line towards the poles, the heating power of the sun diminishes, owing to the direction in which the solar rays fall upon the surface becoming more and more oblique; 2. The position with reference to the level of the sea, for as the temperature of the atmosphere decreases with the elevation above the general surface, a highland district, though in the same latitude with a lowland region, will have a colder climate, other circumstances being equal; 3. Proximity to or remoteness from the great oceans; for the sea being far more uniform in its temperature than the land, the winds impress this character upon the shores, and hence the extremes of heat and cold are never so great in maritime as in inland countries. There are many minor circumstances which affect climate, such as the prevalent winds, the general exposure of the surface, the geological character of the soil, the degree of cultivation it has received, the direction of mountain chains relative to the cardinal points, and perhaps the internal heat of the earth. These causes, acting apart or in concert, determine the differences of climate, as the

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hot and moist, the cold and moist, the hot and dry, the cold and dry, and other varieties.

93. The life of the globe varies with the climate, both with reference to plants and animals. In the *torrid zone*, wherever due moisture combines with the great heat and vivid light, the *vegetable kingdom* exhibits the greatest number of species, while individuals are remarkable for pleasing aspect and majestic proportions. The burning rays of the sun raise the herbaceous plant into a shrub, and the shrub into a tree, while the forests consist of enormous evergreen trees, about the trunks and branches of which are a profusion of orchids and creepers, exhibiting every diversity of floral decoration. In this region are produced those balsams, gums, and juices, which gratify and excite the palate of the voluptuous; and from thence are derived many of the most valuable remedies for the ills which afflict humanity.

94. Passing to the *temperate zone*, dense jungles disappear, and vividly green meadows of tender grass adorn the moist lands; the trees are of the deciduous class, which cast their leaves in winter; and the most important grains, wheat and barley, are raised in the greatest perfection. Proceeding northerly, the cereals cease to be cultivable: trees of the pine tribe prevail; all ligneous vegetation then vanishes, after having become stunted, till, in the *polar zone*, no development of vegetable life is met with, but a few humble plants, mosses, and lichens. Hedenström thus graphically describes the aspect of the Asiatic polar regions:—"With painful feelings, the traveller observes the trees diminishing in height as he approaches the shores of the Icy Sea. At Werchojantsk, 90 German miles from the sea, (upwards of 300 English,) erect and lofty larch-trees afford a veil to expiring nature; but from this place their number decreases, and they become small and crippled. The coating of moss which covers the tree is thicker than the stem itself, but nothing can save it from the destroying breath of the north. Some thin birches endeavour to contend against this fearful foe, but they perish when scarcely sprung from the bosom of mother earth. It is only the moss, the true child of the north, which thrives and blooms even in the midst of winter, and scantily covers a soil which has been barren for thousands of years."

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95 Much the same order is observed in the development of *animal life*, which is most intense in the warm intertropical

Animal Life in the Tropics.

countries. They are specially the home of the sanguinary species, lions, tigers, leopards, panthers, hyenas, and jaguars, and of the huger members of the thick-skinned group, elephants, rhinoceroses, and hippopotami. The reptiles, too, are remarkable for their variety and numbers, some of which attain an immense size, and readily triumph over formidable quadrupeds, while others are armed with the deadliest poison. Birds are specially conspicuous for the splendour of their plumage, but are generally deficient in the faculty of song. Insects in countless swarms are produced, of large size, and destructive or tormenting in many instances, but of exquisite beauty in others, rivalling the lustre of the metals in the brilliancy of their colours. Millions of fireflies in the South American forests present to the eye of the benighted traveller the appearance of a vast artificial illumination. In the more temperate climates, the animals most useful to man predominate; the principal beasts of prey are the wolf and the bear; and reptiles greatly diminish in number, size, and noxiousness, very few reaching the

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north boundary of the temperate zone. In higher latitudes there are few species of animals on the land; but the seal, walrus, and whale, inhabit the waters, and sea-fowl are abundant.

96. Members of the great family of MAN are found in connection with every variety of climate, from the hottest to the coldest, and occupy the most discordant sites, dense forests and treeless wastes, fertile and arid lands, low plains, and mountainous districts. This general distribution is owing to the flexibility of the human constitution, which can accommodate itself to extreme temperatures; and to the superior intelligence which devises means to mitigate the effects of an unfortunate physical position. Striking varieties distinguish the human race, but not greater than might be expected, as the result of very different circumstances, operating through a long series of ages. Naturalists comprehend every variety in three grand divisions, the Indo-European, Mongolian, and Negro, guided by peculiarities of bodily conformation. The Indo-European division includes the south-western Asiatics, the North-Africans, and all the Europeans, with a few exceptions, characterised in very different degrees by the features being symmetrical, the forehead high, and the form of the skull elliptical. The Mongolian group comprises all the Asiatics not included in the preceding division; the Finns, Samoiedes, and Magyars in Europe: the Esquimaux and American Indians, and the dark brown inhabitants of the islands in the Pacific ocean. They are distinguished by a broad flat face, small eyes, lank hair, and the skull of a pyramidal form. The Negro group embraces the negroes of Africa, and some Australasian tribes, who have woolly hair, thick lips, projecting cheek bones, with the form of the skull narrow and elongated. But it is impossible for any accurate classification of this kind to be made, owing to varieties existing with very unequal degrees of development, one passing gradually into another.

We here conclude our Introductory Sketch of the physical aspect of the globe; what especially relates to individual kingdoms will be given in their respective places.

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POLITICAL AND DESCRIPTIVE GEOGRAPHY.

1. The natural divisions of the globe have been formed by the Creator, and maintain their integrity from age to age. But in consequence of its human occupation, artificial or political divisions have arisen, which define the areas respectively held by tribes, nations, and states, where the same government exists, and the people have more or less common interests. These divisions repeatedly change, as quarrels provoke war, ambition incites to conquest, and power secures the victory. Having frequently no natural indication, they are then arbitrary lines agreed upon in treaties of peace. But it is always an advantage to a state, as a barrier against aggression, to have its limits prescribed by nature, either an arm of the ocean, or a chain of mountains. This arrangement of the surface, with the natural and social features of the respective sections, is delineated in the ensuing pages.

2. Tribes and nations may be distributed into three general classes as to their social state. There are the *savage races*, ignorant of the art of writing, and only capable of expressing ideas in an equivalent manner by a few conventional signs, who subsist by hunting, fishing, and the spontaneous productions of the earth, in some instances practising cannibalism. There are the *rude races*, acquainted with letters, possessing systems of laws and military organization, who

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till the ground, rear cattle, and perform various handicrafts, but have little exact knowledge or enlarged information, and whose ideas are chiefly limited to the objects which strike their senses. There are the *civilised races*, distinguished for their advancement in science, literature, arts, and manufactures, which recognise great principles of public law, by cultivating friendly relations with every other state in time of peace, and respecting the property of defenceless citizens in the event of war. The aboriginal natives of Australia and New Guinea are examples of the first class; the Arabs and Turks of the second; and most Europeans of the third.

3. Differences of religion form a marked distinction between nations, and very frequently between the members of the same community. The varieties are endless, but may all be summarily comprehended in four groups:—the *Jewish*, or the religion of the Old Testament Scriptures, professed by the Jews, no longer now existing as a nation, but scattered thoughout the world; the *Christian*, founded upon the Old and New Testament Scriptures, predominant through nearly the whole of Europe and America, prevalent in all European dependencies, partial in northern and south-western Asia, in Egypt and Abyssinia; the *Mohammedan*, a mixture of Judaism and Christianity with the conceits of the impostor Mohammed, who flourished about the year A.D. 611, dominant in Turkey, northern Africa, Western Asia, and extensively professed in India; the *Pagan*, under which head is included all forms of idolatry, from the simple veneration of natural objects, to the highly artificial and elaborate systems of Brahminism and Buddhism. A vast majority of the human race are in bondage to paganism, which has India, China, and Japan for its great strongholds.

4. Diversities of *language* constitute a permanent characteristic by which nations are distinguished from each other, and sometimes the component parts of the same state. The number of known languages and dialects amount to several thousands; but they are reducible to a few linguistic families, the members of which are more or less related to each other by common roots and idioms, or by grammatical affinity. The languages extensively spoken or understood are fifteen in number, of which eight are European, the English,

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German, French, Spanish, Portuguese, Russian, Greek, and Latin; six are Asiatic, the Turkish, Arabic, Persian, Hebrew, Sanscrit, and Chinese; and one, the Malay, belongs chiefly to the Asiatic islands.

5. The forms of government adopted, though very varied in detail, are essentially *monarchical* or *republican*. A monarchy may be styled an empire, kingdom, or grand-duchy, as custom or power prescribes. But it has an hereditary ruler at its head, who, according to circumstances, takes the style of emperor or empress, czar or czarina, king or queen, grand-duke or grand-duchess. Where the ruler has unlimited power over his subjects, as in Russia and Austria, the monarchy is said to be *absolute;* but where it is restrained by law, as in Great Britain, it is said to be *limited*, or *constitutional*. In a *republic*, on the contrary, the rulers are chosen by the people for stated periods of time, as in the United States, and have more restricted prerogatives.

EUROPE.

1. **Europe**, the smallest division of the great eastern continent, may be regarded as a peninsula, for on three sides the frontier is maritime. It is bounded on the north by the Arctic Ocean; on the west by the Atlantic; on the south and south-east by the Mediterranean and its branches, with the Black Sea, the Caspian, and the ridge of the Caucasus between the two latter basins. On the fourth side, or the east, is Asia; and the river Ural, with the main chain of the Ural mountains, is adopted as the dividing line. But these mountains are so low and broken, in several parts of their course, as to form no natural division between the regions on either side. Nor has the distinction been artificially indicated by the lords of the soil, the Russian government. Erman, the scientific traveller, on being informed by his guide that he was approaching the European and Asiatic frontier, saw only before him a range of inconsiderable hills. He remarks:—"In the days of ancient Greece, a point to which universal consent assigned so much importance, would not surely have been left without some striking monument; for even on the isthmus of Corinth, the bounds of two comparatively petty provinces were indicated by a pillar, having

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inscribed on one side, 'This is Peloponnesus, and not Ionia,' and on the other, 'This is Ionia, and not Peloponnesus.' But the fact, that at the present day, the boundary between two great divisions of the earth is not thought worthy of any especial mark, may be hailed as a pleasing sign of the greater facility of movement which is now enjoyed by mankind." At one point, a steep and sharply-pointed rock of difficult access occurs, over which the bounding line is supposed to pass, where there is scarcely room for more than two individuals to stand. It was scaled by the present Czar, when grand-duke, who literally stood upon the summit with one foot in Europe, the other in Asia.

2. With the exception of a small portion of Scandinavia, which passes within the arctic circle, the whole of Europe is in the temperate zone. The mainland has for its extreme northern point, the Nord-kyn, a headland of Finmark, situated in lat. 71° 6′ N.; for the well-known North Cape, which attains a slightly higher latitude, is a promontory of the adjoining island of Mageroe. The most southerly point is Cape Tarifa, in Spain, on the Strait of Gibraltar, lat. 36° N.; the most westerly is Cape Roca, in Portugal, off the mouth of the Tagus, in long. 9° 30′ W.; and the most easterly is in the north of Russia, near the sources of the Kara, a little river flowing into the Arctic Ocean, long. 68° 30′ E.

3. There is thus a difference of nearly eighty degrees of longitude between the eastern and western extremities, equal to a difference of more than five hours of time. Hence, when it is noon at the eastern boundary, it is still the early morning at the western; and when noon has arrived at the western frontier, the shadows of the evening are approaching, or have gathered, according to the season, at the eastern. The greatest distances in a straight line are 2,400 miles, from north to south, or between the extremities of Norway and Greece; and 3,500 miles from the south-west of Portugal to the north-east of Russia. The greatest contractions are between the branches of the White Sea and the Baltic; the Bay of Biscay and the Gulf of Lyons; respectively about 200 and 240 miles.

4. Insular appendages extend the longitude of Europe on the west, and the latitude both north and south. The more important of these adjuncts, which, in a few instances, are

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so wholly in a political sense, are as follow:—Arctic Islands—Nova Zembla, Spitzbergen, Loffoden and Tromsen groups; Baltic islands—Zealand, Funen, Gottland, Oland, Œsel, Aland group; Atlantic islands—Iceland, Faroe Isles, Great Britain and Ireland, the Azores; Mediterranean islands—Balearic group, Corsica, Sardinia, Sicily, Malta, Candia, and the Greek Archipelago.

5. A highly elaborate outline, consequent on being repeatedly and deeply penetrated by the ocean, is the remarkable feature in the configuration of Europe, which immediately arrests attention on the inspection of a map. Hence, with the exception of Switzerland, and some of the German states, there is no European country without direct access to the sea; nor is there any place, except in Russia, at a greater distance than four hundred miles from its waters.—No division of the globe of the same area has an equal extent of coast-line, and therefore of facilities for intercommunication and foreign commerce—a fact which has contributed in no slight degree to the superior civilization of Europeans. The principal arms of the Ocean indenting the continental mass are the White Sea, North Sea, Baltic, Mediterranean, and Black Sea.

6. The WHITE SEA is an extension of the Arctic Ocean, which penetrates upwards of 200 miles into northern Russia, and has a breadth of 150 miles, where the greatest expansion occurs. It answers to its name for four or five months in the year, being closed to navigation, clothed with ice, and covered with snow. It was first visited by an English vessel in 1553, the reign of Edward VI., under Richard Chancellor, who reached a friendly port, while his unfortunate companion, Sir Hugh Willoughby, the commander of the expedition, was overtaken off the entrance by the rigorous winter, and perished of cold and hunger, with his entire crew. Peter the Great took his first lessons in practical seamanship on its waters, and narrowly escaped with life from shipwreck.

7. The NORTH SEA, often, but improperly, called the German Ocean, is a branch of the Atlantic, communicating with it on the north and south, but bounded by the mainland of Europe, and the shores of Great Britain, on the east and west. It extends 700 miles from the Strait of Dover to a line drawn between the most northerly of the

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Shetland isles and the Sogne Fiord, on the Norwegian coast. The breadth is comparatively inconsiderable in the south, but expands to 420 miles between the Firth of Forth in Scotland, and the Ringkiobing Fiord, on the opposite coast of Denmark. The greatest depths occur on the side of Norway, where the soundings give 190 fathoms; but the mean depth of the whole basin does not exceed 31 fathoms. Several enormous banks of sand and debris traverse the bed of this sea, of which the Dogger Bank, situated in the centre, is by far the largest. Its western extremity approaches within thirty miles of Flamborough Head. From thence, it stretches eastward upwards of 300 miles towards Denmark, where it terminates almost in a point, though in several places not less than 60 miles wide. The upper portions consist of fine and coarse siliceous sand, mixed with comminuted corals and shells. This vast shoal is a noted station for the cod-fishery, frequented by English and Dutch fishermen; and as the shallowest part has nine fathoms water, it offers no obstacle to navigation. Altogether, from a great number of observations and comparisons, Mr. Stevenson estimates the average height of the sandbanks of the North Sea at about 78 feet, their superficial extent at 27,400 square miles, and their solid contents at 2,241,248,563,110 cubic yards, an amount of soil which would cover the whole of Great Britain to the depth of 28 feet, if equably distributed over its surface.

8. The BALTIC, connected with the preceding sea by the three narrow channels of the Sound, the Great Belt, and Little Belt, is a more inland expanse, which, with its great terminating branch, the Gulf of Bothnia, stretches between Sweden on the one hand, Denmark, Germany, and Russia on the other. Its waters are everywhere much less salt than sea-water in general; and towards the inner extremities they are sufficiently fresh to be used for culinary purposes. This arises from the great number of streams it receives, which flow through countries annually covered with accumulated snow, while any influx of the ocean is opposed by the narrowness of the connecting channels, and the almost constant prevalence of an outward current. The Baltic is more or less encumbered with ice in winter, according to the rigour of the season, and navigation is

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suspended. In 1333, a surface of solid ice extended from the Danish islands to the coast of Prussia, along which communication was uninterruptedly maintained for some time, and public-houses were erected on the road. The Swedish monarch, Charles X., marched his army across both the Belts in 1559 to the attack of Zealand; and in 1809, the Russian soldiers travelled over the ice from Finland to Sweden.

9. The MEDITERRANEAN, another branch of the Atlantic, is the most physically remarkable of all inland seas, and is historically renowned as the scene of the first recorded navigations. Its waters roll in a grand cleft dividing generally Europe on the north from Africa on the south. Entered from the ocean by the Strait of Gibraltar, which is only thirteen miles across in the narrowest part, it rapidly widens, and has a breadth varying from about 100 to 650 miles throughout its entire course. The length follows a direction nearly due east and west, extending through 48° of longitude, or 2,300 miles. No second example occurs of the ocean penetrating inland to such an extent, or one at all comparable with it. This was the Great Sea of the ancients, a title which proclaims their limited knowledge of physical geography. It is, however, an ocean in miniature, daily becoming of greater commercial and political importance, since the overland route through Egypt to the East was established. In no other part of the globe is there such a variety of coast-line within a few days' sail—the rich landscapes of Spain, the hot stony pavement of Lybia, the sandy plains of the Nile, the volcanic shores of Italy and Sicily, the bold southern heights of Asia Minor, the rugged promontories of the Greek peninsula, and the white limestone cliffs of its archipelago of islands. The basin exhibits profound depths, amounting to 1000 fathoms and upwards, at the eastern and western extremities; but centrally, where it narrows, it is comparatively shallow, with deep water on both sides, as if a submarine chain existed, continuing the respective rock-formations of Sicily and Africa. Though perpetually receiving a strong current from the Atlantic, through the Strait of Gibralter, and another from the Black Sea, through the channel of the Dardanelles, the waters of the Mediterranean are kept in check by the excessive

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evaporation to which they are subject, consequent upon the high temperature derived from the adjoining fiery African Sahara. But in addition, it is supposed, that there is a submarine current flowing outward to the Atlantic, thus making room for the in-flowing contributions. The water contains a somewhat larger proportion of salt than the ocean. The principal branches are the Adriatic Sea, between Italy and Turkey; and the Ægean Sea, between Turkey, Greece, and Asia Minor.

10. The BLACK SEA, between Russia on the north and east, European and Asiatic Turkey on the south and west, is a reservoir fed by some of the largest rivers of the continent, remarkable for its compact form and nearly unbroken surface; for only one small island off the mouth of the Danube, and a few points of rock elsewhere, interrupt its continuity. The extreme length, east and west, is about 690 miles, and the greatest breadth, north and south, between Odessa and the Bosphorus, 390 miles. This great inland basin has been known under various and contradictory designations. The Latin writers often styled it simply PONTUS, "the sea." 11. The Greeks, in their earliest age, termed it AXENUS, "inhospitable," in allusion to the stormy weather common at certain times of the year, perilous to timid and unskilful mariners, as well as to the barbarity of the nations on its shores. But at a subsequent date, when they had established colonies on the coast, the more auspicious title of EUXINUS, "hospitable," "friendly to strangers," was substituted, out of compliment to their own civilized habits, and as an inducement to emigration. The Turks originated the present name KARA-DENZIS, the Black Sea, not at all pertinent, as the water is intensely blue, but an epithet metaphorically expressing its real or supposed perils to seamen. Tremendous storms from the north occasionally visit it in winter, and at the equinoxes, with blinding snow or sleet; dense fogs are common in spring and autumn; and a slight gale raises harassing billows. But on the other hand, it is admirably adapted for navigation through many months of the year, being unobstructed with shoals, generally deep, and possessing excellent harbours.

12. Nearly three-fourths of the surface of Europe consist of plains, some of which are expansions of river-valleys, as the rich plain of the Po, in Lombardy, that of the middle

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Danube in Hungary, and of the lower Danube in Moldavia and Wallachia. But the grand expanse commonly called the *Great Plain*, embraces the immense space from the Black to the White Sea, and extends westward from the base of the Ural mountains to the sandy shores of the North Sea, rising nowhere more than a few hundred feet. Disregarding minor irregularities, it may be said to sweep round the central mountains of France, and to terminate at the foot of the Pyrenees. In this vast tract there are infertile sandy wastes, heaths, bogs, and marshes, primeval forests haunted by wild animals, pastures on which enormous numbers of cattle are reared, richly cultivated corn-bearing districts, and lands inhabited by nations of the highest degree of intelligence, while others are held by rude nomadic tribes.

13. The remainder of the surface consists of highlands, which form two well-defined mountain systems, Scandinavian and Alpine, north and south of the Great Plain. The former is far inferior to the latter in area, the grandeur of the masses, and the height of the projections.

14. The Scandinavian or *North mountain-system* comprises the Thulian, Dofrine or Dovrefield, and Kiölen ranges, a continuous region of high land, which extends through Norway from the south to the north extremity, and ramifies in low heights over Lapland, Finland, and Olonetz. It attains the greatest elevation in the province of Bergen, 8150 feet, which in that latitude is far above the line of perpetual snow. The Britannic highlands and the lofty Faroe isles may be regarded as outliers of the system, isolated by the ocean.

15. The Alpine or *South mountain-system* includes the Pyrenees, Alps, and Balkan, a gigantic highland belt, extending without much disruption from the Atlantic on the west, to the borders of the Black Sea on the east, and forming the spine or back-bone of Europe. To this primary zone the ranges of Spain, Italy, and Greece, on the south, with those of France, Germany, and Hungary on the north, stand in the relation of offsets, spurs, or buttresses. The Alps, the central, loftiest, and most important portions, are divided by geographers into various sections. There are the Maritime Alps, or those nearest the coast, extending from

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the neighbourhood of the Gulf of Genoa to Monte Viso; and the Cottian Alps, stretching from thence to Mont Cenis. Next follow the Graian or Grecian Alps, as far as the Col du Bonhomme; then the Pennines to Mont Rosa; the Lepontines to Mont Bernardin; the Rhætians to the Drey-Herren Spitz, or Three Lords' Peak, in the Tyrol; and the Noric Alps from thence to the vicinity of Vienna. Finally, from this point, the Carnic range diverges in a different direction, south by east, continued by the Julian and the Dinaric, the last of which connects the great system of the Alps with the western extremity of the Balkan. The highest peak, Mont Blanc, in Savoy, 15,750 feet, is the culminating point of Europe; and is visible at Dijon, at the distance of a hundred and fifty miles. 16. The form of the mountain is pyramidal, as seen from the north and south, but from the valley of Chamouni it resembles the back of a dromedary, on account of which BOSSE DE DROMEDAIRE is one of its local titles. The summit, a ridge nearly two hundred feet in length, was reached for the first time in August, 1785, by Dr. Paccard and James Balma; and the year following, Saussure succeeded in the same enterprise, remaining five hours upon the top, making scientific experiments. In the autumn of 1834, Dr. Barry ascended with a principal guide, who had been up eight times before, and was the survivor of four swept away by an avalanche in Dr. Hamel's attempt in 1820. The ascent is now commonly accomplished by summer tourists, though great bodily hardihood and extreme caution are required to avoid perilous incidents.

17. Europe is everywhere well watered. But as the surface exhibits two great slopes, north-west and south-east, the latter being immensely superior in its area to the former, there is a grand development of flowing water in a south-easterly direction. The most important rivers, as to magnitude, are the Volga, which discharges into the Caspian; the Danube, Dnieper, and Don, entering the Black Sea; the Rhine, Vistula, and Rhone, flowing respectively to the North Sea, the Baltic, and the Mediterranean. Representing the length of the Thames, with the size of its basin, and the quantity of water discharged per annum, by 1, the proportionate lengths, &c. of the first class streams are as follow:—

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	Length.	Size of Basin.	Annual Discharge.
Thames	1	1	1
Vistula	4¼	13½	12
Rhine	4½	12½	13
Don	7½	37	38
Dnieper	7¾	36	36
Danube	9¾	56	65
Volga	14	94	80

18. The Volga and the Danube discharge nearly as much water as all other European rivers collectively. Again, representing the whole river water of Europe by 100, the proportionate contributions received by the different seas are:—

Arctic Ocean and White Sea . .	6 parts
North Sea	11
Baltic	13
Atlantic	13
Mediterranean	14
Caspian	16
Black Sea	27
	100

Thus nearly one half of the superficial drainage is conducted south-east to the Caspian and Black Sea.

19. Two *Systems of lakes*, northern and southern, may be distinguished. The former comprehends those in the countries around the Baltic, where they are most numerous, and as well as of the largest class. But their shores are generally tame and dreary, while their waters are ice-bound through the winter months. The most extensive is Lake Ladoga in Russia, which covers an area of 6,330 square miles, more than equal to that of the whole kingdom of Saxony. Next in extent is the neighbouring Lake Onega, after which comes Lake Wener in Sweden, with areas of 3280 and 2136 square miles. The lakes of the southern system are comparatively small, but are generally invested with great natural attractions, as those of Geneva, Lucerne, and Zurich in Switzerland, with those of Garda, Maggiore, and Como, in the north of Italy. These are all fresh-water formations. But in the great plain of Hungary there are large shallow expanses, without outlets, which are brackish or extremely salt.

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20. The CLIMATE due to the latitude of Europe is very materially modified by three great physical causes:—1st, the cold produced by the vicinity of northern Asia, in all the countries exposed to the chilling winds which come from the polar ocean and the frozen plains of Siberia; 2nd, the heat produced by the vicinity of Africa, in those countries which, lying nearest that portion of the world, feel in a greater degree than others more remote, the influence of the hot winds proceeding from its burning deserts; 3rd, the higher and more uniform temperature produced by the Atlantic Ocean, and the *Gulf Stream*, in those countries directly exposed to the prevalent south-west winds, which sweep over that vast expanse of water. But the principal variations of climate experienced in Europe, may be generally indicated in their limits *by three zones*, southern, central, and northern; and in their character as warm, temperate, and cold.

21. The *Southern Zone*, with a warm climate, comprehends the space south of the parallel of 45°, which intersects Europe from the mouth of the Garonne to that of the Danube. It includes the Spanish peninsula, the south of France, Italy, Turkey and Greece. The winter is here of short duration, the cold slight, and vegetation suffers little interruption. Snow is rare, and rapidly disappears from the surface. The heat in summer frequently reaches 106°; and long droughts alternate with abundant rains.

22. The *Central Temperate Zone* extends from the preceding to latitude 60° on the west, and 51° on the east, answering to a line drawn between the Shetland isles and the Ural mountains in the Russian government of Orenburg. It comprises the British isles, two-thirds of France, the whole of Germany and Hungary, southern Russia, and the south of Norway and Sweden. The four seasons are distinct in this region, and gradually interchange, but are of unequal duration, the winter being the longest. Heavy falls of snow occur, with severe and protracted frosts. The contrast between the temperature of the summer and winter is great in general; but becomes much more strongly marked proceeding from west to east.

23. The *Northern Cold Zone* embraces the remainder of Europe to the Arctic Ocean, including almost all Norway, three-fourths of Sweden, Lapland, Finland, and the north

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of Russia. A long rigorous winter here alternates with a brief warm summer; and the two interchange so rapidly as almost to obliterate spring and autumn from the calendar of the seasons.

24. In ancient times, the climate of Europe, at least in the central and southern countries, was much more rigorous than at present. The mean temperature of Spain, Italy, and Greece, was lower; while Gaul and Germany experienced the severities of an arctic winter. Hence the barbarians usually selected the winter season for their warlike incursions into the Roman provinces, on account of the facility afforded by the ice for the transport of their armies across the great rivers, the Rhine and Danube, which have never been so frozen in modern times as to admit of such an occurrence. Ovid describes the cold of the Euxine, and its adjacent coasts, in terms which would suit the shores of the Baltic; and in the latitude of Saxony the legions of Drusus and Germanicus endured the hardships of a Russian winter. The well-attested existence of the elk and rein-deer in southern Germany, and the tribute of furs which the Romans imposed upon their Rhenish provincials, imply a temperature far below that of the same regions at the present day. The more genial character of the climate has no doubt been caused by the destruction of the forests, the drainage of bogs and marshes, and the cultivation of the soil.

25. The *Vegetation* of Europe varies in its form from the tropical to the arctic. In the extreme south, the dwarf-palm, banana, cactus, and sugar-cane appear, occupying limited areas. But over an extensive space in the three southern peninsulas, we meet with the golden fruit of the orange and citron, while the olive, fig, and black mulberry mingle their foliage with the scarlet blossoms of the pomegranate, evergreen trees are conspicuous, and the vine yields a strong and highly-coloured wine. The olive has its northern limit in the south of France; but the vine, less impatient of a cold winter than of a cool summer, brings its fruit to perfection as far north as the parallel of Berlin. This is, however, specially the region of rich corn-fields and verdant meadows, with common fruits and deciduous trees. In the northern countries, the oak, elm, and lime, disappear about lat. 61°,

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the cultivation of wheat extends to lat. 64°, and of barley and rye to 70°; but a favourable aspect and season are required to produce a crop. Farther north, the only vegetation consists of the dwarf-birch, a mere bush growing in shattered hollows, with a few trailing shrubs, mosses and other cryptogamia, and a few herbaceous and flowering plants.

26. The *Zoology of Europe* is less varied than the botany. Two entire groupes of the animal kingdom have no representative, the Marsupialia and Edentata, pouched and toothless quadrupeds. One species of the four-handed or monkey tribe, an import from Africa, has long been naturalised upon the rock of Gibraltar; and one species of the thick-skinned race, the wild-boar, occurs in the forests. The most interesting of the rodents, the beaver, clings to the banks of some of the great rivers, living in burrows. In the Transactions of the Berlin Natural History Society for the year 1829, an account is given of a colony of from fifteen to twenty individuals, settled for more than a century and a half on a tributary of the Elbe, in a lonely canton of the Magdeburgh district. The carnivorous animals are mostly insignificant, with the exception of the white polar bear, the brown bear, wolf, and lynx. The ruminants comprise the rein-deer and elk in the north; the red-deer, fallow-deer, and roebuck, widely distributed in the central districts; the chamois and ibex, found on the highest ridges of the mountains; the moufflon, a species of wild mountain sheep, in Sardinia and Corsica; the auroch, or wild ox, preserved in the Lithuanian forests; and the Bactrian camel, pasturing in the south-eastern steppes. Among the domesticated animals, the horse and ox thrive from south to north, and pass within the polar circle; but the ass, less capable of enduring cold, does not attain so high a latitude, and exists generally in a degenerate condition, as compared with his Asiatic congeners.

27. While far inferior to other divisions of the globe in the supply of native gold, silver, and precious stones, Europe is just as superior to them in yielding the metals and minerals which are of most importance in manufactures and the arts of life—iron, lead, copper, tin, coal, and salt—possessing them apparently in inexhaustible quantities, and often in close juxta-position. The countries mentioned after each of these

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articles are arranged according to the comparative extent of their produce. IRON—Great Britain, Russia, Belgium, France, Germany, Norway and Sweden: LEAD—Spain, Great Britain and Ireland, Austrian Empire, Germany, France, Norway: COPPER—Great Britain and Ireland, Russia, Austrian Empire, Sweden and Norway: TIN—England, Saxony, Spain: COAL—Great Britain and Ireland, Belgium, France, Germany: SALT—Russia, Austrian Empire, France, Spain, Great Britain and Ireland. GOLD is chiefly obtained in Russia, Hungary, and Transylvania; SILVER in Hungary, Transylvania, Bohemia, Saxony, and Hanover; and QUICKSILVER from the mines of Almaden in Spain, of Idria in Austria, and of Wolfstein in Bavaria. Nowhere are *mineral springs* proportionably so numerous and varied as in Europe.

28. Complete obscurity rests upon the early peopling of Europe. But three streams of population were received at an ancient date, the Celtic, Teutonic, and Sclavonian, which are still sufficiently distinct to be discerned among the present inhabitants, though intermingling with each other in certain localities. The *Celts* and *Cimmerians* came first; and being driven westward by succeeding immigrants, permanently settled in the western countries, where pure Celtic blood is found at the present day. The *Teutons*, who arrived at different epochs, established themselves in two great divisions in Scandinavia and Germany, spreading to Iceland and Great Britain. The *Sclavonians*, or as the ancients denominated them, Scythians and Sarmatians, settled in the eastern and south-eastern countries, and seem not to have passed the river Oder in their western migrations. These races, constituting the main mass of the inhabitants, belong to the Indo-European, or Caucasian variety of mankind. By intermingling with each other and with aboriginal tribes, of whom nothing is known, beyond their probable existence, the nations of mixed blood arose, as the Greeks, Latins, French, Spanish, and Portuguese, with part of the British and Irish.

29. Besides these great families, there are smaller sections of the European population, belonging to the Mongolian division of mankind, as the Turks, the Magyars, the Finns and Lapps, the Samoides, and the Kalmucks. In addition,

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there are Jews, members of the Caucasian race, with Gypsies, of unknown origin, generally diffused. Dr. [Kombst gives the following summary of Europeans :—

Of Pure Blood.]

Celtic	12,000,000
Teutonic	52,000,000
Sclavonian	50.000,000
Magyar	9,000,000
Finns and Samoiedes	3,000,000
Tatar	2,000,000
Jews	2,000,000
Total	130,000,000

Of Mixed Blood.

Teutonic-Celtic	22,000,000
Teutonic-Sclavonian	6,000,000
Teutonic mixed with Walloons in Belgium	1,200,000
Teutonic Northmen in Normandy	1,500,000
Celtic, in its various crosses	56,000,000
Sclavonian	6,000,000
Lettons, in Livonia, mixed Finnic and Sclavonian	2,000,000
Turks	4,000,000
Turco-Tatar-Sclavonian, in Russia	2,600,000
Kalmuck, between the rivers Volga and Don	300,000
Total	101,500,000

Total of Pure Blood	130,000,000
Total of Mixed Blood	101,600,000
Gypsies	.600,000
Grand Total of Population of Europe	232,200,000

30. The population is densest in Belgium, England, and Holland; and the most spare in Norway, Sweden, and Russia.

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31. CHRISTIANITY in its various forms sheds a benign influence over the surface of Europe, which has long been its principal seat and centre, though not its birth-place; and is professed by nearly the whole of its numerous inhabitants. It may be said with sufficient correctness, that three communions, the Roman Catholic, the Greek, and the Protestant, constitute three great religions and geographical divisions, since the first prevails in the southern, the second in the eastern, and the third in the northern countries. The *Roman Catholic Church* is dominant, and almost exclusive in Italy, Spain, Portugal, the Austrian Empire, France, Belgium, and Poland. It extends its authority over three-fourths of Ireland, nearly one half of the Swiss confederation, and of the secondary states of Germany; and over a fractional part of the inhabitants of Great Britain, Holland, and Turkey. Its members, of whom the Pope, one of the sovereign powers, is the head, are far more numerous than those of any other communion. The *Greek Church*, which agrees in all important points with the Roman Catholic, except that of the papal supremacy, prevails in Russia, Greece, the Ionian Isles, Servia, Moldavia, Wallachia, and part of the Austrian dominions. The *Protestant or Reformed* religion is professed almost exclusively in Norway, Sweden, and Denmark; and prevails in Great Britain, Prussia, Holland, Finland, the Baltic provinces of Russia, many of the German States, and the Swiss cantons.

32. Among the non-Christian portion of the population, *Mohammedanism* is professed by the Turks, part of the Al-

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banians, and all the Turco-Tatars in Russia; *Judaism* is universally the religion of the Jews; *Lamaism*, a species of Buddhism, is professed by the Kalmucks; and *Heathenism* lingers among the Samoides and other tribes of the northern solitudes.

33. More than any other division of the globe, Europe offers facilities for the physical well-being of its inhabitants, and their proficiency in the arts which elevate or refine mankind. No hot pestilential blasts condemn its plains to sterility; no barren and dangerous deserts separate its races; but numerous rivers and far-penetrating seas furnish them with natural paths for the inter-communication, which stimulates activity, and promotes the general advance, by mutual exchange of commodities and acquirements. Though not the parent, or the earliest nurse of civilisation, it has been for nearly three thousand years that portion of the world where intellectual, moral, and political cultivation has been most assiduously and successfully pursued. The improvement of all the sciences, and the noblest productions of genius, belong exclusively to Europe; the fine arts have their chief seat in it; and all the great painters, sculptors, musicians, architects, statesmen, and orators, of ancient and modern times, were either Europeans, or their descendants planted in other countries. But during the modern era civilisation has left its former home in the sunny south, crossed the Alps and Pyrenees, and become conspicuous on their northern side. The British, French, and Germans, are now eminently the advanced nations, a position once held by the Greeks, Italians, Spanish, and Portuguese, who have not only been outstripped in the race of improvement, but have positively declined.

34. Europe is politically divided into upwards of *fifty independent states*, of which the larger proportion belong to Germany, and are, in many instances, very insignificant, entirely indebted for their existence to the mutual jealousies of the principal powers. Of the important states, *four are empires*, France, Austria, Russia, and Turkey; and *fifteen are kingdoms*, Great Britain and Ireland, Prussia, Belgium, Holland, Norway and Sweden, Denmark, Spain, Portugal, Sardinia, the Two Sicilies, Bavaria, Hanover, Saxony, Wurtemberg, and Greece. The remainder are grand-duchies,

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duchies, principalities, republics, and free cities, with an electorate, a landgraviate, and the States of the Church. The oldest empire is the Turkish, or Ottoman; next, the Russian, Austrian, and French. The oldest kingdoms are Spain, Denmark, and England; the youngest are Belgium and Greece. Five countries, Great Britain, France, Austria, Russia, and Prussia, have the style of *the five great powers*. The forms of government greatly vary, but may be generally reduced to three, namely, *Absolute Monarchies*, in which the sovereign has the sole power of making the laws, as in Russia: *Constitutional Monarchies*, where the supreme power is vested in the sovereign and the estates of the realm, as in Great Britain: and *Republics*, where the supreme power rests with representatives of the people, chosen solely by themselves, as in Switzerland.

35. The earliest mention of Europe by name, occurs in the Homeric hymn to Apollo; and, according to mythological story, it was derived from Europa, the "broad-browed" daughter of a Phœnician King. But with more probability the appellation is referred to a Semitic word, signifying the "land of sunset," as lying to the westward of the Greek archipelago, even as the Italian navigators of the middle ages denominated that portion of the Mediterranean lying to the eastward, the Levant, or the "region of sunrise." Another explanation, perhaps the best, refers the term to two Greek words, meaning the "broad land," originally applied to Thrace, and thence extended, which appearance that region would have to an inhabitant of any of the Greek islands, or of Peloponnesus itself. This view is supported by the fact, that under the Byzantine empire, one of the six dioceses of Thrace was called Europa, as if a vestige of the original designation of the country lingering within its limits.

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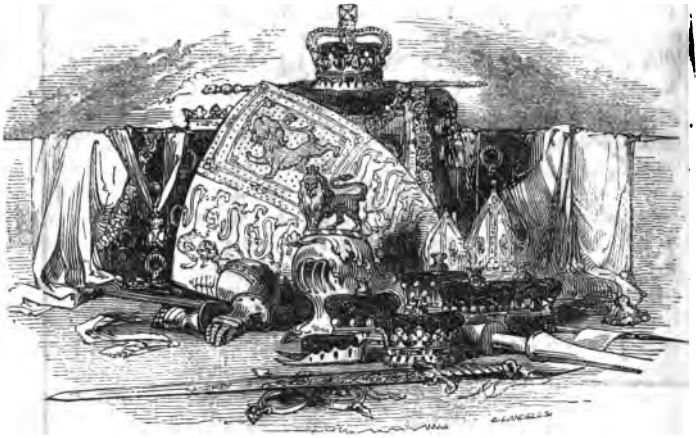

GREAT BRITAIN AND IRELAND.

1. The British Isles, or as they are officially styled, the United Kingdom of Great Britain and Ireland, consist of these two main masses, with a number of subordinate islands adjacent, occurring both solitarily and arranged in groups. It is remarkable that the entire number can only be conjecturally stated. At the end of March, 1851, when the last census was taken, a population was found and distinguished on 175 islands around Great Britain, dwindling down from tens of thousands to units. But this is exclusive of a great number around the shores of Ireland, the population of which is not discriminated in the Irish census from that of the adjoining mainland. If these are included, with the uninhabited insular tracts of some size, bare or scantily covered with pasture, which fishermen visit in their boats, and shepherds occupy in summer, the total number of the British Isles, omitting mere rocks and sandbanks, must be reckoned at between one and two thousand.

2. The most southerly point of land in the group, one of the Scilly Isles, is in latitude 49° 53′; and the most northerly,

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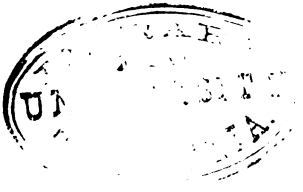
GREAT BRITAIN IRELAND & SCOTLAND
ACCORDING TO
THE CONSTITUTION OF 1832
SHEWING ALL THE PLACES WHICH RETURN
MEMBERS TO PARLIAMENT
IN CHARACTERS WHICH DISTINGUISH THE NUMBER RETURNED BY EACH PLACE
THE OLD FROM THE NEW BOROUGHS
AND ALSO SHEWING THOSE PLACES WHICH WERE THEN DISFRANCHISED.
WITH THE RAILWAYS.
EXPLANATION
Places returning more than two Members are ... LONDON
Old Boroughs returning two Members ... Liverpool
New Boroughs ... D° ... two ... D° ... Birmingham
Old Boroughs ... D° ... one ... D° ... Brighton
New Boroughs ... D° ... one ... D° ... Cheltenham
Boroughs disfranchised by the Bill of 1832 ... Stockbridge
Note. The Number of Members returned by the Counties respectively is attached, for ease in the reference.
ENGLISH CHANNEL
ST GEORGES C
MUNSTER
West Longi O tude East



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one of the Shetlands, in 60° 49′. The most easterly point is Lowestoft Ness, on the coast of Suffolk, in longitude 1° 46′ E.: and the most westerly is one of the Blasquet isles, off the coast of Kerry, in longitude 10° 30′ W. The direct distance between the remote points is about 760 miles, north and south: and 500 miles east and west.

3. GREAT BRITAIN is the largest island of Europe, and the most important in the world. It is situated off the western coast of the continent, being separated from it by the North Sea on the east, and the English Channel on the south, while divided from Ireland on the west by the Irish Sea. There are arms of the Atlantic ocean, which directly washes its shores on the north, north-west, and south-west. The opposite continental coasts are those of France, Belgium, Holland, Denmark, and southern Norway. The island is politically divided into two unequal portions, England and Wales on the south, and Scotland on the north, formerly distinct kingdoms, and still to some extent naturally distinct districts. The southern portion is the most extensive, level, and fertile. It is also characterised by the predominance of secondary and tertiary formations in its geology, while primitive non-fossiliferous rocks are conspicuous in the north.

4. In its general direction Great Britain extends in the line of the meridian, and narrows in breadth from south to north. Hence, in shape it rudely resembles a triangle, of which Dunnet Head in Caithness is the apex, while the Land's End in Cornwall, and the South Foreland in Kent, are the two extremities of the base line. The direct distances between these points amount to about 1460 miles. But the entire circuit of the island, measuring the inlets and estuaries up to the termination of the broader parts of their openings, is 3,112 miles. The salt-water coast line is much more extensive, and still more so the line of tidal influence. The greatest direct distance which may be traversed, without crossing an arm of the sea, is 580 miles, between the coast of Sussex and Cape Wrath in Sutherlandshire.

5. The total area amounts to 89,644 square miles, of which 50,922 belong to England, 31,324 to Scotland, and 7,398 to Wales. An idea of this extent as a whole, and the relative size of the respective parts, may be best con-

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veyed by having recourse to simple geometrical figures. Thus, adopting the figure of a perfect square, the area of England is equal to one of 226 miles to the side; Scotland to one of 177 miles; Wales to one of 86 miles; and the whole of Great Britain to a square of 299 miles to the side. Or adopting the figure of a circle, the area of England is equal to one with a radius of 127 miles; Scotland to one of 100 miles; Wales to one of 49 miles; and the whole of Great Britain to a circle with a radius of 169 miles. Ireland has an area of 32,513 square miles, which, added to that of Great Britain (89,644), and that of the minor islands in the British seas (394), gives a total of 122,551 square miles, for the superficial extent of the United Kingdom.

6. The CLIMATE of the kingdom is remarkable for its mildness, compared with that of continental districts, in corresponding latitudes, and at the same elevations above the sea, whether European, Asiatic, or Trans-Atlantic. Not only is the mean annual temperature higher by from ten to twenty degrees, and even more in some instances, but the seasons are never in such violent contrast. This arises from the vast surrounding expanse of ocean, for water everywhere preserves a more uniform temperature than land; from the warm current of the Gulf Stream; and the prevailing south-west winds which blow up from the direction of the tropics. The greatest difference between the mean temperature of the hottest and coldest months is about 24°. But at Moscow, in the latitude of Edinburgh, it is 57°; and at Quebec, which is more southerly than any part of the British Isles, it is no uncommon occurrence for mercury to freeze in winter, and grapes to ripen in the open air in summer. The western sides, both of Great Britain and Ireland, are warmer than the eastern, being more exposed to the influences which contribute to raise the temperature.

7. The *vegetable productions* are identical with those of the mainland of Europe; but in some instances the flora exhibits a marked correspondence to that of the nearest continental sites. Thus, in the south-west of Ireland, some plants flourish in a wild state, which are found on the opposite north coast of Spain, but are not found really wild in any other part of the kingdom. In the south-west of England, the vegetation is intimately related to that of the opposite

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shores of Brittany and Normandy. Plants common to Alpine heights and Scandinavian lowlands appear in the Highlands of Scotland, more sparingly on the mountains of England and Wales, and still more so in Ireland, where the elevations are lower, and the climate milder. All plants generally diffused throughout the country are of the Germanic type, or common to the central parts of Europe. Species which may be peculiarly called British, because widely distributed over the whole island, and forming main components of the vegetation, include most of the timber-trees, the oak, wych-elm, birch, alder, ash, willow, and pine, with the hazel and black-thorn, many grasses, the common daisy, dandelion, and dog-rose. Species peculiarly English, diminishing from south to north, and scarcely entering Scotland at all, comprise the common elm, beech, and maple, with several ornamental or striking plants, as the sweet violet, daffodil, star of Bethlehem, mezereon, black bryony, traveller's joy, and the mistletoe. Species peculiarly Scottish belong chiefly to the true Alpine flora.

8. The largest *wild animals* belong to the order of ruminants. They comprise the stag or red deer, roaming in herds in the solitudes of the Scottish highlands, found also in retired localities in Ireland; the fallow-deer, probably an ancient rover of the forests, now confined to parks and pleasure grounds; the roebuck, limited to Scotland; the common goat, running semi-wild in parts of Wales; of some breeds of cattle preserved as curiosities by the nobility, believed to be the wild descendants of domesticated stock, which, in troubled times, escaped from the farms to the woods, and returned to a state of nature. The principal carnivorous animals are the badger, now very scarce; the wild cat, most frequently met with in Scotland; the fox, otter, and seal, with five members of the weasel family. Of the class of *reptiles*, there are thirteen species, all innocuous, except the viper, which, with the other snakes and the common toad, does not range to Ireland. The latter island has also only recently received the squirrel, introduced from England, chiefly to the county of Wicklow. Of *native birds* there are about 274 species, of which 230 are known in Ireland. Some of the summer visitors, as the cuckoo and the swallow, range over the whole kingdom, while the

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nightingale is more local. It does not visit Wales, Scotland, or Ireland, nor is it known in Cornwall, the west of Devon, or further north in England than the neighbourhood of York.

9. Owing to the increase and diffusion of the population, whole races of animals have been extirpated from the kingdom, as the beaver, bear, wild boar, and wolf; while others, once widely spread, have now a very restricted range, and individual examples of many are rarely met with. The beaver is commemorated by the name of Beverley in Yorkshire, signifying the "place of beavers," with two or three Welsh pools, called "beaver-lakes;" and historical notices of its existence in Wales come down to the close of the twelfth century. The bear was common in the Roman times, and long infested Scotland after its destruction in England. A few examples of the wild boar lingered in the New Forest, Hampshire, down to the reign of Charles I. The wolf was probably exterminated in England soon after the time of Edward I., who appointed officers to superintend and assist in its destruction. In Scotland, the last was killed in the year 1680, by Sir Ewen Cameron of Lochiel; but the race lingered in Ireland till the year 1710, when the last perished in the county of Cork.

10. Further geographical notices of the United Kingdom may be more conveniently introduced in three sections, referring to the three leading political divisions of the kingdom: 1. *England and Wales.* 2. *Scotland.* 3. *Ireland.*

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I. England and Wales.

1. The southern portion of Great Britain, which includes England and Wales, forms an extensive peninsula, bounded on three sides by the sea, and separated from Scotland on the north by a line drawn from the Solway Firth, along the Cheviot Hills, and the lower course of the river Tweed. The country thus circumscribed extends 362 miles in a straight line from north to south, following the meridian of 2° W., which intersects it from Berwick-upon-Tweed to the South coast; and about 280 miles in the opposite direction, between the shores of Pembrokeshire and Essex. But the extent, east and west, greatly varies, being contracted to 70 miles between Morecambe Bay, in Lancashire, and the mouth of the Tees; and to 62 miles, from the head of the Solway Firth to Tynemouth. From these measurements, as well as from an inspection of the map, it will be seen that the shape is very irregular, and rudely approaches to the fanciful delineation of the Romans, who represented it by the figure of a woman seated upon a rock, the well-known Britannia.

2. The *East coast*, on which the North Sea breaks, has,

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for the most part, a tame appearance, consisting of loose cliffs of chalk or clay, flat marshy lands, with some sandy levels, where the spires and towers of churches are frequently the only prominent landmarks to the seaman. The more considerable inlets are the estuaries of the Thames, of the rivers of the Wash, and of the Humber. The bolder projections are the North and South Forelands in Kent, terminating cliffs of chalk abounding with samphire; and Flamborough Head, in Yorkshire, a more striking cretaceous promontory, owing to its far advance into the sea. The name, signifying the "headland with the flame," is said to be derived from a beacon-fire, kept alight there in the time of the Danes, with whom it was a favourite station.

3. The *West coast*, washed by the Atlantic and the Irish Sea, is generally rugged, and exhibits magnificent scenery, especially in North Devon, and in Carnarvonshire, where the Snowdonian mountains advance to the water's edge, and rise up almost perpendicularly from it. It has the deep indentation of the Bristol Channel, containing Barnstaple, Swansea, and Carmarthen bays; the broad opening of Cardigan Bay; and the most extensive inlet of the sea in the kingdom, formed between North Wales, Lancashire, Cumberland, and South Scotland, in which are the estuaries of the Dee, Mersey, Ribble, Lune, and the Solway Firth.

4. The *South coast*, which forms the north border of the English Channel, has a tolerably regular outline along the shores of Kent and Sussex, but from thence, westward, occur the inlets of Southampton Water, Weymouth Bay, Tor Bay, Plymouth Sound, and Mount's Bay. The remarkable features are *Beachy Head* in Sussex, the highest point of the whole coast, a mass of chalk cliffs which overhang the beach, whence it derives its name; the shingle bar of *Hurst Castle*, a natural causeway running out from Hampshire towards the Isle of Wight, about a mile long, and seventy yards broad; the *Chesil bank*, connecting the peninsula of Portland with the mainland of Dorset, consisting of a ridge of pebbles, ten miles long, and but rarely a quarter of a mile wide; the *Lizard Point*, a promontory of Cornwall, the most southerly part of Great Britain, generally the first land seen and the last observed by home-

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ward and outward-bound vessels; and the *Land's End*, at the western extremity of Cornwall, a projection of granite from an iron-bound coast, forming the end or the beginning of that part of the kingdom, according as it is approached by land from the east or by sea from the west. The western side of a house in the neighbourhood has the inscription, in large letters, "This is the first Inn in England;" while the eastern side is inscribed with "This is the last Inn in England."

5. The *English Channel*, separating England from France, is upwards of 100 miles wide at its western or oceanic extremity, but at the opposite point, where it communicates with the North Sea, through the strait of Dover, the breadth is little more than twenty miles. In clear weather the opposite shores are distinctly visible. It has been supposed that this narrow passage was once closed by an isthmus, connecting Great Britain with the mainland of Europe, through which the sea cut its way in pre-historic times, and thus converted a peninsula of the continent into an island. The correspondence between the rocks and strata on the opposite coasts about Dover and Calais, with the fact of the same noxious animals, the bear and wolf, having existed on both sides of the strait since the date of authentic history, are the chief reasons assigned for the supposition. If ever an isthmus existed, its removal was a most felicitous change, for had it remained, the history of England would in all probability have been the history of a mere province of the continent.

6. The *subordinate isles* of any important extent are western and southern. They consist of the *Isle of Man* in the Irish Sea, nearly midway between England and Ireland, with judicial institutions and revenue laws peculiar to itself; *Anglesea*, off the north-west coast of Wales, and one of its counties, separated from the mainland by the Menai Strait, but now connected with it by a suspension, and a tubular bridge; the *Scilly Isles*, to the west of the Land's End, a compact group of from one to two hundred granitic masses, only forty of which have herbage, and six are inhabited; and the beautiful *Isle of Wight*, divided from the mainland of Hampshire by the channel of the Solent, and the great naval roadstead of Spithead. Besides these, there are the

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Channel Islands, consisting of Jersey, Guernsey, Alderney, and others, geographically belonging to France, but subject to the English crown since the eleventh century; and the *Isle of Thanet*, off the coast of Kent. *Holy island*, or Lindisfarne, off the Northumbrian shore, is of interest as a celebrated ecclesiastical site in the Saxon age, the seat of a bishopric, subsequently transferred to Durham; and as a semi-island, being only completely insulated on the flow of the tide.

7. The eastern, central, and southern parts of England, comprehending the greater proportion of its area, are generally level, presenting only a few chalk ranges and picturesque eminences, which do not reach any considerable elevation, but serve to diversify agreeably the surface of the country. But around the estuary of the Wash, there is an extensive tract of low, flat land, extremely monotonous, comprising portions of the counties of Lincoln, Norfolk, Cambridge, Huntingdon, and Northampton; called the Great Level of the Fens. Owing to the large amount of water brought down by the rivers, their very slight fall, and the lowness of the district, it is naturally exposed to floods from heavy rains, and to inundations of the sea, requiring a net-work of artificial channels, with hydraulic machinery, to promote drainage, and embankments, in order to keep the waters in check. By works of this kind, constructed at an immense expense, a region once nearly useless to man, consisting of stagnant pools and spongy earth, has been converted into rich meadows and corn-bearing lands.

8. On the west and north, the aspect of the country is bold, rugged, and occasionally mountainous. From the Scottish border, a range of the mountain-limestone extends southward to the centre of Derbyshire, a county remarkable for the extremely romantic character of its dales, especially Dovedale, and the grand caverns that open on their sides. The loftiest point is Cross Fell, 2901 feet above the sea, near the junction of Durham, Westmoreland, and Cumberland. Grander highlands are clustered on the west of this range, and are geographically connected with it, but geologically distinct, consisting mainly of slate rocks. They extend over about a third of Cumberland, a fourth of Westmoreland, and a small part of North Lancashire. The

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BRITISH ISLES
ATLANTIC OCEAN
NORTH SEA
IRISH SEA
BRITISH CHANNEL
SCILLY ISLES
SHETLAND ISLES
IRELAND
SCOTLAND
ENGLAND
FRANCE
Greenwich

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prominent elevations are Skiddaw, 3022 feet above the sea, Helvellyn 3055, and Sea Fell 3,166, the highest point of England.

9. A very large proportion of the surface of Wales consists of lofty ranges and groups, which have a close general relation, with high moorland tracts. Snowdon, "the snow-clad hill," in Carnarvonshire, forty miles in circuit, attains the height of 3,571 feet, and is the most elevated point of the kingdom, south of the Grampians.

10. Among the minor superficial irregularities, mention may be made of the *Malvern hills*, in Worcestershire, the *Cotswolds* in Gloucestershire, the *Mendips* in Somersetshire, the bleak plateaux of *Dartmoor* and *Exmoor*, with the three chalk ranges which diverge easterly from Wiltshire, and form the *Chiltern hills* in Buckinghamshire, and the *North* and *South Downs* in Surrey, Sussex, and Kent.

11. Owing to the westerly position of the higher elevations, the general slope of the entire country is towards the east; and hence most of the important RIVERS are formed in that direction, flowing to the North Sea. These, proceeding from north to south, are the Tyne, Wear, Tees, Humber, including Trent and Ouse, Witham, Nen, great Ouse, Yare, Orwell, and Thames, with Medway. On the western side of the kingdom, proceeding from south to north, there are the Parret, Severn, and Wye, entering the Bristol Channel; the Towy, flowing into Caermarthen bay; the Dee, Mersey, Ribble, Lune, and Eden, discharging into the Irish Sea. On the south, and connected with the English Channel, passing from west to east, there are the Tamar, the Exe, and Salisbury Avon, with several of minor note. *The three largest* examples of the whole, are the *Humber*, *Severn*, and *Thames*.

12. The *Humber* is the name of an estuary, formed by the junction of the Trent and Ouse. They geographically constitute a *single river system*, the most important in the British Isles as to the magnitude of its basin, which is very nearly equal to one-sixth of the total area of England and Wales. It comprises almost all Yorkshire, with the counties of Nottingham, Rutland, Leicester, Derby and Stafford, about one-third of Lincolnshire, part of Warwickshire, and small portions of Worcestershire and Lancashire. The *Trent* is the longest and

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largest tributary. It rises on the moorlands of north Staffordshire, and remarkably changes its direction, flowing first from north to south, then towards the north-east, and finally from south to north, passing the towns of Burton, Nottingham, Newark, and Gainsborough. Its name is said to be derived from its containing thirty varieties of fish. The *Ouse* has its remotest sources in the islands which form the border of Yorkshire, Lancashire, Westmoreland. After passing York, and receiving numerous affluents, it joins the Trent at Faxfleet. There the estuary of the Humber commences, and follows a winding course of forty miles to the North Sea, varying in breadth from two to four miles. Though much encumbered with shoals, there is a main channel available for ships of the largest size up to Hull, on the north bank.

13. The *Severn* is the longest of our rivers, owing to its circuitous route, for its actual length of 240 miles is twice the distance from source to mouth. It issues from a chalybeate spring on the east side of Plinlimmon in Wales, proceeds north to Shrewsbury, then bends to the south-east, and flows southerly by Worcester and Gloucester to the Bristol Channel, formerly called the Severn Sea. Few of our rivers are charged with such an amount of sediment, owing to its own course, and that of its tributaries, being for a considerable distance through tracts of marl and soft sandstone.

14. The *Thames*, though only the third in point of magnitude, ranks the first as a tidal river, and is commercially the most important stream on the face of the globe. It has its source in some springs on the south-east slope of the Cotswold hills, about three miles from Cheltenham. It is remarkable for the objects in its path, seats of learning, haunts of the muses, royal palaces and castles, the island of Magna Charta, the houses of parliament, military and naval hospitals and arsenals, with the great world of London. Through nearly the whole of its course, the Thames is a border river, separating Gloucestershire from Wiltshire, Berks and Bucks from Oxfordshire, Middlesex from Surrey, and Essex from Kent. The tide penetrates to Teddington, (*Tydington*), nineteen miles above London Bridge, and sixty-four miles from the Nore Light. Vessels of 1,400 tons burden ascend

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to Blackwall; and those of 800 tons come up to St. Katharine Docks, near the Tower. There is no other example in the world, with perhaps the exception of the Amazon, of a river being navigable for large sea-going vessels through so considerable a part of its course. The Medway, included in its basin, and the chief branch, enters the estuary at Sheerness from Kent.

15. Many of the second class rivers are of the highest commercial value, as the Tyne, Wear, and Tees, for the shipment of coal; and the Mersey for its noble expansion, before reaching the sea, facilitating the foreign trade of Liverpool. It flows through the cotton manufacturing district; and one of its affluents, the Irwell, on which Manchester stands, has been aptly styled, "the hardest-worked river in the world," from the number of mills and factories on its banks. The upper courses of most of the northern streams; with the banks of the Dove and Derwent, in Derbyshire; those of the Dee, Wye, and Towy, in Wales; and of the Tamar, in Cornwall, are renowned for their fine scenery.

16. The LAKES are few, and of unimportant size, chiefly confined to the Cumbrian mountains, where they occupy deep hollows and glens between them. But they are very celebrated for natural beauty, heightened by cultivation and charming residences on the banks. Windermere, the largest, is ten miles long, by from one to two broad. Next in extent are Ullswater, Coniston-water, and Derwentwater. Bala Pool, the largest lake in Wales, through which the Dee flows, is four miles long, but less than a mile broad.

17. England is politically divided into *forty counties*, or *shires*, and Wales into *twelve*, varying greatly in their size. Nothing certain is known of their origin. But they were almost all in being at the time of the Norman Conquest, and appear to have been formed gradually out of old divisions of the country, either distinct British royalties, or Saxon States. Thus Kent was formerly a Saxon kingdom of that name, and more anciently the British principality of Cantium. Each county has a lord-lieutenant, who is also custos-rotulorum, or keeper of the archives, a high-sheriff, and justices of the peace, all appointed by the crown; a treasurer, and a clerk of the peace, generally nominated by the lord-lieutenant; with elective coroners for holding

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inquests, and knights of the shire for parliamentary representation. By authority of the justices at quarter sessions, rates are levied for the maintenance of bridges, gaols, police, prisoners, lunatic asylums, and officials. In addition, there are certain cities and towns which are counties in themselves, with a jurisdiction independent of the authorities of the general county in which they are situated, as London, Canterbury, York, Hull, Coventry, Norwich, and Bristol.

18. Most of the counties are divided into a variable number of *hundreds*, which are mentioned in the Domesday return (1086) as well-known sections of territory. The term is supposed to refer either to the district containing originally a hundred free families, or a hundred hides of land, the hide being equal to from 100 to 120 acres, arable, meadow, forest, and marsh. But in Northumberland, Cumberland, Westmoreland, Durham, and Lancashire, the corresponding districts are termed *wards*, while Yorkshire is distributed into three large portions called *ridings*, which are subdivided into *wapentakes*. The latter answer to the "hundreds," and are common to Lincolnshire and Nottinghamshire. The name is said to have had its origin in a custom observed by the followers of a chieftain, who touched his *weapon*, or spear, fixed in the soil, as a sign of recognition at his installation. Kent is divided into five sections, termed *lathes*, and Sussex into six, called *rapes*, both of which are subdivided into hundreds. Minor divisions, made for spiritual purposes, are *parishes*, many of which, owing to their great extent, and the large increase of population, have been separated into *chapelries*, with boundaries as definite as those of the parent parish. Another division, of recent introduction, is that into *Poor-law Unions*, the names of which are generally derived from the principal market-town of the district.

The COUNTIES of ENGLAND may be conveniently arranged in distinct groups, namely, six northern, five north-midland, five eastern, six western, nine south-midland, and nine southern. In the following enumeration of them, the county towns are placed first, and printed in CAPITALS.

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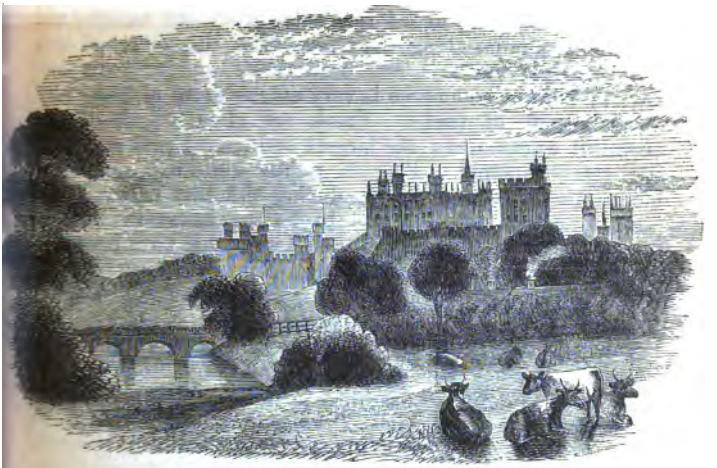

Alnwick Castle, Northumberland.

NORTHERN COUNTIES.

Counties.	Chief Towns.
1. Northumberland	NEWCASTLE-ON-TYNE, North Shields, Tynemouth, Berwick, Morpeth, Alnwick.
2. Cumberland	CARLISLE, Whitehaven, Keswick, Cockermouth, Penrith.
3. Westmoreland	APPLEBY, Kendal, Ambleside.
4. Durham	DURHAM, Sunderland, Monkwearmouth, South Shields, Gateshead, Darlington, Stockton.
5. Lancashire	LANCASTER, Liverpool, Manchester, Oldham, Preston, Bolton, Blackburn, Bury, Rochdale, Wigan. Warrington.
6. Yorkshire (Subdivided into—East Riding, West Riding, North Riding, Almstey of York.)	YORK, Leeds, Bradford, Halifax, Whitby, Huddersfield, Sheffield, Hull, Goole, Northallerton, Richmond, Scarborough, Wakefield, Pontefract, Harrowgate, Doncaster, Beverley.

1. NEWCASTLE, the capital of Northumberland, has its name from an old castle built by William the Conqueror, still existing, and in tolerable preservation, occupied by a local Antiquarian Society. The town stands on the north

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bank of the Tyne, about ten miles from its mouth, and extends two miles along the river. The shipment of coal, the principal business, has been carried on for some centuries; but the commerce is very extensive in almost every other branch of trade. There are glass, oil, lead, and chemical works upon the largest scale; and vast engineering establishments. Elegant public buildings, and spacious streets, have appeared during the last half century, with a covered market, said to be the finest in Europe. In an obscure alley, called Love Lane, the two brothers, Lords Eldon and Stowel, were born. *North Shields*, much smaller and comparatively modern, about eight miles lower down the Tyne, has the same general industry. Between the two places is the village of *Wallsend*, noted for its excellent coal. The name refers to the famous Roman Wall, ascribed to the Emperor Severus, which terminated to the eastward at the spot. *Tynemouth*, at the mouth of the Tyne, much resorted to in summer for sea-bathing, presents a bold landmark to the seaman, in a high rock crowned with the remains of an ancient priory. *Berwick*, on the north bank of the Tweed, near its mouth, formerly considered a separate district, was attached to Northumberland by the Reform Bill in 1832. It has been the scene of many conflicts between the English and Scotch, being a border town, 337 miles from London, and 60 from Edinburgh. The battle of Halidon-Hill was fought in its immediate vicinity; and the scenes of Chevy-Chace and Flodden-Field are within the limits of the county. *Morpeth*, a neat and populous town, has one of the largest cattle-markets in England. *Alnwick* is celebrated for its magnificent castle, supposed to have been founded in the time of the Romans.

2. CARLISLE, the capital of Cumberland, an episcopal city of ancient date, and once of great military consequence, is situated on the river Eden. A castle, cathedral, and noble stone bridge are the conspicuous objects. The castle, founded by William Rufus, is maintained in perfect repair, and usually contains a considerable store of arms; it was one of the places in which Mary, Queen of Scots, was confined. The city, formerly walled, was held for the crown during the great civil war, and was besieged for eight months in 1644, and only surrendered when the inhabitants were reduced to the last extremity by famine. Ma-

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nufactures of cottons, woollens, and hardware are now carried on to some extent. *Whitehaven*, on the coast of the Irish Sea, is a coal-shipping port, with yards for ship-building, sail-cloth and rope manufactories. The collieries are so close to the town, that some of the mines run beneath it, while others are worked to a considerable distance under the sea. A village in the neighbourhood, *St. Bees*, has a college, where candidates for Holy orders are economically educated. St. Bees' Head is a bold promontory of the coast, surmounted by a lighthouse. *Keswick*, centrally situated in the Lake district, in a large and fertile vale, is much resorted to by summer tourists. The remains of Southey are here interred, in the isolated parish church. A few miles distant, on the side of a mountain, is the famous plumbago mine, which gave our lead-pencils repute on the continent as the *crayons d'Angleterre*. It was accidentally discovered in the reign of Queen Elizabeth; but is now very much exhausted. *Cockermouth*, a thriving town, is the polling-place of the county; here the poet Wordsworth was born. *Penrith* is in the Vale of Inglewood Forest.

3. APPLEBY, the capital of Westmoreland, is the smallest of the English county towns, and exceeded in population by many a village. *Kendal*, the only important place in the county, has some considerable cotton and woollen manufactures, furnishing rugs and railway wrappers. It was one of the first provincial towns in which a newspaper was printed. *Ambleside* is romantically located among lofty mountains, on the Windermere lake.

4. DURHAM, an old city, nearly in the centre of the county, occupies a rocky eminence, almost surrounded by the river Wear, the banks of which are finely wooded. It possesses a venerable cathedral, and a young University, the latter founded in 1831, by the dean and chapter. At *Neville's Cross*, in the vicinity, Philippa, queen of Edward III., defeated and took prisoner David II. of Scotland. *Sunderland*, a populous port at the mouth of the Wear, forms a single great town for parliamentary purposes, with *Bishop Wearmouth* adjoining, and *Monk-Wearmouth*, on the other side of the river, with which it is connected by a vast iron bridge of a single span, stretching 236 feet. *South Shields*, at the mouth of the Tyne, opposite *North Shields;* and *Gateshead*, opposite Newcastle, but communicating with it

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by a fine bridge, are largely engaged in the coal-trade and ship-building. Other places in the county are, *Darlington*, on the Skerne, and *Stockton-on-Tees*, in the southern part, remarkable as the first places in England, and indeed in the world, which were connected by a railway admitting of passenger traffic; this was opened in 1825.

5. LANCASTER, the county town of Lancashire, on the south bank of the Lune, and once a strong military post, is now a town of inferior note, but retains its fine old castle, used as a county gaol. *Manchester* and *Salford*, two distinct boroughs on the river Irwell, in the south-east quarter of the county, form one great continuous city, the second in the kingdom, in point of population, and the capital of the cotton manufacture. Every branch of it is carried on to an enormous extent, with that of silk, metal-wares, machinery, chemicals, and almost all other branches of industry. The prosperity of the place is mainly due to its natural position, in the centre of an extensive coal-field, intersected with streams of considerable power, and to the skill and enterprise of its inhabitants. In the year 1801, the population amounted to 94,876; and in 1851, to 401,321. Manchester first returned members to parliament in 1832; was incorporated for municipal purposes in 1838; and was soon afterwards made the seat of a bishopric. It has many benevolent, scholastic, and scientific institutions; and is justly proud of having had for one of its citizens the eminent chemist, Dr. Dalton. *Liverpool*, ranking third in the kingdom in point of population, and next to London the largest sea-port, is situated on the northern bank of the Mersey, near its mouth, and extends from three to four miles along the shore. The broad river affords good anchorage to any number of vessels; and from it, the view of the long line of docks, quays, and warehouses, with the splendid public buildings of the town, is most imposing. It is the great port of the cotton district, receiving the raw material, chiefly from the United States, and exporting it in the manufactured state to every part of the world. In 1801 it contained 82,295 inhabitants; and in 1851, 375,905. The other towns enumerated are all extensively engaged in the cotton trade, except *Rochdale*, on the borders of Yorkshire, where woollen fabrics, especially flannels, predominate. *Blackburn* may be mentioned as having given birth to

Hargreaves, the inventor of the "spinning-jenny;" *Preston* to Arkwright, the successful constructor of the "water frame;" and *Bolton* to Crompton, the inventor of the "mule jenny." Oldham, Wigan, Bury, and Burnley are all largely engaged in manufactures.

6. YORKSHIRE, as already indicated, is divided into three great districts, severally called *North*, *East*, and *West Riding*. A fourth district, formerly called the *Ainstey of York* is now, by Act of Parliament, joined to the North Riding. YORK, the capital of the largest county in England, and, at the time of the Norman conquest, the chief city in Britain, is an archiepiscopal city of great antiquity, situate on the river Ouse (in the Ainstey of York), and retains its walls, gates, and posterns. But it is now chiefly remarkable for its minster, or cathedral, a Gothic building of almost unequalled grandeur. This was set fire to by the crazed incendiary, Jonathan Martin, in 1829, by which the choir was partly destroyed; and, in 1840, an accidental fire destroyed the south tower; but both have since been restored. A few miles to the west of York is *Marston Moor*, where the Royalist forces were signally defeated by the Parliamentarians in 1644; and at a short distance to the south is the field of *Towton*, where the Lancastrians were beaten by the Yorkists, during the wars of the Roses, in 1461. LEEDS, on the Aire, in the *West Riding*, is the chief town of the district, and the great emporium of the cloth manufacture. A new town-hall, opened by the Queen in 1858, is one of the finest buildings of the kind in the kingdom. A weekly cloth-market is held in two commercial halls, one of which is for undyed cloth, and the other for coloured. The chief curiosity of the town is a flax-spinning mill, consisting of a single story, and a single room; its area is more spacious by seven times than Exeter Hall, London, by five times than Westminster Hall, and by one and a half than the General Post Office. The population of York in 1801, was 53,162; and 172,170 in 1851. *Bradford*, *Halifax*, *Huddersfield*, and *Wakefield* are important towns in the neighbourhood, the first chiefly engaged in worsted-spinning, and the latter in the production of both worsted and woollen goods. *Sheffield*, famed for its cutlery, mentioned by Chaucer in the thirteenth century, is very finely situated on the Don, near the south-western margin of the Yorkshire coal-field. At the Paris Industrial Exhibition a greater number of

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medals were awarded to its exhibitors than to those of any other place; and a gold medal was presented to the town itself, by the jurors, as a special mark of honour. *Hull*, one of the principal seaports on the north bank of the Humber, the great mart for the building and equipment of ships, has an extensive commerce with the Baltic countries, and takes the lead in the northern whale fisheries. The other maritime towns of the county are, *Whitby*, the birth-place of Captain Cook, with large alum-works in its neighbourhood; *Scarborough*, resorted to for its medicinal springs and sea-bathing; and *Goole*, a modern and thriving out-port, on the Ouse. Other inland towns are, *Wakefield*, the electoral capital of the *West Riding*, a large corn, wool and cattle mart; *Barnsley*, a chief seat of the linen manufacture; *Rotherham*, with extensive collieries and iron works; *Doncaster*, situate on the river Don, noted for horse-races which have been held here since 1703; *Richmond*, *Northallerton*, and *Malton* are agricultural towns. BEVERLEY, the electoral capital of the *East Riding*, has a fine minster; *Ripon* has also a fine minster, and was made a bishop's see in 1836; *Knaresborough* is celebrated for its dropping well; *Harrowgate*, for its mineral springs; *Pontefract* is connected with the murder of Richard II., in its castle, of which a few vestiges remain.

Scarborough.

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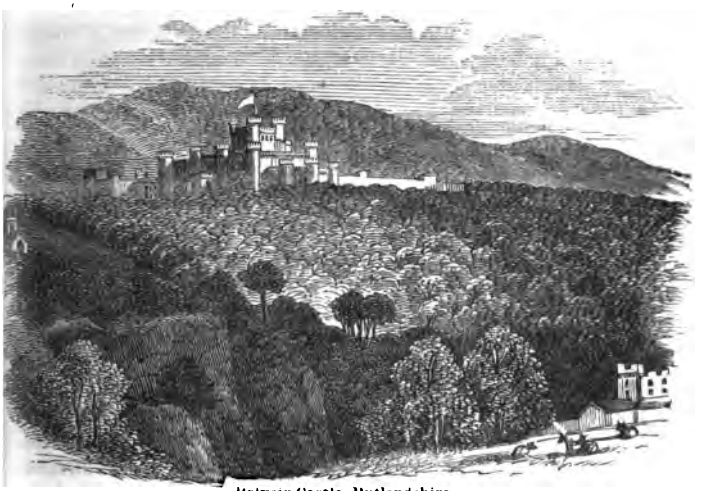

Belvoir Castle, Rutlandshire.

NORTH-MIDLAND COUNTIES.

7. Derbyshire . . DERBY, Belper, Chesterfield, Matlock, Buxton, Wirksworth, Ashbourne.
8. Staffordshire . STAFFORD, Stoke-upon-Trent, Wolverhampton, Lichfield, Walsall, Bilston, and the POTTERIES.
9. Nottinghamshire NOTTINGHAM, Newark, Mansfield.
10. Leicestershire . LEICESTER, Loughborough, Melton Mowbray, Ashby-de-la-Zouch.
11. Rutland . . . OAKHAM, Uppingham, Belvoir.

7. DERBY, on the river Derwent, the centre of an extensive system of railways, has the silk manufacture for its staple. The first silk-mill in the kingdom was erected here in 1717, on an island in the river, in which Hutton the historian was employed when a child. The first cotton-mill, Arkwright's, was also erected on the same river, at *Cromford*, thirteen miles to the north. Both remain entire, and are devoted to their original purpose. Derby was the southern limit of the Pretender's advance from Scotland in 1745.

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Belper, a modern town, has been chiefly called into existence by the cotton-works of the Messrs. Strutt, one of whom, on recently becoming the first ennobled cotton manufacturer, took the title of Lord Belper. *Chesterfield*, connected with collieries, iron-works and potteries, has *Chatsworth* in its neighbourhood, the splendid seat of the Duke of Devonshire, the large conservatory of which gave the idea of the Crystal Palace. *Matlock* and *Buxton* are fashionable watering-places, surrounded with fine scenery and many natural curiosities. St. Ann's Well, at the latter, rises in carboniferous limestone at a temperature of 33° above the vicinity. No thermal waters occur further north in the kingdom. *Wirksworth* and *Ashbourne* are market towns; the latter with an ancient church, erected 1240.

8. STAFFORD, on an arm of the Trent, in the centre of the county, has the boot and shoe manufacture, chiefly women's, for its staple. The large towns are northern and southern. In the former division, *Stoke-upon-Trent*, with *Burslem*, *Newcastle-under-Lyne*, *Hanley*, *Lane End*, and other places, actually connected or closely contiguous, form the remarkable region called the POTTERIES, by which name it is distinguished, in allusion to the leading industry. The marls of the district, which originated the production of earthenware at the spot, are not now used for the purpose; but instead of them the fine clays of Dorset, Devon, and Cornwall, with the flints of Kent. The manufactory established by Wedgwood, the "Father of the Potteries," which he called ETRURIA, after the ancient Italian state, famous for pottery, is carried on by his descendants, and has become a considerable village. In the southern division, *Wolverhampton*, with *Bilston*, *Wednesbury*, *Walsall*, and other contiguous places, form the iron region, devoted to its production, and that of iron goods. It has a very remarkable aspect: in every direction are seen furnaces and engine chimneys throwing out clouds of smoke, with heaps of burning coal in process of coking, and piles of ore calcining in their neighbourhood. The whole land has been so burrowed into for iron-stone and coal, that its hollowness is betrayed by sinkings of the surface, and houses declining from the perpendicular. *Lichfield*, a small cathedral city,

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noted as the birth-place of Dr. Johnson and Garrick; *Burton*, celebrated for its vast ale breweries; *Leek*, engaged in the silk trade, and *Walsall*, a large parliamentary and municipal borough town, having numerous iron and brass foundries, coal and lime works, malt kilns, &c., are all in this county.

9. NOTTINGHAM, a short distance from the Trent, on the north bank, is a populous and flourishing town. Cotton-hose and machine-lace are the important staples. A modern castle occupies the site of the ancient fortress, in which Mortimer was seized by the friends of Edward III., who obtained access by night, through a subterranean passage, still traceable in the castle rock. Here also Charles I. set up his standard at the commencement of the civil war. At *Newark*, towards the Lincolnshire border, now a great corn mart, the fugitive King gave himself up to the Scotch, who were investing the place, and lost the liberty he never regained. *Mansfield*, on the verge of Sherwood Forest, the scene of Robin Hood's adventures, is mentioned in ballads of that date. In the vicinity is *Newstead Abbey*, where Lord Byron resided.

10. LEICESTER, on the Soar, has a large population engaged in the production of worsted hose, other articles of that material, and cotton-thread. Cardinal Wolsey died at an abbey near the town, and was laid in an unknown grave. *Loughborough* is occupied with hosiery and machine-lace. *Melton Mowbray* is widely known as a great sporting centre. It has also one of the largest cattle-markets in the kingdom; and the so-called Stilton cheese was first made in the neighbourhood. *Ashby-de-la-Zouch*, a populous market town, has a ruined castle, in which Mary, Queen of Scots, was once confined. Near *Market Bosworth*, in the county, the decisive battle was fought, in 1485, which terminated the wars of the Roses.

11. OAKHAM, with one exception the smallest English county-town, is the capital of Rutlandshire, by far the smallest English county. It possesses one of the most beautiful specimens extant of the domestic architecture of the twelfth century, in an old hall, now used for county business, in which a number of horse-shoes are suspended. By ancient custom, still enforced, the authorities exact a horse-shoe from every peer of parliament on his first passing through the manor.

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Lord Campbell presented the last, in March, 1858. *Uppingham* has an ancient gothic church. The most remarkable feature in the county is *Belvoir Castle*, the seat of the Duke of Rutland, which stands on a commanding eminence, and with its domains verges on four counties. (*See our Vignette.*)

King's College, Cambridge.

EASTERN COUNTIES.

12. Lincolnshire . . LINCOLN, Boston, Louth, Grimsby, Stamford, Gainsboro', Grantham.
13. Cambridgeshire . CAMBRIDGE, Ely, Wisbech, Newmarket.
14. Norfolk . . . NORWICH, Yarmouth, Lynn, Thetford.
15. Suffolk . . . IPSWICH, Bury St. Edmunds, Lowestoft, Woodbridge, Sudbury, Bungay.
16. Essex . . . . CHELMSFORD, Colchester, Harwich, Maldon, Braintree, Saffron Walden.

12. LINCOLN, an ancient episcopal city, is finely situated at the base and on the acclivity of a lofty hill, from the summit of which a magnificent cathedral overlooks a most extensive landscape. Its great bell, Tom of Lincoln, weighs 50 tons. There are very interesting Roman and mediæval

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CALIFORNIA

remains here; and the humane and enlightened treatment of the insane originated at its Lunatic Asylum. *Boston*, near the mouth of the Witham, is a sea-port, from which large quantities of agricultural produce are sent to London. The chief object is the ancient church, with a fine lofty tower, surmounted by a lantern, which serves as a landmark for the dangerous navigation of the adjoining shores. *Louth*, a large manufacturing town, has a splendid gothic church, of which the spire is 288 feet high. *Grimsby*, an old port, at the mouth of the Humber, is becoming a place of considerable trade, having recently had its harbour improved, and new docks constructed. *Stamford* is an ancient market and borough town, of which a portion is in Northamptonshire. *Grantham* sends two members to Parliament, and is somewhat celebrated for its contested elections. Near it Sir Isaac Newton was born.

CAMBRIDGE, on the Cam, an affluent of the Ouse, is [illegible] of a university, consisting of seventeen colleges and [illegible] with a botanical garden, an astronomical observatory, [illegible]ther kindred establishments. It boasts of having pro[illegible]d Bacon, Milton, and Newton. The oldest foundation, [illegible] Peter's College, dates from the year 1284: the youngest, [illegible]wning College, was first opened to students in 1821. The chapel of King's College is justly deemed one of the most perfect specimens of Gothic architecture in the kingdom. *Ely*, a small cathedral city on the Ouse, is the capital of that portion of the county called the Isle of Ely, a name applicable to it before the drainage of the fens. *Wisbeach*, in the fens, has a church-tower supposed to be erected 1111. *Newmarket*, which is partly in the adjacent county of Suffolk, is famous only for its fine race-course.

14. NORWICH, an episcopal city, on the Wensum, is the capital of the county of Norfolk, and the most important place in the eastern counties; it is also one of the oldest seats of manufacturing industry in the realm. At an early period, refugee Flemings introduced the production of woollen and worsted goods. The latter fabrics have their name from the village of *Worsted*, in the neighbourhood, where stuffs of the kind were made in the reign of Edward II. Shawls, crapes, bombazines, and mixed goods are still extensively manufactured; and Norwich has recently become a

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shoe mart. *Yarmouth*, at the mouth of the Yare, and *Lynn*, near the mouth of the Ouse, are the principal sea-ports of the county. The former town has long been known for its activity in the herring-fishery, which it once nearly monopolized.

15. IPSWICH, on the Orwell, near the sea, the county town of Suffolk, has a considerable general trade, and one of the largest establishments in England for the manufacture of agricultural implements. It was the birth-place of Cardinal Wolsey. *Bury St. Edmunds*, an inland town, of great consequence in the Saxon times, is a leading corn and cattle mart, and has an excellent grammar school. *Lowestoft*, on the coast, the most easterly point of Great Britain, is resorted to for sea-bathing. Owing to modern improvements, the port is in active communication with the opposite coasts of the North Sea. *Woodbridge* is a considerable market town, has a large corn market, a grammar school, and docks. It has the ruins of its ancient priory. *Sudbury*, famous for its silk manufactures, and for having been disfranchised on account of gross bribery. *Bungay*, a well-built town, carries on a considerable traffic, dependent on the navigation of the *Waveney*.

16. CHELMSFORD, agreeably situated near the centre of the county of Essex, is only of note as the local capital. *Colchester*, on the Colne, a populous town, is largely engaged in the oyster-fishery for the metropolis. The oysters are bred in the numerous creeks and estuaries which indent the coast of the county. *Harwich*, an old sea-port, was formerly much frequented as a point of embarkation for Holland, but, since the introduction of steam-boats, has grown into desuetude. *Maldon*, where still prevails the custom of "Borough-english," by which the youngest son, and not the eldest, succeeds to the tenure. *Braintree*, an ancient market town on the Blackwater. Eight miles from the latter is Dunmow, famous for its Flitch of Bacon, the ceremonial of which is still maintained. *Saffron-Walden* derives its name from the circumstance of saffron having formerly been raised there in great abundance. Near it is *Audley End*, the ancient and very interesting seat of Lord Braybrooke.

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Iron Works, Colebrook Dale.

Western Counties.

17. Cheshire . . . Chester, Stockport, Macclesfield, Birkenhead, Cheadle, Congleton, Nantwich.
18. Shropshire, or Salop . . . Shrewsbury, Bridgenorth, Ludlow, Wellington, Oswestry, Coalbrookdale.
19. Herefordshire . Hereford, Leominster, Ledbury, Ross.
20. Monmouthshire. Monmouth, Newport, Chepstow.
21. Gloucestershire. Gloucester, Bristol, Stroud, Cheltenham, Cirencester, Tewkesbury.
22. Somersetshire . Taunton, Bath, Bridgewater, Frome, Wells, Wellington, Glastonbury.

17. Chester, the seat of a bishopric, situated on the Dee, is one of the most ancient and interesting places in the kingdom. It is the only English city which retains its walls in a complete state, affording an excellent promenade to the inhabitants. The cathedral is a plain building; the other public edifices are not important; but the examples of early urban domestic architecture are numerous and sin-

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gularly picturesque. *Stockport*, on the Mersey, is the most populous town of the county, and is engaged in the cotton manufacture. *Macclesfield*, the second in rank, is chiefly occupied with silk; as is also *Congleton*, a large town. *Birkenhead*, on the southern bank of the Mersey, opposite Liverpool, is remarkable for its surprising progress from a village of 200 inhabitants in 1821, to a town at present of 25,000, possessing spacious squares, docks, and a public park. The small towns of *Northwich*, *Nantwich*, and *Middlewich* are connected with salt works, as were originally all the towns ending in *wyke* or *wich*. The mineral is obtained both from brine springs in their vicinity by evaporation, and from beds of fossil or rock salt, worked by ordinary mining processes. The cheese of this county, renowned for its quality, has been long in repute; and large quantities of it, as well as salt, are exported.

18. SHREWSBURY, the capital of Shropshire, chiefly seated on a peninsula formed by the Severn, has considerable trade, and a royal free grammar school, raised to celebrity by accomplished masters, especially by Dr. Butler, the late Bishop of Lichfield. Three miles distant is "Battle-field," with a ruined church, built on behalf of those who fell there in the action between Henry IV. and Hotspur, in 1403. *Bridgenorth* is chiefly employed in the manufacture of malt, and is remarkable for its massive castle, built by King John. Here Charles II. was concealed in the oak. *Ludlow* has also the remains of a fine castle, and is a pretty town. *Wellington*, a small thriving town, is at the base of the Wrekin, a noted landmark, owing to its height and isolation. The populous district of *Coalbrook-dale*, in the county, may be mentioned as the place where coal was first profitably applied to the smelting of iron, and iron superseded wood on the tram roads. The first iron bridge ever constructed was here thrown across the Severn, and ornamental iron castings, exhibiting the principles of the fine arts, have here been applied to massive hardwares, in great perfection.

19. HEREFORD, an episcopal city, on the Wye, has an admired Cathedral, built on the model of that of Aix-la-Chapelle. The chief trade of the place, as well as of *Leominster* and *Ledbury*, is in hops and cider. *Ross* is famous as the birthplace of "the Man of Ross," immortalized by Pope.

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20. MONMOUTH, on the Wye, is unimportant, excepting as the birth-place of Henry V. *Newport*, much the largest town, near the mouth of the Usk, is a flourishing outlet for the produce of the South Wales coal field. *Chepstow*, a beautiful town on the Wye, near its junction with the Severn. The tide rises higher here than in any part of the world, sometimes 70 feet. The ruins of its castle and priory are interesting. In the neighbourhood is Tintern Abbey.

21. GLOUCESTER, a bishop's see jointly with Bristol, is situated on the east bank of the Severn, and commands considerable inland trade by means of the river and canals, with some foreign commerce. It was the birthplace of Whitfield; and here Sunday-school instruction originated. *Bristol*, on the Lower Avon, a few miles from its mouth, has long been known as a great commercial site, and ranks next to London and Liverpool in the list of English seaports. The foreign trade is chiefly with the West Indies, America, Spain and Portugal. The home traffic, especially with Ireland and Wales, is very important: and extensive manufactories of various kinds are carried on. Sebastian Cabot, Chatterton, and Southey were natives of the city. *Clifton*, a suburb, on a high rock, is celebrated for its fine scenery, and hot springs. *Stroud*, among the Cotswold hills, is one of the principal centres of the West-of-England clothing district. The production of fine woollen cloths grew up at an early period in the district, owing to the local breeds of sheep producing the shorter and softer stapled fleeces, and the country abounding with streams of pure water for scouring and bleaching purposes. *Cheltenham*, beautifully seated at the western base of the Cotswolds, has mineral springs in high repute, and has long been a very fashionable place of resort. *Cirencester* (pronounced Ciceter), an old Roman station, now occupied with carpets and cutlery. *Tewkesbury*, where Edward IV. triumphed over Margaret of Anjou, in 1471; and *Berkeley*, the birth-place of Jenner, are small towns of the county. Berkeley Castle was the scene of the inhuman murder of Edward II.

22. TAUNTON, the county town of Somersetshire, is in a luxuriant vale, sprinkled with villages and orchards, watered by the Tone. This little river, at its junction with the Parret, marks the site of King Alfred's retreat in his misfortunes, which was *the Isle of Athelney*, then insulated by a

morass as well as by the streams. *Bath*, a bishop's see jointly with *Wells*, is a large, populous, and handsome city, on the Lower Avon. The light-coloured oolite, quarried on the spot, of which the houses are chiefly built, gives them a rich and elegant appearance. Medicinal and hot springs have here been celebrated from an early period, and attract a crowd of invalids and visitors. They differ slightly in temperature, that of the warmest being 117°. In allusion to them, the Romans called the place Aquæ Solis; and the Saxons called it Bathun, also Achamunnum, or city of the sick. Bath has a fine Abbey Church, and Wells a venerable Cathedral. Near Wells is *Glastonbury*, a small town, famous for the ruins of its abbey, the oldest and, for a long time, the most magnificent in England. *Bridgewater* on the river Parret, a few miles from its mouth, has a coasting and some foreign trade. It produces the peculiar kind of red brick, used for cleaning and polishing purposes, known as Bath brick. The material is a mixture of fine siliceous sand and clay, brought into the river by the tide, and deposited on the sides at high water. In the neighbourhood is *Sedgemoor*, where the Duke of Monmouth was defeated in 1685. *Frome*, on a river of that name, is a seat of the woollen manufacture. *Wellington*, a small but handsome manufacturing town, gave our Warrior Duke his title.

Christchurch College, Oxford.

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SOUTH-MIDLAND COUNTIES.

23. Worcestershire .	WORCESTER, Dudley, Kidderminster, Stourbridge, Bromsgrove.
24. Warwickshire .	WARWICK, Birmingham, Coventry, Leamington, Rugby, Stratford-on-Avon, Kenilworth.
25. Northamptonshire.	NORTHAMPTON, Peterborough, Wellingboro', Daventry, Kettering.
26. Huntingdonshire.	HUNTINGDON, St. Ives, St. Neots, Stilton.
27. Bedfordshire . .	BEDFORD, Luton, Woburn, Dunstable.
28. Oxfordshire . .	OXFORD, Banbury, Woodstock, Witney.
29. Buckinghamshire.	BUCKINGHAM, Aylesbury, Great Marlow, Eton, Olney.
30. Hertfordshire .	HERTFORD, St. Albans, Ware.
31. Middlesex . . .	LONDON, Brentford, Uxbridge, Staines, Harrow.

23. WORCESTER, an episcopal city, on the eastern side of the Severn, is a hop and cider mart, and has manufactures of gloves and porcelain. Cromwell defeated here the forces of Charles II. in 1651. *Dudley* occupies a detached portion of the county, surrounded by South Staffordshire, and participates in its industry, iron-works and the coal trade. *Kidderminster*, on the Stour, is noted for its carpet-weaving, chiefly Brussels carpets, the manufacture of which was introduced by workmen brought from Belgium. Other towns of the county are *Stourbridge*, engaged in the industry of South Staffordshire; *Bromsgrove*, famed for its needles and buttons; *Droitwich*, where salt is prepared from brine springs, known to the Romans; and *Evesham*, famed for its garden-like vale. At *Redditch*, a populous village, and its vicinity, needles are made, to the amount of seventy millions per week.

24. WARWICK, on the Avon, the capital of one of the most picturesque of our English counties, is distinguished by its fine ancient castle and historical associations. Near it is *Leamington*, an elegant and fashionable watering-

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place, and within a few miles those romantic and interesting spots, *Kenilworth Castle* and *Guy's Cliff*. *Coventry*, a bishop's see, jointly with Lichfield, has two somewhat diverse principal occupations, the manufacture of ribbons and watches. *Birmingham*, near the centre of England, on two insignificant streams, is a vast town, the capital of the midland counties. All kinds of metal goods are made here; and the manufacture of glass is extensive. Its wares are remarkable for variety and discordance, being domestic and warlike, elegant and massive, sportive toys and deadly weapons, buttons for coats and ornaments for coffins, products of gold, silver, iron, and copper, or a compound of metals, or gold and silver without, iron or copper within. The place is not mentioned in history prior to the time of Henry VIII. It presented sword-blades to Cromwell's troopers; and first produced fire-arms in the reign of William III. The population was 70,670 in 1801; and 232,841 in 1851. The names of Priestley, Hutton, and Watt, are closely identified with the town. *Rugby* is a great central railway station, and possesses a grammar school of royal foundation, which has of late years risen to considerable distinction, in consequence of the judicious management of that eminent scholar, Dr. Arnold. *Stratford-upon-Avon* is of interest as the native place of Shakespeare, whose house is now preserved with great care.

25. NORTHAMPTON, pleasantly seated on ground rising up from the Nen, is the chief centre of the boot and shoe manufacture, executing large orders for the army, and foreign export. In the meadows by the river, a sanguinary battle was fought in 1460, when Henry VI. was taken prisoner by the Yorkists. Within a few miles of it is *Althorpe*, the seat of Earl Spencer, and the resting-place of the finest library in Europe. Some twelve miles to the north-west is Naseby-field, where Charles I. was decisively defeated by Fairfax and Cromwell in 1645. *Peterborough*, a bishop's see, has a fine cathedral, but is otherwise unimportant. A few miles from it is *Fotheringay*, where Mary, Queen of Scots, terminated her unhappy career. *Wellingborough* manufactures boots, shoes, and bobbin-lace. *Daventry* is a great horse market; in its neighbourhood is *Norton Hall* (the seat of Beriah Botfield, Esq.), where there is one of the finest private libraries in the kingdom.

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26. HUNTINGDON, on the Ouse, where Oliver Cromwell was born, and *St. Ives*, where he practised farming, are both inconsiderable, as is also *St. Neots*, where there are some paper-mills. *Stilton*, a small market-town in the northern part of the county, is famous for the cheese of its name.

27. BEDFORD, an agreeable town, on the Ouse, is noted for its richly endowed free-school, founded by Sir W. Harpur, in 1566, a native and alderman of London, and as being the town where Bunyan resided and preached for nearly twenty years, and was for twelve years in prison. *Woburn* is the magnificent seat of the Duke of Bedford. At *Luton* and *Dunstable* straw-plaiting is pursued, and made up into hats and bonnets. Bedfordshire is one of the seven counties which lie together without a city amongst them, and therefore without a cathedral.*

28. OXFORD, a bishop's see, is situate at the confluence of the Cherwell and Isis, in the midst of fertile meadows; and is the seat of one of the two principal English universities, consisting of nineteen colleges and five halls. The oldest, Merton College, dates from the year 1267. The public buildings and institutions include the Bodleian Library, containing upwards of 200,000 volumes; the Ashmolean Museum; the Clarendon Printing-House; the Ratcliffe Observatory; the Taylor and Randolph Institutes, and a Botanical garden. Europe has nothing of its kind superior, if equal, to the long High Street of the city, lined on both sides with magnificent buildings. *Woodstock* is chiefly known from the manor having been granted to the first Duke of Marlborough, on which stands the palace of *Blenheim*, erected by the nation in honour of his victory. *Banbury*, an agricultural market-town, with a large carrying trade on the Chirwell, is the site of the battle, in 1469, between York and Lancaster, and is famous for its cakes. *Witney* is celebrated for the manufacture of blankets.

29. BUCKINGHAM, the county town, adjoins the fine grounds of *Stowe*, once the seat of the Dukes of Buckingham. *Aylesbury*, in the fertile vale of that name, furnishes the metropolis with a large supply of dairy produce, and is a great market for poultry. *Hartwell*, in the immediate

* The others are: Buckinghamshire, Berkshire, Essex, Herts, Huntingdonshire, and Suffolk.

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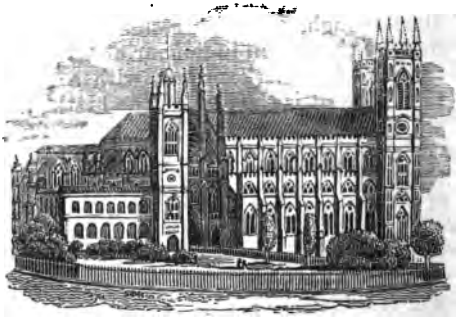
vicinity, was the asylum of Louis XVIII. during the greater part of his exile. At *Olney*, a small town, in the north of the county, the poet Cowper spent the greater part of his days; and at *Beaconsfield*, another small town, Waller, the poet, and Edmund Burke lived and died. *Eton*, in the south, opposite Windsor, is the site of a college founded by Henry VI., which has long been the principal classical school for the sons of the nobility and gentry.

30. HERTFORD, on the Lea, has a branch of Christ's Hospital established at it; and in the neighbourhood is Haileybury College, founded by the East India Company in 1806, for the education of young men destined to fill offices in its civil service. The town was the scene of the captivity of two kings at the same time, John of France and David II. of Scotland, in the reign of Edward III. *St. Albans*, near the Roman *Verulamium*, a very ancient town, now decayed, has an abbey church containing the tomb of the great Lord Bacon. It was the scene of two battles during the wars of the Roses, one in 1455, the other in 1461. At *Barnet*, a few miles distant, the decisive action in that struggle was fought, in which Warwick, the "king-maker," was defeated and slain. *Ware* has a large trade in malt, and is immortalised by Cowper, the poet, as the site of Johnny Gilpin's adventures; in its immediate vicinity are the sources of the New River, which largely supplies the metropolis with water. Within a few miles, in the same county, are Waltham Abbey and the Rye House (at Hoddesdon), celebrated for its plot.



Westminster Abbey.

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St. Paul's Cathedral.

31. LONDON, the capital of England and of the British empire, is the largest, wealthiest, and most populous city in the world, the grand centre of commerce, and the place to which the traders and capitalists of all nations resort. It is situated in the south-east of MIDDLESEX, on the north bank of the Thames, about sixty miles from the sea; but extends over a considerable area of Surrey, on the opposite side of the river, as well as over portions of Kent and Essex. The Census Commissioners now include within metropolitan limits the suburban districts of Greenwich, famous for its Hospital; and Deptford, for its dock-yard; Sydenham, Norwood, Chelsea, Hampstead, Highgate, and other places, which are really continuous with the city proper, giving it an area of more than a hundred square miles, and a population in 1851 of 2,360,000. This vast crowd included, at that time, 160,000 female servants, adults and girls; 93,000 needle-women and girls; 45,000 washerwomen, charwomen, and manglers; 20,000 errand-boys; 27,000 shoemakers; 20,000 tailors; 21,000 carpenters; 10,000 bakers; 7000 butchers, and 6000 grocers. Among the public works and edifices worthy of attention, may be enumerated, the

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Tower, founded by William the Conqueror; Westminster Hall, founded by William Rufus, rebuilt by Richard II.; Westminster Abbey, begun by Henry III., finished by Henry VII.; Whitehall, designed by Inigo Jones, 1619; the Monument, 202 feet high, erected to commemorate the Great Fire in 1666; St. Paul's Cathedral, begun 1675, completed 1710; the Royal Observatory, Greenwich, 1675; Chelsea Hospital, 1682; Greenwich Hospital, 1690; the British Museum, founded 1753; Somerset House, 1776; the Bank, 1789; the East India House, 1799; London Docks, 1805; the Mint, 1810; Custom House, 1817; Waterloo Bridge, 1817; Southwark Bridge, 1819; Colosseum, 1824; Thames Tunnel, begun 1825; Zoological Gardens, 1828; General Post Office, 1829; London Bridge, 1831; New Royal Exchange, 1844; Hungerford Suspension Bridge, 1845; the New Houses of Parliament, opened to the Lords, 1847; Crystal Palace, 1854—the subterranean works of this remarkable glass building are of astonishing magnitude; St. James's Hall, Piccadilly, 1857; Covent Garden Theatre, rebuilt 1858, with a Floral Arcade, 1859; Chelsea Suspension Bridge, 1858; South Kensington Museum; Nelson Column; Christ's Hospital; Kew Gardens and Observatory; National Gallery; St. Bartholomew's Hospital; Buckingham Palace; the Club Houses in Pall-Mall and its neighbourhood. The total length of underground drainage is supposed to be not less than 700 miles; and of gas-piping, nearly 2000 miles. The extent of the latter above-ground is prodigiously greater; and that of the water-piping, above and below, is enormous. The average distribution of water by the companies is 50,000,000 of gallons per day.

Hospitals, asylums, charities, and institutions for the relief of the poor and the reform of the vicious, involve the immense annual outlay of £1,200,000. London has its name from the Roman *Londinium*, mentioned by Tacitus, about A.D. 61, as a mart of commerce. The centre of the dome of St. Paul's, which is nearly central to the city proper, is in latitude 51° 30′ 47″ north, and longitude 0° 5′ 48″ west of Greenwich Observatory. Among the many other places of note in MIDDLESEX, are *Brentford*, *Uxbridge*, *Staines*, *Hounslow*, *Hampton*, *Twickenham*, *Harrow*, *Hammersmith*, *Fulham*, *Hackney*, all of which are full of historical recollections too numerous to mention here.

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Windsor Castle.

Southern Counties.

32.	Kent . .	Maidstone, Canterbury, Rochester, Chatham, Sheerness, Folkestone, Dover, Deal, Woolwich, Gravesend, Margate, Ramsgate, Tunbridge.
33.	Surrey .	Guildford, Kingston, Richmond, Croydon, Epsom, Dorking.
34.	Sussex .	Lewes, Brighton, Hastings, Chichester, Worthing, Rye, Bognor, Eastbourne.
35.	Hampshire	Winchester, Portsmouth, Southampton.
36.	Berkshire	Reading, Windsor, Abingdon, Newbury.
37.	Wiltshire	Salisbury, Devizes, Trowbridge, Bradford, Marlboro'.
38.	Dorsetshire	Dorchester, Poole, Weymouth, Bridport.
39.	Devonshire	Exeter, Plymouth, Devonport, Barnstaple, Tiverton, Torquay, Tavistock.
40.	Cornwall .	Bodmin, Falmouth, Truro, Penzance, Redruth, Launceston, St. Ives.

32. Maidstone, on the Medway, is a centre of the hop trade, and somewhat largely engaged in paper-making. Canterbury, the metropolitan see of all England, is on the Stour, distinguished by a large and fine cathedral,

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founded in 597, and containing the shrine of Thomas-à-Becket, and the tomb of Edward the Black Prince. *Rochester*, an old episcopal city, near the mouth of the Medway, is continued by *Chatham*, a great military depôt and naval establishment, with one of the royal dock-yards. In the vicinity is *Sheerness*, at the north-west point of the *Isle of Sheppey*, with a dock-yard, strongly fortified, as it commands the mouth of the Medway and of the Thames. *Dover*, at the south-east angle of the English coast, is the principal of the *Cinque ports*, a great place of embarkation for the continent, and has a renowned castle, perched upon the summit of a chalk cliff, and with its outworks occupying thirty-five acres. Its foundation has been attributed to the Romans. *Folkestone*, a sub-port to Dover, *Deal* and *Sandwich*, are maritime towns belonging to the Cinque-ports. *Woolwich*, on the Thames, ten miles east of London, is the head-quarters of the artillery and engineers; and has a royal arsenal and dockyard, the former greatly enlarged, and more strictly regulated, since the Russian war. *Gravesend*, twenty-four miles down the river, is a summer visiting-place from the metropolis, and the great rendezvous for outward and homeward bound ships. *Deptford* and *Greenwich*, now ranked as metropolitan suburbs, are in the county; the dockyard of the former is historically famous for its connection with Peter the Great, who resided close to it during his stay in this country, and was an almost daily visitor to inspect the operations. The noble Greenwich hospital, the most glorious institution of refuge in the world, has accommodation for nearly three thousand disabled seamen; and the Royal Observatory, crowning a lofty eminence in Greenwich Park, has been successively under the superintendence of Flamstead, Halley, Bradley, Bliss, Maskelyne, Pond, and Airy. *Margate* and *Ramsgate*, on the coast, are favourite bathing-places of the county; and *Tunbridge Wells*, in the interior, attracts visitors to its mineral waters, which are of great celebrity.

33. GUILDFORD, a populous market-town on the Wey, and one of the assize towns, is the capital of the beautiful county of Surrey. It has ruins of a castle and monastery. *Croydon* and *Kingston-on-Thames* are the other assize towns. *Dorking*, famous for its breed of fowls; *Epsom*, of sporting celebrity; *Kew*, unrivalled in gardens; *Richmond*, with its

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hill and park, and many pleasant associations; *Runnymede*, where Magna Charta was signed, are all among the many celebrated spots in the county. The great boroughs of Southwark and Lambeth, though in the county of Surrey, now form part of the metropolis. At *Petersham* is Ham House, a curious old mansion, where the Cabal held their meetings, and Charles II. and James II. have sojourned.

34. LEWES, the capital of Sussex, has a place in history. It was the scene of the great battle in the reign of Henry III., 1264, which made Simon de Montfort the virtual master of the kingdom, who summoned the first parliament on record, consisting of the three estates. It has the ruins of a castle and monastery. *Brighton*, on the coast, which less than a century ago was a little fishing village, is now a large and splendid town, owing to court patronage and fashion having directed the attention of the titled and wealthy to it. The population was 7440 in 1801, and 69,673 in 1851. It has a chain-pier, and a fantastic Pavilion, once a royal residence, but now the property of the town. *Hastings*, on the shore, to the eastward, is also a popular bathing place, in a milder and more picturesque locality. At *Pevensey Bay*, adjoining, William the Conqueror landed for the invasion of England in 1066, and won the battle which gained him the crown, on ground near the little town of "Battle." *Hastings*, *Rye*, *Winchelsea*, and *Seaford*, in this county, with *Romney*, *Hythe*, *Dover*, and *Sandwich*, in Kent, although eight seaports, have the name of the CINQUE PORTS; and were formerly of maritime importance. They are invested with peculiar privileges, on condition of rendering certain service to the crown in time of war; and are under the jurisdiction of a Lord Warden, whose official residence is Walmer Castle, on the east coast of Kent, where the Duke of Wellington, who held that office, ended his days. *Worthing*, *Eastbourne*, near which is *Beachy Head*, and *Bognor*, are all favourite bathing-places on this coast. *Chichester*, an ancient town, enclosed by walls of Roman construction, with a small but handsome cathedral, contains portraits of all the sovereigns of England. Within four miles is *Goodwood*, famous for its races.

35. WINCHESTER, an episcopal city of great antiquity, on the Itchin, was the metropolis of the kingdom in the Saxon age, or from the time of Egbert to that of Edward the

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Confessor. Here Alfred and Canute chiefly resided, and the royal treasury was kept; nor did it altogether lose its metropolitan supremacy till the time of the Plantagenets. It has a large and richly-endowed grammar school, extremely well conducted. *Portsmouth*, on a peninsula projecting from the mainland, and *Portsea*, continuous with it, form a single populous town, included within the same lines of defence. It is the grand naval arsenal of the kingdom, rendered so by its safe, deep, and capacious harbour, with the adjoining roadstead of *Spithead*, and a central situation in the Channel. The dockyard occupies a hundred acres, and is one of the most interesting and remarkable places in the kingdom. It was here that steam-power was first applied on an extensive scale. Moored in the harbour lies Nelson's old ship, the Victory, preserved with the utmost care, with the spot marked on the deck where he fell. On the opposite side of the harbour is *Gosport*, with the two noble establishments of Haslar Hospital for invalid seamen, and the Royal Clarence Victualling-yard for provisioning the fleet. *Southampton*, at the head of the inlet called the Southampton Water, is a largely-increased town, since it became the chief steam-packet station for the Mediterranean and the West Indies. In an adjacent part of the county is the New Forest, extensively covered with timber, the scene of the tragical death of William Rufus. The *Isle of Wight*, separated from the mainland by the channels of Spithead and the river Solent, renowned for its beauty, has *Newport*, nearly in the centre, for its chief town, with *Ryde* and *Cowes* on the north coast. The latter, a station for yachts, has *Osborne* to the west, the beautiful marine residence of the Queen.

36. READING, the county town of Berkshire, situate on the Kennet, is a considerable mart for agricultural produce. *Windsor*, on the *Thames*, is chiefly remarkable for its magnificent castle, the principal of our royal residences. It stands on an eminence, and forms a commanding feature in the prospect for many miles around. The edifice was founded by Edward III., but received its present form and appearance in the reign of George IV. *St. George's Chapel*, a fine Gothic structure, contains the remains of some sovereigns of former times, in graves which can only be generally indicated; and three repose in the new mau-

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soleum on the eastern side—the founder, George III., and his sons, George IV. and William IV. *Windsor Park* and its lake, called *Virginia Water*, occupy 3800 acres, and present an area of great beauty. *Wantage*, in the county, is noted as the birth-place of Alfred the Great, in 849; and here the thousandth anniversary of his nativity was commemorated, October 25, 1849, by a great gathering of visitors from different parts of the kingdom. *Newbury* was the scene of two engagements in the Civil War, 1643 and 1644, in the last of which Lord Falkland fell. *Abingdon* has an abbey, where Henry I. obtained the name of Beauclerc. *Bray* is principally celebrated for its Vicar, who was twice a Papist and twice a Protestant.

37. SALISBURY, an episcopal city, on the southern Avon, in Wiltshire, has in its cathedral, one of the finest, purest, and noblest existing specimens of the early Gothic. The spire is the loftiest in the kingdom, rising to the height of 410 feet. On Salisbury plain, an undulating tract in the vicinity, is the celebrated monument of *Stonehenge*, consisting of concentric circles of upright stones, with lentils, the supposed remnant of a Druidical temple. The ancient parliamentary town, *Marlborough*, is now famous for its magnificent school. *Devizes*, *Trowbridge*, *Bradford*, and other adjacent places, are engaged in the woollen manufacture.

38. DORCHESTER, on the Froom, the county town of Dorset, has striking remains of a Roman amphitheatre and fort in its neighbourhood. *Poole*, a large seaport, has a considerable shipping trade. The *Isle of Purbeck*, a kind of peninsula, is famous for its stone. *Weymouth* and *Lyme Regis* are favourite watering-places, and, as well as *Bridport*, hold the rank of ports.

39. EXETER, a bishop's see on the Exe, in Devonshire, has a grand old cathedral. *Plymouth*, with *Devonport* adjoining, formerly called Plymouth Dock, at the mouths of the Plym and Tamar, is very similar in character to Portsmouth. The citadel, a regular fortification, mounting about 120 guns, occupies a commanding site on the Hoe, a hill which boldly overlooks the sea, and forms a fine promenade. The royal dockyard, founded in the reign of William III., is very extensive; and great steam docks are now in progress, at Keyham point, a neighbouring peninsula. When completed, everything connected with the war steam-fleet will

be conducted at this station. About three miles distant, in the bay, is the remarkable *Plymouth Breakwater*, constructed to protect the harbour; it consumed 3,369,251 tons of stone, and cost nearly a million and a half sterling. Fourteen miles distant, and nine from the nearest land, is the not less remarkable *Eddystone Lighthouse*, built on a rock, submerged at high water, which, during the present year, 1859, will have braved for a century the fury of the elements. Several coast towns of the county, especially *Torquay*, are much resorted to, owing to the mildness and salubrity of the climate. *Tor-Bay*, often the rendezvous of the British navy, is famous as the landing place of William III. *Tiverton* is a large town, chiefly employed in the woollen and lace trade. At *Tavistock*, which is on the river Tavy, and gives the title of Marquis to the Duke of Bedford, Sir Francis Drake was born.

40. BODMIN, and all the other towns of Cornwall, are small, though in several instances the centres of populous mining districts. *Penzance*, the largest, is the most westerly in England, and much resorted to for the mildness of its climate; indeed, it is commonly called "the Montpelier of England." *Falmouth* has a fine harbour, and is a packet station for the Mediterranean. *Truro* is a fine town, nearly surrounded by water, and has a large carpet-factory. *Launceston*, *Bodmin*, and other towns manufacture coarse woollens. *Redruth* is the active seat of the copper and tin mines.

Weymouth.

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Cardiff Castle.

The counties of WALES are 12; 6 *northern*, and 6 *southern*.

NORTH WALES.

The chief towns are indicated by small capitals.

1. Caernarvonshire . CAERNARVON, Bangor, Conway.
2. Anglesey . . . . BEAUMARIS, Holyhead, Amlwch.
3. Flintshire . . . FLINT, Holywell, Mold, St. Asaph.
4. Montgomeryshire . MONTGOMERY, Welshpool, Newtown.
5. Denbigh . . . . DENBIGH, Wrexham, Ruthyn, Llangollen.
6. Merionethshire . DOLGELLY, Harlech, Bala.

SOUTH WALES.

7. Glamorganshire . SWANSEA, Cardiff, Merthyr-Tydvil, Neath, Llandaff.
8. Pembrokeshire . . PEMBROKE, Haverford-west, St. David's, Tenby, Milford.
9. Cardiganshire . . CARDIGAN, Aberystwith, Lampeter.
10. Radnorshire . . . NEW RADNOR, Presteign, Knighton.
11. Caermarthenshire . CAERMARTHEN, Llanelly, Llandovery, Llandillo, Kidwelly.
12. Brecknockshire. . BRECON, Hay, Builth, Crickhowell.

1. Most of the Welsh towns are inconsiderable; many are mere villages, but often very picturesquely situated. CAERNARVON, the largest in North Wales, and a place of considerable trade, retains its walls and castle, where Edward II., our first Prince of Wales, was born. The lofty *Snowdon* is in this district. *Bangor* is an episcopal city, and close to it is the

tubular bridge across the Menai Strait, one of the greatest engineering works of modern times. *Conway* has a tubular bridge, 327 feet in span, and the remains of a magnificent castle.

2. BEAUMARIS is a favourite watering-place, and has secure anchorage for ships. *Holyhead* has a capacious harbour, and is the government station for communication with Ireland. *Amlwch*, a thriving seaport town, on the N.E. coast of Anglesey, is the great outlet to the Parys and Mora copper-mines.

3. FLINT and *Mold* are in the heart of the North Wales coal field, and have, besides, lead, iron, and other mineral works. *St. Asaph*, a bishop's see, is a very small town, but has a cathedral. *Holywell* derives its name from the copious, ever-boiling and flowing well of St. Winifred, which covers an acre, and was formerly held in great repute for miraculous cures, but is now more usefully employed in driving the machinery of numerous silk and cotton mills.

4. MONTGOMERY, near the Severn, is a well-built and populous town, with the ruins of an ancient castle. At *Welshpool*, *Newtown*, and *Llanidloes*, in the basin of the Upper Severn, flannels and other woollen goods are made.

5. DENBIGH takes its name from being in a *den* or hollow: a small town, with a stately castle, and some curious old buildings. *Ruthyn*, on the Clwyd, has the ruins of a strong castle. *Wrexham* is one of the most populous towns in Wales, having nearly 12,000 inhabitants, chiefly engaged in the flannel trade. In this county is the beautiful *Vale of Llangollen*, with its fine bridge and ruins of castles.

6. DOLGELLY is remarkable for its beautiful hill-scenery, and as the spot where Owen Glendowr held his parliament, in 1404. *Harlech* has the ruins of a fine old castle, the last which held out for King Charles. *Bala* is situated on the northern extremity of the lake of that name, the largest in Wales, being four miles long, nearly one broad, and forty feet deep.

7. SWANSEA, on the northern shore of the Bristol Channel, a fine seaport, is a favourite resort for bathing, and has very extensive copper-works. Owing to the abundance and cheapness of coal, the copper ores of Cornwall, where coal is wanting, are conveyed to South Wales to be smelted. *Merthyr-Tydvil*, in the coal and iron district of South Wales, is now the largest place in the principality, having increased from 10,127 inhabitants in 1801 to 63,080 in 1851. Its neighbourhood is famous for its mineral riches, especially its lead

mines. *Cardiff*, a very flourishing seaport on the Taff, is connected with Merthyr-Tydvil by a canal. Its fine castle, once strongly fortified, was erected in 1079. *Neath*, on the river of its name, is situate in a beautiful vale, and is famous for its iron and smelting works. *Llandaff* is an inconsiderable place, although a bishop's see, with a handsome cathedral.

8. PEMBROKE is a very ancient town, with the ruins of a magnificent castle, on the south side of *Milford Haven*, and has a government dockyard, from which the largest ships have been launched, and the grandest natural harbour in Great Britain, pronounced by Nelson to be the finest in the world. It is well sheltered, and can be entered at all times of the tide without a pilot. *Haverford-west* is picturesquely situate on the West Cleddare river. *Tenby*, in Milford Haven, nine miles east of Pembroke, is a favourite watering-place. *St. David's* is a bishop's see, and has a cathedral with a gothic chapel, containing the monuments of St. Anselm, Giraldus Cambrensis, &c.

9. CARDIGAN has the remains of an ancient church, once famous in Welsh history; a fine harbour, and a great coasting trade. *Aberystwith* is a flourishing town, owing to its iron mines and collieries, and is also a favourite watering-place. *Lampeter* is the seat of a college, founded in 1822, for the education of Welsh clergymen, by Dr. Burgess, Bishop of St. David's, and has a good library.

10. NEW RADNOR, *Presteign*, and *Knighton* belong to the agricultural and grazing district. Knighton is remarkable for the great dyke thrown up by Offa, in the eighth century, as a defence against the Britons.

11. CAERMARTHEN, reputed to be the birth-place of Merlin, is a fine open seaport, with a large coasting trade. *Llanelly* is within the coal district, and has extensive copper and iron works. *Llandillo* and *Llandovery* are small inland towns, on the banks of the Towy. *Kidwelly*, consisting of an old and new town, on both sides of the *Gweneraeth*, has the ruins of an old cruciform church, the remains of a priory.

12. BRECON is the chief town of a very picturesque inland county, bounded on the north by the Wye. It has a considerable armoury. The *Brecknock Beacon* is the loftiest mountain in South Wales. *Builth* and *Hay* are prettily situated on the Wye; the former has mineral springs and a pump-room. *Crickhowell*, on the Usk, the favourite resort of tourists and invalids, has the remains of a castle.

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Soho Iron Works, near Birmingham.

General Remarks on England and Wales.

1. A line commencing at the mouth of the Exe in South Devon, and drawn northwards with moderate curvatures to the mouth of the Tees in Durham, divides generally the great *mining and manufacturing districts* from the decidedly agricultural. All the *Coal deposits*, with the metalliferous ores, except iron, are on the western side of it. *Tin* is obtained only in Cornwall and Devon, chiefly the former county; *Copper* in Cornwall, Devon, Anglesey, and other parts of Wales; *Lead* in the high region around Cross Fell, where the four northern counties converge, also in Derbyshire, Flintshire, Denbighshire, Cornwall, and Devon; *Iron* in South Yorkshire, Derbyshire, South Staffordshire, Shropshire, and South Wales.

2. There are seventeen *Coal* districts, including the small detached tracts. Five are of national importance, owing to the extent of their stores, or the amount of their produce. These are: the *Field of Northumberland and Durham*, the earliest worked, and the most productive, extending about fifty miles from the river Coquet on the north, nearly to the Tees on the south, by an average of twenty miles from the coast: the *Field of Yorkshire* and Derbyshire, ranging from the vicinity of Leeds to that of

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Derby, a distance of more than sixty miles, the breadth varying from twelve to twenty: the *Field of South Lancashire*, stretching in the form of a crescent by Manchester and Rochdale; the *Field of South Staffordshire*, west and north of Birmingham, of limited area, but remarkable for the thickness of its beds; the *Field of South Wales*, the largest in the kingdom, extending from the county of Monmouth to that of Pembroke, as yet very little worked, and therefore a storehouse in reserve.

3. The most important *Manufactures* are the textile, or those in which filaments of cotton, wool, silk, and flax are variously wrought for the purpose of raiment. In 1857, in England and Wales, there were 4,432 factories devoted to them. During the half century from 1801 to 1851, fourteen towns chiefly connected with cotton, namely, Manchester and Salford, Preston, Bury, Bolton, Oldham, Ashton, Blackburn, Stockport, Chorley, Wigan, Carlisle, Belper, increased their population from 216,956 to 843,055. Manufactures in metals hold the second place. During the same interval, nine iron and hardware towns, Dudley, Walsall, Wolverhampton, Birmingham, Sheffield, Rotherham, Chesterfield, Merthyr Tydvil, Tredegar, increased from 185,209 to 636,352.

4. In relation to *Agriculture*, tillage or arable husbandry is carried on to the greatest extent in the counties of Norfolk, Suffolk, Essex, Kent, Sussex, Hants, Berks, Bedford, and Hertford, with part of Lincoln, Yorkshire, Durham, and Northumberland. It is general, though more partial, in the remaining English counties, and in the valleys of Wales. *Dairy produce* is a prime object of attention in the counties of Gloucester, Dorset, Devon, and Cheshire. The rich grazing lands of Bucks, Northampton, Huntingdon, Leicester, Lincoln, and south-eastern Yorkshire, are specially devoted to the fattening of cattle and sheep. *Hops* are raised chiefly in the country around Maidstone and Canterbury in Kent; around Farnham in Surrey; and in Herefordshire and Worcestershire. The two latter counties, with those of Devon and Somerset, are the *Cider and Perry orchard* districts.

5. The most ancient name applied to the country, ALBION, is interpreted to mean the "fair or white land," in allusion

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to the appearance of the chalk cliffs prominent on the south-east coast. The Romans called the entire island BRITANNIA, a word of very uncertain origin and import, but supposed to refer to the native practice of colouring the skin with dyes (*brytho*, to paint). The people consisted of numerous tribes of the Celtic race, who were subject for nearly four centuries to the dominion of Rome (A.D. 43-420).

6. The Romans were succeeded in the mastery by conquerors of the Teutonic or Gothic stock, from the north of Germany, the Jutes, Saxons, and Angles, closely-related families. The Angles came over in the greatest numbers, spread themselves over the widest area, and originated the present name, *England*, which is only a slightly-altered form of *Angle-land*. Many of the old inhabitants, the Britons, retired to the mountainous western districts (Cornwall, Wales, Cumberland), and long preserved their independence. They were called by the invaders *Wilisc-men*, "strangers" or "foreigners," and their territory *Wilisc-land*, whence *Welshmen* and WALES.

7. After several states had been formed, the West-Saxons became supreme; and a single Anglo-Saxon monarchy was founded by Egbert (800), with Winchester for its capital. It continued for two centuries under the government of his descendants, of whom the most remarkable was Alfred the Great (871-901). In 1017, the Danes conquered the kingdom, and Canute ascended the throne. But, in 1042, the Saxon dynasty was restored, and retained possession, till finally displaced, in 1066, by the Normans, under William the Conqueror, from whom the reigning royal family is lineally descended.

8. In various parts of England the names of natural objects commemorate the old British population, as those of the rivers, Avon, Ouse, Axe, and Exe, significant only in some Celtic dialect. The names of places terminating in *caster* or *chester* are of Roman origin, the terminals being derived from *castrum*, a camp. Thus, *Lancaster*, *Doncaster*, and *Colchester*, signify the camps on the respective rivers, the Lune, the Don, and the Colne. Names terminating in *by*, originally denoting a single farm, afterwards a town in general, as Whit*by*, Der*by*, are usually Danish. All names ending in *ton* or *ham*, a house or town, are Saxon.

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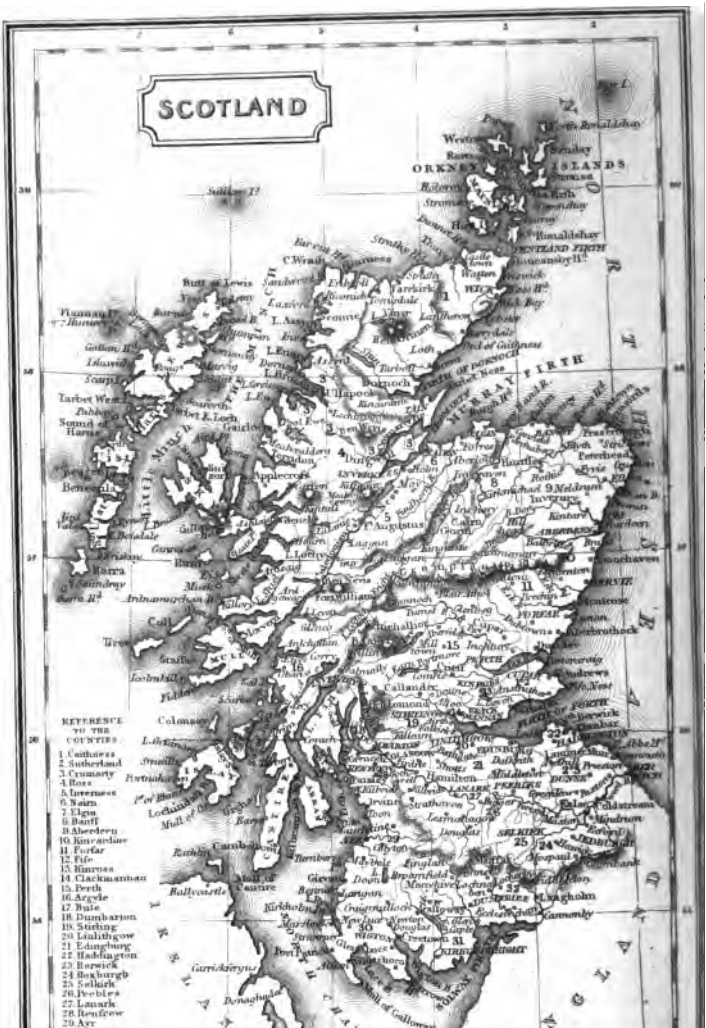

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Fingal's Cave; viewed from within.

SCOTLAND.

1. SCOTLAND, the northern and smaller portion of Great Britain, is bounded by the North Sea on the east, England and the Irish Sea on the south, and the Atlantic Ocean on the north and west. Its greatest length is 280 miles, from the *Mull* of Galloway, the southern extremity, to Dunnet Head, the most northerly point. A few miles from the latter, the site of the famous John O'Groat's house is shown, so commonly referred to as the farthest inhabited spot of Great Britain in that direction. But there are now more northerly dwellings towards Dunnet Head. The greatest breadth is 140 miles, from Buchan Ness, on the east, to the opposite coast of Ross-shire. But the country is so penetrated by inlets of the sea that the breadth is less than forty miles, between the firths of Clyde and Forth.

2. The numerous and deep inlets are a remarkable feature in the aspect of Scotland. They give it a more extensive coast-line than that of England and Wales, and are said to place almost every part of the interior within forty miles of the salt water. The broad openings are the *Firths* of Forth, Tay, Moray, Cromarty, and Dornoch, on the eastern side;

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the firth of Clyde, on the western, with a continued series of tortuous indentations to the northward, commonly called *Lochs;* the Solway firth, with Wigton and Luce bays, on the southern. The principal projections of the shores, some of which are very bold and grand, are St. Abb's Head, Fife *Ness*, Buchan Ness, Kinnaird's Head, Tarbet Ness, and the Ord of Caithness, on the east; Duncansby Head, the north-eastern extremity, Dunnet Head, the northern, and Cape Wrath, the north-western; Ardnamurchan Point and Mull of Cantire, on the west; Mull of Galloway and Burrow Head, on the south. The names of places ending in NESS, a promontory; HOLM, a river-island, or ground lying along a river; AY, EY, or A, an island; originated with the Northmen.

6. A very large proportion of the surface of Scotland is rugged and mountainous; but picturesque and grand features are as prominent as the stern and sterile. The country is distributed into three portions, southern, middle, and northern, by well-marked natural divisions.

7. The SOUTHERN region comprehends the tract to the south of the narrow isthmus between the firths of Clyde and Forth. It has the *Cheviot Hills*, of moderate elevation, on the English border; and the loftier *Lowthers* towards the centre. The latter form a kind of highland nucleus, from which ridges diverge in various directions, and enclose the pastoral valleys celebrated in song and story as Clydesdale, Tweeddale, Annandale, Nithsdale, and Teviotdale, which have their names from the rivers and streams flowing through them. Lead mines, at *Leadhills* in Lanarkshire, have called forth life and cultivation in a most bleak and desolate situation, and collected a village at the height of 1500 feet, the highest inhabited place in Great Britain, with the exception of a few shepherds' huts and gamekeepers' lodges in the Highlands.

8. The MIDDLE region extends from the preceding to Glenmore, or the great glen, through which the Caledonian canal has been constructed, connecting several lakes, and uniting the North Sea with the Atlantic Ocean. In this district the *Central Grampians* form a gigantic and apparently impassable wall across the island, from east to west; and are prolonged on the western side, from north to south, reaching to the firth of Clyde. *Ben Lomond*, 3195 feet high, in

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Stirlingshire; *Ben Cruachan*, 3670 feet, in Argyleshire; *Ben More*, 3818, and *Ben Lawers*, 3945 feet, both in the west of Perthshire; are the loftiest heights of the southern extension. The masses of the central chain, consisting of granite and crystalline schists, seem solitudes of nature, into which man and his labours may not intrude. In fact, it is only by following some of the streams which break through the barrier, that admission to its wild recesses can be gained. The greatest heights are attained by *Ben Nevis*, 4368 feet, in the south of Inverness-shire; and *Ben Macdhui*, 4390, near the junction of the three counties of Inverness, Banff, and Aberdeen. The latter is the highest point of the United Kingdom. South of the chain a wide valley extends, bearing in its eastern part the name of *Strathmore*, or great valley.

9. The NORTHERN region comprises the country from the foregoing to the Pentland firth. It has a surface more extensively mountainous, though not attaining the same elevation; and consists largely of wild, barren, and desolate moorlands. The cultivable soil occurs chiefly in strips along the rivers, and the firths and bays of the east coast. Though none of the Scottish mountains reach the true snow-line, the highest summits make a close approach to it, and experience a temperature which is seldom much above the freezing-point. The loftiest peaks are clothed with snow through the greater portion of the year, and retain it in beds and patches all the year round. Thus, *Ben Wyvis*, in this district, is said never to have been free from snow, within the memory of man, except in the remarkably warm season of September, 1826.

10. All the principal rivers, with the exception of the Clyde, flow to the North Sea. The largest is the TAY, the finest salmon stream in the kingdom. It rises in the mountainous country on the west of Perthshire, expands into the long loch of the same name, proceeds by a very circuitous route to Perth, and passes through an estuary into the sea below Dundee. The TWEED, the second in rank, descends from the highland centre of southern Scotland, and flows eastward to Berwick, while the CLYDE, from a closely contiguous source, travels to the north-west by Lanark and Glasgow, joining the Atlantic through one of the great indentations

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of the western coast. In the neighbourhood of Lanark, the river is precipitated over a succession of falls, descending 230 feet in little more than three miles. The FORTH proceeds from the eastern slope of *Ben Lomond*, by Stirling, to the magnificent firth on which Edinburgh is situated. The SPEY, capricious and rapid, has its origin within a few miles of the west coast, and passes to an opposite shore. The northern DEE, remarkable for its great descent from source to mouth, meets the sea at Aberdeen. It issues from a spring on Mount Braeriach, one of the Grampians, at the height of 4060 feet. Dr. Skene Keith, in the middle of July, found the highland rill running under an arch of snow.

Loch-na-garr.

11. LAKES or LOCHS, as they are commonly called, are a prominent hydrographical feature of the country. They are very numerous; some are of considerable extent, and most of them are celebrated for picturesque beauty. These expanses are in general long, narrow, and confined, being closely pressed upon by the high lands. *Loch Lomond*, the largest, between the counties of Dumbarton and Stirling, has a length of twenty-four miles, by a breadth of seven where the greatest expansion occurs, but contracts to less than one at the northern extremity. It is surrounded with high mountains, and studded with many finely-wooded islands. *Loch Ness*, in the line of the Caledonian canal, has a depth of more than eight hundred feet, and has never been frozen in the severest seasons. *Loch Aven*, in the central

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Grampians, upwards of 1700 feet above the sea, is the most elevated expanse of any extent in the kingdom. It is remarkable for its loneliness, difficult access, and frightful steeps. The surface has no sunshine for several of the winter months. No tree or shrub grows on its banks, and few living creatures are ever seen except the eagle and ptarmigan, with some straggling red deer. *Loch-na-garr*, another of the Grampian lakes, though small, is one of the most beautiful in Scotland. *Loch Leven*, in the county of Kinross, is the only important lake apart from the Highlands.

12. The mainland, on the west and north, is skirted by an immense number of ISLANDS, some of which are of considerable extent, though but few are of much value. Those of Bute, Arran, the Cumbrays, with some small tracts, in the firth of Clyde, form the county of Bute. Of these, the oval-shaped *Arran* is the largest, extending twenty-four miles from north to south, by fourteen in breadth; and presenting a more varied display of geological phenomena than is perhaps to be found in any other district of the same area. To the southward, Ailsa Craig rises abruptly from the sea, and forms a very striking object to passengers sailing to and from Glasgow, owing to its height and isolation. It is everywhere steep, almost perpendicular on one side, uninhabited by man, but constantly covered with vast numbers of wild fowl.

13. The HEBRIDES, commonly called the *Western Isles*, from their position, form the largest archipelago, consisting of more than three hundred members, of which eighty-one are inhabited, and a hundred and fifty are of sufficient size to be marked on an ordinary map. They occur in two ranges, inner and outer, in relation to the mainland, separated from each other by the channel of *the Minch*, twenty miles across the narrowest part. The inner range includes the large island of *Skye*, nearly fifty miles long, by fifteen broad, with *Mull*, *Jura*, *Islay*, *Colonsay*, and *Tiree*, of important size, and chiefly composed of basaltic or trap-rocks. The outer range extends upwards of a hundred miles in a longitudinal direction, and contains *Lewis* and *Harris*, the two Uists, and others, so contiguous, as to have originated for the series the name of the Long island. Still more outerly, at the distance of fifty miles, are the rocks of

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St. Kilda, the most lonesome of the British isles. The principal of these is a mountain, about six miles in circumference, with sides so precipitous, that there are only two points at which a landing is possible. In 1851, there were here 110 persons, grouped in thirty-two families, all born on the spot, except one woman from the county of Sutherland. The Hebrides once formed the patrimony of the "Lord of the Isles," whose rule extended over part of the mainland, and who was at times practically an independent sovereign. The title became extinct in 1536, when Macdonald, the last who held it, died without heirs.

14. The ORKNEYS form a compact group at the eastern extremity of the north coast, separated from it by the Pentland Firth, a channel about seven miles wide. They are sixty-seven in number, of which twenty-eight are inhabited, and several are transiently occupied as pasture grounds. *Pomona*, the largest island, extends about eighteen miles from north to south. Rollo, from whom William the Conqueror was fifth in descent, was some time in the Orkneys before he invaded Normandy.

15. The SHETLANDS, probably the *Ultima Thule* of the ancients, lie to the north-east of the preceding group, at the distance of nearly fifty miles. The cluster comprises upwards of a hundred members, but only twenty-seven are inhabited, though sheep and cattle are pastured on several of the others. They have been aptly described as the "skeleton of a departed country," only the harder rocks having withstood the furious storms of the Atlantic. Though the largest, called *Mainland*, extends about sixty miles from north to south, and has a breadth in one part of twenty-four miles, the shores on all sides are so repeatedly and deeply indented by the sea, that no portion of the interior is more than three miles from it. Both the Shetlands and Orkneys were early seized by the Northmen, and remained subject to the kings of Norway and Denmark till the year 1468, when James III. of Scotland, marrying Margaret of Denmark, obtained possession of them.

16. On the east coast the islands are few and unimportant. But the *Bass rock*, near the entrance of the Firth of Forth, two miles from the shore, and one in circumference, commands attention as a remarkable pile of natural architecture,

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composed of basalt. It rises precipitously from the sea, and had once a strong fortress. This rock is the only place on the east coast of Great Britain resorted to by the gannet or solan goose.

17. The islands and the mainland have many natural curiosities. By far the most striking is the *Cave of Fingal* in Staffa, one of the inner *Hebrides*.[1] This is a grand basaltic cavern, opening towards the ocean, and traversed by its waves to the extremity, 371 feet long, 53 feet wide at the mouth, and 117 feet high at the same point. Its dimensions and columnar style, with the twilight gloom, and the echo of the splashing breakers, combine to render the whole scene singularly impressive. The Gaelic name of the spot, *Llainh-binn*, the cave of music, alludes to the varying sounds of the surge. In various places, powerful tidal currents, whirlpools, and strongly agitated waters, are occasioned by the tortuousness of the shores, the multitude of rocks and isles, separated by very narrow channels. The intermittent whirlpool of Corryvrachan, between the islands of Jura and Scarba, is formed in certain states of the tide by the collision of opposite tidal currents. The "Merry Men of Meg" is the designation of a spot off the coast of Caithness, where the sea has a constantly disturbed surface. The "Bulhars of Buchan," on the Aberdeenshire shore, are named from the peculiar bellowing noise of the waves in storms, rushing through arched rocks and into caverns.

18. Scotland is politically divided into thirty-three counties, which may be arranged in southern, central, and northern groups. Its natural divisions are divided into *Highlands* and *Lowlands*, which are distinguished in the following list by an asterisk * prefixed to the Highlands, and a dagger † to the Lowlands.

[1] See Vignette, p. 109.

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Dundarve Castle, on Loch Fyne.

SOUTHERN COUNTIES.

The county towns are marked in small capitals.

† 1.	Edinburgh or Mid-Lothian . . .	EDINBURGH, Leith, Musselburgh, Dalkeith.
† 2.	Haddington or East Lothian . . .	HADDINGTON, Dunbar, N. Berwick, Preston Pans.
† 3.	Linlithgowshire or West Lothian .	LINLITHGOW.
† 4.	Lanarkshire . . .	LANARK, Glasgow, Airdrie, Hamilton.
† 5.	Renfrewshire. . .	RENFREW, Paisley, Greenock.
† 6.	Ayrshire	AYR, Kilmarnock, Irvine, Girvan.
* 7.	Buteshire	ROTHSAY, Arran.
† 8.	Peebleshire . . .	PEEBLES, Inverleithen.
† 9.	Selkirkshire . . .	SELKIRK, Galashiels.
†10.	Berwickshire . .	GREENLAW, Dunse, Coldstream.
†11.	Roxburghshire . .	JEDBURGH, Hawick, Kelso, Melrose.
†12.	Dumfrieshire . .	DUMFRIES, Moffat, Annan, Lochmaben.
†13.	Kircudbrightshire .	KIRCUDBRIGHT.
†14.	Wigtonshire . . .	WIGTON, Whitehorn, Port-Patrick, Stranraer.

1. EDINBURGH, the capital of Scotland, stands on the

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southern side of the Firth of Forth, at a short distance from the shore, in north lat. 55° 57′ 20″, and west long. 3° 10′ 30″, about 390 miles' travelling distance north by west of London. The city, one of the most beautiful and picturesque in Europe, is finely situated on two ridges of basaltic rock, divided by a deep ravine crossed by a bridge. The old town occupies the more elevated ridge, which terminates on the west by the bold rocky eminence of the Castle-hill. It has long been noted as a seat of learning, and possesses a university, founded by James VI. in 1582. The most conspicuous object is the Castle, centrally planted on a lofty eminence, a principal feature in the view from every direction. It occupies an area of seven acres, has accommodation for a numerous garrison, and forms a kind of small town of itself. The *Palace of Holyrood*, adjoining the city, is of great historical interest, as anciently the residence of the Scottish sovereigns; it is identified with the unfortunate Queen Mary, the murder of Rizzio, and other tragical events. The nobles meet here to elect their representative peers in parliament. Edinburgh is the seat of the supreme courts of law for Scotland; and the place where the General Assembly of the Scotch Church holds its annual meetings. The name is supposed to be an abbreviated form of Edwinesburgh, derived from Edwin, king of Northumberland, who rebuilt, or first founded the castle. *Leith*, less than two miles distant, is the principal port of the city, now connected with it by ranges of building. In 1801, their united population was 82,560; in 1851 it was 191,221, and the next census will show a considerable increase. *Musselburgh* is a fishing town, and has a race-course. *Dalkeith*, one of the largest corn-markets in Scotland, is chiefly remarkable for its palace, the magnificent seat of the Duke of Buccleuch.

2. Haddington, on the Tyne, is perhaps the largest market in Scotland for corn and agricultural produce, and supposed to be the birth-place of John Knox, the Scottish Reformer. *Dunbar* is a thriving seaport, arising from its herring-fishery and corn trade. The *Lammermoor* hills are in this county. *North Berwick*, on the Frith of Forth, has a small harbour and but little trade. *Preston Pans* is famous for the battle fought in 1745, between the English troops and Prince Charles Edward, the Pretender.

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3. LINLITHGOW has magnificent remains of an ancient royal palace, where Mary Queen of Scots was born, and the Regent Murray assassinated.

4. LANARK, a small town, but the capital of the county, is remarkable for the *Falls of the Clyde*, and Mr. Robert Owen's establishment at *New Lanark* for the regeneration of society. *Airdrie* is in the heart of the coal district. *Hamilton*, a small town, is the site of the ducal palace, now containing the late Mr. Beckford's magnificent library and collections. *Bothwell Bridge*, within two miles of it, is where the Covenanters were defeated, in 1679. *Glasgow*, on the Clyde, the principal northern seat of industry, is the rival of Manchester in manufactures, and of Liverpool in foreign commerce. It has a university established in 1450; and an ancient Cathedral, built in the thirteenth century, remarkable as the only one on the mainland of Scotland left entire by the zealots of the Reformation. The city is the fourth in the kingdom in point of population, which, in 1851, amounted to 329,097.

5. RENFREW, chiefly employed in weaving silks and muslins. Within three miles of it is *Paisley*, on an affluent of the Clyde, an important manufacturing town, celebrated for its shawls, both of cotton and silk. *Greenock*, at the mouth of the river, is a flourishing seaport, with an excellent harbour and commodious docks. Here James Watt, the celebrated engineer, was born.

6. AYR, a small seaport, has in its neighbourhood the "banks and braes of bonny Doon," where Burns, the poet, was born. *Kilmarnock*, a far larger town, on the river of its name, has extensive woollen and cotton manufactures. *Irvine* and *Girvan* have each a commodious harbour and a good shipping trade in coals.

7. ROTHSAY, a sea-bathing place, and once a royal residence, on the eastern coast of the *Island of Bute*, gave the title of duke to the eldest sons of the Scottish kings, and still does to those of the sovereigns of Great Britain. *Arran*, an Island near the mouth of the Clyde, celebrated for its picturesque beauty, is the property of the Duke of Hamilton. It has two good harbours, and in its mountains are found marble, jasper, agates, cairngorm, and a crystal called the Arran diamond.

8. PEEBLES is a royal burgh, on the south bank of the Tweed, and has the remains of several ecclesiastical edifices.

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Inverleithen, six miles to the eastward, has mineral springs, and is the *St. Ronan's Well* of Sir Walter Scott.

9. SELKIRK is watered by the river *Ettrick*, familiarized to us by Mr. Hogg, the shepherd-poet. *Galashiels* is a considerable seat of the woollen manufacture, where the so-called "Tweeds" are made.

10. Berwickshire is one of the border counties, extending from the Lammermoor hills to the banks of the Tweed. The county town is GREENLAW, but *Dunse* is by far the most considerable. At Coldstream is a bridge of five arches, which unites England and Scotland.

11. Roxburghshire, on the English borders, is the classic ground of Scottish minstrelsy, and includes the middle portion of Tweeddale, the northern slopes of the Cheviot Hills, and the upper part of Liddesdale. JEDBURGH, on the river Jed, is the county town, and has the remains of a fine abbey, and a grammar-school, where Thomson the poet was educated. *Hawick*, at the confluence of the rivers Teviot and Slitrig, is a busy town, trading chiefly in woollen manufactures and leather. It was here during the war that many of the French and German prisoners were kept. *Kelso*, one of the principal towns, has a considerable trade in corn. Nine miles from it is *Dryburgh Abbey*, the burial-place of Sir Walter Scott; and at a farther distance of four miles, the beautiful ruin of *Melrose Abbey;* and three miles beyond is *Abbotsford*.

12. DUMFRIES, on the river Nith, may be called the provincial capital of the south of Scotland. Burns the poet lies buried in one of its church-yards. At *Annan* is *Gretna Green*, famous for irregular marriages. The fertile valleys of *Annandale*, *Eskdale*, and *Nithsdale*, are within this fine county. *Moffat* is celebrated for its mineral springs. At *Lochmaben* Robert Bruce was born.

13. KIRCUDBRIGHT is the capital of a large maritime county, and has a fine harbour, but not much commerce.

14. WIGTON, on the river Bladerock, near its mouth, is the capital of another maritime county, nearly the whole of which abounds with antiquities previous to the Roman period. *Whitehorn* is said to have been the first Bishop's see in Scotland. *Stranraer* has a fine harbour and increasing trade; and *Portpatrick* is within 21 miles of *Donaghadee*, on the Irish coast, and now has a lighthouse.

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Loch Lomond.

CENTRAL COUNTIES.

*15.	Dumbarton .	DUMBARTON, Kirkintulloch.
†*16.	Stirling . .	STIRLING, Falkirk, Bannockburn.
† 17.	Clackmannan .	CLACKMANNAN, Alloa.
† 18.	Kinross . .	KINROSS.
† 19.	Fife . . .	CUPAR, Dunfermline, St. Andrew's.
† 20.	Forfar . . .	FORFAR, Dundee, Montrose, Arbroath.
† 21.	Kincardine .	STONEHAVEN, Bervie.
†*22.	Perth . . .	PERTH, Scone, Dunkeld, Dumblane.
*23.	Argyle . . .	INVERARY, Campbeltown.

15. DUMBARTON, at the junction of the Leven with the Clyde, is a place of great antiquity, chiefly now remarkable for its castle, built on a lofty rock, formerly a site of great strength and importance. Within its arsenal is the gigantic sword of William Wallace. Partly in Dumbartonshire, and partly in Stirlingshire, is the great lake *Loch Lomond*. *Kirkintulloch*, on the river Luggie, is a populous town, within seven miles of Glasgow.

16. STIRLING, also a very ancient town, on the south bank of the Forth, possesses a castle, the favourite residence of the later Scottish kings, still kept in repair, but of no value as a fortress. From its turrets may be seen twelve battle-fields.

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In the neighbourhood is *Bannockburn*, the scene of the decisive victory gained over the English by Robert Bruce in 1314, which secured the independence of Scotland. *Falkirk* is noted for its large cattle-fairs, called the "Trysts," which are held in August, September, and October. The last is the largest, as the breeders must then dispose of all the stock which they do not intend to keep through the winter. The sales at a single fair, have amounted to 50,000 cattle, 30,000 sheep, and 3000 horses; and the total number sold at the three fairs, to 80,000 cattle, 50,000 sheep, and 5000 horses. In a few weeks, the droves reach the great grazing districts of England, where they are re-sold at the fairs by the stock-jobbers to the farmers, to be fattened chiefly for the metropolitan market. Near Falkirk Edward I. gained a victory over the Scotch in 1298; and the royal forces were defeated by those of the Pretender in 1745. The *Carron Works* are also in the vicinity, on the river Carron, one of the largest foundries and manufactories of iron goods in the kingdom.

17. CLACKMANNAN, at the junction of the Devon and the Forth, is the capital of the smallest county in Scotland, and has, on the summit of a mountain, the remains of the castle of Robert Bruce; *Alloa* is the principal town, and has a large trade in ale, malt, and coal.

18. KINROSS is on the western shore of *Loch Leven*, famous for its trout, and for the castle of that name, whence the unfortunate Mary Stuart made her romantic escape.

19. CUPAR, the capital of Fifeshire, is a thriving town, chiefly engaged in the linen manufacture. It was formerly the stronghold of the Macduffs. *Dunfermline*, a place of great historical celebrity, is now a chief seat of the linen manufacture. It has a ruined abbey-church, in which the remains of Robert Bruce were found in 1818, while digging for the foundation of a new erection; Charles I. was born here, before his father's accession to the throne of England. Eight kings lie buried here. *St. Andrew's*, a venerable city on the coast, once the ecclesiastical capital of the North, is the seat of its oldest university, founded in 1411.

20. FORFAR, the capital of the shire, has a considerable

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trade in weaving, and in its immediate neighbourhood are valuable quarries of sandstone. *Dundee*, on the north bank of the Firth of Tay, is one of the principal of the northern seaports, and a place of great commercial importance, the third town of Scotland in size. In 1851, the population was 78,931. Linens and hempen goods are very extensively produced. This manufacture was originally established at Dundee, and other places on the east coasts, owing to proximity to the countries of the Baltic, from which the principal supply of flax and hemp is obtained. *Montrose* and *Arbroath* are both flourishing seaports. The former has a fine Lunatic Asylum; the latter the remains of an Abbey founded in 1178, and dedicated to Thomas-à-Becket.

21. STONEHAVEN and BERVIE, in Kincardineshire, are on the coast, and chiefly engaged in fishing.

22. PERTH, delightfully situated on the Tay, is a very handsome town, and was at one time the capital of Scotland. Close adjoining is *Scone*, the seat of the Gowrie conspiracy. In its old abbey the Scottish kings were crowned, but the stone on which they sat was removed by Edward I. to Westminster Abbey, where it now is under the coronation chair. *Dunkeld* was once the capital of of Scotland, and has an ancient Cathedral. *Dumblane* has a fine old cathedral; two miles to the east of it was fought the battle of *Sheriffmuir* in 1715.

23. INVERARY and *Campbeltown*, in Argyleshire, are chiefly engaged in the fishing trade. The harbour of the latter is two miles long. Near *Callander* are *Loch Katerine* and the *Trossacks*, celebrated for their romantic scenery. In the northern part of the county is the wild pastoral valley of *Glencoe*, the scene of the infamous massacre of the Macdonalds in 1692. *Loch Awe* (the subject of our next Vignette), a lake thirty miles in length, and from one to two in breadth, is said to display the finest scenery in Scotland, and is called 'Burke's View,' from the admiration it elicited from the author of the 'Sublime and Beautiful.'

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Loch Awe.

Northern Counties.

†24.	Aberdeen	Aberdeen, Peterhead, Huntley.
†25.	Banff	Banff.
†26.	Elgin	Elgin, Forres.
†27.	Nairn	Nairn.
*28.	Inverness	Inverness, Isle of Skye.
*29.	Cromarty	Cromarty.
*30.	Ross	Tain, Dingwall.
*31.	Sutherland	Dornoch.
†32.	Caithness	Wick, Thurso, Pulteney.
33.	Orkney and Shetland .	Kirkwall, Lerwick, Stromness.

24. Aberdeen, largely built of granite, from quarries in the neighbourhood, consists of two towns, the most important of which, New Aberdeen, is on the north bank of the Dee, at its mouth, while Old Aberdeen, an inferior place, about a mile distant, is on the south bank of the Don. The modern town has fine public buildings, spacious and elegant streets, considerable manufactures of cotton, linen, and woollen fabrics; and is a very flourishing port, the harbour 1200 feet long. Aberdeen is the seat of a university, consisting of King's college, in the old town, founded by James IV., in 1494; and Marischal college, in the new, founded in 1593, by George, fifth Earl Marischal of Scotland. In 1851,

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the total population was 71,973. *Peterhead*, a bathing-place, has some good mineral springs. At *Huntley* are the remains of a magnificent castle. About fifty miles to the westward, in the upper part of the Dee valley, is *Balmoral*, the Highland residence of the Queen.

25. BANFF consists of a sea town and an inland town, divided by a castle, and has a shipping trade in fish, cattle, and grain.

26. ELGIN, an ancient and interesting city, on the river Lossie, has the remains of a gothic cathedral, the most extensive and beautiful of any in Scotland. In its vicinity are the ruins of Pluscardine Priory, the model of Melrose, on a smaller scale. *Forres*, on the river Findhorn, has a considerable salmon-fishery; near it is the ancient monument called Sweno's Stone, erected to commemorate a victory over the Danes in 1008.

27. NAIRN, a small, ancient seaport. In its vicinity is *Cawdor Castle*, which gave the title of Thane to Macbeth, and now that of Earl to its possessor.

28. INVERNESS, the reputed capital of the HIGHLANDS, stands on the river Ness, at its entrance into Loch Beauley, near the north termination of the Caledonian canal. Though of ancient date, and now much resorted to by summer tourists, the town only became known to Englishmen, or even to the lowland Scotch, at a comparatively recent date; and the improvements of modern times were late in making their way to it. In 1715, a coach or chariot was first seen in its streets, brought thither by the Earl of Seaforth. In 1760, the first post-chaise made its appearance, and was for a considerable period the only four-wheeled carriage in the district. No roads existed through the greater part of the county, or through the counties of Caithness, Sutherland, Ross, and Cromarty, until the commencement of the present century. Hence the more distant shires were excused from sending jurors to the northern circuit at Inverness. But by parliamentary interference, dating from 1802, roads were opened by the genius of Telford, so that the mail passed direct from London to Thurso, near John o'Groats, 783 miles' travelling distance, in four days and fifty minutes. At present, the communication is direct by railway from Dover to Inverness. A few miles from the town is *Culloden Moor*, a desolate tract of table-land, where the battle was fought

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in 1746 which extinguished for ever the hopes of the Stuart family; and in the south-western corner of the county stands the lofty *Ben Nevis*, the highest mountain in the British islands. The *Isle of Skye*, a large rocky Island of the Hebrides, principally occupied with grazing farms, is chiefly noted for its breed of little dogs, called Skye terriers. This county consists of groups of islands.

29. CROMARTY has a magnificent and safe natural harbour, sufficiently large to contain the entire British navy.

30. TAIN, on the Firth of Dornoch, the county town of Ross-shire, has an ancient church and tower; a grammar school, and a number of mills. *Dingwall* is pleasantly situated on the Firth of Cromarty.

31. DORNOCH, a very small old town, is the capital of the county of Sutherland. It has a good church, originally a cathedral, elegantly fitted up by the late Duchess of Sutherland. The last victim in Scotland of the laws against witchcraft was burnt in this parish in 1722.

32. WICK is the county town of Caithness, and the principal seat of the herring-fishery in the north of Scotland. At the north-east extremity of this county is the spot known as John o' Groat's house. *Thurso*, on the river of its name, has linen manufactures, a rope walk, and some distilleries. *Pulteney*, a suburb of Wick, on the south side of the bay, has now a population of 4000, and is the rendezvous of upwards of 1500 boats, during the season; but little more than half a century ago the site was a huge uninhabited sandbank.

33. KIRKWALL, on the north coast of Pomona, or the mainland of Orkney, smaller than many an English village, has an ancient Gothic cathedral, which remains entire. *Stromness*, on the south coast of the same island, has in its neighbourhood the remarkable "Standing Stones of Stennis," a supposed Druidical monument. LERWICK, the capital of the *Shetlands*, on the principal island, is the most northerly port of the British Isles, in a latitude corresponding to that of St. Petersburgh.

GENERAL REMARKS ON SCOTLAND.

1. Coal and iron are the most important MINERAL products of Scotland. The coal district extends in a series of detached beds diagonally across the country from Fife-Ness to the Ayrshire coast; also through the Lothians to the

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south and east of Edinburgh; and small patches occur in a few other places. Ironstone is found in considerable abundance in the coal-fields; and there are also productive lead-mines in the highlands on the borders of Lanarkshire and Dumfries. Building materials of the finest quality, sandstone, roofing-slate, granite, and variegated or veined marble, are very plentiful, and are extensively quarried for export. On the precipitous coast of Aberdeenshire granite occurs of a fleshy colour, approaching nearer to the red granite of Egypt than any other in the kingdom; and is largely used in London for building and paving purposes. Versailles is adorned with the serpentine of Portsoy, in the adjoining county of Banff.

2. The principal MANUFACTURES are cotton and silk goods, chiefly at Glasgow and Paisley; fine linens at Dunfermline, and coarse linens at Dundee; woollens, especially carpets, at Kilmarnock. In 1857, there were 530 factories of all kinds in Scotland. Ship-building is actively carried on at the principal ports; iron wares are produced in the coal and iron-bearing districts; and the distillation of spirits, chiefly whiskey, is pursued in almost every part of the country.

3. Scotland has long been famed for its FISHERIES. The principal salmon rivers are the Tweed, Forth, Tay, Dee, Don, Spey, and Findhorn, the produce of which is sent in large quantities to the London market. The herring-fishery is chiefly prosecuted on the north-east coast; and has Wick, in the county of Caithness, for its capital. It is estimated that in this district the netting daily set and hauled would extend in a straight line to nearly 600 miles, or would reach from Caithness across the North Sea to the mouth of the Elbe. The fishing commences towards the middle of July, and lasts about eight weeks.

4. Owing to the great extent of the mountain and moorland tracts, AGRICULTURE is restricted to a very limited area. It is estimated that only about one-fourth of the surface is susceptible of cultivation, and even of this portion nearly one-half is in grass. The most fertile districts are in Berwickshire, the Lothians, Perthshire and Forfarshire, long renowned for excellent farming. The climate is not favourable to the growth of wheat, being subject to long intervals of bleak weather. A species of barley, called bere or big, is extensively grown; but oats, the hardiest of all the cereals,

constitute the chief crop. Scotland gave birth to the great improver of agriculture by thorough-draining and subsoil-ploughing, Mr. Smith of Deanstone, who died in 1850. His farm, in the vale of Teith, Perthshire, acquired the character of a model, and was long a show-place.

5. The Romans carried their arms into North Britain under Agricola, A.D. 80, advanced to the foot of the Grampians, and distinguished the natives by the name of CALEDONIANS. But in after-times they are described by the terms PICTS and SCOTS. The Picts seem to have been identical with the Caledonians, and probably the mountaineers are specially meant, from whom the modern highlanders are descended. The Scots emigrated from the north of Ireland, the original SCOTIA, transferred the name to their new home, and gradually extended it to the whole country as they acquired the mastery of it. Intermixing with the Anglo-Saxons, who early extended their power to the Firth of Forth, the lowland Scotch of the present day arose.

6. Scotland was long an independent kingdom, ruled by its own sovereigns, who were often at war with the English monarchs. But James VI. being called to the throne of England, as the next heir, on the death of Queen Elizabeth, in 1603, the two countries were united under one crown. He and his successors were styled kings of England and Scotland, and each country had a separate parliament till the year 1707, when both kingdoms were merged into one under the general name of "Great Britain."

7. Scotland has many sites of historic interest besides those already mentioned. Some remains of the rampart are extant, known by the name of *Grimes Dyke*, constructed by Agricola between the Firths of Clyde and Forth, as a defence against the barbarians to the northward. The small island of IONA, one of the Hebrides, is memorable as the station of Columba, where he trained his followers in a dark age, and sent them forth to enlighten the benighted inhabitants of the adjoining shores. *Loch Leven* castle, now a ruin, on an island in the centre of the lake, was one of the places in which Mary, Queen of Scots, was imprisoned, from which she effected a romantic escape. The *Bass rock* was the prison of many of the Covenanters in the time of Charles II., as well as the last place on which the standard of the Stuarts waved at the Revolution.

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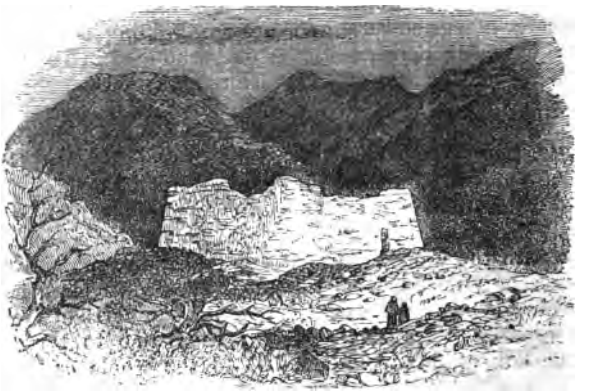

Remains of a Round Tower.

IRELAND.

1. Ireland, the second island of Europe in point of extent, is separated from Great Britain by the Irish Sea, St. George's Channel, and the North Channel; and enclosed in other directions by the Atlantic Ocean. The coasts of the two islands approach within thirteen miles between *Fair Head* in the county of Antrim and the *Mull of Cantire* in Scotland. But the nearest point of Ireland to England is the coast of Down, about seventy miles from St. Bees' Head in Cumberland; and the nearest to Wales is Greenore Point in Wexford, fifty-two miles from St. David's Head in Pembrokeshire. The north extremity of the island corresponds in latitude to that of the Coquet river at its mouth in Northumberland; and the south to that of Bristol.

2. Ireland has the general form of an oblique parallelogram, with the longest diagonal extending from *Fair Head* on the north-east to *Mizen Head* on the south-west, measuring somewhat more than 300 miles. But due north and south, the longest line, which coincides with the meridian of 8° W., extends about 230 miles, from Horn Head in Donegal to near Poole Head in Cork. In the direction east and west, the greatest distance is 180 miles, from Achris Point, Galway, to the coast between Dublin and Drogheda;

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but indentations of the sea contract this breadth one half between Sligo and Dundalk.

3. The east coast, washed by the Irish Sea, has few openings or projections of any extent; and is generally low, encumbered with shifting sands, bars, and sunk rocks, except towards the north, where the mountains of Down and Antrim form the seaboard. But the Atlantic shores are commonly bold, and very deeply indented, presenting a series of long, narrow, rocky peninsulas, the hard remnants of an originally compact strand, against which the ocean has dashed in vain, while more yielding materials between them have been swept away. These peninsular formations are specially characteristic of the south-west coast, which is exposed to the shock of storms, from a quarter whence they are most frequent and violent in our latitude. The intervening expanses are of easy access, have deep water, and rank with the finest harbours in the world.

4. The principal INLETS and ESTUARIES, on the east coast, are Wexford Harbour, Dublin and Dundalk Bays, Lough Strangford, and Belfast Lough; on the north coast, Loughs Foyle and Swilly; on the west coast, Donegal, Sligo, Clew, and Galway Bays, the mouth of the Shannon, Dingle, Kenmare, and Bantry Bays; on the south coast, the harbours of Cork and Waterford. Upwards of SEVENTY HARBOURS are reckoned, well suited for the general purposes of commerce, while fourteen of them are capable of accommodating large naval armaments. The length of the coast-line, embracing the inlets as far as the tide penetrates, is estimated at 2,200 miles.

5. Passing round the shores northward from Dublin Bay, the prominent CAPES and HEADLANDS are the Hill of Howth, on the north side of the entrance; Fair Head, and Bengore Head, in Antrim; Malin Head and Bloody Farland Point, in Donegal; Urris Head, and Achill Head on the island of that name, in Mayo; Achris Point and Slyne Head, in Galway; Loop Head, in Clare; Kerry Head and Cape Sybil, in Kerry; Crow Head, Mizen Head, Cape Clear on Clear Island, and Old Head of Kinsale, in Cork; Carnsore Point and Greenore Point, in Wexford. *Fair Head*, the north-east extremity of Ireland, is a lofty and vast mass of coarse columnar basalt, some of the columns being above 290 feet in

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length. At the base of these gigantic pillars lies a wild waste of ruins, consisting of enormous blocks precipitated from above, against which the waves dash with tremendous fury. The scene is scarcely less savage than striking, for scarcely a trace of vegetation intermingles with the hard rock to diversify its colouring, and relieve its aspect. Basaltic columns here extend along the coast for several miles, and form the extraordinary promontory called the *Giant's Causeway*, a natural pier or quay, near Bengore Head. It extends above a thousand feet in length at low-water; and consists of polygonal pillars so closely and regularly joined together, that their tops form a perfectly smooth platform.

Giant's Causeway.

6. Along the western shores numerous ISLANDS occur, commonly close to the mainland, almost all small, though often thickly peopled. *Achill*, the largest, belonging to the county of Mayo, contains about 35,000 acres. It has its name, which signifies "eagle," from the number of eagles by which it is frequented. The three south *Islands of Arran*, which lie across the entrance to the bay of Galway, are remarkable for containing monuments of a pre-historic race — remains of cyclopean stone fortresses — some of the most striking barbaric erections extant in Europe. *Valentia Island*, off the coast of Kerry, extremely fertile, is of interest, as the appointed site for the Atlantic telegraph. The *Blasquet Isles*, thirteen in number, in the same neighbourhood, contain the most westerly point of the United Kingdom; and *Cape Clear Island*, off the coast of Cork, is the most southerly point of Ireland.

7. The mainland consists of a great CENTRAL PLAIN, with mountains on its borders, occasionally throwing out spurs into it. The plain extends across the island from

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Dublin to Galway bay, and from the county of Fermanagh on the north to the confines of Waterford on the south. It has an undulating surface composed of carboniferous limestone, largely overlaid with gravel and clay, forming a soil of remarkable fertility. But a very considerable portion of the area, chiefly on the western side, is occupied with bogs, which also occur in the highland districts. These formations consist of decayed vegetable matter or peat, covered with unproductive living vegetation, *sphagnum palustra*, and other mosses, holding more or less stagnant water. They are estimated to cover one-tenth of the surface of the island. The peat generally used for fuel has an average thickness of about twenty-five feet, though sometimes extending to nearly twice that depth.

8. The MOUNTAINS exterior to the plain form no continuous belt, but occur in detached groups and ranges of limited extent. On the eastern side, the mountains of *Mourne*, in Down, approach the elevation of 3000 feet, and those of *Wicklow* slightly exceed it. On the western, the great heights frequently press closely to the shore, descend abruptly to the water's edge, and form a most magnificent coast scenery. This is particularly the case in Donegal, where stupendous cliffs have no parallel as to altitude in any other part of the United Kingdom. The *Twelve Pins* in Galway, *Mount Brandon* in Kerry, and other lofty masses occupy specially maritime sites, and are seen far out upon the western deep. The latter county has the most decidedly mountainous surface, and contains the highest summit of Ireland. This distinction belongs to *Carn Tual*, one of the Macgillicuddy's Reeks, which rises 3,404 feet. The *Reeks*, a ridge extending due east and west between the lakes of Killarney and the ocean, are so called from their sharp, jagged peaks, the appellation of Macgillicuddy being derived, according to tradition, from an old family in the neighbourhood.

9. Few countries of the same extent possess greater natural facilities for INLAND NAVIGATION, or have an equal amount of water-power fitted for industrial purposes. The *Shannon*, at the head of the RIVERS, is navigable for a greater distance than any other British stream, amounting to 214 miles from its mouth, nearly its entire course. It rises in the north-west of Carran, almost insulates the province of

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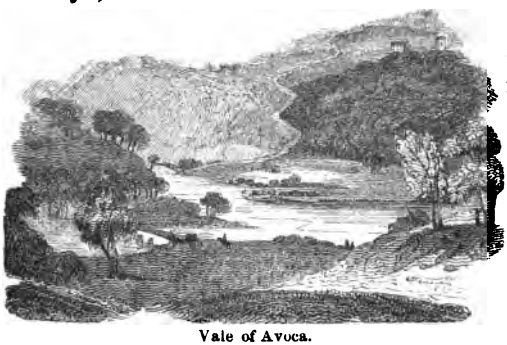
Connaught, washes the shores of ten counties, expands into several spacious lakes, and enters the Atlantic between Loop Head and Kerry Head. Next in importance is the *Barrow*, with the *Nore* and *Suir*, popularly called the Three Sisters, from their sources lying in the same ridge of mountains, and their junction, after a long separate course, before reaching the sea through Waterford harbour. The other considerable rivers are the *Blackwater*, *Lee*, and *Brandon*, on the south coast; *Slaney*, *Liffey*, and *Boyne*, on the east; the *Bann* and *Foyle*, on the north. The beautiful Vale of Avoca, in the county of Wicklow, is celebrated for its 'Meeting of the Waters,' of which there are two examples, that of the *Avonmore* with the *Avenbeg*, and of the joint streams, under the name of Avoca, with the *Aughrim*.



Vale of Avoca.

10. The LAKES are numerous, and many are of considerable extent. *Lough Neagh*, in the province of Ulster, is the largest in the British Isles, extending twenty miles by twelve, celebrated for the encrusting quality of its waters. In Ireland, the term *lough*, like that of *loch* in Scotland, is applied indifferently to fresh-water expanses, and to land-locked or deep inlets of the sea. Few of the lakes have any natural attractions, except those of *Killarney*, among the mountains of Kerry. They are three in number, mutually connected, and renowned for the contrasts afforded by their scenery, from the soft, verdant, and beautiful, to the wild, rugged, and sublime. The arbutus, with its vividly green foliage, abounds in the woods, and the ruins of *Muckross Abbey* form a very picturesque object on the shores. Lough Dery, in Donegal, bounded by dreary moorland hills, and subject to violent gusts of wind, has on one of its

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islands *St. Patrick's Purgatory*, a site annually visited by thousands of votaries in the summer months.

Blackwater Bridge.

Ireland is divided into four principal provinces, *Ulster*, *Leinster*, *Connaught*, and *Munster*, which are subdivided into thirty-two counties.

COUNTIES OF ULSTER.

1. Antrim	. .	BELFAST, Carrickfergus, Lisburn, Connor, Antrim.
2. Down	. . .	DOWNPATRICK, Newry, Donaghadee, Hillsborough.
3. Armagh	. .	ARMAGH, Portadown, Lurgan, Blackwater.
4. Monaghan	.	MONAGHAN, Clones.
5. Cavan	. .	CAVAN, Cootehill, Kilmore.
6. Fermanagh	.	ENNISKILLEN, Lowtherstown.
7. Tyrone	. .	OMAGH, Strabane, Dungannon.
8. Londonderry.		LONDONDERRY, Coleraine.
9. Donegal	. .	LIFFORD, Ballyshannon.

The people of *Ulster* differ from the natives of the other parts of Ireland, being mostly of Scottish descent, and very frugal and industrious.

1. BELFAST, at the head of Belfast Lough, a kind of northern capital, is the third city in Ireland (some rank it as the second), and is rapidly advancing in commercial importance. It has extensive manufactures of linen, cotton, glass, &c.; considerable foreign trade; and is in active inter-

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course with English and Scotch ports, especially Liverpool, to which large quantities of agricultural produce and live stock are sent. There are two important collegiate institutions; and the inhabitants, upwards of 75,000, have a decided taste for letters. The environs are very beautiful. *Carrickfergus*, a small seaport of great antiquity, was till of late years the county town, and once the key of Northern Island. *Lisburn* is a thriving inland town, on the river Lagan. *Connor*, now dwindled to a mere village, forms a bishopric with Down and Dromore. *Antrim* has extensive linen works.

2. DOWNPATRICK, a seaport and county town, near which are the ruins of a very ancient cathedral, the place of St. Patrick's interment, has a great trade in linens and agricultural produce. *Newry*, a large and thriving town and river-port, having a considerable export trade. Its chief edifices are Catholic chapels and seminaries. *Donaghadee*, a seaport and market town, has a good harbour with a light-house. Embroidery and flax are its chief produce. *Hillsborough*, formerly a parliamentary borough, has a remarkably fine church, erected by the Earl of Hillsborough in 1774.

3. ARMAGH, on a plain south of Lough Neagh, the seat of an archbishop, primate of all Ireland, has an ancient cathedral, an archiepiscopal palace, built by Charles I., and an observatory. Its principal manufacture is linen. *Portadown* and *Lurgan* have extensive linen and cotton works, distilleries, &c. *Blackwater* is a small town on the river of its name.

4. MONAGHAN and *Clones* are small inland towns, near the Blackwater river, trading chiefly in linen and pigs.

5. CAVAN, a small inland town, formerly a parliamentary borough, has but little trade out of its own locality. It has an endowed Catholic school, with a rental of £500 per annum. *Coothill* is a neat market town, with a considerable linen trade. *Kilmore* has a bishop's palace, and the ruins of an abbey, said to be built by St. Colomb in the sixth century.

6. ENNISKILLEN, the chief town of the county of Fermanagh, is well built, and carries on a considerable trade in linen and provisions. In its town-hall are still preserved the banners borne by the Enniskilleners at the celebrated "battle of the Boyne," when, in support of the Protestant cause, they so distinguished themselves. *Lowtherstown*, also called *Irvinestown*, the head of a Union, has several good buildings con-

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nected with Religion and Education; also weekly markets and monthly fairs.

7. OMAGH, the county town of Tyrone, built on a deep declivity, has the remains of an old castle, some fine modern buildings, and a large trade in linen and corn. *Dungannon*, a borough and head of a Union, has the reputation of being the chief seat of the O'Neils, assumed to be the ancient kings of Ulster. *Strabane*, on the river Bourne, is a considerable linen market. and has a salmon fishery.

8. LONDONDERRY, an episcopal city, on both banks of the *Foyle*, is a flourishing port, noted in history for its successful defence, by a feeble garrison, against the forces of James II. in 1688-9. *Coleraine*, on the river Bann, is famed for its salmon-leap, fine linen, and large bleaching grounds.

9. LIFFORD, a very small town, is the capital of Donegal, and is connected with *Strabane* by a bridge. *Ballyshannon*, a seaport, is the principal place of traffic, has a salmon fishery, is head-quarters for the militia, and has the ruins of an ancient castle belonging to the Earls of Tyrconnel.

COUNTIES OF LEINSTER.

10. Dublin	DUBLIN, Kingstown, Swords.
11. Louth	DUNDALK, Drogheda, Ardee, Carlingford.
12. Meath (Eastmeath)	TRIM, Navan, Kells.
13. Westmeath . .	MULLINGAR, Athlone.
14. Longford . .	LONGFORD, Edgeworthstown.
15. King's County .	TULLAMORE, Philipstown, Parsonstown.
16. Queen's County .	MARYBOROUGH, Portarlington.
17. Kilkenny . . .	KILKENNY, Callan, Castlecomer.
18. Carlow	CARLOW, Tullow.
19. Kildare . . .	NAAS, ATHY, Maynooth, Kildare.
20. Wicklow . . .	WICKLOW, Arklow, Bray.
21. Wexford . . .	WEXFORD, New Ross, Enniscorthy.

10. DUBLIN, the capital of Ireland, is situated at the head of a bay, near the middle of the east coast, in lat. 53° 20′ N., and long. 6° 17′ W., about 334 miles north-west of London, by Holyhead. It occupies a plain on both sides of the river *Liffey*, near its mouth; and its spacious streets and squares, splendid public buildings and private mansions, entitle it to rank as one of the finest cities of Europe. At the

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same time, narrow lanes and alleys, with wretched homes, are more than usually abundant in the neighbourhood of its palaces. The principal edifices are the Castle, the residence of the lord lieutenant, containing state apartments and the government offices; the Bank of Ireland, formerly the Parliament House; Trinity College, a Protestant University, founded by Queen Elizabeth in 1594; the Law Courts, surmounted by a dome, on the north bank of the river; the Custom-house, near its mouth; and St. Patrick's Cathedral, which may be deemed the Westminster Abbey of Ireland, owing to its numerous monuments. The city contains upwards of 260,000 inhabitants. *Kingstown*, its port (formerly called *Dunleary*), six miles to the eastward, on the south side of the bay, received its present name in honour of the landing of George IV. in 1821. *Swords* is a long irregularly-built town, where there is a round tower. (See Vignette, p. 128.)

11. DUNDALK, a considerable town at the mouth of the bay of its name, has a good harbour, a chartered school, and the only cambric manufactory in Ireland. *Drogheda*, a large town on the river Boyne, and one of the principal corn markets in Ireland, is associated with the decisive battle fought in its neighbourhood, in which James II. was defeated by William III. in 1690. *Ardee* is a decayed post town. *Carlingford*, a small seaport, celebrated for its oysters.

12. TRIM and *Navan*, on the river Boyne, and *Kells*, on the banks of the Blackwater, are the three chief towns in the county of East Meath.

13. MULLINGAR, the county town of Westmeath, is in the midst of the great agricultural plain of the interior. *Athlone*, on the banks of the Shannon, a town of considerable trade, is one of the chief government military stations.

14. LONGFORD stands on a tributary of the Shannon, and is an important military station. Within six miles E.S.E. is *Edgeworthstown*, formerly the residence of A. L. Edgeworth and his gifted daughter.

15. TULLAMORE, the capital of King's County, on the grand canal, is a thriving town and shipping station. *Charleville* forest is adjacent. *Philipstown* has an old castle, once the residence of Philip II. of Spain. *Parsonstown* is famous for Lord Rosse's monster telescope, one of the greatest achievements of modern science. It is placed at Birr Castle, the seat of his Lordship. (See Vignette, p. 143.)

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16. MARYBOROUGH, the capital of Queen's County, and the pretty town of *Portarlington*, both on the river *Barrow*, give titles to the Earls of the name.

17. KILKENNY, on the river Nore, a seat of the woollen-manufacture, is the largest inland town in Ireland, and has a population of 19,071, nearly all Roman Catholics. It has a cathedral, ruins of a castle built by 'Strongbow,' and several public buildings. *Callan*, or Kings river, is a mean town, the scene of many conflicts in former times. *Castlecomer* has extensive colleries, and the ruins of an ancient castle.

18. CARLOW, on the river Barrow, four miles S.W. of Dublin, has a fine Roman Catholic Cathedral and College, and a great trade in agricultural produce. *Tullow*, on the Slaney, has an elegant stone bridge, and a castle of the twelfth century.

19. NAAS and ATHY both rank as county towns, and have an inland trade in corn, butter, and malt. *Kildare*, which gives its name to the county, is a small decayed town, with a cathedral. *Maynooth*, fifteen miles west of Dublin, is the seat of St. Patrick's College, supported by the government for the education of the Roman Catholic priesthood.

20. WICKLOW, at the mouth of the river Vartry, is the capital of a county distinguished for its beautiful mountain-scenery and its interesting remains of antiquity. *Arklow*, at the mouth of the river Avoca, is celebrated in song for its romantic vale. *Bray* is a favourite resort for sea-bathing.

21. WEXFORD is a considerable seaport at the mouth of the river *Slaney*, and has a bridge 733 feet in length, and some interesting architecture. Its export trade in provisions, hides, and tobacco is very active. It was taken 1169 by the first English adventurers in Ireland. *Enniscorthy*, on the river Slaney, and *New Ross*, on the river Barrow, are both thriving towns in the export of provisions and wool.

COUNTIES OF CONNAUGHT.

22. Leitrim	. .	CARRICK-ON-SHANNON, Manor-Hamilton.
23. Roscommon	.	ROSCOMMON, Boyle, Elphin.
24. Sligo	. . .	SLIGO, Ballymote.
25. Mayo	. . .	CASTLEBAR, Mayo, Westport, Killala.
26. Galway	. .	GALWAY, Tuam, Loughrea, Ballinasloe.

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22. CARRICK-ON-SHANNON (crag or rocky place), capital of the county of Leitrim, is a small inland town on the left bank of the Shannon; it possesses a court house, gaol, and permanent barracks. *Manor Hamilton* is a small, neatly built market town, seventeen miles east of Enniskillen.

23. ROSCOMMON lies in the midst of a fine agricultural district near Lough Ree. *Boyle*, on the river of its name, has some linen factories, and a large trade in corn and butter, &c. On one of its two fine bridges is a statue of William III. *Elphin*, an ancient ecclesiastical town, of which the see is said to have been founded by St. Patrick, was the birth-place of Oliver Goldsmith.

24. SLIGO, on the Yarrow, which falls into Sligo Bay below the town, is a considerable and very thriving seaport. *Ballymote* is a small post town, devoted to the linen manufacture.

25. CASTLEBAR, a remarkably neat, well-built town, the capital of the county of Mayo, carries on a considerable trade, particularly in linen. *Mayo* is a neat, well-built and flourishing town. *Westport* is a thriving seaport, situated at the head of Clew bay. *Killala*, a small coast town, was held by the French for thirty days, under General Humbert, who landed to aid the abortive rebellion of 1798.

26. GALWAY, near the head of Galway bay, is the largest town in Connaught, connected with the fisheries of the west coast, and fitted with quays and docks for extensive commerce. It is the seat of a college. Since railway communication with Dublin has been established, great efforts have been made to render it a principal station for the Trans-Atlantic passage. It is the most westerly post of any importance in the kingdom; distant from St. John's in Newfoundland 1656 miles, from Halifax 2165, from Boston 2385, and from New York, 2700. *Tuam* is a handsome and thriving inland town, the See of the Primate of Connaught, whose spacious palace forms an interesting feature in the prospect. *Lough Rea*, situated on the banks of a lake of its name, has a good market for agricultural produce. *Ballinasloe*, on the river Suck, has large wool and cattle fairs.

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COUNTIES OF MUNSTER.

27. Clare . . .	ENNIS, Kilrush, Killaloe.
28. Limerick . .	LIMERICK.
29. Tipperary. .	CLONMEL, Thurles, Tipperary, Cashel, Nenagh, Carrick-on-Suir.
30. Waterford .	WATERFORD, Dungarvan, Lismore.
31. Cork . . .	CORK, Queenstown, Youghal, Kinsale, Baltimore.
32. Kerry . . .	TRALEE, Killarney, Dingle.

27. ENNIS, on the west bank of the river Fergus, is the capital of the county of Clare, and of considerable size, but irregularly built. It has the finest Gothic abbey in Ireland, and in the neighbourhood are quarries of black marble. *Kilrush* is a small trading and fishing town on the north bank of the Shannon. *Killaloe* is an episcopal town.

28. LIMERICK, on both banks of the Shannon, and partly on an island in the river, at the head of the estuary, is an ancient historic city, the fourth in Ireland in point of population, upwards of 53,000. It has a fine cathedral, and its manufactures are varied and extensive; and vast shipments are made of agricultural produce to the English ports. Large vessels can ride at the quay; and from thence to the ocean the river is unobstructed and secure. The city was the chief stronghold of the cause of James II. at the time of the Revolution. The citizens heroically resisted the arms of William III., and only surrendered on terms highly favourable to them. Sixty years elapsed after the siege before its bastions were permitted to remain without sentinels. Seventeen gates were in existence about the middle of the last century, which were regularly guarded and locked every night.

29. CLONMEL, the capital of the county of Tipperary, and the birth-place of Sterne, is a town of great antiquity, on the north bank of the river Suir, over which it has a handsome bridge of twenty arches. It carries on a great trade in agricultural produce. The small town of *Thurles* is now important as a station on the great S. and W. Railway. *Cashel*, another small town, is an ancient archiepiscopal city, built round a remarkable eminence known as the "Rock of Cashel." Its ancient cathedral, the largest

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and most remarkable ecclesiastical ruin in Ireland, stands on the summit. *Nenagh*, *Tipperary*, and *Carrick-on-Suir*, are considerable market towns.

30. WATERFORD, on the south bank of the Suir, is a very prosperous port, and possesses great natural advantages, as vessels of large burden can come up to the quay, twelve miles from the sea. The export of dairy produce and live stock is immense, especially to Bristol and other English ports. *Dungarvan*, situated on the bay of its name, is a thriving seaport, with a good fishery and a large export trade. *Lismore*, a small town, has been greatly improved by the late Duke of Devonshire, whose castle, in the days of Queen Elizabeth, was the property of Sir Walter Raleigh.

31. CORK, the second city in Ireland in population, 107,000, is situated on the river *Lee*, at its entrance into the harbour, and forms a kind of southern capital. It owes its importance to its geographical position, convenient in relation to the English and Bristol Channels, and to its fine harbour. This is a spacious land-locked expanse, which may be entered by ships of the first class at any time, without regard to the tide. It is interspersed with islands, on one of which is *Queenstown*, the principal port of Cork, formerly called the "Cove of Cork," but changed to its present name on Her Majesty's visit to Ireland in 1849. *Youghal* and *Kinsale* are seaports upon the South coast, chiefly concerned in grain and the fisheries. *Baltimore*, a decayed town, is well situated on a headland, with a good harbour.

32. TRALEE, the county town of Kerry, is situated on the small river Lee, and possesses considerable trade. Contiguous is the *Spa of Tralee*, which has an attractive chalybeate spring. *Killarney*, a small inland town, is celebrated for its lakes, which are a general source of attraction, especially since they have become accessible by rail from Dublin. *The Gap of Dunloe*, with its castle, romantically situated in a wild ravine (see Vignette on next page), is an object of general attraction. *Dingle*, a small seaport on the north side of the bay of its name, is the most western town in Ireland.

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Gap and Castle of Dunloe.

General Remarks on Ireland.

1. Among the *mineral* products of Ireland, coal occurs in several counties, but the quality is inferior, and the beds are very little worked. Iron ore is abundant, but useless, for want of coal. Some copper and lead mines are wrought in Waterford, Kerry, and Cork. The *manufactures* are not important, except that of linen, chiefly carried on in Ulster. It was introduced in the reign of Charles I., by the unfortunate Earl of Strafford, while governor-general, who brought flax seed from Holland, and hired foreigners to teach the process of production.

2. Ireland is essentially a pastoral and agricultural country, and one of the chief sources from which the provision markets of Great Britain are supplied. The extreme dampness of the climate limits the growth of wheat and barley. But large quantities of oats are raised, and the prevailing humidity favours grazing husbandry. The pastures are very rarely parched; the trees remain long in leaf; and hence that generally verdant aspect to which the favourite phrase of the "Emerald Isle" refers. Cattle and swine are the live stock most extensively reared; flax is largely grown in Ulster for the linen manufacture; and the potato is everywhere an object of culture. Sir Walter Raleigh introduced

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the potato into Ireland about the year 1601 or 1602, planting it in his garden near Youghal, from whence it gradually spread over the entire country. The peasantry adopted it as their staff of life, for which it is not adapted, led to do so by the comparative facility of the cultivation, and the usually abundant yield of the crop. But its total failure in 1846, and the resulting famine, illustrated the folly of depending for subsistence upon a single root, and has since stimulated a more enlightened agriculture.

3. The early *history* of Ireland is obscure. The people are said to have been Christianised by St. Patrick in the fifth century. They were subject to a number of petty chieftains, who were the vassals of insular sovereigns, when Henry II. of England landed at Waterford, in 1171, and was speedily recognized as the lord-paramount. He took the title of Lord of Ireland. But for centuries afterwards English authority was not acknowledged beyond a limited district around Dublin, which received the name of the English Pale. Henry VIII. assumed the title of King of Ireland. Cromwell may be said to have been the first who reduced the whole island. Its legislative union with England and Scotland was effected in the year 1800; but it has still a distinct and executive government, administered by a Lord Lieutenant, appointed by the crown.

4. Among various interesting *Antiquities* of Ireland, the most remarkable are the *Round Towers*. These are tall circular buildings, generally from 40 to 50 feet in external circumference at the base, and rising to a height exceeding 100 feet. When perfect, they terminate in a conical roof, with four small windows near the top, generally looking to the cardinal points. The sites of 118 of these peculiar buildings have been discovered. Of several, only the foundations remain, while of others, more or less of the building has been preserved. Only eighteen are found entire, or nearly so, and retain the conical roof. Their origin and purpose are quite unknown, but they are, no doubt, relics of pagan times.

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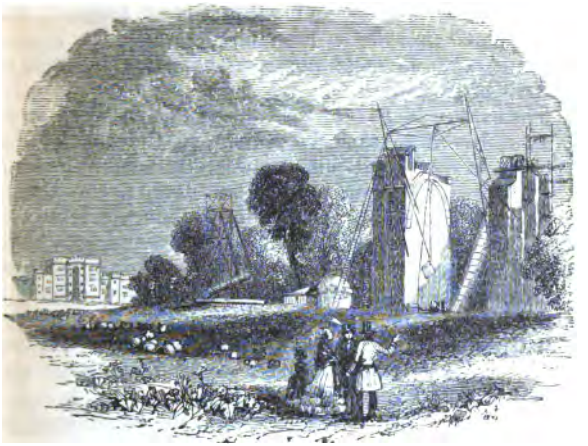

Lord Rosse's Monster Telescope at Parsonstown.

General View of the United Kingdom of Great Britain and Ireland.

1. No part of the globe is more amply provided with the means of *Internal Communication*. In England and Wales alone, the turnpike roads extend 22,000 miles, and the cross roads 100,000; the river navigation extends 1800 miles; the canals 2,300; and the length of railway opened at the close of the year 1857, amounted to 6,777 miles; which, with 1,269 in Scotland, and 1,076 in Ireland, makes a total of 9,116 miles of railway for the United Kingdom.

2. The *Population* in 1851, the date of the last census, amounted to 16,921,088 in England; 1,005,721 in Wales; 2,888,742 in Scotland; 143,126 in islands of the British Seas; 6,550,319 in Ireland; and 162,490 at sea or serving abroad in the army. The grand total being 27,672,286.

3. The *Races* to which the main mass of the people may be referred, are the Celtic, or the original inhabitants of the islands; and the Teutonic, represented by the Anglo-Saxon settlers from Germany, with the Danes, and other Northmen. They still remain tolerably distinct, notwithstanding considerable fusion. Pure Celtic blood prevails in Wales, the extremity of Cornwall, the Isle of Man, Highlands of

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Scotland, Western Isles, and great part of Ireland. Pure Teutonic blood prevails in England generally, the lowlands of Scotland, and its most northern counties, the east and north-east of Ireland.

4. The extant *Dialects* of the Celtic and the Welsh, spoken in Wales; the Manx, nearly extinct, in the Isle of Man; the Gaelic in the Highlands and western isles of Scotland; and the Erse in Ireland. Another dialect, the Cornish, lingered in Cornwall between Penzance and the Land's End to the middle of the last century, when it was finally blotted from the list of living languages. The Teutonic dialects are the English, based upon the Anglo-Saxon, spoken extensively in England, largely in Wales, and now predominant in Ireland; and the lowland Scotch, either a debased Saxon idiom, or distinct, but derived from the same stock, through the Northmen.

5. In England, Wales, and Ireland, the established *Religion* is that of the Protestant Episcopal Church, called the Church of England and Ireland. The English Church is governed by two archbishops and twenty-six bishops; the Irish by two archbishops and ten bishops. These dignitaries are appointed by the Crown; and in all ecclesiastical affairs the authority of the legislature and the sovereign is supreme. In England and Wales, the dissidents from the national establishment outnumber its members, while in Ireland upwards of eighty per cent. of the population are Roman Catholics. The established religion of Scotland is that of the Presbyterian Church, governed by presbyteries, synods, and a General Assembly, subject to state control. But the Free Church, constituted in 1843, independent of the state, is a larger body; and Roman Catholics, with other classes of religionists, are numerically important.

6. The *Form of Government* is usually styled a limited or constitutional monarchy, in which the supreme power resides in a compound body, consisting of the sovereign, a house of lords, and house of commons. These three estates constitute the Imperial Parliament, and must concur in every enactment before it has the force of law. The succession to the throne is hereditary. Various prerogatives belong to the crown, as the power of making war or peace, commuting punishment, and pardoning offenders; but these are

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exercised with the advice, and through the means of ministers responsible to parliament.

7. The *House of Lords* consists of all the temporal and spiritual peers of England and Wales; sixteen temporal peers of Scotland; with four spiritual and twenty-eight temporal peers of Ireland. The Scotch peers are elected by the members of the Scotch peerage at the commencement of every new parliament; the Irish temporal peers are similarly elected, but for life; while the title of the English peers to a place in the legislature is hereditary. The peerage consists of five orders—dukes, marquesses, earls, viscounts—and barons, any one of which can be increased by the sovereign at pleasure.

8. The *House of Commons* consists of 658 members, which number cannot be increased or diminished without the concurrence of the three estates. They are the representatives of counties, cities, boroughs, and universities, elected by persons in possession of certain prescribed qualifications, to serve in parliament for seven years, when a new parliament must be summoned. But this period may be shortened by the demise of the crown, when a dissolution necessarily takes place, and also by the will of the sovereign. England returns 471 members; Wales, 29; Scotland, 53; and Ireland, 105.

9. The important *Historical Events* in relation to the United Kingdom since the Norman Conquest, are the invasion of Ireland by Henry II. in 1171; Magna Charta, 1215; Wars of the Roses, 1455-1485; the Reformation, established by Elizabeth, 1558; the Spanish Armada defeated, 1588; Rise of the East India Company, 1600; the Union of the Crowns of England and Scotland, 1603; Foundation of the American Colonies, 1607; the Petition of Right, 1628; Great Civil War, and Commonwealth, 1642—1660; the Revolution which displaced the Stuarts, 1688; Toleration Act, 1689; the Legislative Union between England and Scotland, 1707; Accession of the House of Hanover, 1714; Loss of the American Colonies, 1783; War of the French Revolution, 1793; Legislative Union of Ireland with England and Scotland, 1800; Roman Catholic Emancipation, 1829; Parliamentary Reform Bill, 1832; Government of British India assumed by the Queen, 1858.

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Malta.

10. The FOREIGN POSSESSIONS of GREAT BRITAIN are as follow:—

In EUROPE—Heligoland, Gibraltar, Malta, and Gozo; Ionian Islands.

In ASIA—Aden, British India, with the Trans-Gangetic provinces, Ceylon, Penang or Prince of Wales' Island, Malacca, and Singapore; Arracan, Hong-Kong, Labuan.

In AFRICA—Sierra Leone, the Gambia, and Cape Coast Castle, Cape of Good Hope Colony and Natal, the Island of St. Helena, Fernando Po, Ascension, Mauritius, and its dependencies (Seychelles, Roderique, &c.)

In AMERICA—Newfoundland, Nova Scotia, and Cape Breton, Prince Edward's Island, New Brunswick, Canada, Hudson's Bay Territory and Labrador, Vancouver's Island, British Columbia, Bermudas, West India Islands (including Jamaica, Barbadoes, Trinidad, Demerara, Antigua, St. Christopher's, St. Vincent's, Guiana, the Bahamas, Berbice, Tobago, &c.), Honduras, British Guiana, Falkland Islands.

In OCEANIA—Australia, Tasmania or Van Diemen's Land, New Zealand, Norfolk Island.

The entire empire is estimated to comprise an area of 8,000,000 square miles; and a population of 183,000,000.

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FRANCE
REFERENCE TO THE PROVINCES
1. Flanders
2. Artois
3. Picardy
4. Normandy
5. Bretagne
6. Maine
7. Anjou
8. Touraine
9. Orleanois
10. Isl France
11. Champagne
12. Lorraine
13. Alsace
14. Franche Comte
15. Burgundy
16. Nivernois
17. Berry
18. Poitou
19. Aunis
20. Santogne
21. Angoumois
22. Marche
23. Bourbonois
24. Lyonnois
25. Dauphiny
26. Provence
27. Avignon
28. Languedoc
29. Auvergne
30. Limosin
31. Guienne
32. Gascony
33. Beam
34. Rouxillon
ENGLAND
ENGLISH CHANNEL
NETHERLANDS
PRUSSIAN STATES
SWITZERLAND
BAY OF BISCAY
SPAIN
MEDITERRANEAN SEA
Southampton
Chichester
Dorchester
Exeter
Plymouth
Scilly Is
Guernsey
Jersey
Cherbourg
Caen
Havre
Rouen
Dieppe
Calais
Boulogne
Dunkirk
Ostend
Antwerp
Namur
Liege
Maestricht
Mezieres
Rheims
Troyes
Paris
Versailles
Orleans
Chartres
Evreux
Alencon
Mans
Angers
Tours
Blois
Bourges
Nevers
Moulins
Limoges
Poitiers
Angoulême
Rochelle
Bordeaux
Bayonne
Toulouse
Montpellier
Narbonne
Perpignan
Nantes
Rennes
Brest
Quimper
Lyon
Grenoble
Geneva
Dijon
Besancon
Metz
Nancy
Strasburg
Basle
Genoa
Nice
Marseille
Toulon
Avignon
Valence
Clermont
Aurillac
Cahors
Agen
Pau
Vannes
Lorient
Saumur
Poitiers
Bourges
Nevers
Moulins
Limoges
Angoulême
Rochelle
Bordeaux
Bayonne
Toulouse
Montpellier
Narbonne
Perpignan
Nantes
Rennes
Brest
Quimper
Lyon
Grenoble
Geneva
Dijon
Besancon
Metz
Nancy
Strasburg
Basle
Genoa
Nice
Marseille
Toulon
Avignon
Valence
Clermont
Aurillac
Cahors
Agen
Pau
Vannes
Lorient
Saumur

TABULAR VIEW OF THE OLD PROVINCES OF FRANCE

With their Respective Departments.

Provinces.	*Departments.*	*Caps. of Prov.*
Alsace	Haut Rhin; Bas Rhin	Strasbourg.
Angoumois	Charente	Angoulême.
Anjou	Maine et Loire	Angers.
Artois	Inland, or S. E. portion of pas de Calais	Arras.
Aunis	Maritime portion of Charente Inférieure.	La Rochelle.
Auvergne	Puy de Dome and Cantal	Clermont.
Bearn and Navarre	Basses Pyrénées	Pau.
Berry	Cher, Indre, and part of Nièvre	Bourges.
Bourbonnais	Allier	Moulins.
Burgundy	Ain, Cote d'Or, Saone et Loire, Yonne	Dijon.
Brittany	Cotes du Nord, Finistère, Ille et Vilaine, Loire Inf, Morbihan	Rennes.
Champagne	Ardennes, Aube, Marne, Haute Marne	Troyes.
Comté de Foix	Ariége, and the republic of Andorre	Foix.
Dauphiny	Hautes Alpes, Drome, Isère	Grenoble.
Flanders (French)	Nord	Lille.
Franche Comté	Doubs, Jura, Haute Saone	Besançon.
Gascony / Guyenne	Aveyron, Dordogne, Gers, Gironde, Lot et Garonne, Landes, H. Pyrénées, Tarn et Garonne	Auch. Bordeaux.
Ile de France	Oise, Seine, Seine et Oise, Seine et Marne, Aisne	Paris.
Languedoc	Ardeche, Aude, Gard, Herault, H. Garonne, H. Loire, Lozère, Tarn	Toulouse.
Limousin	Correze, Haute Vienne	Limoges.
Lorraine and Barrois	Meurthe, Meuse, Moselle, Vosges, Metz	Nancy.
Lyonnais	Loire, Rhone	Lyon.
Maine and Perche	Mayenne, Sarthe	Le Mans.
Marche	Creuse	Gueret.
Nivernais	Nièvre	Nevers.
Normandy	Calvados, Eure, Manche, Orne, Seine Inf.	Rouen.
Orleanais	Eure et Loire, Loiret, Loir et Cher	Orleans.
Picardy	Somme, Pas de Calais, N. part of Aisne	Amiens.
Poitou	Deux Sèvres, Vendée, Vienne	Poitiers.
Provence	Basses Alpes, Bo. du Rhône, Var. E. Vaucluse	Aix.
Roussillon	Pyrénées Orientales	Perpignan.
Saintonge, Argumois	Eastern or Inland part of Charente Inf.	Saintes.
Touraine	Indre et Loire	Tours.
Comtat d'Avignon, and Venaissin	W. S. and N. part of Vaucluse	Avignon.

TABLE OF THE MODERN DEPARTMENTS (86) OF FRANCE.

Departments.	*Area in Eng. sq. m.*	*Population in 1856.*	*Capitals.*
Ain	2,258	370,919	Bourg.
Aisne	2,322	555,539	Laon.
Allier	2,762	352,241	Moulins.
Alpes (Basses)	2,600	149,670	Digne.
Alpes (Hautes)	2,114	129,556	Gap.
Ardèche	2,110	385,835	Privas.
Ardennes	1,955	322,188	Mezieres.
Ariège	1,738	251,318	Foix.
Aube	2,351	261,673	Troyes.
Aude	2,340	282,833	Carcassonne.
Aveyron	3,349	393,890	Rhodez.
Bouches du Rhone	1,956	473,365	Marseilles.
Calvados	2,145	478,397	Caen.
Cantal	2,245	247,665	Aurillac.
Charente	2,300	378,721	Angoulême.
Charente Inf.	2,500	474,828	Rochelle.
Cher	2,747	314,844	Bourges.
Correze	2,218	314,982	Tulle.
Corsica	3,331	240,183	Ajaccio.
Côte d'Or	3,354	385,131	Dijon.

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MODERN DEPARTMENTS OF FRANCE.

Côtes du Nord	1,967	...	621,573	St. Brieux.
Creuse	2,133	...	278,989	Gueret.
Dordogne	3,492	...	504,651	Periguex.
Doubs	2,028	...	286,888	Besançon.
Drome	2,503	...	324,760	Valence.
Eure	2,248	...	404,665	Evreux.
Eure et Loire	2,117	...	291,074	Chartres.
Finistere	2,548	...	606,552	Quimper.
Gard	2,256	...	419,697	Nimes.
Garonne (Haut)	2,529	...	481,247	Toulouse.
Gers	2,390	...	304,497	Auch.
Gironde	3,714	...	640,757	Bordeaux.
Herault	2,382	...	400,424	Montpelier.
Ille et Vilaine	2,554	...	580,898	Rennes.
Indre	2,624	...	273,479	Chateauroux.
Indre et Loir	2,332	...	318,442	Tours.
Isère	3,163	...	576,637	Grenoble.
Jura	1,894	...	296,701	Lons le Saulnier.
Landes	3,490	...	309,882	Mont de Marsan.
Loir et Cher	2,389	...	264,043	Blois.
Loire	1,805	...	505,260	Montbrison.
Loire (Haut)	1,900	...	300,994	Le Puy.
Loire (Inf.)	2,595	...	555,996	Nantes.
Loiret	2,551	...	345,115	Orleans.
Lot	2,004	...	293,753	Cahors.
Lot et Garonne	2,027	...	340,041	Agen.
Lozere	1,965	...	140,819	Mende.
Maine et Loire	2,755	...	524,387	Angers.
Manche	2,363	...	595,202	St. Lo.
Marne	3,116	...	372,050	Chalons-sur-Marne.
Marne (Haut)	2,385	...	256,512	Chaumont.
Mayenne	1,966	...	373,841	Laval.
Meurthe	2,322	...	424,378	Nancy.
Meuse	2,368	...	305,727	Bar le Duc.
Morbihan	2,667	...	473,332	Vannes.
Moselle	2,034	...	451,152	Metz.
Nievre	2,595	...	326,066	Nevers.
Nord	2,170	...	1,212,353	Lille.
Oise	2,218	...	396,065	Beauvais.
Orne	2,329	...	430,127	Alençon.
Pas de Calais	2,505	...	712,846	Arras.
Puy de Dome	3,039	...	590,062	Clermont.
Pyrénées (Basses)	2,862	...	436,442	Pau.
Pyrénées (Hautes)	1,730	...	245,856	Tarbes.
Pyrénées (Orient)	1,571	...	188,056	Perpignan.
Rhin, Bhas	1,777	...	563,855	Strasbourg.
Rhin, Haut	1,548	...	499,442	Colmar.
Rhône	1,066	...	625,991	Lyon.
Saône (Haut)	2,028	...	312,397	Vesoul.
Saône et Loire	3,270	...	575,018	Macon.
Sarthe	2,371	...	467,198	Le Mans.
Seine	185	...	1,727,419	PARIS.
Seine (Inf.)	2,154	...	769,450	Rouen.
Seine et Marne	2,141	...	341,382	Melun.
Seine et Oise	2,298	...	484,179	Versailles.
Sèvres (Deux)	2,315	...	324,846	Niort.
Somme	2,343	...	566,619	Amiens.
Tarn	2,185	...	354,632	Alby.
Tarn et Garonne	1,405	...	234,782	Montauban.
Var	2,773	...	370,820	Draguignan.
Vaucluse	1,228	...	268,994	Avignon.
Vendée	2,595	...	399,688	Bourbon Vendée.
Vienne	2,574	...	322,585	Poitiers.
Vienne (Haute)	2,118	...	319,787	Limoges.
Vosges	2,230	...	406,706	Epinal.
Yonne	2 781	...	368,901	Auxerre.

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FRANCE.

1. FRANCE is one of the largest, most populous, and powerful states of Europe, very conveniently situated with reference to communication with its maritime countries, as well as the central districts. It is bounded on the north by Belgium and the English Channel; on the west by the Atlantic; on the south by Spain and the Mediterranean; and on the east by Northern Italy, Switzerland, and Germany. Its landward limits are generally defined by natural features. The *Pyrenees* form the boundary from Spain, the *Alps* from Italy, the *Jura* mountains from Switzerland, and the *Rhine* from Germany. But on the north-east, towards Belgium, the frontier is entirely artificial, consisting of a diverging line, drawn from the Rhine below Strasburg to the coast near Dunkirk, guarded by a series of strong fortresses.

2. The north coast is generally irregular. Two great bays, with the intervening peninsula of Cotentin in the old province of Normandy, are the conspicuous features. The north-west point of this peninsula is *Cape la Hogue*, off which the French fleet was defeated by the English in 1692. After boldly projecting to the westward, and forming the peninsula of Brittany, the coast bends to the south-east, and forms the Bay of Biscay, renowned for its boisterous bil-

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lows. The south coast, belonging to the Mediterranean, has the Gulf of Lyons for its chief inlet, the shores of which are lined with lagoons separated by strips of land from the sea.

3. Besides the *Channel islands*, which politically belong to Great Britain, there are several on the Atlantic sea-board, all small, and close in shore. The Isle of Ushant, near Brest, marks the west extremity of France. Bellisle, to the southward, was held by the English, 1761-3. Noirmoutier, Ré, and Oleron, are off the mouths of the Loire and Charente. The latter is historically known from the Laws of Oleron (the foundation of the maritime jurisprudence of Modern Europe), a code issued by Richard Cœur de Lion, of whose foreign dominions the island was a portion. The little islet of Cordovan, at the entrance of the Garonne, has a celebrated light-house, begun by Henry IV. in 1584, completed in 1611, and enlarged in 1727, remarkable as the first structure of the kind in which a revolving light was exhibited. In the Mediterranean, the large *Island of Corsica*, geographically belonging to Italy, is politically an integral part of France, to which it was ceded in 1768, and forms one of the departments. At *Ajaccio*, the capital, Napoleon Bonaparte was born.

4. The greatest extent of France, due north and south, is from Dunkirk to the Pyrenees, along the meridian of 2° W., and amounts to about 600 miles. It is very nearly the same, due east and west, from the Rhine to the west coast of Brittany, along the parallel of 48° N. The superficial area is estimated at upwards of 52,000,000 hectares, equal to about 204,000 English square miles.

5. The *Face of the Country* is generally level; and its aspect is often monotonous or positively dreary. There is very fine scenery in Normandy and the Limousin, also on the borders of the great rivers, and in the departments connected with the Alps and Pyrenees. But the range of uninviting landscape is vastly in excess of the attractive. The want of ornamental plantations, and the almost total absence of hedges, give an unusual degree of tameness and irksome uniformity to the surface; and the traveller will in vain look for that cheerful and varied aspect which is so common and striking in England. Southward, from

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CALIFORNIA

the estuary of the Garonne to the base of the Pyrenees, vast sandy downs or *Landes* stretch inland from the coast, bare, or clothed with heath and pine-forests, interspersed with fens and marshes, bordered with jungles of giant rushes and water weeds. Dwellings, or huts, composed of sods, separated by many miles, often by many leagues, dot the wilderness, with a field or two around each, yielding a miserable crop of rye or millet. The inhabitants elevate themselves on stilts to facilitate the passage of the stagnant waters, and the shifting sands.

6. The *Mountains* entirely within the limits of France are the *Vosges*, which run parallel to the Rhine, separate the old provinces of Lorraine and Alsace, and rise in the Ballon de Sulz to the height of 4690 feet; the *Cevennes*, which extend from the neighbourhood of Toulouse to that of Dijon, separate the Atlantic from the Mediterranean rivers, and attain the height of 5,820 feet in Mount Mazene, near the sources of the Loire; and the ranges of *Auvergne*, which diverge from the latter to the north-west, divide the valleys of the Loire and the Garonne, and rise 6,221 feet in the Puy de Sancy, to the south of Clermont, the highest point of the interior. On the borders, *Vignemalle*, one of the French Pyrenees, and the *Grand Pelvoux*, in the department of the Upper Alps, have the elevation respectively of 11,000 and 13,440 feet. The town of Briancon, in the department named, has the *Fort de l'Infernel* comprised in the line of its fortifications, situated at the height of 7,850 feet. This is not only the highest fortress in Europe, but the highest place, constantly inhabited, after the Hospice of the Great St. Bernard.

7. Twenty-one principal *Rivers* water and fertilize the soil, several of which rank with the first-class streams of Europe, and open an extensive inland navigation. Of those which entirely belong to the country, having their rise, course, and termination within its limits, the *Loire* is the most important. It rises in the Cevennes mountains, traverses the central districts, and passes by the towns of Orleans, Blois, Tours, Saumur, and Nantes, flowing into the Atlantic. To this class also belong the *Adour*, *Garonne*, *Charente*, and *Vilaine*, which have the same termination with the *Seine*, *Somme*, and *Orne*, running to the English

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Channel, and the *Herault* and *Aude*, entering the Mediterranean. The rivers which rise in France, and flow beyond the frontier, are in the north-east, the *Meuse* with its affluent the *Sambre*, the *Scheldt*, and the *Moselle*. Those which have a foreign origin, but the greater part of their course in France, are the *Rhone*, from Switzerland, with its affluent, the *Isere*, from Savoy. It crosses the frontier soon after emerging from the lake of Geneva, is joined at the Saone at Lyons, and from thence flows southerly by Vienne, Valence, Avignon, and Arles, to the Mediterranean, into which it discharges by several mouths. The Rhine, coming from Switzerland, is simply a border river, in relation to France, from which it receives the Ill, in the neighbourhood of Strasburgh. There are no *lakes* of any magnitude.

8. The *Climate* in the north corresponds to that of the south of England, and likewise the vegetable productions. Proceeding southerly, a sensible increase of temperature is gradually experienced, and the vine becomes an article of culture. The sky is less clouded, the atmosphere more clear, and the weather not so variable. Still more to the south, or in Central France, these characteristics are decided, and while vineyards become general, maize begins to appear. The winters are brief and mild; the summers dry and oppressively hot; but violent hailstorms are common and destructive to the crops. In the extreme south, maize is general, along with the vine; and in the warmer localities the olive, the orange, lemon, and pistachio nut. In the inland districts, the summers being hotter than at corresponding latitudes on the coast, the vine is cultivated to near lat. 50° on the eastern side of France, but has its north about the mouth of the Loire on the western, in lat. 47°. Maize is raised near Strasburg, on the east, lat. 48½°, but has its northern limit on the mouth of the Garonne, on the west, lat. 46°.

9. The natural *Forests*, once vast and dense, have been greatly reduced by mismanagement and improvident consumption, especially in the stormy times of the Revolution. But they are still numerous, occupy an extensive area in the aggregate, and were it not for the quantity of timber required for fuel, would be quite sufficient for all domestic purposes, with the exception of supplying fancy

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woods for furniture and cabinet-work. The common trees are the oak, birch, ash, elm, beech, and varieties of the pine. From the latter, in the Landes, a large quantity of resin is obtained. The forests shelter the wolf, the most formidable of the wild animals of France, on account of its ferocity and numbers.

10. Among the *Mineral* products, iron ores are abundant; but they are rarely contiguous to coal, as in England, where the two are found interstratified, and are brought to the surface through the same shaft. Coal is, indeed, extensively distributed, but the quality is often inferior, the beds are small, and inconveniently disposed, being at a distance from the sea. Mines of silver, copper, lead, and antimony are wrought, but their gross produce is inconsiderable. Fossil or rock salt occurs in the Vosges and Jura mountains. Salt is also extensively made on the low swampy shores of the Mediterranean, where the heat of the climate favours the evaporation of salt water, as well as on the western coast.

11. The great proportion of the people are directly engaged in *Agriculture*, holding small allotments of land, very often as proprietors. All descriptions of corn, vegetables, and most fruits are grown. But if the produce is usually abundant, it is more owing to the climate and the soil than to the skill of the producers, as the modes of husbandry are primitive, and the implements are rude. Besides the ordinary objects of cultivation, beet-root for sugar, tobacco, madder, and saffron, are raised to a limited extent. The vine culture prevails in five regions, namely, the valleys of the Meuse and Moselle, of the Seine and Marne, of the Loire and its tributaries, of the Rhone and Saone, and the valleys of the Garonne, Charente, and Adour. The mulberry, for the support of the silk-worm, first planted near Tours in the fifteenth century, is chiefly grown in the departments of Gard, Drome, Vaucleuse, and Ardeche, where there are perhaps not less than fifteen millions of trees. The olive is raised principally in the tract between Grenoble and Narbonne.

12. The *Manufacturing* industry of France is only second to that of Great Britain in extent, variety, and value. The leading products are linen, woollen, cotton, and silk fabrics, paper, porcelain, wine, and jewellery. Ornamental wo

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and scientific instruments are made in great perfection; and the French surpass all other nations in products requiring beauty of design, artistic skill, and chemical knowledge. The linens of St. Quentin, the lace of Valenciennes, the paper of Annonay, the tapestry of the Gobelins, the porcelain of Sèvres, and the silks of Lyons, are of unrivalled excellence. Besides the raw silk raised in the country, a large quantity is annually imported, chiefly from Italy and Turkey. In all the provincial manufacturing towns, *Conseils des Prudhommes*, "Councils of Experienced Men," are established, for the settlement of disputes between the masters and artisans. The members are chosen by annual election, and consist of representatives of the manufacturers and the workmen. They act in the first instance more as courts of conciliation than of judicature, suggesting remedies for grievances, but are vested with the power of summons, seizure, fine, and three days' imprisonment. The first institution of this kind was established at Lyons, in 1809, by decree of Napoleon I.

13. The means of *Internal Communication* include about 70,000 miles of highroads and crossways; 8000 miles of navigation by rivers and canals; and 3000 miles of railway. Commerce is extensively carried on at fairs. The principal, one of the largest in Europe, is at Beaucaire, on the right bank of the Rhone, in the neighbourhood of Nismes, held annually for a week at the close of July. It is attended by an immense crowd, comprising merchants from the south European countries and the Levant; and regulated by the prefect of the department, with a military force. A large meadow along the river is covered with tents for the accommodation of the traffickers.

14. The civil divisions of the country, down to the close of the last century, consisted of thirty-two provinces, corresponding to the territorial possessions of the great feudal lords in the middle ages. But by the States-General in 1789 the present division into *Departments* was introduced. These are styled after some leading natural feature, a mountain, river, or part of a river, in the respective localities. The largest department, that of the Gironde, is about equal to the united area of Cornwall and Devon; the smallest, that of the Seine, somewhat exceeds the county of Rutland;

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but generally the departments correspond in size much more than the English counties. The local government of each is conducted by a prefect, appointed by and responsible to the minister of the interior. The departments are further divided into *Districts*, invariably named after chief towns, and superintended by sub-prefects. Each district is distributed into *cantons*, and each canton into a number of *Communes*, analogous to our parishes. France at present comprises 86 departments, 363 districts, 2845 cantons, and 38,623 communes.

Paris.

15. *Paris*, the capital, on the banks of the Seine, in lat. 48° 50′ N., and long. 2° 20′ E., extends about four-and-a-half miles along the river, and is three-and-a-half miles in its greatest breadth. It is the second city of Europe in size, containing rather more than a million of inhabitants; but is the first in the number of its attractions, consisting of superb palaces and public edifices, squares, promenades and monuments, fountains, libraries, and museums. The city was originally confined to an island in the river, which is still called *Ile de la Cité*, on which stands the cathedral of Notre Dame, with high massive towers, from which a complete view of the capital may be taken. It contains 8 former royal palaces, 75 public places, 41 churches, 22 bridges, about 1150 streets, and 30,000 houses, many of which are eight stories high, with numerous theatres, hospitals, and barracks. There are 43 public libraries, of which the *Bibliothèque du Roi*, containing upwards of 800,000 volumes and pamphlets, is only rivalled in extent and value by our British Museum. In social conveniences, as lighting, paving, sewerage, and water supply, Paris is far behind London, as

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well as in the wealth of its shops. A fortified wall, with detached forts, encloses the city and suburbs; and there is also an inner wall which marks the line of the 56 barriers, or gates. The magnificence of Paris originated with Francis I. It was largely increased under Henry IV., Mary of Medicis and Cardinal Richelieu, Louis XIV., and Napoleon I. Great improvements have been made by the present emperor.

16. In the neighbourhood, *Versailles* claims attention by its vast and superb palace, built by Louis XIV., the ordinary royal residence from 1672 to 1790, with a highly remarkable park and water-works; *St. Cloud* contains a fine chateau, the favourite abode of Napoleon I. *St. Denis* is of interest as the burial-place of the sovereigns, in the abbey-church of which repose the remains of twenty-six kings, sixteen queens, and eighty-three princes and princesses. *Vincennes* has an ancient royal castle, now used as a military arsenal and state prison, with a weeping willow in the ditch, marking the place where the unfortunate Duc d'Enghien was shot in 1804.

Lyons.

17. *Lyons*, situated at the confluence of the Rhone and the Saone, is the second city of France, and the chief manufacturing centre in the provinces. Silk goods, gold and silver lace, embroidered stuffs of every kind, jewellery, and a variety of chemical preparations, are the principal products. The place is of great antiquity, having been the capital of Celtic Gaul, in the time of the Romans, under

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the name of Lugdunum. But the buildings are almost all of very modern erection. In 1793, after a siege of forty days, which it sustained against the forces of the jacobin party, the inhabitants were decimated, the monuments destroyed, and nearly the whole city was laid in ruins. In 1831 and 1832, Lyons was the scene of sanguinary insurrections. The quays and numerous bridges across the two rivers are striking objects. The population is upwards of 156,000.

18. *Marseilles*, the third city in size, and a principal seaport, occupies the left side of a large open bay of the Mediterranean, and has 141,000 inhabitants. It is the great emporium of the trade with the Levant; and the steam-packet station for Italy, Algeria, Egypt, and the East. The famous Marseillaise hymn commemorates the enthusiasm with which the inhabitants hailed the Revolution. On a small island at the mouth of the Bay is the Chateau d'If, the prison of Mirabeau, and afterwards of the Duke of Orleans (Egalité), with his younger son. Marseilles is perhaps the most ancient city of France, having been founded by a colony of Greeks from Asia Minor, B.C. 539.

19. *Bordeaux*, the fourth in extent, with 120,000 inhabitants, is on the left bank of the Garonne, about seventy miles from its entrance into the Atlantic; and communicates also with the Mediterranean by means of the river and the canal of Languedoc. Wines and fruits are the principal exports. The old part of the city retains the features of the middle ages; the new is built in a very magnificent manner. A fine stone bridge of seventeen arches crosses the river, which is here about a quarter of a mile wide, and soon expands into a broad arm of the sea. Bordeaux sent some of the most eloquent and virtuous of the Girondists to the national assemblies.

20. *Rouen*, fifth in rank, with a population of 100,000, the ancient capital of Normandy, is picturesquely situated on the Seine. It possesses a noble and venerable cathedral, many remains of antiquity, but is now distinguished as the chief seat of the French cotton manufacture. William the Conqueror died here; and the heroic Joan of Arc suffered a barbarous sentence in the open space which bears her name.

21. *Toulouse*, on the Garonne, between the river and the

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canal of Languedoc, is the capital of literature and science in the south of France. It has, besides, extensive trade, large steel-works, and a principal cannon foundry. In the immediate neighbourhood a sanguinary battle was fought in 1814, between the English and French troops, under the Duke of Wellington and Marshal Soult.

22. *Nantes*, a commercial city and port, occupies the right bank of the Loire, about thirty miles from its mouth. An edict in favour of the Protestants was issued here by Henry IV., 1598, called the Edict of Nantes, which was revoked by Louis XIV.

23. *Lille*, a very strongly fortified city, with extensive trade and manufactures, is situated near the Belgian frontier, on an affluent of the Scheldt. Its fortifications, executed by Vauban, are accounted his masterpiece.

24. *Strasbourg*, formerly a free imperial city of Germany, is situated near the frontier towards Baden, in the midst of a rich, open agricultural country. It is famed for its fine Gothic cathedral, the spire of which rises 474 feet from the pavement, which exceeds St. Paul's by 104 feet, and is about the height of the Great Pyramid.

25. *Nismes*, the Nemausus of the Romans, in the south-east, is remarkable for its monuments of antiquity consisting of an amphitheatre capable of accommodating 17,000 spectators, a temple, triumphal arch, and pyramidal tower, with the Pont du Gard, a magnificent aqueduct in its neighbourhood. The ancient name of Nismes has recently been transferred to the skies, and applied to the fifty-second small planet, discovered by M. Laurent, a native of the place, January 22, 1858.

26. The *Ports* of consequence, besides those named, are Toulon, on the Mediterranean; Bayonne, Rochefort, Rochelle, and Brest, on the Atlantic; St. Malo, Cherbourg, Caen, Havre, Dieppe, Boulogne, and Calais, on the English Channel. Toulon, Rochefort, Brest, and Cherbourg are great naval arsenals. The latter has an artificial breakwater, constructed to protect the harbour, of far greater magnitude than that at Plymouth, but much less remarkable in its execution. The Cherbourg breakwater was begun thirty years before the Plymouth, and not finished till long after it, while the work was attended throughout with mishaps.

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Bayonne, at the mouth of the Adour, originated the well-known weapon, the bayonet, which has its name from that town. Caen, on the Orne, was the burial-place of William the Conqueror.

27. The other *Inland cities and towns*, of the most importance, are *Metz*, on the Moselle, very strongly fortified, being near the frontier of Belgium and Rhenish Prussia; *Amiens*, on the Somme, with an admired cathedral, and very considerable manufactures; *Orleans*, on the Loire, formerly a kind of second capital to France; *St. Etienne*, in the coal district, to the south-west of Lyons, celebrated for its manufactures of arms and hardwares; *Montpellier*, near the Mediterranean, famed for salubrity, finely seated on a lofty hill; *Avignon*, on the Rhone, surrounded with mulberry plantations, the residence of the popes from 1303 to 1376; and *Rheims*, noted for its colossal cathedral, in which the former sovereigns of France were crowned.

28. Places chiefly of historic interest are *Sainte Victoire*, a picturesque hill near the city of Aix, which derives its name from the great victory gained over the Cimbri and Teutones by the Roman consul Marius, B.C. 102; *Tours*, a considerable city on the Loire, near which Charles Martel arrested the advance of the Saracens from Spain, in a three-days' battle, A.D. 732; *Falaise*, a town in Normandy, where William the Conqueror was born, which has an equestrian statue of him, erected in 1851; *St. Valery*, at the mouth of the Somme, from which he sailed for the conquest of England; *Bayeux*, a Norman city, famous for its tapestry, which represents the leading events of his contest with Harold; *Chinon*, an imposing ruined castle on the Loire, between Saumur and Tours, the French Windsor of our early Plantagenet sovereigns; *Fontevraud*, an abbey church in the neighbourhood, now used as a prison, in which Henry II. and Richard I. of England were buried; *Cressy*, a small town in the department of the Somme, where Edward III. gained a decisive victory over the French in 1345; *Poitiers*, an ancient city, southward of the Loire, noted for the triumph of Edward the Black Prince, in a battle fought in 1356, when the French King John was taken prisoner and conducted to London; *Agincourt*, not far from the field of Cressy, where Henry V. triumphed in 1415; *Alby*, on a

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branch of the Garonne, which gave its name to the persecuted Albigenses in the middle ages; *Calais*, the last possession of England in France, captured by the Duke of Guise in 1558; *Amboise*, near Tours, where the civil wars on account of religion broke out, and the name of Huguenots was first given to the Calvinists in 1560; *Noyon*, on the Oise, the native place of Calvin; *Pau*, at the base of the Pyrenees, where Henry IV. was born, and also Bernadotte, King of Sweden; *Ferney*, a village near the Swiss frontier, the residence of Voltaire; *Fontainebleau*, thirty-five miles south-west of Paris, with a fine forest and royal palace, the scene of Napoleon's abdication; and *Ham*, on the north-east, possessing an ancient castle, in which the ministers of Charles X. were imprisoned, and also the present Emperor Louis Napoleon.

29. The *Natural Curiosities* of the country are not numerous. The most remarkable are the extinct volcanoes of *Auvergne*, the activity of which must have been long anterior to the historic period. There is also an extinct volcano near *Rochemaure*, on the Rhone, with a basaltic colonnade on one side, upwards of six hundred feet in length, and an enormous funnel, nearly five hundred feet deep, and thirty in diameter at the brink. Near *Castres*, on the Garonne, is the *Rocher tremblant*, a block estimated to weigh between twenty and thirty tons, so nicely poised upon a rock, that one man can make it oscillate several times. Not far from the mouth of the Rhone, a singular stony desert occurs, the plain of *La Crau*, about fifteen miles across. It is entirely composed of rounded pebbles, some of which are as large as a man's head; and the shingle of the sea-shore is not more destitute of vegetation.

30. France has a *Population* somewhat exceeding 35,000,000. The great bulk of the people are French, a very mixed race, but with Celtic blood predominating. Their language is mainly based upon the ancient Latin, variously modified by admixture with the tongues of aboriginal tribes and successive hordes of conquerors. There are two principal dialects —the proper French, spoken on the north of the Loire, formerly distinguished as the *Langue d'Oui*, and the Romance on the south, called the *Langue d'Oc*. Besides the French people, there are a considerable number of Germans and

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Flemings, using their respective dialects, in the departments bordering on Germany and Belgium. The *Bretons*, in Brittany, form another variety of the population. They belong to the Cymric branch of the Celtic race, speak a dialect analogous to the Welsh, and are the descendants of a colony from the opposite British coasts. The *Basques*, in the western Pyrenean departments, are also a very distinct race, still retaining a peculiar language of uncertain origin and very difficult acquirement.

31. There is no established *Religion* in France, all denominations being professedly equal in the eye of the law. But the vast majority of the people are Roman Catholics, under the spiritual jurisdiction of fourteen archbishops, and sixty-six bishops; and this communion is eminently favoured by the government. The separatists are chiefly Lutherans, who adhere to the Confession of Augsburg, in the north-eastern departments; Calvinists, or members of the Reformed Church, in the southern; and Jews, found in most of the principal cities. The salaries of both the Catholic and Protestant clergy are paid out of the public revenues.

32. The French are temperate, gay, impulsive, remarkably polite, at least as regards the higher classes, fond of show and spectacle, attached to military glory, and accustomed to place the most unhesitating confidence in their prowess in war. Yet, though their arms have at various times been crowned with the most splendid success, no nation has ever experienced greater reverses or more signal defeats. A vast standing army is at present maintained, admirably organised and equipped; and great efforts have recently been made to raise the navy to an equality with that of England.

33. The Romans, who reduced the country under Julius Cæsar, about B.C. 50, styled it *Gallia*, from the Gauls, by whom it was chiefly occupied. After the fall of the Roman empire, this name was supplanted by that of *France*, derived from the *Franks*, an assemblage of tribes from Germany, who, under their King Clovis, in the fifth century, conquered the whole territory. The name of *Louis*, borne by eighteen of the French sovereigns, is a corruption of *Clovis*. The form of government was that of an absolute monarchy down to the breaking out of the Revolution in 1789, since which

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time there have been repeated changes, namely, limited monarchy in 1791, republic with terrorism in 1793, republic with aristocratism in 1795, republic with absolutism in 1799, unlimited military imperialism in 1804, limited monarchy in 1814, republic in 1848, military imperialism in 1852, apparently limited, but not really so, as the representatives of the people have only nominal power, and are not freely elected.

34. The *Foreign Possessions* of France consist of Algeria, in northern Africa, with St. Louis and Goree, islands on the west coast, and parts of the adjoining mainland; French Guiana in South America; Martinique, Guadaloupe, and a few other islands in the West Indies; St. Pierre and Miquelon, small islets in the Gulf of St. Lawrence; the Isle of Bourbon, in the Indian Ocean; Pondicherry, Chandernagore, and some other settlements in India; Tahiti and the Marquesas in Oceania.

35. The little territory of *Andorre*, immediately adjoining the French department of Ariege, but on the south, or Spanish side of the Pyrenees, is an independent state under the protection of France, dating from the time of Charlemagne, in the eighth century. It consists of three mountain valleys, and contains 190 square miles, with a population of 18,000, occupying between thirty and forty villages. The government is vested in a council, over which presides a syndic; and justice is administered by two judges, one appointed by the French sovereign and the other by the bishop of Urgel in Spain. The country produces little besides wood and iron, with which the people purchase corn and other articles of their neighbours. Andorre, a town of 2000 inhabitants, is the capital, on an affluent of the Ebro.

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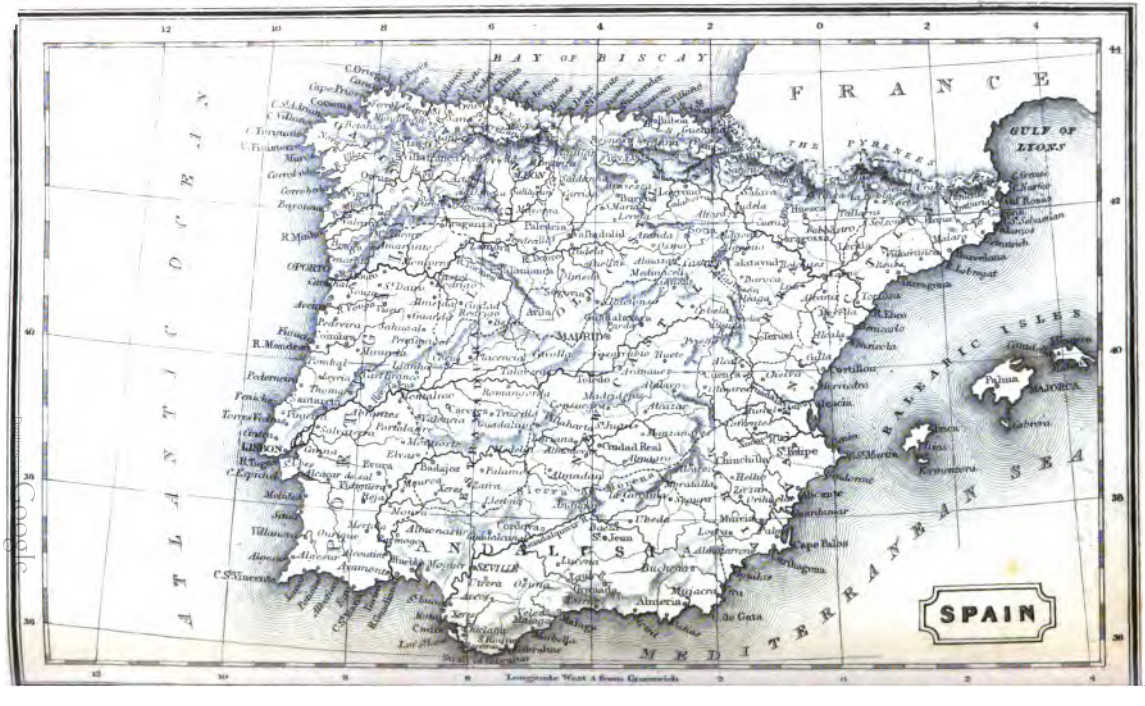
BAY OF BISCAY
FRANCE
GULF OF LYONS
THE PYRENEES
ATLANTIC OCEAN
BALEARIC ISLES
MAJORCA
MEDITERRANEAN SEA
SPAIN
ANDALUSIA
MADRID
SEVILLE
OPORTO
LISBON
Longitude West from Greenwich

TABLE OF THE DISTRICTS AND PROVINCES OF SPAIN,

With their Chief Cities and Towns.

Provinces.	*Area in sq. miles.*	*Population in 1857.*	*Cities and Towns.*
NEW CASTELLE.			
Madrid	1,315	483,795	MADRID, Florida, Casa del Campo, Getafe, Leganes, Chinchon, Alcala de Henares, Colmenar, El Escurial.
Guadalaxara	1,946	242,171	Guadalaxara, Siguenza, Brihuega, Trill Molina.
Toledo	8,773	340,635	Toledo, Aranjues, Ocaña, Consuegra, Madridejos, Talavera.
Cuença	11,294	243,260	Cuença, Requena, San Clemente, Huete.
La Mancha	7,543	277,788	Ciudad Real, Almaden, Almagro, Manzanares, Val de Peñas, Almodovar, El Viso, Calatrava, Guadalupe.
2. OLD CASTILLE.			
Burgos	7,674	347,693	Burgos, Aranda de Duero, Lerma.
Logrono		183,208	Logroño, Calahorra, Alfaro, Agreda, Ezcaray, Haro.
Santander		233,523	Santander, Laredo, Santillana, Santoña, Espinosa.
Soria	4,076	178,645	Soria, Osma.
Segovia	3,466	162,062	Segovia, San Ildefonso, or La Granja.
Avila	2,569	187,156	Avila, Medina del Campo, Arevalo, Peñaranda.
Palencia	1,783	205,666	Palencia, Torquemada, Saldana, Cervera, Carrion.
Valladolid	3,279	255,116	Valladolid, Medina del Rio Seco, Tordesillas, Peñafiel.
3. ASTURIAS.			
Oviedo	3,686	434,635	Oviedo, Aviles, Gigon, Navia.
4. LEON.			
Leon	5,894	354,295	Leon, Astorga, Sahagun, Ponferada Bembire, Rueda.
Salamanca	5,630	280,722	Salamanca, San Estevan de la Sierra, Ciudad-Rodrigo, Bejar, Espeja.
Zamora	3,562	262,451	Zamora, Toro, Fermoselle, Morales, Benavente, Monbuey, Puebla de Sanabria.
5. GALICIA.			
Coruña	15,897	573,114	Coruña, Santiago de Compostella, Muros, Padron, Betanzos, Ferrol.
Lugo		446,801	Lugo, Mondoñedo, Ribadeo.
Orense		406,294	Orense, Ribadavia, Montery, Oencia.
Pontevedra		464,969	Pontevedra, Tuy, Bayona, Vigo.
6. ESTREMADURA.			
Badajos	14,329	427,932	Badajos, Albuquerque, Xeres de los Caballeros, Olivença, Zafra, Merida, Llerena, Cabeza de Buey.
Caceres		313,912	Caceres, Cazar de Caceres, Alcantara, Valencia, Placencia, Coria, Truxillo.
7. ANDALUSIA.			
Seville	8,989	501,050	Seville, Guadalcanal, Cazalla, Constantina Utrera, Carmona, Ecija, Ossuna, Estepa.
Huelva		184,110	Huelva, Ayamonte, Moguer, Palos, Niebla, Aracena.
Cadiz		397,701	Cadiz, Xeres, San Fernando, Caracca, Puerto Real, Medina Sidonia, Puerto de Santa Maria, Arcos, Rota, San Lucar de Barrameda, Tarifa, Algeziras, San Roque.
Cordova	4,159	362,538	Cordova, Baeza, Bujalance, Lucena, Fuente, Ovejuna, Hinojosa, Carlota, Montilla, Priego.
Jaen	4,603	361,190	Jaen, Andujar, Linares, Alcala la Real Beaza, Baylen, Ubeda.

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DISTRICTS AND PROVINCES OF SPAIN.

Provinces.	*Area in sq. miles.*	*Population in 1857.*	*Cities and Towns.*
8. GRANADA.			
Granada	9,622	461,240	Granada, Albama, Loja or Loxa, Ugijar, Huescar, Baza, Guadix, Almuñecar, Motril, Torviscon.
Almeria		326,640	Almeria, Adra, Dalias, Mujacar, Velez el rubio, Velez el Blanco.
Malaga		471,554	Malaga, Marbella, Velez Malaga, Ronda, Grazalema, Antequera, Archidona, Estepona.
9. VALENCIA.			
Valencia	7,684	622,677	Valencia, Grao, Chelva, Liria, Murviedro, Cullera, Alcira, Jativa, Montesa.
Alicant		392,990	Alicant, Onteniente, Denia, Gandia, Alcoy, Orihuela, Monovar, Elche, Elda.
Castellon-de-la plana		312,743	Castellon de la Plana, Segorbe, Alcora, Vinaroz, Benincarlo, Villareal, Peniscola, Morella.
10. MURCIA.			
Murcia	7,877	387,377	Murcia, Carthagena, Loreha, Archena, Alhama, Caravaca, Molina, Moratalla, Totana.
Albacete		211,402	Albacete, Chinchilla, Hellin, Villena, Almanza, Alcaraz.
11. CATALONIA.			
Barcelona	12,180	750,804	Barcelona, Villafranca de Panades, Igualada, Manresa, Monserrat, Mataro, Tarrasa, Vich.
Tarragona		339,012	Tarragona, Reus, Valls, Tortosa, Alfaques, or San Carlos.
Lerida		316,868	Lerida, Corvera, Solsona, Cardona, Urgel.
Gerona		328,736	Gerona, Santa Maria de Arens, Figueras, Rosas, Olot, Ripoll, Castillo de Ampurias.
12. ARAGON.			
Saragossa	14,726	397,366	Saragossa, Daroca, Calatayud, Tarazona.
Huesca		270,157	Huesca, Jaca, Barbastro, Ayerbe, Mequinenza.
Teruel		256,616	Teruel, Alcañiz, Caspe, Albarracin.
13. NAVARRE.			
Navarre	2,450	308,622	Pamplona, Estella, Tudela, Corrella, Tafalla.
14. BASQUE PROVINCES.			
Alava	1,082	100,756	Vittoria, El Ciego, Salvatierra, Orduña.
Biscay	1,267	160,470	Bilbao, Somorrostro, Portugalete, Durango.
Guipuscoa	622	164,991	San Sebastian, Fontarabia, Mondragon, Lor Passages, Placencia, Tolosa, Vergara, Oñate, Ernani, Segura.
BALEARIC ISLES.			
Palma	1,757	266,952	Palma, Manacor Pollenza, Soller, Felaniche, in Majorca; Ciudadela and Mahon, in Minorca; Iviça or Ibiza.
CANARY ISLANDS.			
Canary Islands	3,220	227,146	Laguna, Santa Cruz, Las Palmas, Orotava, &c.

Spain was formerly divided into the *kingdoms* of Galicia, Navarre, Aragon, Valencia, Murcia, Granada, and Leon; the *principalities* of Asturias and Catalonia; the *lordship* of Biscay and the *provinces* of Andalusia, Old Castille, New Castille, and Estremadura. Of these, Aragon, Valencia, Murcia, Catalonia and the Balearic Islands formed the kingdom of Aragon; all the rest belonged to the kingdom of Castille and Leon.

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The Alhambra.

SPAIN.

1. The kingdom of Spain occupies by far the greater portion of the south-western peninsula of Europe, which is hence commonly styled the Spanish peninsula. It is bounded on the north by France and the Bay of Biscay; on the west by Portugal and the Atlantic Ocean; on the south and east by the Strait of Gibraltar and the Mediterranean. The entire peninsula has a very compact and somewhat square form, which the ancients compared to that of a bull's hide. It contains an area of about 216,000 square miles, of which 180,000 belong to Spain, the remainder to Portugal.

2. The *Islands* which are integral portions of Spain are the *Isle de Leon*, on which Cadiz is situated, close to the Andalusian coast; the *Balearic group*, off the coast of Valencia, of which the important members are Majorca, Minorca, and Iviça; and the *Canaries*, which geographically belong to Africa, but constitute one of the provinces into which the kingdom was divided by royal decree in 1837.

3. The *Chain of the Pyrenees* divides Spain from France, running across the isthmus between the Gulf of Lyons and the Bay of Biscay. The highest point, the *Pic Nathou*, a summit of Mount Maladetta, 11,427 feet above the sea, is within the Spanish frontier; and more than twenty peaks rise to the height of 10,000 feet. But the chain extends far beyond the limits named, being prolonged without interruption by the mountains of Asturias, which follow a course

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parallel to the southern shores of the Bay of Biscay, and terminate at *Cape Finisterre*, the western extremity of the country.

4. The *Interior* of the kingdom is very largely a mass of lofty table-lands, descending with a somewhat gradual slope towards the west, the direction generally followed by the rivers. Several ranges of mountains intersect this high central tract, and form in part its boundaries or ramparts. The most conspicuous is the *Sierra Nevada*, a kind of side wall on the south, which contains the culminating point of the peninsula, called the *Cerro da Mulhacen*, south-east of Granada; this is 11,665 feet high, and upwards of 1,500 feet above the line of perpetual snow. The prefixes to the names of the Spanish mountains refer to their configuration—*cerro* denoting a hog-backed hill, *sierra* a saw-like or serrated range, and *pic* a pointed height.

5. The largest *Rivers*, flowing westerly to the Atlantic, are the *Douro*, northern; the *Tagus*, central; the *Guadiana* and *Guadalquiver* southern. The eastern slope of the peninsula, of far inferior dimensions to the western, contributes only one important river, the *Ebro*, to the Mediterranean. But of these streams, the Guadalquiver and Ebro are alone exclusively Spanish. The Tagus and the Douro have the lower parts of their course, where their commercial value is the greatest, entirely confined to Portugal; and the Guadiana also quits Spain for Portugal below Badajoz, but returns to it again to form the frontier towards its mouth. In general, the rivers are not available to any great extent for navigation, owing to want of water in summer, and their impetuous flow when filled by rains or melted snow.

6. The *River-valleys*, and the *Plains* at the base of the mountains, are very fertile, especially the lowlands along the southern and south-eastern coasts. This last region, subject to almost tropical heat, abounds with many of the choicest vegetable productions, and looks like a garden in perpetual bloom. There are the vine, fig, olive, mulberry, lemon, orange, citron, and pomegranate, with the sugar-cane, date-palm, banana, aloe, and cactus, in the warmest localities. The cork-tree also flourishes, and yields an important article of commerce. It is strikingly different with the lofty central *Table-lands*, comprising nearly one-half the kingdom.

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These are treeless, arid, and dreary plains, to which the name of *desploblado*, or desert, is properly given. Being completely unsheltered, they are alternately exposed to biting winds in winter and the most scorching heat in summer. Hence the year of Madrid is said to consist of nine months of winter and three of hell!

7. With respect to *Agriculture*, a large proportion of the productive soil lies waste, while the remainder is cultivated with the rudest implements, and altogether without science. But more than three-fifths of the surface are devoted to pasturage, upon which immense numbers of sheep are reared. The *Merinos*, or fine-woolled breed, once peculiar to the peninsula, have now been introduced into most European countries. Spanish sheep-farming is almost entirely a monopoly, in the hands of an incorporated company of nobles, persons in power, and influential clergy, who possess and exercise the right of feeding their flocks on the pasture lands all over the kingdom, to the detriment of the community. The sheep pass the summer on the high grounds of Castile and Leon; and are driven in vast flocks of ten thousand to winter on the plains of Estremadura and Andalusia. Proprietors of inclosed lands on the route are obliged to leave spaces clear for the passage. Horses are likewise numerous and valuable. The Arabs, when in possession of the country, stocked it with their finest breeds; and though the race has degenerated, it still shows many of the qualities for which it was once distinguished. Mules, being more sure-footed, are generally preferred for travelling the mountain roads.

8. The *Mineral wealth* of the country is very important. But formerly the precious metals from the Transatlantic colonies, and more recently political convulsions, have hindered the development of native resources. The remark will apply to other industrial pursuits, agricultural and manufacturing. Iron, in great profusion, occurs in the Asturias; lead is found more or less abundantly in almost every province; and the quicksilver mines at *Almaden*, in New Castile, are supposed to be the richest in that metal in the world, the property of the government. Silver, copper, zinc, cobalt, antimony, coal, and rock-salt, are other products.

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9. Spain was formerly divided into *fourteen great districts*, several of which were once distinct kingdoms and principalities. But it is now distributed into *forty-nine provinces*, most of which are named after their principal towns. *Madrid*, the capital of the kingdom, in lat. 40° 25″ N., and long. 3° 40′ W., is seated on a small affluent of the Tagus, nearly in the centre of the peninsula, and contains upwards of 200,000 inhabitants, almost all of them Spaniards. The city occupies an elevated site, 2175 feet above the sea, in the midst of a sterile country, without easy communication with the more productive provinces. It has no attractions besides the Calle de Alcala, a magnificent street; the royal palace; and the Prado, a long and spacious walk in the neighbourhood, adorned with trees and fountains, the evening resort of all ranks and classes of the citizens. Twenty-seven miles to the north-west is the *Escurial*, a monastery and palace, forming a stupendous mass of building. It was erected by Philip II., in fulfilment of a vow made at the battle of St. Quentin, which he gained in 1557; and consists of a number of square courts built in the form of a gridiron, in honour of St. Lawrence, the martyr, to whose intercession he ascribed his success, and who is said to have been roasted to death on an instrument of that kind. It contains the splendid mausoleum of the Austrian and Bourbon kings of Spain, a rich library, 48 wine cellars, 80 staircases, 800 columns, 73 fountains, 12,000 windows and doors, 1860 rooms, 1560 oil and fresco paintings, and is little less than a mile in circumference. The palace of *La Granja*, forty miles north of the capital, the summer residence of the sovereigns, occupies a fine situation in a mountain recess, screened from the scorching sun, and open to the refreshing breezes of the north. It is 3940 feet above the sea, or higher than the summit of Vesuvius.

10. *Barcelona*, the second city of the kingdom, is situated on the Mediterranean, and contains 120,000 inhabitants, all busily engaged in trade and manufactures. Southward, on the same sea-board, are *Tarragona*, an ancient place and important port; *Tortosa*, on the Ebro, near its mouth, with a majestic Roman tomb in the vicinity; *Valencia*, delightfully situated on the Guadalaviar, a few miles from the sea, a populous city, with fine public buildings; *Alicant*, noted

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for its wines; *Carthagena*, a place of Carthaginian origin, possessing an excellent harbour; and *Malaga*, a large commercial city, from which considerable quantities of wines, raisins, almonds, and other fruits are exported.

11. On the south-west Atlantic coast, *Cadiz* is the principal port, a strongly fortified town, considered impregnable. Near it, on the opposite side of the bay, is *Santa Maria*, from which most of the sherries of Spain are exported. The wine has its name from *Xeres*, a town a few miles inland, where it is chiefly made. There are several places of interest in this neighbourhood, as the little port of *Palos*, from which Columbus sailed on his memorable voyage in 1492; *San Lucar*, from which Magellan started on the first circumnavigation of the globe in 1509; and *Cape Trafalgar*, off which Nelson defeated the combined French and Spanish fleets in 1805.

12. On the north-west Atlantic coast is *Corunna*, which, in the centre of an old battery, contains the tomb of Sir John Moore, who fell in the vicinity in the hour of victory, January, 1809. The ports of the Bay of Biscay are *Santander*, a seat of thriving commerce of modern date; *Bilbao*, the great emporium of Spanish wool for exportation; and *St. Sebastian*, a fortified town, near the French frontier, celebrated for its capture by the British from the French by storm in 1813, with dreadful loss on both sides. At *Vittoria*, a town fifty miles inland, Wellington gained, in 1813, the last of his great victories in the peninsula.

13. *Seville*, on the Guadalquiver, ranks after the capital among the inland cities, containing upwards of 100,000 inhabitants. It possesses the finest Gothic cathedral in the kingdom, with imposing Moorish remains. The trade is extensive in the export of oranges, and the manufacture of cigars. *Granada*, seated on the *Darro*, in a plain renowned for its beauty and fertility, bounded by snow-covered mountains, was the capital of the first Moorish kingdom in Spain. It still contains the palace of the kings, the famous *Alhambra*, reckoned one of the finest existing specimens of Moorish architecture; and the *Xeneralife*, their pleasure-house; but no description can convey any just idea of these structures. The cathedral, a fine building, contains the tombs of Ferdinand and Isabella, the conquerors of

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Granada; of their daughter, Joanna, the first queen of Spain; and of her husband, the Archduke Philip of Austria. *Cordova*, also a former capital of the Moors, has a splendid monument of their taste in a great mosque, converted into a cathedral. *Saragossa*, on the Ebro, is famous for its desperate resistance to the French during the peninsular war. *Badajos* and *Ciudad Rodrigo*, towards the frontiers of Portugal, and *Pampeluna*, near that of France, are important military positions, with strong fortresses. *Salamanca*, on the Tormes, an affluent of the Douro, is chiefly known as the seat of a university, once famous in Europe, now utterly decayed; and as the site of Wellington's victory over Marmont in 1812. *Toledo*, on the Tagus, below Madrid, long celebrated for its sword-blades, still produces them of admirable temper. But it belongs, with *Valladolid*, *Burgos*, *Segovia*, and others, to the class of cities, numerous in Spain, which were once very flourishing, but are now greatly decayed.

14. Spain has long been notorious for deficient means of *Intercommunication*. The common roads are very generally such as have been worn by the passage of vehicles and the feet of mules, while canals are few, and the rivers are only partially adapted for navigation. *Railways* to a small extent have been introduced. One from Santander to Reynosa, across the Asturian mountains, partially opened in 1857, is remarkable as the highest in Europe, being carried to the height of 3,053 feet above the mean tide of the Bay of Biscay.

15. The *Population* of the country is loosely estimated at 14,000,000, for the official reports are not founded upon a regular census. It was certainly much greater three centuries ago. Considerable inequality appears in the distribution of the people; for while the southern, south-eastern, and some other provinces are populous, a great extent of the high, central region corresponds in solitariness to the steppes of Russia.

16. Several *Races*—Celtic, Carthaginian, Latin, Gothic, and Moorish—have contributed to form, by their varying mixture, the main body of the Spanish people. But the *Biscayans*, or *Basques*, in the northern provinces, are a distinct stock, perhaps representing the aborigines. Owing to

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their different origin, the natives of distinct provinces are remarkably diverse in their characteristics. The Castilians are proud, taciturn, and gloomy, have a stately bearing, with a high sense of honour. On the contrary, the Biscayans are frank, lively, sociable, fiery, and generous. The Galicians are trustworthy and industrious, officiating as general labourers throughout the peninsula, while the Murcians and Estremadurans are indolent and insincere. The Andalusians and Valencians are vain, imaginative, careless, and vivacious, though reduced to poverty, yet vindictive, a temperament derived from the Moors.

17. The *Spanish language*, so called by foreigners, is properly the tongue of Castile, only spoken there in its purity, but so widely known as to be considered national. It is the result of a mixture of the Teutonic with the Latin, enriched with words and forms of pronunciation from the Arabic. The dialect of the Catalans and Valencians corresponds to the southern French, and that of the Galicians to the Portuguese. The language of the Basques is perfectly distinct.

18. Though varying greatly in their temperament, the people are universally attached to the same *amusements*. It has been said that, if the *bolero*, a national dance, were to be struck up in the churches and courts of law, the very clergy and judges could not refrain from joining in it. High and low, male and female, are passionately fond of the bull-fight, a brutalising sport derived from the Romans.

19. The *Roman Catholic Religion* is exclusively professed in Spain. Till recent times, in no other country had that church acquired a more complete control of the government and the people. It literally swarmed with hosts of idle and luxurious monks and priests, who lived upon the wealth of the land without contributing in the smallest degree to the welfare and improvement of the people. They kept them, on the contrary, in a state of the most abject ignorance and superstition, opposing every obstacle to the diffusion of knowledge, and making everything subservient to their selfish interests. The worst parts of the establishment have been swept away by the *suppression of the monasteries and the Inquisition*. The property of the church has also been confiscated, and the secular clergy made entirely dependent

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upon the state. There are seven archbishops and forty-seven bishops. The Archbishop of Toledo is the primate.

20. The *Spanish monarchy* was formed in the year 1516, by the union of the kingdoms of Castile and Arragon. Don Carlos I. was the first King of Spain, who, as Archduke of Austria, is best known in history as the Emperor Charles V. of Germany. After a series of political struggles and convulsions, in 1835, the form of government, before absolute, became constitutional. The power of the crown is limited by the Cortes, or national assembly, consisting of two chambers, a senate and a house of representatives. The members of the senate are appointed by the crown for life. The representatives are elected by juntas of the population for five years; but the crown may at any time dissolve them and call for a fresh election.

21. The *Foreign Possessions of Spain* are very inconsiderable in comparison with their former magnitude. They consist of *Ceuta*, and a few other places, on the north coast of Africa, to which criminals and political offenders are banished; the islands of *Cuba* and *Porto Rico*, in the West Indies; and a portion of the *Philippine Islands*, on the east coast of Asia.

22. Part of the mainland of Spain, near the extreme south point, consisting of the Rock of *Gibraltar*, is an important British possession, commanding the entrance to the Mediterranean. The rock is the ancient Mount Calpe, one of the Pillars of Hercules. It rises abruptly from the sea to the height of nearly 1500 feet, is about three miles long from north to south, three quarters of a mile wide at the broadest part, and seven miles in circuit. The north and east sides exhibit a line of almost perpendicular precipices, while the south and west sides descend in rugged slopes, with occasional flats or terraces. The mountain mass terminates to seaward at Europa Point, and is connected with the Spanish main by a narrow sandy isthmus, only a few feet above the level of the sea. Its summits are occupied by a protected colony of monkeys from Africa, the only example of the animal wild in Europe. Every accessible point is defended by formidable batteries, and the whole is so completely fortified as to be deemed impregnable. Gibraltar town, consisting chiefly of a single street, about a mile long, is at the

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north-west foot of the rock, and has a very miscellaneous population of about 15,000, exclusive of the garrison, which is always considerable. The place was captured by Sir George Rooke in 1704; and was successfully held by General Elliot, during a long and very celebrated siege, 1778-83, against the united forces of Spain and France.

Cintra.

PORTUGAL.

1. PORTUGAL comprises the most westerly portion of the European mainland, and forms one of its smallest and least influential kingdoms. It is bounded on the north and east by Spain, on the south and west by the waters of the Atlantic, and includes 36,000 square miles, and an area about one-eighth larger than that of Ireland.

2. The *face of the country* is almost everywhere agreeably diversified, and is rich in beautiful landscapes. *Three ranges of mountains* cross the frontier from Spain, of which the *northern*, the Sierra d'Estrella, is the loftiest, attaining the height of 7000 feet. It forms the watershed between the Douro and the Tagus, and terminates at the coast, on the north bank of the latter river, in Cape Roca, the well-known Rock of Lisbon, a conspicuous sea-mark. The *central range* divides the basins of the Tagus and the Guadiana, stretches likewise to the sea, and is connected by diverging offsets with the southern range. This last is a *westerly* continuation of the Sierra Morena of Spain, and terminates at Cape

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St. Vincent, off which Sir John Jervis defeated the Spanish fleet in 1797, and obtained the title of Earl St. Vincent.

3. The chief *Rivers* are the *Tagus* and *Douro*, flowing to the west coast, and the *Guadiana*, to the south, all Spanish in their origin. The Tagus enters the ocean below Lisbon, and is the only river in the whole peninsula with any considerable breadth towards its mouth. It usually overflows its banks like the Nile, and fertilizes the adjacent plains. Above the city it expands into a wide estuary, and forms a most secure and capacious harbour, capable of containing the largest fleets without danger; but below the city it contracts to less than a mile, and the bar at the entrance is dangerous to be passed without the aid of skilful pilots. Between the bar and the city, the *Fort of St. Julian* and the strong *Castle of Belem*, in the river, under whose guns all ships must pass, form its principal military defences. Few finer objects can be seen than a panoramic view from the harbour; the smooth expanse of water studded with ships, the vineyards on the surrounding hills, and the straggling city extending two miles along the shore, afford a view of singular beauty. The rivers entirely confined to Portugal are not important.

4. The *Climate* and vegetable productions correspond to those of the adjoining kingdom; but the winters are more rainy. The vine is most extensively cultivated in the northern provinces, but it is common throughout the country, along with the olive, lemon, and orange. More than half the land is uncultivated, and the only husbandry known is rigidly governed by custom, in defiance of the most obvious improvements. There is no wine produced in any part of the world which might not be grown in Portugal; but the agriculturists seem incapable of entertaining the idea of progress, and prefer, in many districts, to produce an inferior article rather than change their usages, although with a little science, and no more trouble, the quality might be greatly improved. The wines of a superior description are almost entirely the gifts of nature, unaided by art.

5. Nearly all other *branches of Industry* are in the same backward state. Though a source of immense wealth exists in abundance of iron ore, lead, copper, quicksilver, and antimony, the mines are so little worked, that the imports of minerals greatly exceed the exports. The *Foreign Trade* is

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chiefly with England, amounting to more than double the whole of the trade with the rest of the world. Wine, principally port, is shipped at Oporto, to the extent of from 50,000 to 70,000 pipes annually. It is not the pure juice of the grape, being invariably mixed with brandy at Villa Nova, without which it would not keep.

6. The extreme *Ignorance* of the people, their dependence upon the government to which they have been long accustomed, the system of crown monopolies, with the almost total want of roads and means of transport, are the main causes which have checked the development of native industry. In 1854, there was not a coach, diligence, or carrier's cart plying between the two principal cities, Lisbon and Oporto; and the government mails were conveyed on horseback at the rate of three miles an hour. Except in the cities named, there was no public conveyance of any kind throughout the whole country, nor a carriage-road twenty miles long, apart from their vicinity.

7. *Lisbon*, the capital of the kingdom, in lat. 38° 40′ N., long. 9° 10′ W., occupies several hills, with the intervening valleys, on the right bank of the estuary of the Tagus. The newest part of the city, erected since the earthquake of 1755, is laid out in regular streets which cross each other at right angles, and are lined with good houses. The residences of the nobility and rich merchants are splendid; but the public buildings are not attractive; and the greater part of the city consists of narrow, winding, and dirty streets, with miserable habitations, notorious for filth. Its appearance, however, as a whole from the river is very striking. The climate is remarkably salubrious, and attracts invalids from the northern countries for relief in pulmonary complaints. In the English cemetery are the remains of Dr. Doddridge, Fielding the novelist, and other visitors. The capital is well supplied with water, by means of an aqueduct, upwards of ten miles long, completed in 1732, after nineteen years' labour, which will bear a comparison with the greatest Roman works of the kind.

8. In the neighbourhood are several places worthy of notice. On the banks of the Tagus, five miles from the centre of the city, is the magnificent church and monastery of *Belem*, built by King Emanuel in 1499, on the spot from

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which Vasco da Gama embarked for India. It is a noble Gothic building, and contains the tombs of many members of the royal family. *Cintra*, fifteen miles distant, a small town in a beautiful and picturesque situation, with a delightful climate, is memorable for the convention made there in 1808, by which the French, under Marshal Junot, were allowed to evacuate Portugal. Nine miles to the north is *Mafra*, noted for a superb cathedral, an extensive convent, and a magnificent royal palace, the finest building in Portugal, and one of the finest in Europe, all founded by King John V. *Torres Vedras*, twenty-five miles from Lisbon, a small town, has given its name to a celebrated line of entrenchments, forts, and field-works, constructed by Wellington in 1810, within which he successfully defied the French. Not far distant, the village of *Vimiera* recalls his first victory in the peninsula over Junot in 1808.

9. *Oporto*, on the right bank of the Douro, near its mouth, is the only provincial city of consequence. Various manufactures are carried on; but its main dependence is on the export of wine, white and red, chiefly the latter, which has the name of "Port" from that of the place, properly *Porto*. The trade is mostly in the hands of English merchants. *Braganza*, a small ancient town, in the province of Tras-os-Montes, signifying beyond the mountains, in allusion to the Sierra d'Estrella, gives its name to the royal family of Portugal, descended from John, Duke of Braganza, who was raised to the throne in 1640. *Coimbra*, an episcopal city, on the Mondego, contains the only university in the kingdom. In the vicinity is *Busaco*, a village, where Wellington defeated Massena in 1810.

10. The total *Population*, according to a census taken in 1850, amounted to 3,800,000. The Portuguese are of the same lineage as the Spaniards, and speak a dialect of the same language; but they cherish a deep-rooted antipathy to their neighbours. Their *Religion* is the Roman Catholic, universally professed by the people. But, as in Spain, great changes have taken place in ecclesiastical affairs, and the monks and friars have been driven from their splendid mansions, and their estates confiscated to the crown. No male religious houses are now permitted; and the secular clergy, the only class allowed, depend upon small stipends from the state.

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11. The *kingdom was founded* by Don Alonzo Henriquez, who, after a great victory over the Moors in the year 1139, threw off his allegiance to the sovereigns of Castile, and was proclaimed by the army the first king of Portugal. The form of government is that of a limited hereditary monarchy, but with far less power belonging to the crown than is usual under similar constitutions.

12. The *Azores*, or Western islands, in the Atlantic ocean, belong to Portugal, and are reckoned parts of Europe, as the nearest mainland, though about eight hundred miles distant from it. The group consists of nine Islands, all volcanic, mountainous, and highly productive, exporting wine and fruits. *San Miguel*, or St. Michael's, a name well-known in England in connection with its oranges, is the largest island, and the chief centre of commerce; but *Terceira* contains the seat of the local government. The inhabitants are all of Spanish or Portuguese extraction.

13. The foreign possessions of the kingdom consist of *Madeira*, and the *Cape Verde Islands* on the north-west coast of Africa; *St. Thomas* and *Prince's Islands*, in the Gulf of Guinea; *Angola*, *Benguela*, *Mozambique*, and other territories, in southern Africa; some small settlements in the *East Indies*, and *Macao* in China.

Orange of St. Michael's.

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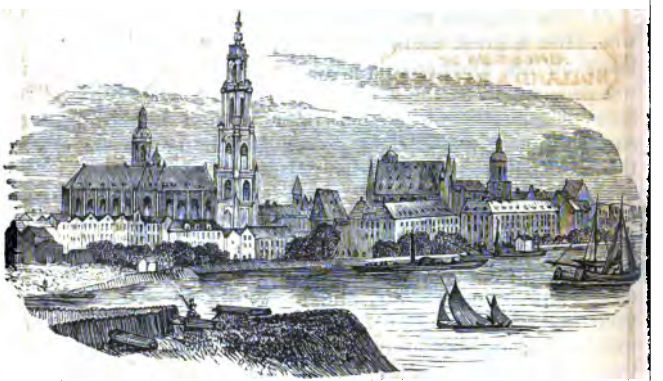

Antwerp.

BELGIUM.

1. BELGIUM, one of the youngest states of Europe, is bounded by Holland on the north; France on the south and south-west; the North Sea on the north-west; Rhenish Prussia, with parts of the Dutch provinces of Limburg and Luxemburg, on the east. Its greatest extent in a direct line is about 115 miles from north to south, by 160 miles from east to west. The area comprises 11,370 square miles, scarcely equal to one-fifth of that of England and Wales, and somewhat less than twice the size of Yorkshire. But this little territory is the most densely peopled portion of Europe, one of the best cultivated and governed, possessing abundant resources of almost every description, and occupied by a very industrious population.

2. The *Surface* consists generally of a flat plain, very little raised above the level of the sea; but traversed in every direction by numerous rivers and canals; diversified by woods, arable-fields, and meadows; and thickly studded with towns and villages. In the northern provinces, along the rivers and estuaries, the country is protected from inundation by dykes; and along the open sea by sandhills, dunes or downs, which vary in breadth from one to three miles, rise to a height of fifty or sixty feet, and are in most places thickly covered with pine trees. The sea itself, to a

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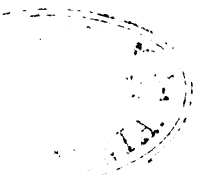

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great distance from the shore, is filled along the whole coast with sand banks, which render the navigation very intricate, and, to large ships, even dangerous. Rugged ridges and moderately elevated ground occur in the southern provinces, forming fine scenery along the course of the Meuse between Namur and Liege.

3. Belgium is one of the best-watered countries of Europe. The small streams entirely within its limits are very numerous; but the great *Rivers* into which they flow are foreign as to their source and termination. The *Scheldt* enters the kingdom from France, passes by Ghent and Antwerp, below which it flows to the sea through the Dutch territory. It is navigable for large ships up to Antwerp, where the river is upwards of a quarter of a mile wide, and has a mean depth of thirty feet at low water. The *Meuse* likewise enters the country from France, and leaves it for Holland, where it joins the Rhine. These navigable rivers, with many canals, good common roads, and an extensive system of railways, supply means of intercommunication, cheaper and more convenient than are enjoyed in any other part of the world within the same area.

5. The principal *Minerals* of the kingdom are coal, iron, zinc, lead, copper, manganese, pyrites, and alum, with admirable building materials in abundance. They are chiefly found in the provinces of Hainault, Namur, Liège, and Luxemburg. More coal is raised than in any other country of continental Europe. The fields are remarkable for the enormous derangements exhibited, the strata having not only been violently contorted, but often elevated through an angle greater than that of a right angle, so as to be actually inverted. Iron ore does not occur interstratified with the coal, but is in close proximity, chiefly in the province of Liege, between the Sambre and the Meuse. Rock-salt is wanting in the list of native mineral productions; and the quantity required for culinary purposes is imported from England.

6. The *Manufactures* are varied and extensive. That of woollen goods is the oldest and most important. Cloths of the finest quality are produced at *Verviers* and its neighbourhood; carpets, splendid and costly, as well as plain and cheap, at *Tournay* and *Brussels;* flannels, serges, and camlets, in most parts of the kingdom. The linens of Ghent,

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Termonde, and Courtray, have long been celebrated for the excellence and beauty of their quality; flax is largely cultivated for the support of the manufacture, as well as imported in the form of yarns; and the bleaching establishments rival those of Holland. Lace, made of the finest flaxen threads, at Mechlin and Brussels, though less important than formerly, still maintains a pre-eminent reputation. Iron-works and manufactures in metals have their great centres at Liege, Namur, and Charleroi. The iron-works at Seraing, near the former city, are the largest, an establishment founded by an Englishman, where most of the steam-engines in the country are made.

7. One half of the entire *Surface* is under tillage. The other half is occupied by meadows and pastures, canals, roads, towns, and forests of valuable timber, the latter principally in the provinces on the French frontier, remnants of the ancient forest of Ardennes. Only a very small proportion of the area is uncultivated and waste. In Flanders, the industry of the people has converted a tract of land, originally a sandy and barren heath, into a rich and beautiful garden; and the produce of its cereal crops is proportionably much greater than in England. The system of farming, in which spade husbandry is conspicuous, has been commended by the most experienced agriculturists. Flanders is noted for a breed of strong horses for purposes of draught, which are reared for export.

8. Belgium is divided into provinces, districts, communes, and cantons, after the model of France. *Brussels*, the capital, in lat. 50° 50′ N., long. 4° 20′ E., is central to the kingdom, situated on both banks of the small river Senne, an affluent of the Scheldt. Though one of the smallest of the European capitals, it is a noble city, and contains about 120,000 inhabitants. The city has many local attractions, consisting of public walks of rare beauty, ornamental fountains, and a very fine park. The most interesting public buildings are the *Cathedral of St. Gudule* and the *Hotel de Ville*, both ancient gothic edifices, the last of which contains the hall in which the emperor Charles V. abdicated his throne. About three miles to the north is *Laeken*, a village, with a royal palace, the frequent residence of the king. Ten miles in the opposite direction is the field

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of *Waterloo*, with a conical mound, two hundred feet high, surmounted by the Belgian lion in bronze, commemorating the deadly strife of June 18, 1815. *Louvain*, to the eastward of the capital, formerly the most considerable town in Belgium, but now having only a population of 26,000, is the seat of a celebrated university. Its town-hall is one of the most interesting Gothic buildings in Europe. In *Vilvorde*, on the Senne, our William Tindall was confined in 1536, and afterwards suffered martyrdom as a heretic.

9. *Antwerp*, the principal port, on the right bank of the Scheldt, is a large and fine city, strongly fortified by walls, ditches, and a citadel, where the Dutch maintained an obstinate defence against the French in 1832. The Cathedral is a remarkably fine gothic structure, with an exquisitely light steeple, rising to the height of 466 feet, one of the loftiest in Europe. The famous painting of the Descent from the Cross, by Rubens, in the interior, constantly attracts a crowd of visitors; the painter was a native of the city, as were also Vandyke and Teniers. The Bourse was chosen by Sir Thomas Gresham as a model for the Royal Exchange of London. The trade of Antwerp, though still considerable, is but the shadow of what it was during the sixteenth century, just before the revolt of the Netherlands.* It was then the principal mart of commerce of Europe. Thousands of ships of all nations crowded its port; its population amounted to 200,000 souls; and the treasures of the globe were accumulated in its warehouses. Every thing, however, was ruined by the terrible siege which it maintained against the Prince of Parma in 1585, and a bar was put to its recovery by the closing of the Scheldt, one of the conditions of the peace of Westphalia in 1648, in favour of the Dutch. The river was opened again by Napoleon, with the intention of making Antwerp a great naval arsenal; for which purpose he constructed a magnificent dock and dockyard, which still remain. Since 1831, when the *Scheldt* was finally liberated by the treaty which separated Belgium from Holland, the city has in a measure recovered its commercial importance, to which the railway-system has contributed; but its popula-

* This remarkable event is recounted with great brilliancy in Schiller's Revolt of the Netherlands.

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tion is little more than half what it was in the days of its glory. *Mechlin*, or *Malines*, midway between Brussels and Antwerp, celebrated for its lace, is the central point of the Belgic railways, has a fine cathedral, and is the seat of the primate of Belgium.

10. *Ghent*, the second city in the kingdom, at the confluence of the Lys with the Scheldt, in the province of East Flanders, is divided by the rivers and canals into a number of islands, connected by not less than eighty bridges. It is the Manchester of Belgium, as the chief seat of the cotton-manufacture, introduced at the beginning of the century; and presents a strange appearance, factories driven by steam-power being in close contact with civic buildings of the middle ages and ancient churches. It was the birth-place of "John of Gaunt, time-honoured Lancaster," and of the emperor Charles V. The compact of the provinces of the Netherlands against the tyranny of Spain, in 1578, was drawn up within its walls; and here the treaty of peace was signed between Great Britain and the United States, after the brief war of 1814. In this town is a *Beguinage*, the principal convent of the *Beguines*, a singular order of Sisters of Charity.

11. *Bruges*, eight miles from the coast, in West Flanders, was four centuries ago one of the most famous members of the Hanseatic league, and is still a considerable though decayed city, with fine monuments of medieval times, especially its town hall and churches. It contains the largest number of pictures, by Memling and Van Eyck, in Europe; they are collected in the Hospital of St. John, and in the Royal Academy of Drawing. The cathedral contains the tomb of Charles the Bold, the last Duke of Burgundy. *Ostend*, a fortified seaport and bathing place, is the principal point of communication between England and central Europe.

12. *Mons*, a flourishing town, with upwards of 25,000 inhabitants engaged in the manufacture of linen, muslin, &c., is on the line of railway between Brussels and Valenciennes. *Tournay*, in the province of *Hainault*, the most ancient town of Belgic Gaul, has a superb cathedral, large manufactures of carpets and cloths, and of fine porcelain, scarcely inferior to Sèvres. *Namur*, the capital of the province of its name, 36 miles from Brussels, with which it is connected by a rail-

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UCALIFORNIA

way, is a strongly fortified city, with fine cathedral, town hall, and public library. It is celebrated for its cutlery, and has numerous foundries, glass works, and tanneries. It is often mentioned in connection with the wars of William and Anne.

13. *Liège*, in the valley of the *Maese* (called by the Dutch *Maas*, by the French *Meuse*), at its junction with the Ourthe, surrounded with vine-clad hills, and in the midst of rich stores of coal and iron, is the Birmingham of Belgium, with a royal cannon foundry, and large establishments for the production of machinery and hardwares. *Verviers* is celebrated for its cloth and yarn manufactures. *Spa*, a small town to the south-west, romantically situated in the heart of the *Ardennes*, is of European celebrity for its mineral waters.

14. The Belgian portions of *Limburg* and *Luxembourg* contain no towns of any magnitude or importance; the small town of *Bouillon* is interesting as having given its name to Godfrey, the famous crusader.

15. The names of many places in the kingdom, small towns and villages, recall the memory of great conflicts, as *Fleurus*, *Ramillies*, *Nivelles*, *Oudenarde*, *Dendermonde*, *Fontenoy*, *Jemappes*, *Ligny*, *Wavre*, *Quatre Bras*, and *Waterloo*. The sieges of *Ostend*, *Antwerp*, *Namur*, and *Liège*, are among the most famous in history. Belgium has hence been called the "Cock-pit" of Europe.

16. The total population of Belgium amounts to about 4,700,000, consisting mainly of *Flemings*, a branch of the Germanic race, in the northern provinces, and *Walloons*, who are of French extraction, in the southern. The lower classes speak Flemish or Walloon, according to their origin; but French is the language of the government and of general society in the towns.

17. The *Religion* is almost universally Roman Catholic, under the jurisdiction of an archbishop and seven bishops. But all sects are tolerated. There are four *Universities*—two supported by the state at *Ghent* and *Liège*, one by the Catholic clergy at *Louvain;* and another at *Brussels*, called the free university, established by a private association. The kingdom was founded in the year 1831, as the result of the revolt of the Belgians against Holland, with whom they

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had been previously united under the rule of the King of Holland. The government is a constitutional hereditary monarchy, with the succession to the throne limited to the direct male line of the reigning sovereign, to the perpetual exclusion of females and their descendants.

BELGIAN PROVINCES, WITH THEIR CHIEF TOWNS, AREA, AND POPULATION.

Provinces.	Area, sq. m.	Pop. in 1856.	Cities and Towns.
South Brabant	1267	772,728	BRUSSELS, Vilvorde, Louvain, Nivelles, Waterloo
Antwerp ..	1093	445,705	ANTWERP, Mechlin, Turnhout.
East Flanders..	1157	787,070	GHENT, Oudenarde, Termonde, Alost.
West Flanders	1248	631,854	BRUGES, Ostend, Ypres, Courtray.
Hainault ..	1436	789,844	MONS, Jemappes, Tournay, Charleroy
Namur ..	1413	290,980	NAMUR, Dinant, Philippeville.
Liège ..	1116	514,894	LIÈGE, Verviers, Clermont, Spa.
Limburg ..	931	193,160	HASSELT, Tongres, St. Tron.
Luxemburg ..	1705	196,854	ARLON, Neufchateau, Bouillon.

Brussels.

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The Hague.

HOLLAND.

1. The kingdom of Holland, or the Netherlands, is enclosed by the North Sea on the west and north; by Belgium on the south, and Germany on the east. It extends about 150 miles from north to south, by 100 miles from east to west, and comprises ten provinces,* in an area of 11,897 English square miles, exclusive of the Dutch portion of *Limburg*, and the grand duchy of *Luxemburg*, which being added, make the area 13,598. This duchy, separated from Holland by Belgium, and from Prussia by the Moselle, and strongly fortified, forms part of the Germanic confederation, but is ruled by the King of Holland as hereditary grand-duke, who thereby ranks as one of the German powers.

2. The chief maritime features of the kingdom are the two inlets of the *Zuyder Zee* and the *gulf of Dollart* on the north coast; the islands of *Texel*, *Vlieland*, *Ter-Schelling*, *Ameland*, and *Schiermonnik*, in the same direction, running parallel to the shore; and those of *Walcheren*, *North* and *South Beveland*, *Tholen*, *Schouwen*, *Over-Flackee*, and others on the south-west, between which the waters of the Scheldt and Maas find their way to the sea. The Zuyder Zee, or South Sea, is so called to distinguish it from the North Sea. The islands are low, flat, marshy tracts, unhealthy to strangers at certain seasons of the year. *Walcheren* has acquired

* See Table of Provinces, &c., p. 185.

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an unhappy notoriety in our own annals, owing to the fine British army sent thither in 1809, under incapable commanders, having been reduced to a wreck by the marsh fever.

3. The greater part of the country is from twenty to forty feet below high water-mark on the adjoining coast. Hence the term Holland applied to it, derived from the German word *hohl*, to which our word *hollow* corresponds, implying a concave or low surface. The other term, the Netherlands or Low Countries, refers to the same peculiar physical condition. In ancient times, the whole region was an extended swamp, alternately submerged and abandoned by the tidal waters, with a few inhabitants occupying spots of ground left uncovered by the waves; but by skill and industry, aided by natural agencies, a successful contest has been maintained with the ocean, which has ended in its incursions being restrained, and a territory once exposed to its inroads being brought to a high state of cultivation and comparative security.

4. To a considerable extent the coast is lined with broad sand-hills or downs, partially covered with grass or heath, and in some places so high as to shut out the view of the sea even from the tops of the spires. These appear to have been formed by a natural process which is still going on. During the prevalence of sea-winds, clouds of sand are raised from the beach into the air, and showered down upon the country inland. To secure it from proceeding too far, the sandy ground is sown with a kind of grass, *arundo arenaria*, the long roots of which bind the whole mass together. These downs, where they exist, form a complete barrier against the encroachments of the sea.

5. In other places, where these natural barriers have not been formed, the sea is kept out by enormous sloping artificial mounds, or *Dykes*, constructed of clay and earth, sometimes faced with masonry, and protected to seaward by a fringe of piles intended to break the force of the waves. Similar dykes are also raised along the banks of the rivers, whose beds are frequently higher than the surrounding country. These works are under the superintendence of local boards of commissioners, subordinate to a High board, whose duty it is to inspect their condition and attend to

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their repair. But, in spite of every precaution, the sea has repeatedly broken bounds in tempests, permanently submerging extensive tracts, and making havoc of life and property. In times of war also, the inhabitants have themselves let loose the waters by breaking down the embankments in order to harass or cut off the enemy.

6. Holland has within its limits the *Lower Rhine*, the *Maas*, and the *Scheldt*, which divide into several branches before reaching the sea. The Rhine enters the country from the Prussian territories, 2,000 feet broad; sends off the *Waal*, *Yssel*, *Leck*, and *Amstel*; and falls into the North Sea, in a vastly diminished volume, under the name of the Old Rhine, below Leyden. The Maas crosses the frontier from Belgium near Maestricht, and the Scheldt below Antwerp. They connect themselves towards their termination, and form an extensive delta containing numerous islands.

7. *Lakes and Meres*, generally of trifling depth and small extent, occupy a large proportion of the surface, especially near the coast. But a great number have been drained and converted into verdant meadows, which are then called *polders*. As these sites are very low, while there is a constant filtration into them from the sea, its undue accumulation of water is prevented by windmills and steam engines, employed to pump it out, as from a leaky ship, into the canals and rivers. The *Lake of Haarlem*, fourteen miles long by eight broad, formed by an inundation in 1539, has recently been drained by gigantic steam power, and nearly fifty thousand acres of land recovered for pasturage.

8. The *Canals* are very numerous, formed for the purpose of drainage, as well as for the conveyance of passengers and the transit of goods. Rows of poplars and willows commonly line their banks. A great ship canal, completed in 1825, at a cost of 750,000*l*., connects the port of Amsterdam with the North Sea near the Helder, by which the dangerous navigation of the Zuyder Zee is avoided. It is nearly fifty miles long, 24 feet deep, 120 feet wide at the surface, and will, therefore, carry the largest merchantmen, with ships of the line of 74 guns. When the canals are frozen, they answer the purpose of roads, and are travelled over by sleighs and skates. Peasant girls skate to market and to church.

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9. In consequence of so much water, with unsheltered exposure to the sea breeze, the *Climate* is very humid and foggy. It is much colder also in winter than that of England, owing to the prevalence of chilling east winds. Yet the industry of the inhabitants has converted their soil into one of the richest districts in Europe.

10. Holland has *no coal* or building-stone, and *few minerals* of any description. Timber is also scanty; and, as there are no forests, the wild animals are wholly unimportant. Aquatic birds are numerous. Leeches, frogs, and other small reptiles abound in the pools and marshes, to which the stork is an annual summer visitor, carefully protected by the inhabitants as a useful scavenger.

11. The people engage in the herring and cod *Fisheries*, both off their own shores and those of Great Britain, though not to such an extent as formerly, when the saying arose that Amsterdam was built on herring bones. They excel in ship-building and all branches of horticulture. Wooden clocks and children's toys are extensively made for export, with great quantities of the liquor called Hollands, and tobacco. Their manufactures of linen, woollen, and cotton goods are chiefly for home consumption.

12. But *Agriculture* and *Commerce* are the prime pursuits. Owing to the climate, the greater part of the land is devoted to grazing husbandry. Vast meadows of the richest verdure are during eight months of the year covered with cattle, whose high condition attests an abundant and wholesome nutriment. The produce of the dairy, *cheese* and *butter*, is sent in immense quantities to the English and other foreign markets. For several centuries Holland has been the centre of a great carrying trade in the produce of other countries, receiving and exchanging the spices of the East, the fruits of Spain, the wines and brandy of France, the manufactured goods of Great Britain, the corn and timber of Germany. Huge rafts of timber, felled in the German forests, are floated down the Rhine to Dort, and then in smaller masses as far as Amsterdam, consisting chiefly of wood suited for ship and house building, nearly the whole of which is for domestic use.

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DUTCH PROVINCES, CHIEF TOWNS, AREA, AND POPULATION.

Provinces.	Area, sq. m.	Pop. in 1859.	Cities, Towns, &c.
North Holland...	958	543,043	AMSTERDAM, Haarlem, Hoorn, Alkmaar, Brock, the islands of Texel, Vlieland, Ter Schelling.
South Holland...	1173	627,684	The HAGUE, Leyden, Rotterdam, Schiedam, Delft, Gouda, Dort, Helvoetsluys.
Zealand ...	671	166,493	MIDDELBURG, Flushing, Walcheren, Sas-de-Gand.
North Brabant...	1976	414,470	BOIS-LE-DUC, Breda, Bergen-op-Zoom.
Utrecht	535	162,249	UTRECHT, Amersfort, Zeyst.
Gelderland	1965	403,972	ARNHEIM, Zutphen, Nimwegen.
Overyssel	1290	236,769	ZWOLL, Kampen, Deventer.
Drenthe	1028	95,136	ASSEN, Meppel.
Groningen	1000	208,814	GRONINGEN, Delf-zyl.
Friesland	1264	272,910	LEEUWARDEN, Franeker, Harlingen, the islands of Ameland and Schiermonikoog.
Limburg	763	217,217	MAESTRICHT, Ruremond, Venloo.
Luxemburg	975	196,028	LUXEMBURG, Diekirch, Echternach.

13. AMSTERDAM, the chief commercial and largest city of the kingdom, though not its capital, is in *North Holland*, at the mouth of the Amstel, on an arm of the *Zuyder Zee*, and contains 260,000 inhabitants. It is intersected in every direction with canals, which form upwards of ninety islands, communicating by nearly three hundred bridges. The streets, almost all straight and well paved, extend along the canals, and consist of brick houses painted with various colours, interspersed with many buildings of a palatial character. The city, formerly the centre of the exchanges, funds, and bill transactions of the world, still retains a considerable share of that commerce. As the seat of the general administration of the marine, it possesses a fine harbour, with building-yards and magazines of stores upon a vast scale. Its *Stadt-house*, now the Royal Palace, is a fine large building, and stands on 13,659 piles. *Haarlem*, eleven miles west of Amsterdam, within the province of North Holland, is noted for its large organ, with 8000 pipes, and its fine flower gardens, which support an extensive trade, especially in Tulips and other bulbs; and also as being the supposed seat of the invention of printing. *Hoorn*, on the Zuyder Zee, for its great trade in butter, its ship-building establishments, and as the port whence the expedition sailed in which Tasman, the discoverer of Tasmania and New Zealand, first passed the southern extremity of America, hence called Cape Horn. *Alkmaar*, a fortified town, on the line of the great ship canal, for its annual cheese and swan fairs; and *Saardam*, near Amsterdam, for its naval stores, its paper manufactories, and

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numerous windmills, and as having been the place where Peter the Great, in 1697, studied ship-building. *Brock*, a small town on the Waterland, North of the Yssel, is remarkable for the wealth and extreme neatness of its inhabitants. All the houses are covered with glazed tiles, and the streets are paved with small pebbles in mosaic fashion. No animals are allowed to enter this town, for fear of soiling it.

14. The HAGUE, the political capital, as the seat of the court and government, in lat. 52° 5′ N., long. 4° 20′ E.—an elegant city, with many splendid public buildings—is in *South Holland*, near the coast of the North Sea. Population 72,000. The name is an abbreviation of Gravenhagen, signifying the "Count's meadow," having been the residence of the former Counts of Holland. Near it is *Ryswick*, a castle, where the treaty of peace was signed in 1697; and *Loo*, a superb royal palace, with public walks. *Rotterdam*, on the north bank of the Maas, twenty miles from the sea, ranks after Amsterdam in extent, wealth, and commerce. It is very advantageously situated; for vessels of the largest size are not only able to come up the river, but even to approach the warehouses in the heart of the town by means of canals. A fine bronze statue of Erasmus, a native of the city, adorns the market-place. Pop. 110,000. Near it is *Schiedam*, noted for its numerous wind-mills, and gin distilleries; and *Helvoetsluys*, a fortified seaport, once the principal English packet station. *Leyden*, near the mouth of the river, noted for its fine Museum and Library, for its heroic and romantic defence against the Spanish besiegers, in 1574, and for a gunpowder explosion, in 1807, which half destroyed the city. *Delft*, between Rotterdam and the Hague, for its earthenware, and the tomb of the Prince of Orange, the founder of Dutch independence, who was assassinated there in 1584. *Dort*, the ancient capital of Holland, situated upon an island of the Maas, is historically remembered for the Synod in 1618 against the Arminians.

15. *Middelburg*, the capital of Zealand, is a thriving agricultural and manufacturing town; *Flushing*, in Dutch *Vliessing*, of which the gallant Sir Philip Sydney was once the governor, is a fortified seaport on the south side of the island of *Walcheren*, in the same province, at the mouth

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of the Scheldt. It has two fine harbours and dockyards, and immense magazines.

16. *Breda*, the capital of *North Brabant*, is a fortified city with a fine cathedral; *Bois le Duc*, with its fine church; and *Bergen-op-Zoom*, one of the strongest of the fortifications of the celebrated Coehoorn, unsuccessfully besieged by the English in 1814, are the other principal towns of the province.

17. *Utrecht*, the capital of its province, is a fine old city, situate amidst gardens, on a branch of the Old Rhine. It has a university, a cathedral, and a town-hall, where the general Peace of 1713 was concluded. *Amersfoort* has a considerable trade in herrings and corn.

18. *Arnheim*, capital of the province of *Guelderland*, is a very ancient fortified town, handsomely built, with various public institutions, and a good port. *Zutphen*, on the Yssel, is noted for the battle in which Sir Philip Sydney fell, 1586; *Nimeguen*, celebrated for its pale ale and the treaty of 1678.

19. *Zwoll*, the capital of *Overyssel*, is a large and thriving commercial town, where printing was carried on at a very early period, and where, in an Augustine monastery, Thomas à Kempis is supposed to have lived and died; *Kampen* or *Camp*, a village on the shore of the North Sea, in the same province, is celebrated for Duncan's victory over the Dutch in 1797, off the adjoining downs, since called the battle of Camperdown. *Deventer*, a fortified town, with literary and scientific institutions, and an active commerce, is also one of the places in which printing was established at an early period.

20. *Groningen*, the capital of the province, is a large and strongly fortified town on the river *Haase*, with a cathedral, a university, and several fine public buildings, a port, ship-building yards, and a botanic garden. *Leeuwarden*, the capital of *Friesland*, is a rich trading city. *Franeker* is a small thriving town, formerly the seat of a university; *Harlingen*, in the same province, stands on the site of a town swallowed up by the sea, and is protected by one of the largest Dykes in Holland.

21. *Maastricht*, on the *Maas*, the capital of *Dutch Limburg*, is a large and very strongly fortified town on the Belgian frontier, with a considerable trade. It has vast quarries, and fine public buildings. *Venloo* and *Ruremonde*, both fortifica-

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tions, but the latter dismantled, are in the same province. *Dutch Luxembourg* contains the town of that name, one of the strongest fortresses of the Germanic confederation.

22. The kingdom of Holland has a population of 3,543,755, consisting of the Dutch, who form the great bulk of the people, belong to the German stock, and speak a dialect of the German language. There are also Germans proper, a few Walloons, and many Jews. The Dutch are frugal and industrious, proverbial for cleanliness, charitable to the poor, faithful in domestic relations, orderly in their habits, and strongly attached to civil and religious liberty. They have exhibited remarkable enterprise. To a country originally almost floating on the waters, they have given a firm foundation. Without possessing stone or timber at home, they have reared spacious cities, and built navies that have disputed the seas; and though without arable land, they have been among the leading corn-factors of Europe. But they are not at present an advancing people.

23. There is no established form of *Religion*, the ministers of all sects being maintained by the state, which also defrays the expenses of the three universities. The great majority of the inhabitants are Protestants, and mostly belong to the Calvinistic church, which was founded on the statutes of the synod of Dort in 1618. Numerous and excellent elementary schools are provided, in which all classes may receive instruction from duly accredited teachers at a very trifling cost.

24. The *Government* is an hereditary constitutional monarchy, consisting of the king and states-general, who share the legislative power between them. Two chambers compose the latter body; one of the members is nominated by the crown for life; the others are elected by the people triennially. They have the style of high and mighty lords, or high mightinesses, as their predecessors used to be called in English, and must be convened once a year at least. The heir apparent has the old family title of Prince of Orange.

25. Holland possesses a few *Colonial settlements* on the west coast of Africa; *the Islands* of *St. Eustasia, St. Martin, Curaçoa*, &c. in the West Indies; *Dutch Guiana* in South America; *Java*, the *Moluccas*, parts of *Sumatra, Celebes*, and *Borneo*, with *Amboyna* and several smaller islands, in the East Indian Archipelago.

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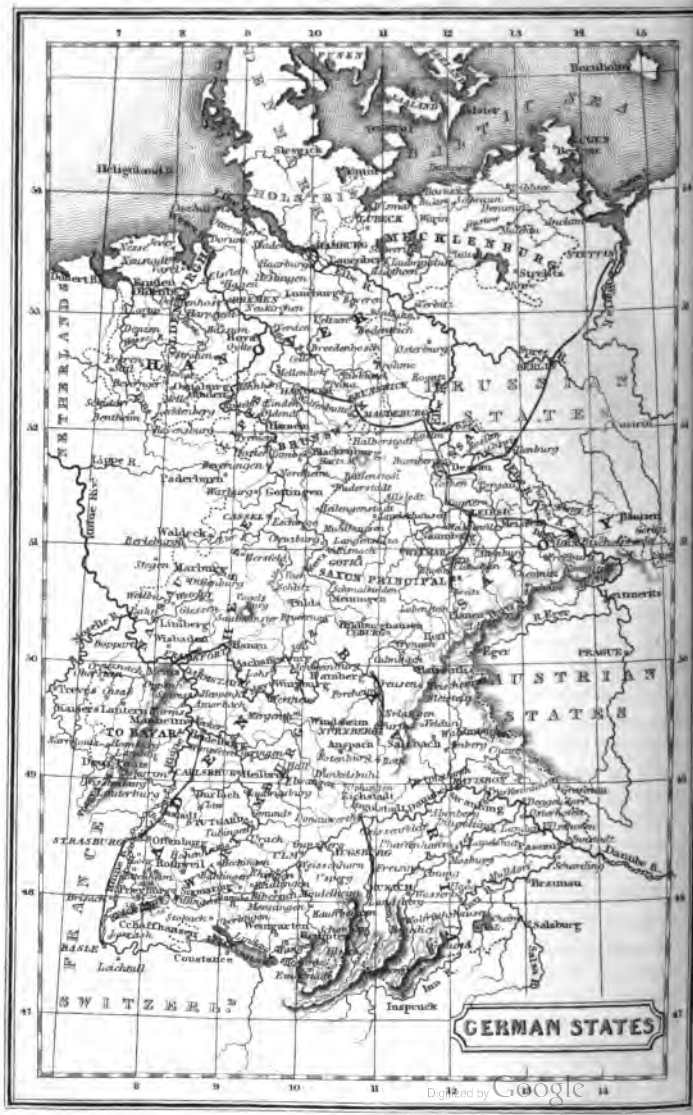

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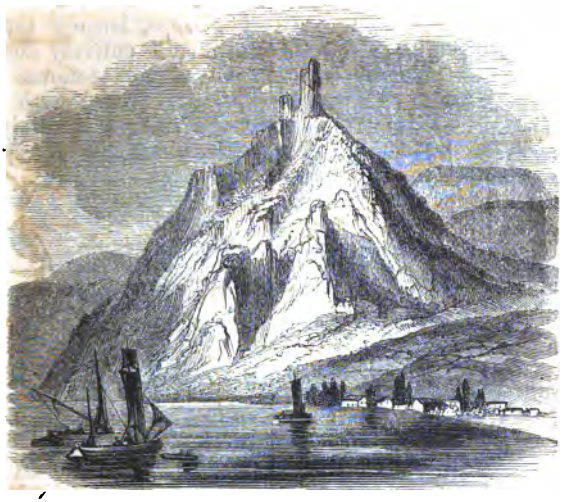

The Drachenfels, on the Rhine.

GERMANY.

1. This great country, the *Deutschland* of the inhabitants, and *Allemagne* of the French, occupies a considerable area of central Europe. It has the North Sea, Denmark, and the Baltic on the north; Holland, Belgium, and France on the west; Switzerland, Italy, and the Adriatic Sea on the south; Prussian, Russian, and Austrian Poland, with Hungary on the east. Its greatest extent is about 680 miles in longitude, following the parallel of 50°, from the west of Luxemburg to the east of Silesia; and 600 miles in latitude along the meridian of 10° E. from the north of Holstein to the borders of Lombardy. The area closely approaches 250,000 square miles, or one-fourth greater than that of France. The country comprised within these limits does not constitute one government, but is divided into numerous STATES; of these *Austria* occupies nearly one-third of the whole extent, and *Prussia* about two-sevenths. All the others may be grouped into three great Divisions, NORTHERN, CENTRAL, and SOUTHERN, each having distinct national features. The entire number of German states is thirty-five.

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2. NORTHERN GERMANY is a low and level region, forming part of the great plain of Europe, largely infertile. West of the Elbe, the country is almost entirely destitute of trees, and presents a succession of monotonous moorlands, consisting of deep beds of peat, covered with heath and juniper. East of the river, the surface is sandy, but extensively clothed with pine-woods, which are interspersed with fertile tracts.

Hartz Mountains.

3. CENTRAL GERMANY is diversified with hilly ranges of moderate elevation, but occasionally aspiring to the height of *Mountains*, which abound with verdant valleys, watered by clear streams, affording much picturesque scenery. These ranges, more or less connected, include the *Hartz Mountains*, on the southern border of Hanover, famous for their spectre of the Brocken, a purely meteorological phenomenon; the *Thuringerwald* and *Riesengebirge* in the Saxon Duchies; the *Odenwald* and *Black Forest* chain, or Rhenish highland system, running parallel to the course of the Rhine; the *Böhmerwald*, *Erzbirge*, and *Riesengebirge*, (ore and giant-mountains), which enclose the basin-shaped valley of Bohemia. The last-named range contains the highest point of the territory north of the Danube, or *Schneekappe* (snow-cap), 5,235 feet, south-west of Breslau, near which are the sources of the Elbe, and the highest inhabited house of Prussia, or Hampelbaude, 4,300 feet.

4. SOUTHERN GERMANY consists of a high plain or tableland in the south-west, extending through *Bavaria* and

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Würtemberg, with a mean elevation of from 1500 to 2000 feet; and of a true mountainous region in the south-east, formed by the Rhætian and Noric Alps, with their branches; which spread in enormous masses over the Tyrol and the adjoining provinces of Austria. The *Ortler Spitz*, on the borders of the Tyrol, Switzerland, and Lombardy, is the culminating point, 12,850 feet. Its summit was first scaled by three peasants of the neighbourhood, in the year 1804, in consequence of a reward offered for the enterprise by the Archduke Charles.

5. There are fifty *Navigable Rivers*, either wholly, or in part Germanic; and the number of streams, excluding rivulets, is said to be not less than 35,000. The more important *river-systems* are those of the *Danube*, *Rhine*, *Elbe*, *Oder*, *Weser*, *Ems*, and the *Maine*. They differ remarkably in character. The Rhine is one of the swiftest streams in Europe, while the Oder is so sluggish, that a north wind will drive the waters of the Baltic up its channel, and reverse the current.

6. The *Danube*, the largest river, next to the Volga, in Europe, rises on the eastern slope of the Black Forest in Baden, and flows generally north-east to Ratisbon, and from thence south-east to Vienna, soon afterwards passing into Hungary, Servia, and Wallachia. The *Rhine* enters the country from Switzerland, but is only a border river from the Lake of Constance to some distance below Strasburg; it then divides the Palatinate from Baden, and flows through the Prussian states to Holland. The river is celebrated for fine scenery between Mayence and Bonn,

> "A blending of all beauties; streams and dells,
> Fruit, foliage, crag, wood, cornfield, mountain, vine;
> And chiefless castles, breathing stern farewells,
> From grey but leafy walls where ruin grimly dwells."

It is estimated that upwards of 200,000 tourists annually visit this part of its course, a large proportion of whom are English.

7. The *Elbe* is the largest river entirely German. It descends from a lofty source, the Elb-brunnen, in the east of Bohemia, escapes from that confined region through a gorge in the enclosing mountains, and flows north-west by Dresden, Magdeburg, and Hamburg, to the North Sea. The

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Oder rises at the base of the Carpathian mountains, and follows the same direction to the Baltic, which it enters below Stettin. The *Weser* and *Ems* run nearly due north from central Germany to the North Sea. The *Maine* flows through Franconia into the Rhine.

8. The principal *Lakes* of Germany are the *Boden Sea* or Lake of Constance; the *Chiem, Tegein, Wochen*, and *Wurm*, in Bavaria; the *Schwerin, Glauca*, and *Muris* in Mecklenburg.

9. Germany is mountainous towards the South and in the centre, but the North consists of an immense sandy plain. The *Alps*, of which the *Brenner* in the Tyrol is loftiest; the *Black Forest* in Bavaria; the *Hartz* in Hanover; the *Bohemian* and *Silesian* (or Suderic Mountains); and the *Kalenberg* in Austria. Next to these in importance are the *Erzgebirge* in Bohemia; the *Sieben-gebirge* in Prussia, and the *Fichtelgebirge* in Bavaria.

10. No part of Europe yields a greater variety of *Mineral* productions, and nowhere are the mines wrought with greater skill and economy. Silver, iron, copper, lead, tin, zinc, quicksilver, coal, salt, and turf, are more or less abundant. *Mineral springs*, hot, cold, bitter, acid, and saline, are very numerous. The thermal waters of Aix-la-Chapelle, Pyrmont, Carlsbad, Töplitz, Wiesbaden, Baden-Baden, and Kissengen, annually attract crowds of visitors in the summer season. The syllables *bad*, a "bath," and *hall*, an old word for "salt," occur in the names of many places where there are thermal or brine springs, as Carls*bad*, "Charles's bath," in Bohemia, and *Halle* in Prussia.

11. *Forests* of oak, beech, and ash, extensively clothe the mountain ranges, and pine-woods the northern plain. They not only supply the people with their ordinary fuel, and timber for dwellings and implements, but a very considerable quantity is exported to other countries. The cultivated vegetation embraces grain of almost every kind; the vine in the valleys of the Danube, Maine, Neckar, Rhine, and Moselle; and the olive in the neighbourhood of Trieste. Deer and swine, in a semi-wild condition, are numerous in the forests; the wolf is met with on the west of the Rhine; and is found also, with the black bear, lynx, and chamois in the Alpine provinces.

12. Germany has been called the labyrinth of geography, owing to the number of its political divisions, their involved

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arrangement, and connection in several instances with non-Germanic countries. There are, as we have already said, thirty-five independent states, namely:

	States.		Area. sq. m.	Population, 1858.	Capitals.
1 Empire	Austria (*Ger. States**)		76,000	12,500,000	Vienna
5 Kingdoms	*n.* Prussia (*Ditto*)		71,000	13,500,000	Berlin
	s. Bavaria		29,637	4,621,279	Munich
	n. Hanover		14,658	1,865,104	Hanover
	c. Würtemberg		7,434	1,690,898	Stuttgard
	c. Saxony		5,789	2,122,148	Dresden
1 Electorate	*c.* Hesse-Cassel		3,633	726,739	Cassel
7 Grand Duchies	*s.* Baden		5,838	1,334,054	Carlsruhe
	n. Mecklenburg-Schwerin		4,845	542,148	Schwerin
	n. Mecklenburg-Strelitz		1,029	99,628	New Strelitz
	c. Hesse Darmstadt.		3,192	845,571	Darmstadt
	c. Luxemburg		975	195,028	Luxemburg
	n. Oldenburg		2,394	294,359	Oldenburg
	c. Saxe-Weimar		1,386	267,112	Weimar
8 Duchies	*n.* Holstein-Lauenberg		3,654	573,003	Glückstadt
	c. Nassau		1,785	439,454	Wiesbaden
	n. Brunswick		1,307	273,394	Brunswick
	c. Saxe-Meiningen		903	168,816	Meiningen
	c. Saxe-Coburg-Gotha		756	153,879	Coburg
	c. Saxe-Altenburg		504	134,659	Altenburg
†	*c.* Anhalt Dessau		360	72,000	Dessau
†	*c.* Anhalt Koethen		318	47,515	Koethen
	c. Anhalt Bernburg		315	56,031	Bernburg
6 Principalities	*n.* Lippe Detmold		420	106,086	Detmold
	n. Lippe Schaumburg.		168	30,144	Buckeburg
	c. Waldeck		442	57,550	Corback
	c. Reuss, elder		146	39,397	Greitz
	c. Reuss, younger		315	81,806	Gera
	c. Schwarzburg-Rudolstadt		378	70,030	Rudolstadt
	c. Schwarzburg-Sondershausen		325	62,974	Sondershn.
	s. Lichtenstein		62	7,150	Lichtenstein
1 Landgraviate	*c.* Hesse-Homburg		105	25,746	Homburg
4 Free Cities	*n.* Hamburg		133	222,379	Hamburg
	c. Frankfort on Maine		42	79,278	Frankfort
	n. Bremen		96	88,800	Bremen
	n. Lubeck		126	55,423	Lubeck

The letters *n.*, *c.*, *s.* prefixed, denote northern, central, or southern states.

The Germanic provinces belonging to Prussia and Austria

* The entire population of Austria in 1858, including its Polish, Hungarian, and Italian States, was nearly 38,000,000, but the loss of Lombardy lessens it to about 35,000,000.

† United, May 22, 1853.

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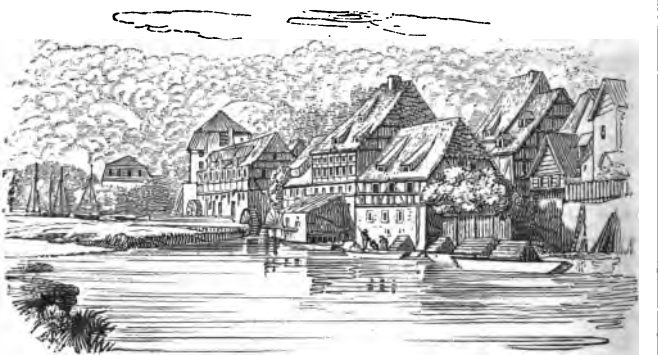
are separately noticed. (See PRUSSIAN DOMINIONS; AUSTRIAN EMPIRE).

13. NORTHERN STATES. This division of the country includes one Kingdom, *Hanover;* three Grand-duchies, *Mecklenburg-Schwerin, Mecklenburg-Strelitz,* and *Oldenburg;* two Duchies, *Brunswick* and *Holstein-Lauenburg;* two Principalities, *Lippe-Detmold* and *Lippe-Schaumburg;* and three Free cities, *Hamburg, Bremen,* and *Lubeck.*



The Old Palace and Bridge at Münden.

14. The KINGDOM OF HANOVER, which is divided into seven provinces, consists of a large tract of heathy and sterile low land bordering on the North Sea; and of a much smaller detached portion, separated from it by part of Brunswick. This last has a different character, being diversified by the Harz mountains, rich in lead, silver, iron, and copper, clothed with forests of pine and fir. The *Weser* and the *Ems* intersect the country from south to north; and the *Elbe* forms the north-eastern border. HANOVER, the capital, on the Leine, an affluent of the Weser, contains two royal residences and a large botanic garden, and gave birth to the astronomer, the elder Herschel. *Hildesheim,* an episcopal city in its neighbourhood; *Emden,* a commercial town and seaport at the mouth of the Ems; *Göttingen,* the seat of a celebrated university, founded by George II., with a fine library, an observatory, and a botanic garden; *Osnaburg,* noted for the manufacture of coarse linens, called Osnaburgs, the first town in Westphalia which embraced the

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Lutheran faith, but now returned to Catholicism. *Münden*, at the confluence of the Fulda and the Werra, one of the most commercial towns in the kingdom, noted for its stone quarries; and *Clausthal*, the capital of the mining district of the Hartz; are the principal places, though all of inconsiderable size. *Celle* or Zell, a well-built town, was formerly the residence of the Dukes of Luneberg. In the park of its castle is the mausoleum of Matilda, Queen of Denmark, sister of George III. The kingdom dates its existence from the year 1815, having previously been an electorate. On the accession of the Elector, George I., to the throne of England in 1714, the two crowns of Hanover and Great Britain were united. The union continued down to the accession of Queen Victoria, in 1837, when females being excluded from the Hanoverian succession, that crown descended to her uncle.

15. The *Grand-duchies of Mecklenburg-Schwerin* and *Mecklenburg-Strelitz*, which may be called agricultural districts, border each other on the coast of the Baltic, and consist chiefly of a low sandy plain, variegated with woods, and studded with lakes which abound in fish. Their capitals, SCHWERIN and NEW STRELITZ, are inland places of not much importance. *Rostock*, the largest town, is the seat of a university, and has a considerable export trade in cattle.

16. The *Grand-duchy of Oldenburg* has the North Sea for its northern boundary, and is enclosed in all other directions by the Hanoverian territory, with the exception of three small detached tracts, one in Rhenish Prussia, and two in Holstein. It has no features of natural interest, and but little political consequence, with a capital not larger than one of our smaller country towns.

17. The *Duchy of Brunswick* consists of three unconnected districts, with several others of very trifling extent, lying between the Hanoverian and Prussian territories. The soil is fertile, and there are mines, game, and plenty of corn. The capital, BRUNSWICK, in the northernmost district, is a quaint old city of narrow streets and high overhanging houses, on a small tributary of the Weser. It has a venerable cathedral, and a magnificent palace and a museum, but its most striking object is a fine obelisk commemorating the two dukes, father and son, who fell successively in the battles of Jena and Quatre Bras.

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The reigning dynasty of Britain is descended from the line of Brunswick. *Wolfenbüttel*, in the duchy, is celebrated for its extensive library of Bibles. The *Duchy of Holstein-Lauenburg*, north of the Elbe, is attached to the crown of Denmark.

18. The *Principalities of Lippe-Detmold and Lippe-Schaumburg* are hilly regions clothed with woods, on opposite sides of the Weser, between Hanover and the Prussian province of Westphalia. Their towns are little more than respectable villages. *Detmold*, the capital of the former, has on an eminence in its neighbourhood, a colossal statue on a lofty pedestal, erected by the German princes, in honour of Arminius, or Hermann, who contended successfully for the independence of the country against the Roman legions under Varus.

19. *Hamburg*, the largest of the *Free Cities*, on the right or north bank of the Elbe, sixty miles above its mouth, is the greatest commercial emporium of Germany, and the most populous city after Vienna and Berlin. The total annual value of its trade has been estimated at 20,000,000. Since the extensive conflagration in the year 1842, which destroyed many of the old streets and buildings, its appearance has been vastly improved. Its territory comprises a portion of the vicinity, some islands in the Elbe, and a district west of the mouth of the river which contains the important harbour of *Cuxhaven*. The population, including the suburbs, but excluding the dependent territory, is above 222,000.

20. *Bremen*, on both banks of the Weser, about forty miles from its mouth, ranks after Hamburg in point of commercial consequence. Population, 88,800. *Lübeck*, on the small river Trave, a few miles from the Baltic, is a comparatively decayed city, but very picturesque, containing many monuments of the architecture of the middle ages. It was formerly the capital of the Hanseatic League, of which Hamburg and Bremen were members. They are hence still called the *Hanse towns*. The association arose in the beginning of the thirteenth century, and embraced eighty-five commercial cities, especially those on the shores of the North Sea and the Baltic; its object was to repress piracy, procure restitution of shipwrecked property, and facilitate the safe navigation of the seas.

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21. CENTRAL STATES. This group includes one Kingdom, *Saxony;* one Electorate, *Hesse-Cassel;* three Grand-duchies, *Hesse-Darmstadt, Luxemburg,* and *Saxe-Weimar;* six Duchies, *Nassau, Saxe-Meiningen, Saxe-Coburg-Gotha, Saxe-Altenburg, Anhalt-Dessau* and *Koethen, Anhalt-Bernburg;* five Principalities, *Waldeck, Reuss Elder, Reuss Younger, Schwarzburg-Rudolstadt, Schwarsburg-Sondershausen;* one Langraviate, *Hesse-Homburg;* one Free city, *Frankfort on the Maine.*

22. The KINGDOM OF SAXONY, between Prussia and the Austrian empire, is a fertile tract divided nearly centrally by the *Elbe,* which flows through it from south-east to north-west. It belongs to the great plain of Germany, except the southern portion, which includes the northern spurs and valleys of the *Erzgebirge,* a richly metalliferous district, called the Saxon Switzerland, from its wild and romantic aspect. Besides great mineral wealth, the country is extensively clothed with vineyards and orchards. It possesses also fine pasture lands, on which the flocks of sheep, so celebrated for their wool, are reared; and is occupied by a people entitled to the first place among the Germans for intelligence, industry, and enterprise. DRESDEN, the capital, situated on both banks of the Elbe, especially noted for its collections of paintings, sculptures, antiquities,

The Royal Palace, Pilnitz.

and extensive royal library, contains about 117,000 inhabitants. Within six miles of it, on the left bank of the Elbe, is *Pilnitz,* which has a royal park and chateau, where, in

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1791, the treaty was signed to maintain the rights of the Bourbons. *Leipzig*, in the north-west corner of the kingdom, is famous for its two great annual fairs, its trade in books, and the terrible three days' conflict in October, 1813, called the "battle of nations," fought in its environs, and partly in the streets, which freed Germany from the yoke of Napoleon. *Chemnitz* is the principal seat of manufactures, the Saxon Manchester. *Freiberg*, with rich silver mines in its vicinity, is noted for its mining school, mineralogical collections, and connection with the names of Werner, Humboldt, and other distinguished naturalists.

23. The *Electorate of Hesse Cassel* consists mainly of a long irregular tract, stretching from Hanover on the north to the neighbourhood of Frankfort on the south. It is watered by the Fulda, one of the chief affluents of the Weser; and has CASSEL, on the banks of the former river, for its capital. An elegant built town, called *Wilhelmshöhe*, which has been called the German Versailles, is a magnificent palatial residence, three miles from the town. *Marburg*, the seat of a university; *Fulda*, with an ancient cathedral; and *Hanau*, a thriving commercial town, are the three other principal places of the electorate. In a detached portion of the electorate is the small town of *Schmalkald*, historically known from the league made there by the Protestants in 1531, and called after it.

24. The *Grand-duchy of Hesse-Darmstadt* comprises two principal districts, northern and southern, separated by part of Hesse-Cassel, and the territory of Frankfort. The southern and larger portion is traversed by the Rhine; and contains on the eastern side the beautiful range of the *Odenwald*. The capital, *Darmstadt*, on the little river Darm, is a handsome town, with a splendid opera-house. The largest city is *Mayence* or *Mentz*, on the left bank of the Rhine, nearly opposite to the influx of the Maine; it is strongly fortified and garrisoned by the Germanic Confederation. The citizens have erected a statue of John Guttenberg, the inventor of printing, a native of the place; and the site of his dwelling is shown. *Worms*, an ancient but decayed imperial city; *Offenbach*, famous for carriage-building and gingerbread nuts; *Giessen*, the seat of a university, and *Hesse Homburg*, are all in this duchy.

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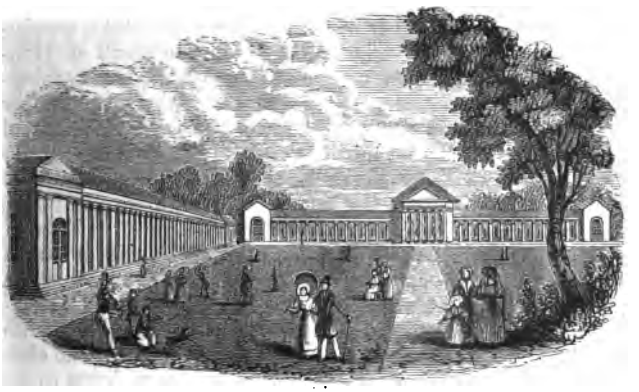
25. The *Grand duchy of Saxe-Weimar*, consisting of fifteen detached tracts, between Hesse-Cassel and Saxony, is celebrated for the literary eminence of its capital, WEIMAR, with which the names of Goethe, Schiller, Herder, and Wieland, are associated. *Jena*, on the Saale, the seat of a university, is famed as the scene of one of Napoleon's great victories in 1806; and *Eisenach*, on the Nesse, is of interest as the spot where Luther was concealed after his excommunication.



The Kursaal, Wiesbaden.

26. The *Duchy of Nassau* is a compact territory, beautifully diversified, stretching along the right bank of the Rhine, from the vicinity of Mayence to that of Coblentz, and abounding with mineral springs and vineyards. The mineral waters of *Wiesbaden*, the capital, with those of *Ems*, *Schlangenbad*, *Selters*, and *Schwalbach*, are held in high repute; they are all places of much resort, especially by the English. *Biberich* is pleasantly situated on the Rhine, with a fine ducal residence.

27. The *Duchy of Saxe-Coburg-Gotha* comprises the two principalities of *Gotha* and *Coburg*, which became united in 1826, on the extinction of the line of Gotha, under the sovereignty of the late duke, uncle of Queen Victoria, and father of His Royal Highness Prince Albert. The chief

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places are, *Gotha*, a somewhat literary town, near the river Leine; and *Coburg*, the ducal residence. The *Duchy of Saxe Meiningen* lies on the border of Switzerland, and is traversed by the *Werra*. The chief town, *Meiningen*, is the residence of the Duke, brother of the late Queen Dowager of England. The *Duchy of Saxe Altenburg*, on the border of Saxony, is divided into two portions by *Weimar* and *Reuss; Altenburg* is well built, and has considerable manufactures. Of the *two Duchies of Anhalt*, the only town of any consideration is *Dessau*.

28. The *Principality of Waldeck* is a petty state, consisting of two divisions. The northern, on the south of Hanover, contains the town of *Pyrmont*, a fashionable bathing-place. The territories of the two *Reuss's*, the younger of which contains *Gera;* the two *Schwarzburgs*, one of which contains *Rudolstadt*, the other *Sondershausen;* the *Landgraviate of Hesse-Homburg*, of which the capital, *Homburg*, is noted for its baths, and notorious for its gambling; are comparatively unimportant places,

29. The Free city of *Frankfort on the Maine* is one of the oldest in Germany, a place of great inland trade, and a centre of banking transactions, containing nearly 80,000 inhabitants. It has political importance as the federal capital; and great historical celebrity, as the scene of the election and coronation of the German emperors, down to the year 1792: their portraits hang in the banquetting room of the Hôtel de Ville. Goethe was born here, as was also the ancestor of the Rothschilds, whose house is still standing in the Juden-gasse.

30. SOUTHERN STATES. This group comprehends two Kingdoms, *Bavaria* and *Würtemberg;* one Grand Duchy, *Baden;* and one Principality, *Lichtenstein*.

31. The KINGDOM OF BAVARIA, which is divided into eight circles or provinces, is at the head of the minor German states in point of extent and population. It consists of two distinct districts, separated by the duchies of Baden and Darmstadt. The smaller, called the *Palatinate*, or the *territory of the Rhine*, lies along the west bank of the river, and forms part of the north-eastern frontier of France. The larger, comprising seven of the eight provinces, is styled the *territory of the Danube and Maine*,

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being watered by those rivers. This portion is for the most part a high table-land, overspread in the south with many small lakes, and diversified by the northern spurs of the Alps. The people are chiefly engaged in agriculture and the production of coarse manufactures. MUNICH, the capital, on the Isar, an affluent of the Danube, occupies after Madrid the highest site of any European city. It has many magnificent public buildings, a university, a library of great extent and value, many fine works of art, and upwards of 135,000 inhabitants. *Nuremberg*, in the basin of the Maine, ranks after it in size; and presents, in its antique houses, a lively picture of the middle ages, when it was renowned for the wealth and industry of its citizens; it is still an interesting city. *Augsburg*, where jewellery, horology, and other manufactures are now conducted, was once the centre of European exchanges; it has an episcopal palace, containing the hall in which the Protestant Confession of Faith, drawn up by Luther and Melancthon, was presented to the Emperor Charles V. in 1530. It is a very picturesque city, with large and well-wrought stone fountains in its main streets. *Ratisbon*, of great historic fame as an old imperial city, has a splendid cathedral, several monasteries, and in its vicinity, on a rock rising up boldly from the Danube, the Walhalla, a splendid Doric temple, erected to receive the busts and statues of distinguished Germans. *Bamberg*, with its large palace and gothic cathedral; *Bayreuth*, the capital of its principality, *Wurzburg*, with an ancient university and fortifications; *Passau*, with a fine cathedral; and the venerable city of *Spiers*, once the residence of Charles V., are all ancient catholic cities of some importance. The well-built and thriving commercial town of *Erlangen* has the only Protestant university in Bavaria; *Kissingen*, in lower Franconia, on the Saale, is a favourite resort for its saline chalybeate springs. The famous battle-fields of *Blenheim*, *Dettingen*, and *Hohenlinden*, are all in Bavaria.

32. The KINGDOM OF WURTEMBERG, which is divided into four circles, lies between Bavaria and Baden; and is enclosed by them, except on the south, where it touches the lake of Constance. It is traversed by the *Danube* from west to east; and by the *Neckar* from south to north.

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STUTTGARD, the capital, beautifully situated near the latter river, is distinguished for its library, which is said to contain the largest collection of Bibles in the world. *Ulm*, on the Danube, an old imperial city and a military post of consequence, with a fine abbey and gothic cathedral, is memorable for the capture of General Mack and his Austrian army by Napoleon in 1805. *Tübingen*, a walled town on the Neckar, is famed for its university, where Melancthon and Reuchlin were once professors.

Mannheim.

33. The *Grand Duchy of Baden*, which is divided into four circles, is a long narrow territory on the right bank of the Rhine, extending from the lake of Constance to below *Mannheim*. Wooded mountains, picturesque scenery, numerous streams, a mild climate, and fertile soil, have led to its being styled *Das Eden Deutschland's*, "the paradise of Germany." *Carlsruhe*, the capital, is a small elegant city, of modern origin, built in the form of a fan, with its principal streets, thirty-two in number, diverging from the grand ducal castle. *Baden-Baden*, from which the territory has its name, is similarly situated to the south-west; and frequented by thousands of visitors, owing to its warm mineral springs, which were resorted to in the time of the Romans. *Heidelberg*, on the Neckar, in a lovely locality, is distinguished for its university, and the splendid remains of the ancient palace of the Electors-palatine. In the cellars beneath the castle is

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the enormous "Tun of Heidelberg," capable of holding 5000 gallons. *Constance*, beautifully situated on the lake of its name, is famous for the Ecclesiastical Council held there, 1414—1418, which condemned the tenets of Wyclif, and the bodies of John Huss and Jerome of Prague to the flames. MANNHEIM, at the junction of the Neckar and the Rhine, elegantly built, is the largest and most commercial city of the duchy, and was formerly the residence of the Elector-palatine.

34. The *Principality of Lichtenstein* lies along the Rhine, immediately after its issue from the lake of Constance; and is the smallest member of the Germanic Confederation, about equal in area to one-third of the county of Rutland.

35. Various *Forms of Government* are adopted in Germany. The four free cities are republics; the kingdoms are constitutional monarchies, each with two legislative chambers; and in most other instances, the sovereign power is more or less limited. While independent in affairs of internal administration, the preceding states form collectively, with Austria and Prussia, a federal body, called the *Germanic Confederation*, for their mutual security from foreign aggression. The organ of this body is a *Diet*, composed of plenipotentiaries from the various states, which holds its sessions at Frankfort, under the presidency of the representative of Austria. It sat for the first time on the 5th of November, 1816. The whole number of votes is seventy, of which Austria, Prussia, Bavaria, Würtemburg, Saxony and Hanover, have four each. The other states have one, two, or three votes, according to their importance. Each contributes a contingent to the federal army.

36. Germany contains a total *Population* of 45,000,000; but excluding the subjects of Austria and Prussia, the remaining population is little more than 18,000,000. These consist mainly of High Germans in the southern states, and Low Germans in the northern. They speak different dialects, but are essentially the same race, very similar in habits, character, and disposition; and as the instruction in the schools throughout the country is in High German, that dialect is universally understood. Jews are numerous in the great cities; and there are French on the left bank of the Rhine. The Roman Catholic religion is

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almost exclusively professed in the south; Protestantism predominates in the centre and the north.

37. Elementary *Schools* provided by the respective states are so general, that none but the wilfully ignorant, or the incapable, can be unacquainted with the rudiments of instruction. Higher class schools, called lyceums and gymnasiums, are found in almost every large town. Universities are sufficiently numerous and well-endowed to render classical and scientific knowledge cheaply attainable. The annual production of the press is enormous. Leipsic, Weimar, Gotha, Stuttgard, Munich, and Carlsruhe, are great centres of literary activity. Public libraries are widely diffused, many of which are of great magnitude and value. Germany has been styled the "fatherland of thought," owing to the great number of natives who have become pre-eminent in the various branches of natural philosophy, polite literature, and the fine arts.

38. *Manufactures* of fine woollen and linen cloths, and porcelain, are extensive in Saxony, and in high repute; as are also watches, scientific instruments, and toys. Frankfort, Leipsic, Cassel, Brunswick, Augsburg, Nuremberg, and Munich, are some of the more considerable centres of inland trade. Hamburg, Bremen, Lübeck, and Emden, are the chief seats of foreign commerce. By the *Zollverein*, or Customs Union, formed by the influence of Prussia, and embracing all the principal states of Germany except Hanover and Austria, the transit of goods through them has been greatly facilitated.

The following States form the ZOLL-VEREIN or German Customs-union:—

1. Baden.
2. Bavaria.
3. Brunswick.
4. Frankfurt on the Maine.
5. Hanover, with Lippe Schaumburg.
6. Hesse Darmstadt.
7. „ Cassel.
8. Luxemburg (Dutch).
9. Nassau.
10. Oldenburg.
11. Prussia.
12. Saxony.
13. Thuringian Union.
14. Würtemberg.

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Bonn.

PRUSSIAN DOMINIONS.

1. The Prussian monarchy extends along the south coast of the Baltic, to a considerable distance inland; and embraces a large detached territory on both banks of the Rhine, with several other isolated tracts of insignificant extent. There are thus two principal divisions of the kingdom, which may be called eastern and western, from their relative position, separated from each other chiefly by the intervening states of Hanover, Brunswick, Hesse-Cassel, and Nassau. Their total area, with the small dependencies, is 108,000 square miles.

2. *Prussia proper* designates only a fractional portion of the monarchy, or the country around the mouth of the Vistula, anciently occupied by the *Pruczi*, from whom the name is derived. This district, together with the adjoining province of Posen, is beyond the pale of Germany, and once constituted part of the former kingdom of Poland. But the general title of *Prussia* is now also applied to the Germanic provinces, which acquired their present extension by the conquest of Silesia under Frederick the Great, in 1742, and by the cessions of territory made by the congress of Vienna in 1815.

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3. The *Sea-coast* extends about five hundred miles from the Mecklenburg frontier on the west, to the Russian on the east, and has the *gulf of Dantzic* for its principal indentation. The shores are low, or marked with ranges of naked sand-hills, extending some miles into the interior. Spacious but very shallow sheets of fresh water, derived from the rivers, are singular features of the coast line. They are called *haffs* or bays, and are nearly landlocked, only communicating with the sea by confined openings through long spits of sand. The largest examples are the *Curische-haff*, or bay of the Cures, near Memel, called after an ancient people who dwelt upon its banks; the *Frische-haff*, along the Gulf of Dantzic, so styled from the freshness of the water; and the *Stettiner-haff*, below Stettin, named after the town. The Frische-haff is about sixty miles in length, by from six to fifteen in breadth, and communicates with the sea by a strait little more than half a mile wide.

4. A few *Islands* lie along the shores. The largest, *Rugen*, is off the north-west coast of Pomerania, within a mile, at one point, of the mainland. Those of *Usedom* and *Wollin* are similarly contiguous to it, as well as to each other, enclosing the bay of Stettin, which is most frequently entered through the channel between them. Besides the Baltic sea-board, Prussia has recently obtained a strip of territory on the North Sea, by purchase from Oldenburg, for the purpose of forming there a commercial port and a naval station.

5. The country has a generally *level surface* and *sandy soil*. Erratic blocks of granite are found imbedded in it, through a considerable space, which appear to have been drifted from the mountain masses of Scandinavia in pre-historic times. Forests, chiefly of coniferous trees, abound, sheltering the stag, wild boar, and innumerable foxes. Moors and heaths, morasses and lakes, intermingle with the woodlands. The number of the *Lakes* is said to exceed 1000, some of which are from ten to twenty miles in length, and supply vast quantities of fish. But many have been contracted by artificial embankments, and the recovered soil appropriated to agricultural purposes. The borders and mouths of the rivers are fertile, especially the delta of the Vistula. In the south-west, the surface is diversified by the Harz moun-

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tains from Hanover; and in the south-east, the Silesian province is penetrated by the northern spurs of the *Riesengebirge*, which separate it from Bohemia. The western detached division of the kingdom has a rich and diversified tract of country, extending along both banks of the Rhine and the Moselle, abounding with vineyards and fine landscapes.

6. No considerable *Rivers* are entirely confined to the Prussian dominions. The *Oder* makes the closest approach to this condition, flowing through the heart of the country to the Bay of Stettin, and having only a small portion of its upper course within the Austrian empire. The other rivers are the *Niemen* or *Memel*, received from the Russian territory, and discharging in the Carische-haff, near Memel; the *Vistula*, which crosses the frontier from Russian Poland, and disembogues in the Gulf of Dantzic; the *Elbe*, which passes through the western districts, from the Saxon kingdom to Hanover; the *Pregel*, running through Königsberg; the *Weser*, in Westphalia; and the *Rhine* in that part of its course lying between Hesse-Darmstadt and Holland, with the lower portion of its affluent, the *Moselle* and the *Lippe*. Most of the rivers have a very slow current, owing to the slight declination of the surface. This renders them navigable nearly to their sources, but causes them to overflow their banks after heavy rains, giving rise to the numerous lakes and marshes.

7. The *Mineral Produce* includes coal, iron, lead and zinc, chiefly found in the Rhenish, Saxon, and Silesian provinces. The zinc works in the latter locality are upon a most extensive scale, and largely supply the foreign market. But the most peculiar mineral of Prussia is *Amber*, owing to its size and abundance. Though minute quantities of the indurated vegetable resin are met with in almost every country, its grand repository is the south-east coast of the Baltic, particularly the long tongue of land which separates the Curische-haff from the sea. It may be obtained by mining, but is generally gathered from the strand, upon which it is thrown by the waves during violent storms. The collection is strictly watched, as the produce is farmed from the government. On the 1st of January 1848, a storm threw up no less than 800 pounds. The largest known specimen, weighing eighteen pounds, is in the Royal Museum at Berlin.

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The mineral is largely sent to Turkey, where it is used to form mouth-pieces for tobacco-pipes.

PROVINCES AND GOVERNMENTS, WITH THEIR AREA AND POPULATION IN 1858.

Provinces.	Governments.	Area, sq. m.	Population.
Brandenburg ..	Potsdam with Berlin ..	8,128	2,329,996
	Frankfort-on-the-Oder ..	7,405	
Schlesien, or Silesia	Breslau	4,466	3,269,613
	Oppeln	4,011	
	Liegnitz	1,312	
Prussia	Königsberg	8,673	2,744,500
	Gumbinnen	6,337	
	Danzig	3,236	
	Marienwerder	6,787	
Sachsen, or Saxony	Magdeburg	5,273	1,910,062
	Merseburg..	5,104	
	Erfurt	5,324	
Pomerania ..	Stettin	5,034	1,328,381
	Köslin	5,494	
	Stralsund	1,679	
Posen, or Posnania	Posen	6,836	1,417,155
	Bromberg	4,565	
Westphalia ..	Munster	2,809	1,566,441
	Minden	2,033	
	Arnsberg	2,977	
Rhenish Provinces	Köln, or Cologne	1,538	3,172,907
	Dusseldorf	2,110	
	Coblenz	2,330	
	Trier, or Treves	2,786	
	Aachen, or Aix-la-Chapelle	1,608	
	Hohenzollern	138	

8. As will be seen from the above table, the kingdom is divided into eight provinces: six are in the eastern division, namely, *Pomerania, Brandenburg, Saxony, Silesia, Posen,* and *Prussia Proper;* two are in the western, *Westphalia* and the *Rhineland.* Prussia Proper, divided into east and west, and Posen are non-Germanic.

9. BERLIN, the capital in the inland province of *Brandenburg*, latitude 52° 30′ N., longitude 13° 18′ E., with upwards of 460,000 inhabitants, is very unfavourably situated on the small river Spree, in the midst of a flat sandy plain. It contains a first-rate university, a massive palace, museums, picture galleries, and many other public buildings, as also statues; with a remarkably magnificent street, named *Unter den Linden,* "beneath the lime-trees," which extends in a

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straight line about a mile and a quarter from the Brandenburg gate, and is divided into five roads by four rows of trees, lined on each side by stately residences. But as a whole the city fails to interest the stranger, not having a single antique structure, and being besides very deficient in social conveniences. *Potsdam*, the Prussian Versailles, eighteen miles distant, is the usual residence of the sovereigns, and a principal station of the army. Among the many palaces in the neighbourhood, that of *Sans Souci*, "without care," is maintained, with its extensive gardens, in much the same state, by the present king, as when it was occupied by Frederic the Great. His tomb, a plain sarcophagus in the garrison church, overshadowed with captured flags and eagles, is a place of pilgrimage. *Frankfort on the Oder*, also in the province of Brandenburg, is a fine and commercial city, with mineral springs. Its university was transferred to Breslau in 1810.

10. BRESLAU, the capital of *Silesia*, on the *Oder*, is the second place in the kingdom in extent, containing rather more than 130,000 inhabitants. It is a busy manufacturing site, has the largest wool fair in Germany, and is also the chief mart for corn and the linens of the province. It has a rising university, and its church, St. Elizabeth, has the loftiest tower in Prussia, 364 feet high. *Liegnitz* is an ancient town on the *Katsbach*, where Blucher gained a victory over the French in 1813. It has a Royal College and Museum.

11. KÖNIGSBERG, the capital of *Prussia Proper*, on the Pregel, with *Pillau* on the Baltic for its port, has an extensive trade in corn, timber, and flax, and is the seat of a university, with a fine cathedral, palace, and an observatory rendered famous by the astronomer Bessel. *Dantzic*, near the mouth of the main branch of the Vistula, is one of the chief corn-shipping ports in the world. It was a free city, governed by its own laws and magistrates, under the protection of the crown of Poland, down to the year 1795, is strongly fortified, and has sustained many sieges. The sanguinary battle-fields of *Friedland* and *Eylau* in 1807 are to the south of Königsberg; and to the north is *Tilsit*, where the delusive peace was afterwards contracted, and Napoleon had his fanciful interview with the czar Alexander.

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Memel, a good port on the Curische-haff, has a great trade in timber, grain, flax, and linseed.

12. MAGDEBURG, on the *Elbe*, the capital of *Prussian Saxony*, with a fine cathedral and palace, possesses one of the strongest fortresses in Europe, and has always a large garrison. *Wittenberg*, on the Elbe, may be called the cradle of the Reformation; in its church are the tombs of Luther and Melancthon.

Quedlinburg, the birth-place of Klopstock.

13. *Quedlinburg*, a busy manufacturing town on the river Bode, thirty-one miles S.W. of Magdeburg, is celebrated as the birth-place of the poet Klopstock. It is enclosed by turreted walls, and its ancient castle was formerly the residence of the Abbesses of Quedlinburg. *Halle* is the seat of a celebrated university, and has long been noted for the activity of its printing establishments and its salt springs. Handel was born here. *Erfurt* is famous for its gymnasium and benevolent institutions.

14. STETTIN, a fine fortified town near the mouth of the Oder, is the capital of the province of Pomerania, and a principal seaport. *Stralsund*, a strongly-fortified seaport, is celebrated in the Thirty Years' War.

15. POSEN, formerly the capital of Ancient Poland, and now of the *Grand Duchy of Posen*, on the rivers Warta and

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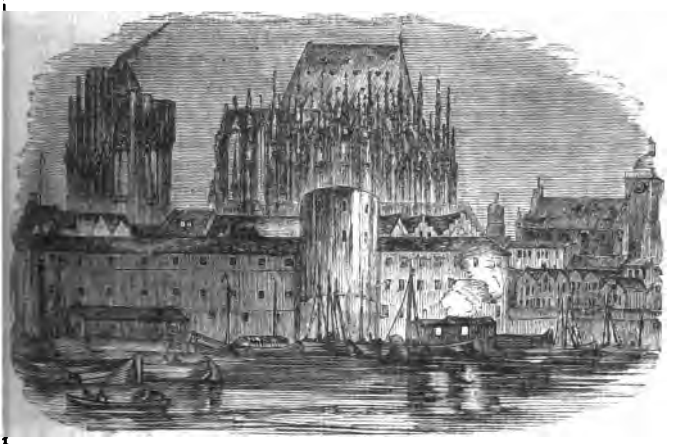
Lowna, is a fortified city, with a cathedral and twenty-five churches, all Catholic excepting two, which are Protestant; flax, hemp, tobacco, and hops are its principal staple.

16. MUNSTER, the chief city in the province of *Westphalia*, is the see of a Catholic bishop, and has a fine cathedral. It is celebrated as the scene of the fanatic doings of John of Leyden and his followers, A.D. 1535-6, as well as for the Treaty of Westphalia, signed here in 1648, which put an end to the Thirty Years' War, and secured religious liberty to the Protestants. At *Minden*, a strongly-fortified town on the Weser, the French were defeated by the British in 1759.



Cologne.

17. COLOGNE, the capital of *Rhenish Prussia*, on the left bank of the Rhine, is the third city of the kingdom, and has a population of 114,271. It is noted for the manufacture of a spirituous aromatic liquor, called *Eau de Cologne*, of which a million flasks are exported annually, and is accredited as the city where gunpowder was invented. It possesses in an unfinished cathedral of ancient foundation, one of the grandest specimens of Gothic architecture extant; this the present King of Prussia is determined to complete, according to the original designs (which are still preserved),

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and considerable progress has lately been made. *Dusseldorf*, a pretty town and shipping-port, was once famous for its picture gallery, which has been removed to Munich; *Bonn*, a celebrated seat of learning, which attracts a considerable number of our countrymen to its well-conducted university and schools; and *Coblentz*, a military stronghold; are other important places on the Rhine. The latter is situated at the confluence of the river with the Moselle, and takes its name, which is a corruption of *Confluentes*, from that circumstance. On the opposite bank is the hill-fortress of *Ehrenbreitstein*, deemed impregnable. *Aix-la-Chapelle*, near the Belgian frontier, is celebrated as the residence and burial-place of Charlemagne, for its beautiful cathedral, where many of the emperors of Germany have been crowned; and for its thermal waters of high temperature, of great repute from remote antiquity. *Elberfeld* and *Barmen*, contiguous towns, on the borders of Westphalia, are principal seats of linen manufactures, containing together more than 70,000 inhabitants. *Crefeld* is a thriving town, concerned in the manufacture of silk and velvet. *Treves*, 63 miles S.W. of Coblentz, formerly the see of an archbishop, is believed to be the oldest city in Germany, and assumed to be founded before the time of Christ.

18. At *Thorn*, a small town on the Vistula, remarkable for its wooden bridge 2500 feet long, Copernicus was born, who passed the greater part of his life, and was buried, at *Freyburg*, overlooking the waters of the Gulf of Dantzic. *Eisleben*, in the Saxon province, gave birth to Luther, who commenced the Reformation at *Wittenberg*, in the same district, which contains his tomb, and a statue of him, with the inscription in German, "Is it God's work? then will it endure. Is it man's? then will it perish." Near *Lutzen*, in the same province, Gustavus Adolphus, the champion of Protestantism, fell in the moment of victory, in 1632; and Napoleon triumphed in 1813 over the Russo-Prussian armies; a simple stone marks the spot where the body of Gustavus was found.

19. The *Population* of the Prussian monarchy is upwards of 18,000,000. Three-fourths of these are Germans; the remainder are chiefly races of Sclavonic origin, in Posen, eastern Silesia, and Prussia Proper, consisting for the most part of Poles in the former province, where there is also a

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considerable number of Jews. About three-fifths of the population are *Protestants*, who predominate in Brandenburg, Pomerania, and Saxony; two-fifths are *Roman Catholics*, who are principally found in Posen, Westphalia, and the Rhenish province. The professors of all religions enjoy toleration, and nearly equal rights, though Protestantism may be regarded as in some respects the religion of the state.

20. The country can boast the most complete system of *National Instruction* existing in Europe. Every parish is bound to have an elementary school; and all parents are required by law to send their children to it for a certain term, unless they can prove that they are giving them a proper education at home. Every town has also one burgh school or more, according to its size. The teachers for these seminaries are carefully instructed in normal schools. There are seven universities, namely, Berlin, Breslau, Königsberg, Bonn, Halle, Münster, and Greifswald.

21. The *Cultivation of the Soil* is the main pursuit of the people, and the principal source of the national wealth. Though but little art, and rude implements are employed, yet unremitting industry has changed some of the most naturally barren portions of Europe into a territory which not only supplies the wants of its own inhabitants, but generally leaves a surplus for exportation. Rye and potatoes, the chief food of the labouring classes, are the principal crops. Flax, and beet-root for sugar are also largely grown; the rearing of bees is prominent in various districts; and wine of excellent quality is made in the valleys of the Rhine and Moselle.

22. Domestic weaving is very general; but in Westphalia, the Rhenish province, and Silesia, the factory-system is extensively applied to the production of cotton, woollen and linen goods. The country within a few miles of Dusseldorf resembles one of the great English manufacturing centres. *Berlin* is celebrated for its ornamental cast-iron articles, glass, and porcelain; and with *Halle*, enjoys a considerable book trade. *Dantzic*, *Königsberg*, *Stettin*, and *Memel*, are the important ports. The foreign commerce of the country, which embraces the export of raw materials,

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and the import of cotton and eastern produce, is chiefly carried on in English vessels.

23. The kingdom dates from the year 1701, when the Elector of Brandenburg, Frederick III., was proclaimed King of Prussia, with the title of Frederick I., and placed the crown upon his own head at Königsberg. It was one of the most absolute monarchies in Europe down to the year 1848, when a constitution somewhat resembling that of Belgium was granted, vesting the supreme power in the sovereign and two chambers. The present King, Frederic William IV., came to the throne in 1840. His nephew, Frederic William Nicholas Charles, heir presumptive, married Victoria Adelaide Mary Louisa, Princess Royal of England, January 25, 1858.

Birth-place of Rubens, Cologne.

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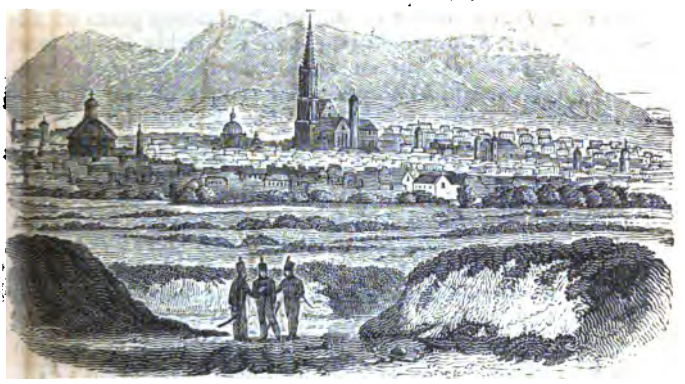
AUSTRIAN DOMINIONS.
REFERENCE
1 Tyrol
2 Salzburg
3 Austria
4 Illyria
5 Styria
6 Croatia
7 Dalmatia
8 Transylvania
9 Venetia
GERMAN STATES
SWITZERLAND
RUSSIA
TURKEY
ITALY
MEDITERRANEAN SEA
ADRIATIC SEA
BOHEMIA
MORAVIA
GALICIA
HUNGARY
AUSTRIA
VIENNA
PRAGUE
DRESDEN
CRACOW
LEMBERG
BUDA
PEST
HERMANSTADT
TRIEST
VENICE
MILAN
TURIN
Longitude East



Vienna.

AUSTRIAN EMPIRE.

1. AUSTRIA ranks the third among the European states in extent of territory, being only exceeded by the possessions of the Swedish crown, while far inferior to the dominions of Russia. The empire embraces a fine portion of central and south-eastern Europe, containing a great diversity of soil and climate, with a heterogeneous assemblage of nations and tribes, differing from each other in race, language, manners, religion, and degree of civilisation. It is bounded by Saxony, Prussia, and Russian Poland on the north; Bavaria, Switzerland, and Sardinia on the west; Italy below the Po, the Adriatic Sea, and Turkey on the south; Russia and Turkey on the east.

2. Excluding a southerly projection along the coast of the Adriatic, the territory, within the above limits, forms a compact oblong mass, extending 850 miles from east to west, by 490 from north to south. It includes an area of 258,000 square miles; and has a frontier-line of more than 4000

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miles, in general very advantageously defined by natural boundaries. The empire is principally inland, having only about 500 miles of sea-coast, limited to the Adriatic.

3. The *Surface* comprises a very considerable extent of level country, consisting of the great enclosed plain of *Bohemia*, the vast flats of *Hungary*, and the richly fertile tract of *Northern Italy*. But an equal area is overspread with *mountain chains* and *highlands*. The ranges of the *Rhætian*, *Noric*, *Carnic*, *Julian*, and *Dinaric Alps*, occupy the western and southern districts, and connect the system of the Swiss Alps with the Balkan in Turkey. On the north-west, the *Bohemian* and *Sudetic mountains* form a rampart between the empire and the rest of Germany. On the north-east and east, the *Carpathians* extend in the form of a huge semicircle around Hungary and Transylvania, separating the former country from Galicia, and the latter from Moldavia and Wallachia. The grand heights are in the Alpine ranges, and tower far above the line of perpetual snow. The *Gross Glockner* rises 12,230 feet, and the *Ortler Spitz* 12,850. Near the latter is the highest carriage-road in Europe, through the pass of *Monte Stelvio*, at the height of 8,850 feet.

4. The *Rivers* of the Empire include the sources and early course of the *Elbe*, *Oder*, and *Vistula*, flowing to the Baltic; the *Adige*, *Piave*, *Brenta*, and *Mincio*, with the lower course of the *Po*, entering the Adriatic; the upper *Dniester*, and the *central Danube*, connected with the Black Sea. The *Danube* has a course of more than six hundred miles in the Austrian dominions, through nearly the whole of which it is navigable, and forms the great natural means of intercommunication. It enters the country below Passau, about 750 feet wide, and runs easterly by Vienna towards the centre of Hungary, where it has a breadth of 2000 feet. It then makes an abrupt bend, flows nearly due south to its junction with the *Drave*, and from thence south-easterly to Orsova, below which it passes the Turkish frontier. Just before its exit, the river enters the ravine of the Iron Gate, between offsets of the Carpathian mountains on the one hand, and of the Balkan on the other, which contract the stream, and form rapids impeding the navigation. Its principal Austrian affluents are the *March*, *Waag*, and *Theiss* on

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the left bank, and the *Inn*, *Ems*, *Raab*, *Drave*, and *Save*, on the left.

5. In almost all parts of the country small *Lakes* occur, amounting in number to upwards of 20,000. There are also several of important extent. Lake *Balaton*, or the *Platten See*, in the west of Hungary, slightly salt, and of crystal clearness, but said to become turbid on the approach of a storm, covers an area of 500 square miles, including the surrounding marshes. The *Neusiedler See*, in the same district, is a considerable expanse, salt and shallow. The *lake of Zirknitz*, among the mountains of Illyria, is remarkable for disappearing and refilling according to the season, its bed being connected with subterranean cavities. It has hence been said, that fishing, hunting, and gathering in the harvest, are here possible on the same spot. Among the Carpathians, the *Grüne See*, or Green Lake, is famous for green spots diversifying its generally dark surface, an appearance supposed to be the effect of shallows, and a bottom of light-coloured sand.

6. No section of Europe is so rich in *Mineral stores*, which include a limited supply of the precious metals, and all the important ones in abundance, with the exception of platinum. Of three towns at the base of the Carpathian mountains, an old Hungarian proverb states, that *Neusohl* is surrounded with walls of copper, *Schemnitz* with walls of silver, and *Kremnitz* with walls of gold, in allusion to the abundance of the respective metals. The gold and silver mines, though still productive, are in a great degree exhausted. *Schemnitz* is the school of the Austrian miner. Its academy was founded during the reign of the empress Maria Theresa, for the purpose of educating officers to superintend all the mining and smelting works in the empire, but it has never acquired the celebrity of the Saxon Freiberg. *Hungary* yields lead and iron in abundance; *Bohemia*, lead, iron, and tin; *Illyria* and *Styria*, lead, iron, native steel, and quicksilver. In the two latter provinces the mountains are to some extent solid blocks of carbonate of iron. Coal is widely diffused, but often of inferior quality; and enormous deposits of rock-salt extend along the line of the Carpathians. Mineral springs are hence very numerous, some of which have acquired a European

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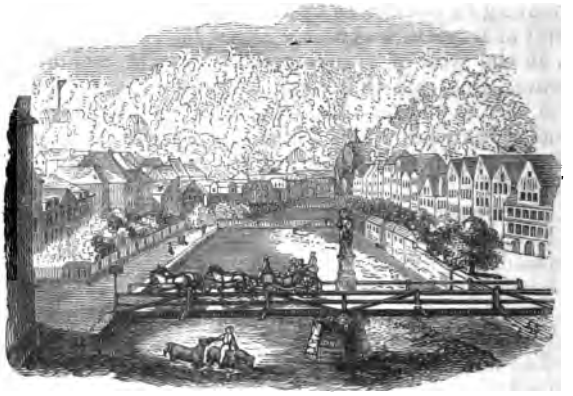
reputation, as the waters of *Seidlitz*, *Toplitz*, *Marienbad*, and *Carlsbad*.



Carlsbad.

7. *Forests* of oak, elm, beech, and in the higher grounds, of fir and other pines, cover more than one-fourth of the entire surface, though there are great tracts of country, as in Hungary, without tree or bush. The woods supply fuel for domestic purposes, manufacturing and smelting establishments. They shelter the bear, wolf, lynx, wild-boar, and varieties of deer. But the formidable animals have been much reduced in number during the present century, in consequence of rewards offered for their destruction by the imperial government. In Galicia, between the years 1812 and 1814, the peasantry destroyed forty-one bears and 4938 wolves.

8. The *Climate* varies considerably according to the inequalities of the surface, and the *cultivated vegetation* likewise. The mountainous districts are cold, while the plains are warm, and oppressively hot in the summer months. Oats, barley, and rye, are the ordinary products of the high grounds; wheat and maize of the lower; and in the rich alluvial soil adjoining the rivers, rice, hemp, flax, and tobacco are raised in considerable quantities. Vineyards are abundant in Hungary, where, in a limited district of the

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north-east, under the shelter of the Carpathians, the well-known Tokay, the "king of wines," is produced. That country has been called the "paradise of the melon," the fruit being extensively raised there in the open fields, and eaten by all classes. It possesses also entire forests of plum and damson trees. Olive grounds appear in the extreme southern provinces, bordering the Adriatic, with fig and mulberry trees, the latter for the rearing of silk-worms.

9. The provinces constituting the Austrian empire form four great divisions, as follow:—

GERMANIC PROVINCES . .	Austria Proper, Moravia, Silesia, Bohemia, Styria, Illyria, the Tyrol.
POLISH PROVINCES	Galicia and the Bukowine.
HUNGARIAN PROVINCES . . .	Hungary, Transylvania, the Banat, Sclavonia, Croatia, and Dalmatia.
ITALIAN PROVINCES	Lombardy and Venice.*

PROVINCES, WITH THEIR AREA AND POPULATION.

	Area, sq. m.	Population in 1857.
Germanic Provinces.		
Austria, Upper and Lower . . .	12,268	2,414,034
Salzburg	2,788	148,825
Moravia	8,602	1,878,806
Silesia	1,988	447,497
Bohemia	19,953	4,720,313
Tyrol and Vorarlberg . . .	11,109	876,263
Styria	10,952	1,070,747
Illyria, Carinthia, and Carniola . .	10,952	1,465,092
Polish Provinces.		
Galicia, Cracow, and the Bukowine .	33,800	5,174,358
Hungarian Provinces.		
Hungary	69,504	8,185,000
The Banat, Servia, &c. . . .	10,902	1,532,251
Transylvania	22,196	2,180,121
Croatia and Sclavonia . . .	7,423	865,403
Dalmatia	4,927	415,632
The Military Frontier . . .	15,138	1,220,000
Italian Provinces.		
Lombardy†	8,235	2,866,396
Venetia	9,111	2,306,658

10. AUSTRIA PROPER, an archduchy, extends along both banks of the Danube from Bavaria to Hungary, and is divided into two districts, *Upper* and *Lower*, by the river *Ems*. It is the nucleus of the empire, and the hereditary

* The changes which are now taking place in respect to the Austrian possessions in Italy, will be noticed under "Italy."

† Since this Table was drawn up, Lombardy has passed to Sardinia.

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possession of the reigning house, to which the other parts have become attached by treaty, marriage, or descent, comparatively few additions having been made by conquest. The name, in German, *Oesterrich*, signifies "eastern kingdom," and was applied to it as being the eastern part of the dominions of Charlemagne. VIENNA, the capital of the empire, in lat. 48°10′ N., long. 16° 20′ E., is situated in *Lower Austria*, on the south bank of the Danube, but at a short distance from the main stream. It is the largest city in Germany, containing upwards of 475,000 inhabitants, is strongly fortified, and full of fine public buildings. It was twice closely but unsuccessfully besieged by the Turks, in 1529 and 1683; and was twice entered by the French in 1805 and 1809. The splendid cathedral of St. Stephen's possesses a large bell made from the cannon which the Turks left behind them when they raised the siege on the last occasion. The royal palace of Schönbrunn, "beautiful spring," built by Maria Theresa, is about two miles from the city; and the great battle-fields of *Aspern*, *Essling*, and *Wagram*, are in its vicinity. Westward of Vienna, on the opposite bank of the Danube, is the castle of *Dürrenstein*, where Richard Cœur de Lion of England was confined by the Duke of Austria, and where the French were defeated by the Russian and Austrian armies in 1805. *Lintz*, the principal city of *Upper Austria*, on the south bank of the Danube, is a place of considerable trade, and remarkable for its military defences, which consist in a circle of 32 detached forts.

11. SALZBURG, 70 miles W.S.W. of Linz, on the borders of Bavaria, situated on both sides the river Salgach, is one of the most picturesque cities in Germany, and was formerly the seat of a sovereign archbishop. Haydn and Mozart were both born here: the tomb of the former is in the church of St. Peter, and the house of the latter is still preserved. It is the chief town of the province of its name, recently constituted.

12. BOHEMIA, a north-west section of the empire, is its largest and most populous Germanic division, bordered by mountains of primitive rocks, richly metalliferous. It belongs almost entirely to the basin of the Elbe, is a very productive territory, distinguished for the manufacture of or-

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namental glass, and has the nominal style of a kingdom. In history it is celebrated for the devotion of its inhabitants to the principles of the Reformation, promoted by the teachings of John Huss and Jerome of Prague, and displayed in a gallant struggle with the imperial forces, under the renowned Ziska. PRAGUE, the capital, built on seven hills, is nearly in the centre of the country, on both banks of the Moldau, joined by a noble bridge. It is one of the most ancient, interesting, and beautifully situated cities of Germany, the seat of its oldest university, and ranks after Vienna in population, containing 142,588 inhabitants, many of whom are wealthy Jews. The Danish astronomer, Tycho Brahe, here ended his days, and his illustrious pupil, Kepler, struggled with poverty. The other Bohemian towns are either of note for mines or mineral waters. *Carlsbad*, on the river Töpel, 70 miles N.N.W. of Prague, is famous for its public walks, and for the Congress held there in 1809.

13. MORAVIA, north of Lower Austria, watered by the river Morava or March, an affluent of the Danube, is a fertile and highly-cultivated region, producing abundance of flax, hemp, and corn. BRUNN, the chief town, has been called the Austrian Leeds, owing to its extensive woollen and other manufactures; it is well fortified, and the see of an archbishop. Near it is the *Spielberg*, surmounted by a kind of castle, used as a prison for political offenders, in which Baron Trenck, General Mack, and Silvio Pellico were confined. At the distance of fourteen miles is the village of *Austerlitz*, where Napoleon defeated the Austro-Russian army in 1805. *Olmutz*, a strongly-fortified city and the seat of a university, the former capital of the district, is delightfully situated in a valley, with celebrated baths.

14. SILESIA, a very small territory, north-east of Moravia, adjoins the large Prussian province of the same name, which was wrested from Austria by the great Frederick. It contains the town of *Troppau*, noted for the production of fire-arms.

15. The TYROL, immediately eastward of Switzerland, corresponds to it in having snow-capped mountain masses, immense glaciers, and deep narrow valleys, into which the avalanche tumbles, and cascades fall. It is inhabited

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by a brave peasantry, who are skilled marksmen, hunters of the chamois, devoted to the Austrian rule, but not inclined to defend it apart from their native hills. *Innspruck*, the capital, and seat of a university, is a small town, in a valley of the river Inn, bordered by stupendous heights, upon which the snow glistens in the summer's sun. It contains a fine statue of Andrew Hofer, the patriot peasant, who so nobly defended his country against the arms of the French in 1809, and was so basely betrayed and executed. *Trent*, delightfully situated in a valley on the *Adige*, is noted for the famous council from 1545 to 1564, for settling tenets of the Roman Catholic religion. The *Vorarlberg* is a tract lying to the north-westward, adjoining the Lake of Constance.

Innspruck.

16. STYRIA, likewise a mountainous region to the south of Austria Proper, is famed for its medicinal springs and inexhaustible mines of rich iron. *Gratz*, a large and important mercantile town, well fortified, with a university and museum, is its capital. ILLYRIA, stretching from thence to the Adriatic, abounds with natural curiosities; among which are the Caves of Adelsburg, through one of which the *Peuka* flows, remarkable for its extent, fantastic stalactites, and the presence of the *proteus anguinus*, a kind of water lizard, in its dark pools. The quicksilver mine at *Idria*, in which criminals were formerly condemned to work by the government, but now free labourers are employed, tempted by high wages, is one of the most productive in the world. *Laybach*, an episcopal city in the valley of the Save, is the capital of Illyria. *Trieste*, a seaport, near the head of the Adriatic, is an important and very populous city, the centre of the foreign commerce of the empire, and a great

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steam-packet station; connected with it by a bridge, is *Capo d'Istria*, a considerable seaport, on an island in the Adriatic. *Pola*, on an extremity of the Istrian peninsula, is famous for its Roman amphitheatre and remains of ancient temples.

17. GALICIA, an extensive province on the north of the Carpathians, watered by the Dniester and Vistula, was obtained from *Poland* on the partition of that country in 1772. It is a woodland region towards the mountains, but elsewhere a fine corn-growing district, and possesses valuable salt mines, the property of the government. At *Wieliczka*, the total length of excavation is upwards of eight miles. Besides subterranean chambers for managers and men, and a stable for horses, there is a chapel dedicated to St. Anthony, every part of which, the floor, roof, columns, statues, altar, and crucifix, is of solid salt. The only town of magnitude is LEMBERG, the capital, with a cathedral, fortifications, and a university, with upwards of 70,000 inhabitants, of whom 20,000 are Jews. On the north-western border of the province is *Cracow*, on the Vistula, the ancient capital of Poland, recognised as a free city by the congress of Vienna, with a small territory around it, but which has since been incorporated in the Austrian dominions. It has a castle, built 700, a fine cathedral, and very remarkable salt-mines. Cracow was long the burial-place of the Polish sovereigns and great men, and contains the tomb of John Sobieski, with a tumulus of earth 150 feet high, to the memory of Koskiusko. The BUKOWINE, adjoining Galicia, to the south, is a forest region (Scla. *buckow*, an oak), formerly a part of Moldavia, ceded by the Turks to Austria in 1777.

18. HUNGARY consists for the most part of a vast plain, south of the Carpathians, traversed by the *Danube*, and its great arm the *Theiss*, and is divided into Upper Hungary, which is the east, and Lower Hungary on the west. It abounds with mines, and the soil is in general of great fertility, though marshy towards the rivers. There are uncultivable tracts, called *puszta*, consisting of deep naked sand, interspersed with soda lakes, which dry up in summer, and leave the ground encrusted with the mineral. BUDA, also called *Ofen*, or oven, in allusion to its hot waters, and PESTH, on the opposite banks of the Danube, connected with

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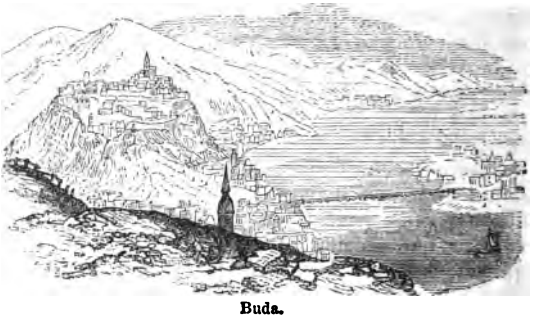
it by a suspension bridge erected by an English engineer, form the capital, and together contain a population of upwards of 130,000. It is the residence of the principal Hungarian nobility, and has churches, convents, and mili-



Buda.

tary hospital. Buda is overlooked by a stern castle, in which the crown of Hungary was long preserved with care, as a monument of the former independence of the country. It was carried off by Kossuth during the late war, but subsequently fell into the hands of the Austrians, and is now at Vienna. *Debrecsin*, eastward of the Theiss, with more than 60,000 inhabitants, has been called the largest village in Europe, on account of its wide, rambling, unpaved streets, scattered one-storied houses, and the total absence of roads in the neighbourhood. During the late insurrection, it was for a short time the seat of the national diet. *Kremnitz* is noted for gold, *Schemnitz* for silver mines, and *Tokay* for its wines. The *Banat*, a rich agricultural but marshy district, forms the most southern part of the Hungarian plain. *Temeswar*, its capital, has an important fortress, capable of containing 10,000 men.

19. TRANSYLVANIA, largely overspread with the southern Carpathians, is to the east of Hungary; *Kronstadt* is its largest and most commercial town. *Hermannstadt* is a large, strongly-fortified town, military head-quarters, and the see of a Greek bishop. SCLAVONIA and CROATIA, with their capitals, *Peterwardein* and *Agram*, strong military towns, are to the south-west; DALMATIA, a narrow, rugged terri-

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tory, extends southward along the eastern coast of the Adriatic, fringed with numerous islands. *Zara*, its capital, on the coast of the Gulf of Venice, is strongly fortified, and has a fine, though small harbour. *Spalatro*, on the same coast, is celebrated for its cathedral, near the site of the Palace of Diocletian. *Ragusa*, an ancient and increasing seaport, well fortified, was changed from a republic into a duchy by Napoleon. *Cattaro*, which in 1813 was taken by the English, has one of the largest and best harbours in Europe. These provinces border upon Turkey. A section of them, not more than thirty miles in average breadth, forms a distinct district, called the MILITARY FRONTIER, and extends upwards of 500 miles from the waters of the Adriatic to the eastern limits of Transylvania. Along the whole line there is a range of guard-houses, with strong fortresses at intervals; and all the male population are liable to serve as soldiers in case of exigency, except those of tender years. This arrangement was made at the time when the Turks were formidable, under the direction of Prince Eugene; and has been maintained to the present day as a military training school, from which to recruit the standing army.

20. The Austrian dominions are naturally subject to great disadvantages in relation to *inland trade* and *foreign commerce*, owing to a scanty sea-coast, the distance of some of the provinces from a port, and the obstacles presented by formidable lines of mountains to intercommunication. The expense of transit operates as a check upon production, and generally renders provisions twice as dear at Vienna as they are at Lemberg. Great efforts have been made by the government to facilitate conveyance by the construction of macadamized roads, and more recently, railways. An excellent highway now runs uninterruptedly from Pavia in Italy to *Czernowicz* in the Bukowine, a distance of more than 1100 miles; and since the appearance of the first steamer upon the Danube, in the year 1830, that river has become a great thoroughfare for goods and passengers. But many districts apart from the leading routes are practically remote, though geographically proximate, owing to the wretched cross roads.

21. The Empire contains a population of about 38,000,000, of which the races of the *Sclavonic* stock, comprehending Poles,

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Czeches, or aboriginal Bohemians, Croats, and Sclavons, are numerically by far the most important. The *Germans* rank next in number, and are first in intelligence, industry, and political power. The rest are *Græco-Latins*, consisting of Italians in the southern Tyrol and Italy, with a few Wallachians; *Magyars* in Hungary and Transylvania; *Jews* in the cities and towns; *Greeks, Armenians, and Gypsies*, scattered through the eastern provinces. The dominant *Religion* is the Roman Catholic, and is professed by the great majority of the people. Next to it is the Greek church, which prevails in Transylvania, Southern Hungary, Croatia, Sclavonia, and Galicia. Protestantism is the profession of the Magyars. Bohemia, the cradle of the Reformation, and celebrated for the stand made by it in favour of John Huss, is now one of the strongholds of Catholicism.

22. The *government* is an hereditary and practically absolute monarchy, both the legislative and executive power being administered by the emperor, with ministers solely responsible to himself. Hungary had an independent national constitution, which gave great power to the nobles, who met in a diet or parliament, and regulated the taxation and internal concerns of the country. But since the abortive insurrection of 1848, this constitution has been annulled, as well as similar privileges in other states; and the imperial government has steadily aimed at bringing them all under the direct control of the cabinet of Vienna. It is alone by military force that the empire is ruled, and its different nationalities are kept in cohesion; but in spite of an enormous standing army, disruption has often threatened, and was never more imminent than at present.

The Italian territories of *Austria*, as settled by the treaty of Villafranca, will be noticed under ITALY.

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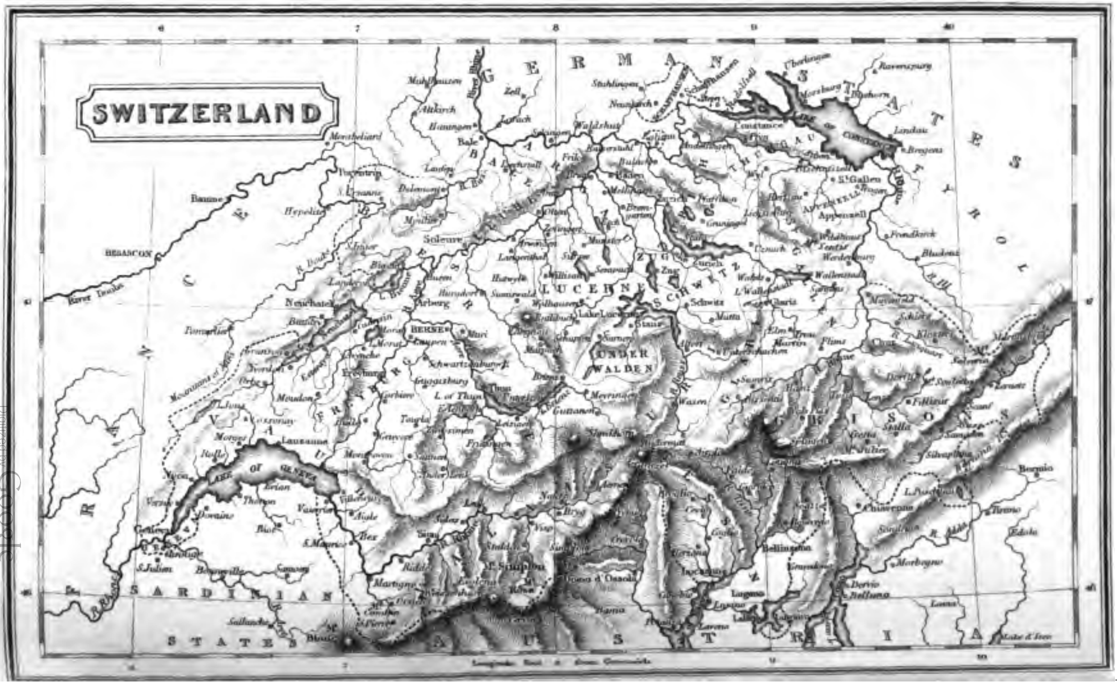

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SWITZERLAND.

1. The name of Switzerland is derived from that of one of its cantons, *Schwytz*, which took a leading part in the struggle for independence in the beginning of the fourteenth century, when William Tell and his confederates threw off the Austrian yoke. The territory was anciently called *Helvetia;* and in modern times, while under the rule of France, (from 1793 to 1814,) the state was termed the *Helvetic Republic*. It is entirely inland, enclosed by Germany on the north and east, France on the west, and Italy on the south. The greatest length is about 208 miles; the greatest breadth 156; and the area is estimated at 15,000 square miles, rather more than twice the extent of the Welsh principality. Though of limited dimensions, the country exhibits almost every description of scenery, and forms the grandest portion of Europe; annually attracting thousands of visitors, many of whom are from Trans-Atlantic countries.

2. *Mountains* extensively furrow and intersect the surface, the greater part of which are ramifications of the *Alps*, while the remainder belong to the chain of *Jura*. The former are southern and eastern; the latter are western. They are separated by the lake of Geneva, and a high hilly plain belonging to the basin of the Rhine. The main chain of the *Alps* reaches Switzerland from Italy, under the name of the *Pennine Alps*, immediately after passing *Mont Blanc*, which is

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within the limits of Sardinia.* It runs along the border nearly east to *Mont Rosa*, 15,157 feet, where it takes the name of the *Lepontine Alps;* and proceeds on the frontier in a northerly direction to the *St. Gothard*, where it becomes interior, bending to the east, through the canton of the Grisons. It acquires here the name of the *Rhætian Alps*, which follow the same course into the Austrian empire. From this principal axis branches stretch in all directions, covering about two-thirds of the surface of the country. The most important diverges near the *St. Gothard*, under the name of the *Bernese Alps*, or the *Oberland*. It runs towards the west, and forms a huge northern wall to the canton of Valais, and the basin of the Upper Rhone. Though containing no heights equal to those of the main ridge, it has mountains of more imposing mass and continuous elevation. The *Finster-Aar-Horn* rises 14,106 feet, and is the culminating point of Switzerland apart from the frontier; the *Jungfrau*, 13,718; the *Monk*, 13,498; the *Schreckhorn*, 13,386; the *Grindelwalder*, 13,321; the *Eiger*, 13,075; and six other peaks attain upwards of 12,000 feet.

3. The *High Alps* rise far above the line of constant congelation. This begins at the height of about 8000 feet, above which is the region of glaciers and perpetual snow. The glacial formations or ice-fields result from the partial melting of the snow in summer, which is again frozen on the approach of winter. They are very remarkable objects, of diversified appearance, some being smooth, while others are as rough as the surface of the ocean would be if suddenly congealed when strongly agitated. They vary likewise in extent, being from three to twenty miles in length, and from 100 to 600 feet in depth. The total number, from Mont Blanc to the frontiers of the Tyrol, is reckoned at above 400, forming collectively a sea of ice of more than 1000 square miles.

4. The *snows* accumulated on the tops of the mountains are continually falling down their precipitous sides into the lower regions, where they often occasion very serious injury. These falls, or *Avalanches*, as they are called, carry along with them fragments of rocks, trunks and branches of trees, and, increasing in their downward career,

* That is in Savoy, recently ceded to France.

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sometimes overwhelm houses and villages, sweep away whole forests, and interrupt for a time the course of rivers. Still greater danger is occasioned by *landslips*, but happily of rare occurrence. They consist of masses of earth and rock, loosened from the mountains by various natural causes, which carry ruin and desolation into the valleys beneath them. One of the most extensive and remarkable of these slips took place in the year 1806, when *Goldau* and other villages in the valley of Arth were overwhelmed by masses dislodged from the *Rossberg*.

5. The principal *Passes* of *the Alps*, proceeding from west to east, are the *Great St. Bernard*, 8,185 feet, the route between Martigny, in the lower Valais, and Aosta in Piedmont; *Mont Cenis*, nearly 7,000 feet high, between Savoy and Piedmont; the *Simplon*, 6,595 feet, between Brieg in the upper Valais and Domo d'Ossola in Lombardy, across which was carried Napoleon's famous route: the *St. Gothard*, 7,087 feet, between the cantons of Uri and Tessin, on the summit of which is a hospitable convent; the *Bernardine*, 7,115 feet, and the *Splugen*, 6,814 feet, which connect the canton of the Grisons with that of Tessin. The Great St. Bernard is crossed every year by more than 10,000 travellers, for whose accommodation and relief there is a hospice near the summit, occupied by Benedictine monks, the highest permanent habitation in Europe. The pass is noted in modern history for having been traversed by Bonaparte, at the head of the French army, in the year 1800. The church of the hospice contains a marble monument erected by him in honour of General Desaix, who fell in the battle of Marengo. Famous are the noble dogs kept here by the monks for the aid and preservation of such travellers as may lose their way, and be benumbed in the snow-storms.

6. The *Jura mountains* are a secondary chain stretching in parallel ridges along the western and north-western frontiers, from the bend of the Rhone below Geneva to the banks of the Rhine, in the neighbourhood of Basle. They present an aspect totally different from that of the Alps, nowhere reach the snow-line, and are clothed from base to summit with luxuriant pine-woods.

7. The *Drainage* of the country is conducted principally to the North Sea by the *Rhine*, and in the next proportion

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to the Mediterranean by the *Rhone*. A very inferior degree is conveyed to the Adriatic by the *Ticino*, an affluent of the Po; and to the Black Sea by the *Inn*, a tributary of the Danube. The Rhine has its chief source at a high elevation near the St. Gothard, flows northerly to the Lake of Constance, and thence westerly to Basle, forming in this part of its course the frontier of Germany. It receives the *Aar* in the canton of Aargau, which is nearly equal to itself in volume of water. The *Rhone* issues from a glacier at the base of Mont Furca, drains centrally the canton of the Valais, passes through the Lake of Geneva, and enters France soon after emerging from it. The *Oglio* rises in the Rhætian Alps, and, after a course of 130 miles, joins the Po, ten miles S.W. of Mantua. The *Reuss*, which rises on the south side of St. Gothard, drains the canton of Uri, and enters the lake of Lucerne. Though of little navigable utility, owing to their rapid flow, the rivers are remarkable for picturesque scenery, and form magnificent waterfalls as those of the Rhine at the small town of *Schaffhausen*, where the noble stream, divided into three parts, has a descent of from 70 to 80 feet.

Falls of the Rhine at Schaffhausen.

8. Switzerland is pre-eminently the country of *Lakes*. The largest examples are the crescent-shaped *Lake of Geneva*,

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in the south-west, forty-seven miles in length, by ten at the greatest breadth; the deep *Boden See* or *lake of Constance*, in the north-east, the shores of which are in part Germanic; and the *Lake of Neuchatel* in the west. The smaller lakes of *Zurich*, *Lucerne*, *Zug*, *Thun*, *Sempach*, *Briens*, and others of inferior dimensions, are renowned for their beauty. All of them, except the lake of Geneva, belong to the system of the Rhine, which receives their surplus waters.

9. Owing to the very different level of the surface, the *Climate* strikingly varies, from the cold of the polar zone on the mountain tops to oppressive summer warmth in the deep pent-up valleys. There is consequently great diversity in the *vegetation*. The vine flourishes to the height of about 1800 feet above the sea; the oak rises to 2800 feet; the beech, to 4000 feet; the birch, alder, and pine, to 7000 feet; above which are the plants of hyperborean climates to the height of 8000 feet, which marks the line of perpetual snow. Though generally a healthy country, examples of *cretinism*, a species of idiotcy, and of *goitre*, a swelling of the neck, are very common in the deep enclosed valleys, especially the canton of *Valais*, the cause of which is obscure, but by some attributed to the drinking of snow water.

10. Among *Wild Animals* the bear and wolf are found in the remote mountain forests; but the former is now rare. The name of *Berne* is said to be derived from the German *bären*, the plural of *bär*, a bear; and the figure of the animal is conspicuous in the armorial bearings of the canton. Occasionally, in severe winters, pressed by hunger, a solitary individual will come down from the mountains, upon which the adjoining population take arms, as a handsome reward is offered by the government for its destruction. Among the other wild animals, the *ibex* or rock-goat has become very scarce; and the pursuit of the *chamois* has told upon the number of the race. The *marmot*, a social burrowing animal, valued for its fur, is common in the Alps, where are also found, in the higher regions, the bearded vulture and the golden eagle.

11. *Metals* are less abundant than might be expected in so mountainous a country. The chief mines are of *iron*, but silver, copper, and lead are also found.

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TABLE OF THE CANTONS AND CHIEF TOWNS OF SWITZERLAND.

Cantons.	Area, sq. m.	Population in 1851.	Chief Towns.
Berne	2567	458,000	Berne.
Soleure	255	69,613	Soleure.
Geneva	91	63,932	Geneva.
Pays de Vaud . . .	1185	199,453	Lausanne.
Basle	185	77,385	Basle.
Freyburg	565	99,805	Freyburg.
Zurich	687	250,134	Zurich.
Schweitz	339	44,159	Schwyz.
Lucerne	588	132,789	Lucerne.
Uri	422	14,500	Altorf.
Unterwalden . . .	263	25,135	Stantz.
Zug	85	17,456	Zug.
Glarus	280	30,197	Glarus.
St. Gallen	749	169,508	St. Gall.
Appenzel	153	54,869	Appenzel.
Aargau	503	199,720	Aargau.
Thurgau	270	88,819	Frauenfeld.
Neuchatel	281	70,679	Neuchâtel.
Grisons	2975	89,840	Coire.
Valais	1665	81,527	Sitten.
Tessin	1037	117,397	Bellenz.
Schaffhausen . . .	116	35,278	Schaffhausen.

12. The territory, as is shown in the foregoing table, is divided into *twenty-two cantons*, or provinces, very unequal in their extent and population. The canton of *Zug* has an area of only eighty-five square miles, with 17,500 inhabitants, while that of *Berne* contains 2567 square miles, and a population of 458,000. The cantons are entirely independent of each other in the management of their internal affairs, but form a federal republic, the general interests of which are directed by a diet composed of deputies from all the states, who appoint a president, and the chief officers of the executive. The diet meets for periods of two years at *Berne*, *Zurich*, and *Lucerne* successively, but the former is considered the capital, as the permanent seat of the general government, and the residence of the foreign ambassadors.

13. Berne, in lat. 46° 57′ N., long. 7° 28′ E., is situated on the left bank of the Aar, and commands many beautiful prospects, with the snow-crowned heights of the Schreckhorn,

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Jungfrau, Wetterhorn, and other of the loftiest mountains of Switzerland. It contains 22,000 inhabitants. Six miles north of Berne is *Hofwyl*, the celebrated educational institution founded by Fellenberg, on the Pestalozzian principle. *Soleure*, a small canton, is covered chiefly by the gentle sloping hills of the lower Jura, and enclosed between Basle and Berne.

14. GENEVA, the largest town in Switzerland, with a population of 31,000, is seated on both banks of the Rhone, at its exit from the lake, and is much visited, being one of the leading routes to *Mont Blanc*, as well as on account of its beautiful environs. It was long the residence of Calvin, who founded the existing academy or college; and the birthplace of Rousseau. The inhabitants, distinguished for their literary predilections, ingenuity, and industry, are chiefly engaged in watch-making and jewellery. *Lausanne*, on the north bank of the lake, is remarkable for the beauty of its situation; here Gibbon completed his Roman History, and Byron wrote his Prisoner of Chillon, an ancient castle at the eastern extremity.

15. BASLE, on both banks of the Rhine, near the frontier towards France and Germany, the seat of a university, is of ancient origin, was of great importance in the middle ages, and is still the seat of considerable trade. It was the birth-place of Euler and Bernouilli the mathematicians, as well as of Holbein the painter, whose Dance of Death and other works decorate the town hall. It has a fine cathedral, which contains the tomb of Erasmus, many churches, a university, several literary and scientific institutions, a public library, and a botanic garden. The hall remains where the great ecclesiastical council was held between 1431-38. *Freyburg*, romantically situated on the Saane, is noted for its cathedral and magnificent suspension bridge, 885 feet in length, over a gorge 160 feet deep. *Gruyere*, in this canton, is celebrated for its cheese.

16. ZURICH, at the north extremity of the lake of its name, where the river *Limmat* issues from it, has extensive silk and cotton manufactures, a cathedral founded by Charlemagne, several fine churches, and many literary institutions. Ulric Zuingle, the Swiss Reformer, preached here at the era of the Reformation, and the celebrated Lavater was minister at

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the great church of St. Peter for twenty-three years. Owing to the activity of the press of Zurich, with the number of learned refugees who here found an asylum, it acquired the name of the Athens of Switzerland. Coverdale's Bible, the first entire English version of the Scriptures, is presumed to have been printed here in 1535.

17. LUCERNE, on an arm of its beautiful lake, at the outlet of the *Reuss*, amid scenery of the finest description, is the capital of Catholic Switzerland, and the ordinary residence of the papal nuncio. It contains a celebrated map in relief of 180 leagues round the lake, executed by General Pfyffer; and near the town is a colossal lion, a monument in honour of the Swiss soldiers who perished at the Tuileries in Paris in 1789. Within a few miles south-west of the lake, rises the huge and gloomy mass *Mount Pilate*, 7080 feet high. *Yverdun*, in this canton, is celebrated as the residence of Pestalozzi, the great reformer of education. *Sempach*, a village on the small lake of that name, eight miles north-west of *Lucerne*, witnessed the second great Austrian defeat in 1386; and has a statue in its market-place of the Swiss hero Arnold von Winkelried, by whose self-devotion the victory was won.

18. *Burglen*, a village in the *canton of* URI, boasts of being the birth-place of the Swiss hero, William Tell. *Altorf*, the capital of the canton, is the reputed scene of the story of his shooting at the apple on the head of his son, by the order of Gessler, the Austrian tyrant. *Tell's Platte*, in the neighbourhood, is the name of the spot where he effected his escape; and *Tell's Chapel* marks the site where he killed the oppressor. *Morgarten*, a defile in the canton of *Zug*, is memorable as the place where 1300 hardy mountaineers defeated 20,000 Austrians in 1315. The third triumph of the Swiss peasantry, in 1388, at *Nafels*, in the canton of *Glarus*, is still commemorated by an annual festival at the village. *Martinsloch*, in Glarus, is remarkable for a large round hole in the mountain of Falsberg, behind which the sun passes, and may be seen as through a funnel, on the 3rd, 4th and 5th of March, and on the 14th, 15th and 16th of September, of each year. The village loses the sunshine for six weeks in winter, owing to the height of the mountain. *Schwytz*, which lies immediately west of Glarus, is one of

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the four forest cantons, and a most romantic spot; here is the famous *Rigi*, on the summit of which is a comfortable inn. At *Wildhaus*, in the canton of St. Gallen, Zuingle was born; and at *Cappell*, in that of Zurich, he was killed. The canton of *Appenzell*, beautifully situated in a fertile valley, and celebrated in the story of William Tell, is entirely surrounded by the canton of St. Gall.

19. St. Gall, capital of the canton, a busy commercial town, nineteen miles S.S.E. of Constance, was an important seat of learning in the middle ages, and has a cathedral, the remains of a magnificent abbey of the seventh century, and several public institutions. *Aarau*, the capital of Aargau, is a neat town on the river *Aar*, and in its neighbourhood is the castle of Hapsburg, the cradle of the house of Austria. *Martigny* is a small town at the commencement of the road which leads over the great St. Bernard. *Neuchatel*, on the shores of the beautiful lake which bears its name, embracing portions of the heights of the Jura, is distinguished by the industry of its artizans in the manufacture of watches, lace, cheese, &c.

20. The Canton of Valais, one of the most singular and romantic regions in the world, is a great trough, seventy miles long, two wide, and a mile and a half in depth; on the north side are the Bernese, and on the south Pennine and Lepontine Alps, including the Simplon and great St. Bernard.

21. Tessin, though one of the confederated cantons, is more Italian than Swiss, as well in its position and scenery as in the language of the people. *Bellenz*, the principal town, is on the *Ticino*, and within its limits are the *Lago Maggiore* and the lakes of Lugano.

22. Thurgau, which reaches eastward from Zurich to the lake of Constance, is unlike the rest of Switzerland, consisting for the greater part of rich plains and broad open valleys. The river *Mur* flows through the heart of the canton, and on the banks of one of its tributaries is *Frauenfeld*, the capital, a very small town.

23. The Grisons, which form the south-east canton, are the most extensive but least populous of the whole. The little town of *Coire*, which stands on the right bank of the upper Rhine, is the capital, and presents much curious architecture, including a cathedral of the 8th century, a bishop's palace, and a protestant school. Angelica Kauffmann was born here.

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Printing must formerly have been rather actively exercised at Coire, as, beside other books, there were two different editions of a large folio Bible "in the *Rumonsch* dialect, for the use of the Protestants in the *Engadine Valley*," printed here.

23. The country contains a population of 2,400,000, mainly referrible to two stocks, the Germanic and Greco-Latin. The Germans, by far the most numerous, occupy the centre, north, and east; and their language is officially adopted by the general government. The Greco-Latins consist of French in the west, and Italians in the southern canton of Tessin. Agriculture is the principal pursuit of the people, but many of the German Swiss are silk and cotton manufacturers, while the French Swiss are occupied largely with jewellery, horology, and artistic productions. Three-fifths of the population are Protestants, and two-fifths Roman Catholics. Industry, sobriety, economy, courage, and the love of country are marked features in the national character. Public education is in a highly advanced state, especially in the Protestant cantons. Its great reformers, Pestalozzi, laboured at *Yverdun*, in the canton of Lucerne; and De Fellenberg at *Hofwyl*, near Berne.

The Dog of St. Bernard.

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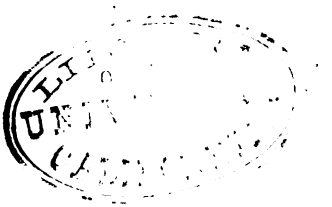

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St. Peter's, Rome.

ITALY.

1. ITALY consists of two distinct portions, the continental and the insular. The continental portion is for the most part a long narrow peninsula, terminating on the south with two still narrower peninsular projections. It extends 700 miles in length from north-west to south-east. The breadth varies considerably, being 360 miles in the north, about 100 miles generally in the centre, and not much exceeding twenty miles in parts of the extreme southern projections. Austrian Germany, Switzerland and France, lie on the northern and north-western border. In other directions the country is enclosed by the waters of the Mediterranean and its arm the Adriatic, the shores of which are tolerably regular. The *Gulf of Genoa* is on the western side; the *Gulf of Manfredonia* on the eastern; and the *Gulf of Tarento* on the southern. Insular Italy includes the large *Islands of Corsica, Sardinia,* and *Sicily,* with those of *Elba, Malta,* and others of small extent. The area of the mainland and islands is estimated at 120,000 square miles.

2. The northern border is chiefly formed by the stupendous range of *the Alps,* noticed in connection with the Austrian Empire and Switzerland. But on the north-western side the chain is partly interior, and in part runs along the French frontier. Its divisions here are the *Maritime Alps,* from the Col de Tende, on the high road between Nice and Turin, to Monte Viso, which attains the height of 12,586 feet; the *Cottian Alps,* from thence to Mont Cenis,

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11,460 feet; the Graian or *Grecian Alps*, from thence to the Col du Bonhomme, culminating in Mont Iseran, 13,274 feet; and the *Pennine Alps*, from thence to the Swiss border, which contain Mont Blanc, 15,750 feet, the loftiest point of Europe. The highest pass, that of the *Little St. Bernard*, rises 9,591 feet at the hospice; and is of interest as the supposed route of Hannibal. The pass of *Mont Cenis*, recently crossed by the French army, ascends 6,775 feet. At the eastern extremity of the Maritime Alps commence the *Apennines*, a far lower range, but forming the characteristic mountain-system of Italy. The chain runs round the Gulf of Genoa, and then traverses somewhat centrally the entire length of the peninsula. None of its summits reach the snow-line. The *Gran Sasso d'Italia*, or Great Rock of Italy, towards the centre, rises 9,523 feet, and is a fine object from the Roman plain.

3. The greatest extent of level country is in the north, where lies the magnificent *plain of Lombardy*, which is traversed by the river Po, and watered by numerous streams which pour down into its channel from the Alps on the one side, and the Apennines on the other. The length of this plain is about 250 miles from east to west, with an average breadth of fifty. It is nearly a dead flat, extremely fertile, well cultivated, and densely peopled. A generally level tract, divided by low ridges into separate plains, extends nearly 200 miles along the coast of Tuscany and the Papal states, varying from twelve to forty miles in its inland limits. The prevalence of malaria renders the whole of this region unhealthy through the greater part of the year, and it cannot be traversed with safety except in the winter season. It bears the name of the *Maremma* in the north; the *Campagna di Roma* in the middle; and the *Pontine marshes* in the south. There is a rank vegetation in many parts, affording excellent pasturage.

4. The most naturally interesting portion of the country is the volcanic region of the south-west, of which *Vesuvius*, near Naples, is a prominent feature, the only active volcano of continental Europe. Its first recorded eruption was in the year A.D. 79, when the cities of *Herculaneum* and *Pompeii* were overwhelmed by the ashes ejected from it, and only discovered in the beginning of the last century. The

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mountain rises 3792 feet in height, and has a very graceful outline. *Stromboli* and *Vulcano*, two of the Lipari isles,

Vesuvius.

are also sites of igneous activity. But volcanic action is most grandly developed by the gigantic cone of *Etna*, in the north-east of Sicily, which rises from a base of about eighty-seven miles in circumference, to the great height of 10,882 feet. It has been in action from remote times, and some eruptions have been terribly destructive. The whole of southern Italy is subject to earthquakes, which have often permanently altered the features of nature, and been fearfully fatal to human life. But they would doubtless be much more frequent and severe, if there were no volcanic vents to admit of the escape of the subterranean forces.

5. Italy has but one *River* of the first class, the *Po*, which descends from the eastern slope of Monte Viso, one of the Cottian Alps, and flows, with few great windings, nearly due east, to the Adriatic. It receives the *Ticino*, *Adda*, and *Mincio*, on the left bank; the *Tanaro*, *Trebbia*, and *Secchia*, on the right. Large quantities of sand and mud brought down by the river have formed in the course of ages an extensive delta by their deposition; and the coast-line has been very sensibly advanced during the historic period. The town of *Adria*, from which the Adriatic has its name, was a sea-port in the time of Augustus, and a station for the Roman fleet, but is now fifteen miles from the nearest point of

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the shore. The deposit has also raised the bed of the stream, in the lower part of its course, above the level of the surrounding country, which is only preserved from inundation by immense embankments. In the *plain of Ferrara*, the surface of the water is thirty feet higher than the streets of the town. The other rivers of any importance are the *Adige*, which descends from the Tyrol to the Adriatic northward of the Po; the *Arno* and the *Tiber*, which flow from the western slope of the Apennines to the Mediterranean; the *Var*, till recently a frontier river of France and Italy; and the *Volturno*, a river of Naples.

6. Large and lovely *Lakes* occur at the base of the Alps, as those of *Garda*, *Maggiore*, and *Como*. There are also a considerable number of smaller size in the central districts of the peninsula; and, near Rome and Naples, some smaller still, of circular shape, occupying the craters of extinct volcanoes. Several extensive *lagoons* mark the Adriatic coast.

7. With the few exceptions named, the country is not rich in *Minerals*. Iron of excellent quality, magnets and marble, are obtained in the large and historically celebrated *Island of Elba*, where the mines were worked in the early Roman times. Tuscany yields great quantities of alum and boracic acid. Immense beds of sulphur are in Sicily, upon which Europe mainly depends for its supply of that product. There are several marble quarries, but the finest for the purposes of the sculptor is procured at *Carrara*, from quarries in the Apennines.

8. A clear, dry, and warm atmosphere, with deep-blue cloudless skies, are characteristic of the *Climate* of Italy. But in the north, winds blowing from the Alps are often piercingly cold in summer; and in the south, the *sirocco*, a hot southerly blast, is felt in the same season, aggravating the high temperature, and distressing man and beast. Hot summers and mild winters distinguish generally the climate of the lowlands. This becomes more marked on passing from north to south, and admits of a corresponding variety in the vegetation. In the northern districts, the vine and mulberry flourish, and rice is cultivated; in the central, the olive, orange, and lemon grow luxuriantly; and in the southern, in Sicily, where winter can scarcely be said to exist, except on the heights of Etna, tropical plants, such as

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the sugar-cane, Indian fig, papyrus, and date palm, grow freely.

9 Italy is politically divided into five considerable states, and three of minor extent. The former consists of the kingdom of *Sardinia;* the territory of *Venice,* or Austrian Italy; the grand-duchy of *Tuscany;* the *Papal States;* and the kingdom of *Naples* and *Sicily.* The latter are the duchies of *Parma* and *Modena,* and the republic of *San Marino.*

Provinces.	Area, sq. m.	Population in 1860.	Principal Towns.
KINGDOM OF SARDINIA (including the recently-acquired Lombard territory)	37,510	8,035,090	Turin, Alessandria, Genoa, Milan, Pavia, Como.
GRAND DUCHY OF TUSCANY (including Lucca)* . .	8,553	1,815,686	Florence, Sienna, Leghorn, Pisa, Lucca, Elba.
DUCHIES OF PARMA AND MODENA*	4,968	1,104,000	Piacenza, Reggio, Carrara.
NAPLES AND SICILY* . .	44,510	9,117,000	Naples, Palermo, Messina, Marsala.
PAPAL STATES*	17,860	3,126,263	Rome, Bologna, Ferrara, Ravenna, Urbino, Ancona, Civita Vecchia.
VENETIA	9,472	2,306,358	Venice, Padua, Verona, Mantua, Vicenza.
REPUBLIC OF SAN MARINO.	27	10,000	San Marino.

10. The SARDINIAN MONARCHY, on the north-west and north, comprehends the provinces of *Savoy,* Piedmont, Nice,** and *Genoa;* the territory of *Milan,* or *Lombardy,* and the *Island of Sardinia. Savoy,* a dukedom, the original patrimony of the reigning house, is beyond the Alps, and without the proper limits of Italy, in the basin of the Rhone; the people are of French extraction, and speak the French language. *Chambery,* the capital of *Savoy,* is a small town of less note than the hamlet of *Chamouni,* from which the ascent of Mont Blanc is usually made. *Piedmont,* the largest province, embraces the upper part of the valley of the Po, and principally stretches eastward from the base of the Alps. Its mountains contain few metalliferous stores; but the

* Since this Table was framed, Tuscany, Parma, and Modena have passed to Sardinia; as have also Naples and Sicily, and all the Papal States, excepting Rome, Civita Vecchia, and a few contiguous places. Savoy and Nice have been ceded by the King of Sardinia to France, in requital for military services.

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rivers abound with fish, and the forests with game; and corn, wine, fruits, hemp, flax, and silk are produced abundantly. It has its name from *pied*, foot, and *mont*, mountain. Three of its Alpine valleys are inhabited by the *Vaudois* or Waldenses, a people who have held for centuries the distinctive tenets of Protestantism. The provinces of *Nice* and *Genoa* lie along the Mediterranean; that of *Lombardy*, acquired from Austria by the recent peace of Villafranca, borders on Austrian Italy. The *Island of Sardinia*, separated from that of Corsica by the strait of Bonifacio, is the largest in the Mediterranean; and has *Cagliari*, on the south-east coast, a university and somewhat considerable place, for its chief town.

11. The Kingdom of Sardinia is an hereditary sovereignty, and the only Italian state which enjoys a representative government, and where there is freedom of opinion. It has recently acquired great political distinction. *Turin*, its capital, on the left bank of the Po, is a fine city, chiefly brick built, with 143,000 inhabitants, distinguished as a principal seat of learning and science south of the Alps. To the south-east is *Alessandria*, one of the bulwarks of the kingdom, deemed almost impregnable; the battle-field of *Marengo* is in its neighbourhood. To the north-east is *Novara*, where the late king was disastrously defeated by the Austrians in 1849. *Genoa*, on the Mediterranean, once the seat of a celebrated republic, is a large commercial city, strongly fortified, with many antique houses and palatial residences, now largely devoted to humble uses. Its fine appearance from the sea, owing to a commanding site, and the number of its splendid edifices, originated the epithet of "the Superb," familiarly applied to it. It was the birth-place of Columbus. *Nice*, on the coast, near the French frontier, a comparatively small town, once very celebrated for its salubrity, has fallen into disrepute as a place of resort for invalids. *Milan*, a city of palaces, in the centre of the rich plain of LOMBARDY, between the Ticino and the Adda, lately wrenched out of the hands of Austria, is now the largest place in the *Sardinian Dominions*, containing a population of 190,000. It possesses many important buildings, and the most spacious and finest theatre in the world, but its principal object of attraction is

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the Cathedral, built of white marble, and profusely adorned with pinnacles and statues. The *Lombard province* contains many places of former note or present interest, as *Pavia*, near the junction of the Ticino and the Po, the seat of an ancient university; *Lodi*, on the Adda, famous for Napoleon's passage of the bridge and defeat of the Austrians, in 1796; and *Como*, beautifully situated on the southern shore of its lake, of classical celebrity as the residence of Pliny, now the centre of a community of travelling pedlars, many of whom extend their excursions to London. *Monza* and *Bergamo* are also important towns; the latter has an extensive silk manufactory, and a large annual fair.

Venice.

12. The VENETIAN TERRITORY, or Austrian Italy, stretches along the head of the Adriatic, and from thence inland between the Tyrol on the north, and the Po on the south, to Lombardy on the west, and is one of the most naturally fertile territories in Italy. VENICE, the capital, the former "Queen of the Ocean," when the head of a republic, stands near the sea, inclosed by a lagoon, and is built on a cluster of small islands, connected by upwards of 500 bridges. The channels or canals between them serve for its thoroughfares,

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traversed by gondolas. It contains a population of 128,000, with many magnificent public buildings, palaces, and churches. The piazza of St. Mark, with the former palace of the doges on one side, and the cathedral of St. Mark on another, is one of the finest squares in Europe. *Padua*, a large ancient city on the Brenta, is twenty miles to the west, and possesses a celebrated university, and a rich cathedral, to which Petrarch bequeathed his library. *Verona*, on the Adige, remarkable for its Roman remains; and *Mantua*, on the Mincio, the seat of a university and the birth-place of Virgil, are strongly-fortified places of great military importance.

13. TUSCANY (the ancient *Etruria*), a grand-duchy,* is an extensive and fertile territory on the Mediterranean, and possesses one of the most attractive cities in the world for its capital, *Florence*, seated in a delightful valley, on both banks of the river Arno, with a population of 100,000. It is celebrated for its literary establishments, libraries, museums, galleries of paintings and sculpture; and for the number of eminent men to whom it has given birth, Dante, Petrarch, Boccaccio, Machiavelli, Galileo, Michael Angelo, Leonardo da Vinci, and Benvenuto Cellini. *Sienna*, 31 miles from Florence, a large ancient city, once the capital of a powerful province, is now chiefly famous for its school of art and marble quarries. It has a university, public library, many fine buildings, and 32 convents. Its staple is silk, for which the mulberry tree is extensively cultivated. *Leghorn*, on the coast, fifty miles to the westward, is one of the principal seaports of the Mediterranean, and the chief seat of the foreign commerce of Italy. It resembles Venice in the canals that intersect the streets, and has a fine lighthouse, which stands prominently on a single rock in the sea. Its name has become attached to the straw-plait made in the district, as it is exported thence to foreign countries. *Pisa*, a large city near the mouth of the Arno, once the head of a flourishing republic, now much decayed, is interesting for its many noble edifices, a cemetery, called the *Campo Santo*, a cathedral, and the celebrated "leaning tower." This tower is a circular structure of white marble, 188 feet high, which diverges fifteen feet from the perpendicular, whether from accident or design is not known.

* No longer a grand-duchy, having been transferred to Sardinia.

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Lucca, formerly an independent state, but ceded to Tuscany in 1847, is a well-built and very populous town, with a cathedral, public library, museum of antiquities, and a ladies' college, founded by the sister of Napoleon. Near it are the baths of Nero. The island of *Elba*, a few miles from the coast, memorable as the scene of Napoleon's exile in 1814, has a population of 12,000.

14. The PAPAL STATES stretch in the form of a curve through the entire peninsula, from the western to the eastern coast, and are intersected somewhat centrally by the Apennines. They include nearly the whole basin of the Tiber, are the least populous portions of the country, and the most disorganised, abounding with beggars and brigands. The Pope, elected by the college of cardinals, is perfectly absolute. ROME, the capital, in lat. 41° 50′ N., long. 12° 30′ E., is built on seven hills on both banks of the Tiber, sixteen miles above its mouth; and contains about 175,000 inhabitants, many of whom are foreigners of almost all nations. Twice the mistress of the world, in the days of the Roman empire, and when the Catholic Church was supreme in the middle ages, the city is full of fine monuments of antiquity — the Pantheon, Coliseum, Trajan's Column, numerous Palaces and Triumphal Arches—besides modern structures of celebrity, including museums, academies, and theatres. There are 364 churches, of which *St. Peter's* is the largest and most magnificent; but a much inferior building, *St. John Lateran*, is the metropolitan church, of which the Pope is minister, and in which he is crowned. The *Vatican*, the winter palace of the pontiff, is an immense pile, with rare collections of ancient and modern art, choice manuscripts, and a very extensive library. The city has a circuit of fifteen miles, following the line of the walls, but the greater part of the enclosed space is occupied by gardens, vineyards, and ruins. *Bologna*, between the Apennines and the Po, is the principal provincial city, distinguished by an ancient university; its academy of the fine arts; and its picture galleries. *Ferrara*, a fortified town on the Po, once the most splendid court in Italy, is the seat of a university, has many fine old buildings, a vast cathedral, and a ducal palace. Here Ariosto was buried, and Tasso confined. *Ravenna*, a decayed, but, to the lover of mediæval art, a very inte-

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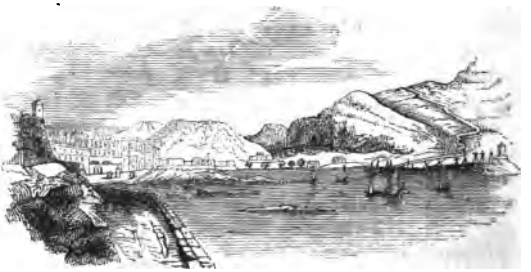
resting city, is situated in a marshy plain on the *Montone*. It was once the residence of the Gothic kings, and has many fine buildings, and a leaning tower. *Urbino*, formerly the seat of a splendid court, is interesting as the birth-place of Raphael, and as the spot where most of our beautiful painted pottery, called Majolica, was produced. *Civita Vecchia*, a small place, is the chief port of the Papal States on the Mediterranean, with a convenient harbour, which was enlarged by Trajan. *Ancona* is an important seaport on the Adriatic. *Tivoli*, celebrated for its beautiful scenery; *Loretto*, formerly rich beyond calculation in the offerings made at the shrine of the Virgin Mary; *Spoleto*, once a Roman colony; *Perugia*, with an area of 1447 square miles, and a population amounting in 1852 to 222,926; and *Benevento*, geographically within the kingdom of Naples, population 16,500; all belong to the Papal States.



Palermo.

15. The KINGDOM OF NAPLES comprehends the whole south of the peninsula, with the island of Sicily, and the Lipari isles, and is often styled the Kingdom of the *Two Sicilies*. It is the largest of the Italian States, possessing great natural resources, but in a wretched condition, owing to mal-administration under an absolute government. Its capital, NAPLES, splendidly situated on a bay of the Mediterranean, is the largest of the Italian cities, and ranks with the great capitals of Europe in population, containing 416,000 inhabitants. The delightful neighbourhood and climate have originated the saying, *Vedi Napoli e poi muori*, "See Naples and then die." The towns in the provinces

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are all small, but possess many natural attractions of great interest, or are sites of classical celebrity. Among them may be named *Tarentum* and *Reggio*, once large cities of Magna Græcia; *Pozzuoli*, on the coast, where St. Paul landed on his voyage to Rome; *Otranto*, with its castle; *Baiæ*, the Brighton of the Romans; *Gaeta*, remarkable for its fortifications and harbour; *Capua*, one of the keys of the kingdom; and *Nola*, celebrated for its remains of antiquity, and as the place where bells are said to have been first used in churches. *Aquila*, *Chieti*, and *Civita Ducale*, are in the district of the ABRUZZI, where painted pottery was once extensively manufactured.

16. SICILY, separated from the mainland by the narrow strait of *Messina*, is a large and lovely triangular island, containing the important city of *Palermo*, on the north coast, with numerous public buildings, extensive commerce, and upwards of 200,000 inhabitants. *Messina*, on the strait to which it gives its name, is also a considerable place, with a very fine harbour. This strait has a place in history, owing to *Scylla*, a rock on the Italian side, and *Charybdis*, an eddy on the Sicilian, much dreaded by ancient mariners, but passed without difficulty by the moderns. It is also of interest as the occasional scene of the *Fata Morgana*, an illusion of the senses dependent on atmospheric refraction, which pictures in the air distorted images of objects on either side to spectators on an opposite shore. In 1783 the city was completely overwhelmed by an earthquake. *Siragusa*, ancient *Syracuse*, once the chief town in Sicily, was in 1693 also destroyed by an earthquake, but now has 18,000 inhabitants. *Catania*, at the foot of Mount Etna, experienced the same fate, but is now a large and splendid city, with a population of 52,000. *Marsala*, is a thriving town, which exports large quantities of its wine to England. The *Lipari isles* are about twelve in number, and yield a considerable revenue to the government of Naples; the chief are *Lipari*, *Stromboli*, *Panaria*, *Volcano*, *Salena*, *Alicudi*, *Felicudi*, *Lisca*, *Ustica*.

17. The DUCHIES OF PARMA AND MODENA are small states between the Po and the main ridge of the Apennines, with capitals of the same name, the seats of universities. *Parma* is celebrated for its fine picture gallery and for its printing establishment, formerly conducted by Bodoni. *Mo-*

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dena has a ducal palace, a fine public library, and one of the highest church towers in Italy. *Reggio* (the birth-place of Ariosto) and *Carrara*, famous for its statuary marble, both belong to this Duchy. The *Republic of San Marino** consists of a small fortified town, built on a mountain, with a scanty territory, completely enclosed by the papal dominions, only nominally independent. Its whole population does not exceed 8000.

18. The states of Italy, in order of extent, beginning with the largest, rank as follows:—*Naples*, *Sardinia*, *Papal States*, *Tuscany*, *Venetia*, *Modena*, *Parma* and *San Marino*. The total population is supposed to be about 24,000,000, belonging to the Græco-Latin stock. Their language, the Italian, is based substantially upon the ancient Latin, and is said to be spoken in its greatest purity at Florence, but with the most correct enunciation at Rome. The people are almost universally Roman Catholics, bigotted and grossly superstitious. Manufactures are little attended to except in Lombardy, where silk goods especially are largely made; but a considerable amount of produce is raised by the cultivation of the soil, and exported. The country produces more raw silk than any other in Europe, chiefly in the north, where extensive plantations of the white mulberry are maintained for the silk-worm. The wheat is excellent; the olive oil of the best quality; and the so-called Parmesan cheese is widely celebrated. It is made in the district between Milan, Pavia, and Lodi; and is said to employ the milk of more than 30,000 cows.

19. The ISLAND OF CORSICA, on the north of Sardinia, geographically belongs to Italy, and was long held by the Genoese, but has been connected with France since the close of the last century, and now forms one of its departments. It is about 115 miles long by sixty-four broad, and boasts of having given birth to Napoleon I., in its chief town, *Ajaccio*, an unimportant place. The Corsicans speak a dialect of the Italian language.

20. The MALTESE GROUP of ISLANDS, fifty miles to the south of Sicily, consisting of *Malta*, *Gozo*, and *Comino*, closely

* One of the best chapters in Addison's Travels in Italy, is his account of *San Marino*. See works, (Bohn's Ed.) Vol. i. p. 403, *et. seq.*

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adjoining each other, form a small, but important colony of the British crown. They are naturally barren rocks, with a very hot climate, inhabited by a considerable native population. *Malta*, the largest and most southerly island, is about one-third less than the Isle of Wight, yet contains 135,000 inhabitants, a very remarkable proportion to the area. It was long held by the Knights of St. John, but taken from them by the French in 1798, who were deprived of it by the British two years later, after a close blockade. *Valetta*, the capital, is surrounded by fortifications deemed impregnable, which, with a spacious and safe harbour, in a central position of the Mediterranean, render it a valuable possession for purposes of trade or war. On the coast adjoining is the *Porto de San Paolo*, or harbour of St. Paul, which tradition regards as the spot where he suffered shipwreck. The Maltese are a mixed race, Italian and Arabic, and speak a dialect which is intelligible on the opposite shores of Africa. But pure Italian is the language used by the higher and mercantile classes, and English to some extent is also commonly understood by the natives.

Postscript on the recent Changes in Italy.

After the recent war in Italy, Austria, by the treaty of peace concluded at Villafranca, July 12, 1859, ceded Lombardy, as far as the river Mincio, to Napoleon, who thereupon made it over to his ally, the King of Sardinia, in exchange for Savoy and Nice. Early in 1860, the duchies of Tuscany, Modena, and Parma expelled their rulers and transferred their allegiance to Sardinia; after which, Sicily and Naples revolted, and welcomed an expedition against the state, conducted by Garibaldi, the well-known leader of the popular party. Soon after, on the flight of the King, the two Sicilies were annexed, first by proclamation, and afterwards by the formality of votes, to Sardinia. In the meantime, and since, the Sardinian troops have taken possession of all the Papal States, with the exception of Rome, Civita Vecchia, Terracina, and a few intermediate places. The king being now completely hemmed in on the land side, and his principal revenues and resources cut off, can make no long-continued or effectual resistance, and must soon take flight either to Rome or Spain, probably the latter.

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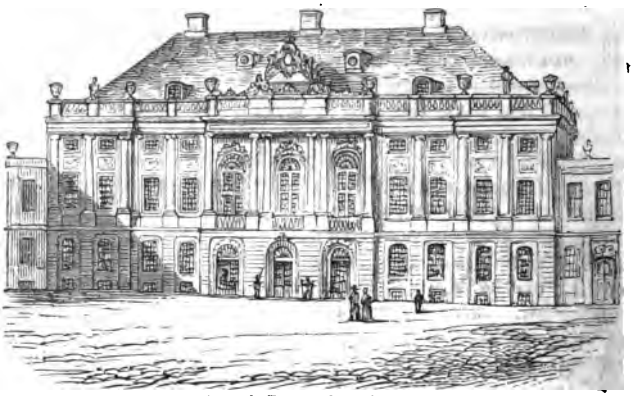

Queen's Palace, Copenhagen.

DENMARK.

1. The Dane-country, or Denmark, consists of a peninsula projecting from the north of Germany, and an archipelago on the eastern side. It is enclosed on the west by the North Sea, on the north and east by its branches, the Skager-rack and Cattegat, the Sound and the Baltic. The peninsula is one of the very few formations of the kind on the face of the globe which projects towards the north. It extends in that direction about 330 miles, by 110 miles from east to west, where the breadth is the greatest; and has an area, including the archipelago, of nearly 22,000 square miles.

2. The PENINSULA (or continental portion of the country) is deeply penetrated by *Fiords* or inlets of the sea, which give it a very extensive coast line. The most considerable of these, the *Liim Fiord*, is on the eastern side, a narrow arm of the Cattegat, which acquires great expansion in the interior, and contains a large number of islands. It so closely approaches the opposite western coast, that during a storm in the year 1825, the North Sea cut its way through the intervening isthmus; and the passage thus formed has since remained open, though not available for navigation, from its shallowness. The coast has little maritime value corresponding to its extent, owing to the want of good harbours, and

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DENMARK
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Fallenburg
Helsingborg
Copenhagen
Elsinore
Roskild
Slesvig
Flensburg
Tondern
Ripen
Aabenraa
Hadersleben
Veile
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Aarhuus
Randers
Aalborg
Viborg
Thisted
Lemvig
Ringkiobing
Skanderborg
Odense
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Nyeborg
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Faaborg
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Rendsburg
Neumunster
Itzehoe
Altona
Gluckstadt
Wilstar
Meldorf
Heyde
Tonningen
Husum
Friedrichstadt
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Sonderburg
Norburg
Augustenburg
Glucksburg
Flensburg
Schleswig
Wittenburg
Lauenburg
Harburg
Hamburg
Lubeck
Oldesloe
Ploen
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Segeberg
Neustadt
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Wismar
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Boitzenburg
Lubz
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Kyritz
Wusterhausen
Neuruppin
Fehrbellin
Rathenow
Brandenburg
Potsdam
Spandau
Berlin
Zossen
Luckenwalde
Juterbogk
Belzig
Treuenbrietzen
Wittenberg
Dessau
Zerbst
Coswig
Roslau
Bernburg
Cothen
Calbe
Barby
Egeln
Aschersleben
Quedlinburg
Halberstadt
Osterwick
Wernigerode
Blankenburg
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Wolfenbuttel
Gifhorn
Celle
Zell
Uelzen
Lunenburg
Winsen
Harburg
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Buxtehude
Otterndorf
Cuxhaven
Ritzebuttel
Bremervorde
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Varel
Rastede
Wildeshausen
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Meppen
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Haselunne
Papenburg
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Wittmund
Friedeburg
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Jever
Sea of Kattegat
Skager Rack
North Sea
Baltic Sea
Zuyder Zee
Texel
Vlie
Ameland
Schelling
Terschelling
Vlieland
Helder
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Medemblick
Hoorn
Alkmaar
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Leyden
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Rotterdam
Dordrecht
Utrecht
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Leeuwarden
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Elburg
Harderwick
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Offenburg
Kehl
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Kaiserslautern
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Montefiascone
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Aquapendente
Radicofani
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to the shallows off shore. On the north-western side there is scarcely a port to give shelter to shipping; and dreary sand-hills, where a living creature is seldom seen, shifting with the wind, form the boundary of the waves.

3. The interior is almost uniformly level, and forms part of the great plain of Europe. A range of low hills traverses the country centrally, but there is nothing like a mountain, and but few woods, while small lakes, marshes, sands, and heaths, are prominent features of the northern districts. The southern have a much better aspect, and even a pleasing character, without ever reaching the picturesque, presenting vividly green knolls, and luxuriant meadows, interspersed with small sheets of water. The only *navigable River* wholly Danish is the *Eider*, which divides the provinces of *Sleswig* and *Holstein*, and enters the North Sea. But Denmark participates to some extent in the advantages of the Elbe, the estuary of which forms part of the southern frontier.

4. The ARCHIPELAGO includes the large islands of *Zealand* and *Funen; Lalande, Falster, Moen, Langeland, Samsoe,* and *Alsen,* of smaller size; and *Bornholm,* an outlier, at some distance in the Baltic. Except the last, they all closely adjoin each other, and form the most important division of the country. Though generally level, like the mainland, they have a more agreeable appearance. The most beautiful beech-woods, with fertile fields and verdant meadows, vary the scene, while prospects of the sea and shipping, perpetually commanded, diversify the landscape.

5. The island of *Zealand* is separated from the Swedish shore by the channel of the *Sound,* and from that of Funen by the *Great Belt,* while *Funen* is separated from the Danish mainland by the *Little Belt.* The Sound is the most frequented passage for ships between the North Sea and the Baltic. Nearly 20,000 pass annually, and each pays a toll of five dollars, except Danish or Swedish vessels. This toll, which has been imposed for upwards of five centuries, and forms a considerable item in the revenue of the crown, is levied at *Elsinore,* on the eastern coast, but it is very impatiently borne by the maritime nations, and was compounded for by America in 1855, and by Great Britain in 1857. During the frozen state of the Sound, in the winter of 1830, an exact measurement was

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made of its breadth, which was found to be 4328 yards, nearly two miles and a half, at the narrowest part. On the small island of *Hoene*, at its southern entrance, the astronomer Tycho Brahe resided, and erected his observatory, fancifully styled the Castle of the Heavens. The *Great Belt* has more sea room, being eight miles wide, and greater depth; but as a circuitous route between the two seas, it is only taken by vessels of very large burden. Most of the British men of war passed through it during the recent contest with Russia. The *Little Belt* is but three-quarters of a mile wide, quite out of the way, and only locally used by small craft.

6. The *Climate* of Denmark is mild for the latitude, but very foggy and humid, in consequence of the great extent of watery surface. This renders the atmosphere dull, but it is favourable to vegetation, which succeeds surprisingly during summer, and delights the eye with a fresh bright green. Yet the winters are occasionally of extreme severity; and ice impedes or suspends the navigation of the seas. If not actually frozen over, which is sometimes the case, the Sound is frequently impassable, owing to the accumulation of drift ice from the Baltic.

7. There are no *Minerals* of any importance. Coal and salt are imported; but turf, of which there is abundance, is the ordinary fuel. The island of *Bornholm* has quarries of freestone, some blue marble, and pottery clay.

8. The kingdom is divided into four great provinces, namely:

Provinces.	Area sq. mls.	Pop. in 1855.	Cities and Towns.
Denmark proper, comprising Jutland and most of the Islands	14,493	1,378,200	Copenhagen, Roskilde, Elsinore.
Duchy of Sleswig	3,451	363,000	Sleswig, Flensborg.
Duchy of Holstein	3,508	479,364	Altona, Kiel, Glückstadt.
Duchy of Lauenburg	404	46,486	Lauenburg, Rutzeburg.

The two latter, *Holstein* and *Lauenburg*, are parts of Germany, and form together one of the members of the Germanic confederation, namely, the Duchy of *Holstein-Lauenburg*.

9. Copenhagen (Merchants' Haven), the capital, in lat. 55° 40′ N., long. 12° 38′ E., is situated on the east coast of the island of Zealand, and partly on the small island of Amak. The intervening channel forms a superb harbour. Though

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in a low situation, the city has a pleasing appearance, is well laid out, and surrounded with beautiful environs. It contains three Royal Residences; a University; a Museum of Northern Antiquities; the Thorwaldsen Museum, consisting of works executed, or objects connected with the great sculptor; a Royal Library in the palace of Christianberg of 400,000 volumes, rich in northern literature; and has a population of 130,000. *Roskilde*, formerly the capital, a small inland town to the westward, possesses an ancient cathedral, in which are the tombs of a long line of sovereigns. *Elsinore*, on the Sound, a resort of pilots and government officials, is the place where the Sound dues are collected. It is of interest from its connection with Shakespeare's "Hamlet." *Cronberg Castle*, near it, is a strong fortress, which commands the strait.

10. The second city of the kingdom in size, *Altona*, in Holstein, is only of moderate extent, containing a population of 37,000. It is seated on the north bank of the Elbe, close to Hamburg, from which it is alone separated by a hill called the Hamburgerberg. On account of its proximity, and considerable commerce, it is sometimes called by the people of the great free city *All-zu-nah*, "all too near." An astronomical observatory has acquired distinction under the superintendence of Schumacher. *Kiel* and *Glückstadt*, both seaports of Holstein, the former a university, and *Flensborg*, a seaport in Sleswig, are other places of some note. Between Flensborg and the Slie fiord, on the south, there is a district nearly equal to the county of Middlesex in extent, which bears the name of *Anglen*. It was anciently part of the country of the *Angles*, one of the conquering Germanic tribes who came over to our shores, and originated the name of *England*. The memory of the *Jutes*, another tribe who principally possessed themselves of Kent, is preserved in the name of the northern province, *Jutland*. The small Duchy of *Lauenburg* is bounded by Lubeck, Holstein and the Elbe. Its capital has a custom-house for the Elbe dues, and a considerable transit trade.

11. The *Faroe islands*, 200 miles from the north-west of Scotland, remote outliers of the mainland of Europe, are parts of the Danish kingdom, and form a bailiwick of *Jutland*. They are twenty-two in number, of which seven-

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teen are inhabited; all small, but lofty, precipitously towering about 2000 feet above the deep stormy ocean, and haunted by prodigious flocks of wild fowl. No wood now grows in the islands, but the remains of birch trees are found embedded in the peat bogs. The only corn much cultivated is a hardy kind of barley, and even that does not always ripen. The islanders, who in 1855 numbered upwards of 8651, are fishermen, fowlers, and shepherds. *Thor'shavn*, in the island of Stromsee, is the only town, a mere village.

12. The *Population* of Denmark somewhat exceeds 25,00,000. They are all of the Teutonic stock. But the inhabitants of Jutland, and of the islands, with great part of Sleswig, belong to the Scandinavian branch, and are the Danes proper, while those of Holstein, Lauenburg, and the southern portion of Sleswig, belong to the Germanic, and are Germans. The former speak a dialect of the Norse, or Scandinavian Gothic, one of the softest of the living languages of Europe; the latter speak German.

13. The established *Religion* is the Lutheran form of Protestantism, professed by nearly the whole population; but perfect toleration is allowed to all sects. The means of *Education* are widely supplied by parish schools, sustained by local rates. Attendance upon those of the primary class is compulsory. But notwithstanding this provision, there is great popular ignorance; and the people have not kept pace generally with the progress of European civilisation. There are two *Universities*, those of Copenhagen and Kiel; and Glückstadt has a marine school.

14. In early times the Danes were celebrated for bold and skilful *seamanship*. They still retain the distinction, and have a considerable mercantile marine, engaged to some extent in the carrying trade of other nations. *Ship-building* and *distillation* are conducted upon an extensive scale; but other manufactures are wholly insignificant. Throughout the country, as in other parts of northern Europe, the peasants weave a few coarse linens and woollens for their own use, and make most of the articles required in their households. *Agriculture* and the *Fisheries* are the main dependence of the people. The inferior cereals are chiefly grown, especially rye, which forms the daily bread commonly consumed. But the extent of rich pasturage render the rear-

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ing of horses and oxen, with dairy produce, prime objects of attention in Holstein and Sleswig, from whence they are largely exported.

15. The *monarchy* is one of the oldest in Europe, and furnished England with a dynasty of sovereigns in the first half of the eleventh century. By the Union of Calmar in 1397, Denmark, Sweden, and Norway, were united under one crown. Sweden renounced the union in 1523, but the other two kingdoms remained connected down to the year 1814, when Norway was annexed to Sweden, and the German duchy of Lauenburg was annexed to Denmark. The succession to the crown, once elective, in the hands of the nobles, is now hereditary; and a Diet, consisting of an upper and a lower house, shares the supreme power with the sovereign. The German duchies retain usages and institutions in some respects differing from the other parts of the kingdom.

16. The FOREIGN POSSESSIONS of the Danish crown consist of *Iceland*, the *Faroe Islands* and part of the west coast of *Greenland*, which may be conveniently described here. The TROPICAL POSSESSIONS are, the islands of *Santa Cruz*, *St. Thomas*, and *St. John*, in the West Indies; four forts and a factory on the *Guinea coast* of Africa; and the *Nicobar Islands* in the Bay of Bengal, described in their respective sections.

17. The Island of ICELAND lies in the Northern Atlantic Ocean, about 700 miles W. of Norway, and 200 E. of Greenland; is 200 miles in length, and as many in breadth, and contains about 64,000 inhabitants. In the greater part of the island the winter is intensely cold, and the soil barren. Its exports are sulphur, hides, and salt fish. In this cold country are upwards of thirty known volcanoes, one of which is the famous burning mountain *Hecla*, and there are several boiling springs, of which the *Great Geyser* throws a column of hot water seventy or eighty, and sometimes 150 feet high; and at the depth of seventy-two feet is thirty degrees above the boiling point. In this country the Aurora Borealis is seen in all its splendour. The Island is destitute of trees, and no grain of any kind can be raised; but cabbage and potatoes are cultivated. Fish and birds are the chief support of the inhabitants.

18. *Greenland* is a dreary extensive region of north-east

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America, celebrated for its whale fishery. The climate is very severe, only one month in the year, July, being free from snow, and accordingly but little vegetation excepting moss is produced. Population about 9,500, nearly all native Esquimaux, who are chiefly employed in hunting seals.

19. *Heligoland*, or Holy Island, and another adjoining, off the west coast of Holstein, is now a small possession of Great Britain, taken in the year 1807. It served as a great depôt for our manufactures during the long continental war, from which they were smuggled into the neighbouring countries. The inhabitants, about 2,500, are Frieslanders, and subsist by fishing, and acting as pilots.

Palace of Rosenberg, Copenhagen, built by Inigo Jones.

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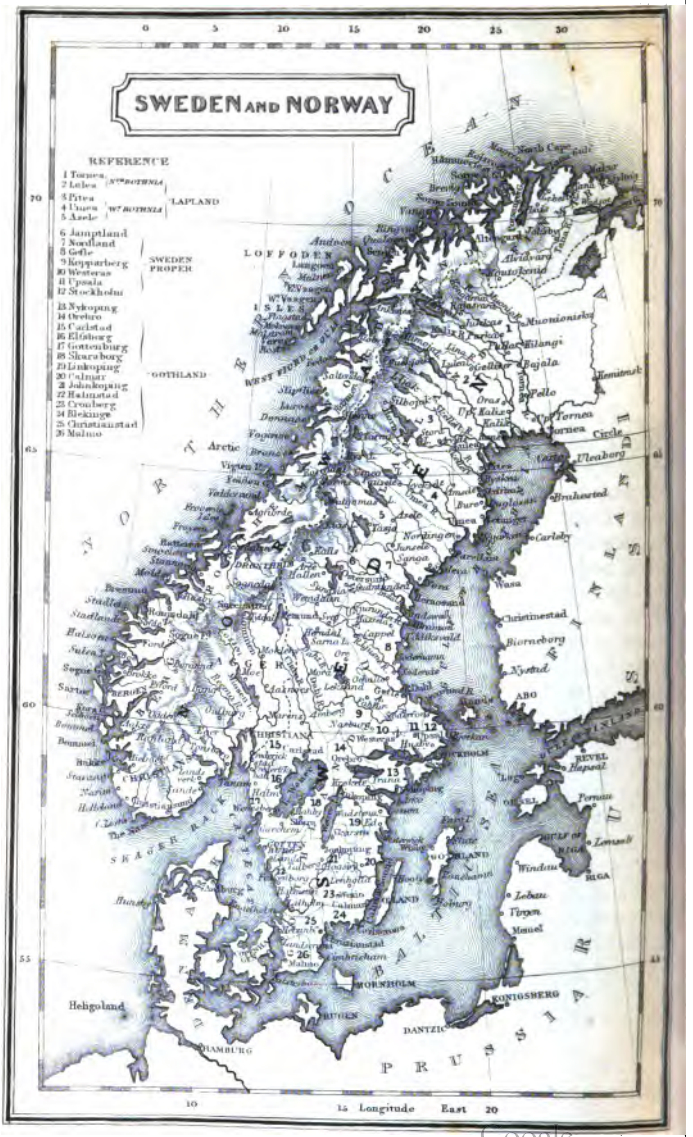

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Lapland.

SWEDEN AND NORWAY.

1. The *Scandinavian peninsula*, the largest in Europe, forming its north-western extremity, comprehends Sweden and Norway, two perfectly distinct kingdoms united under one crown. The former is on the eastern side, and is the most extensive; the latter is on the western, stretches less to the south, and further to the north. This great geographical region is bounded by the Atlantic ocean on the west; the Arctic on the north; and has *Russian Lapland*, the Baltic and its branches on the east and south. It has a linear extent of nearly 1200 miles from north to south, by upwards of 450 miles from east to west, where the breadth is the greatest; and an area of 293,000 square miles, of which 170,000 belong to Sweden, and 123,000 to Norway.

2. The *Coast*, especially on the Norwegian side, is remarkable for its irregularity, having an almost uninterrupted series of fiords, or inlets of the sea, long, narrow, and winding, with deep water, beautifully clear. The bottom is distinctly seen, with the minutest objects, at very extraordinary depths: and the surface so distinctly reflects the forms of the rocks on shore, that when viewed at a short distance, it is difficult to mark the line of separation between sea and land. Naked mountains where they are exposed to the wild gales from the ocean, but under shelter clothed with pines, border these inlets, and form very fine scenery. It is sometimes beautiful, often very grand, and occasionally terrible.

3. The *Hardanger fiord*, one of the largest, on the south of Bergen, extends nearly a hundred miles inland, and con-

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tains within itself many of minor dimensions. One of these, the *Matre fiord*, four miles long, and but a quarter of a mile wide, is an immense cleft in a mountain mass, the sides of which rise from three to five thousand feet, either perpendicularly, or overhang in places the water, said to be here unfathomable. When visited by Wittich, at eleven o'clock on the morn of a midsummer day, the rays of the sun had not yet penetrated to the bottom of the cleft; and the gloom which rested on the surface, heightened by the dark rocky masses on the sides, excited painful sensations. "The view was not grand, it was not sublime—it was horrific. At the view of a truly grand scene our feelings expand, but at the sight of this cleft I felt that they were contracted. I could not breathe with common ease, and the sensation which filled my mind approached nearer to horror than to any other feeling." The inlets furnish a plentiful supply of fish to districts considerably inland.

4. Innumerable *Islands* line the coast of the peninsula. They closely fringe the shores, rise abruptly from the sea, vary in size from mere points of rock to areas of several square miles, are bare of vegetation on the Norwegian side, but clothed with pine woods on the Swedish, and form a labyrinth difficult to be threaded, significantly called *Skargard*, or "reef-defence." Sweden also possesses the large and fertile islands of *Gothland*, in the centre of the Baltic, and of *Oeland*, on the south-east coast. Norway has likewise the two chains of the *Lofoden* and *Tromsen Isles*, both of which are within the Arctic circle. They are mostly desolate; a few are sparingly inhabited; but they are much resorted to as fishing stations and to collect the down of the eider ducks.

5. The most northerly of the Tromsen isles, that of *Mageroe*, is occupied by a few families, and contains the celebrated *North Cape*, the northern extremity of Europe, a promontory shattered by the winds and waves, boldly fronting the Arctic ocean, nearly 1200 feet in height. Two of the south Lofoden isles have between them the famous *Maelström*, "grinding stream," a whirlpool caused by the rush of strong tidal currents, occasionally dangerous to shipping. The *Vigten isles*, to the north of *Drontheim*, are of historical note, as the original home of the *Vi-kingr*, or sea-king, Rolf, commonly called Rollo, who finally established

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himself in Normandy, the ancestor of William the Conqueror.

6. The interior of the peninsula has a moderately undulating surface, embracing level tracts, through the greater part of the eastern division. But towards the centre, from north to south, it is traversed by the *Scandinavian Alps*, which throw spurs into Sweden, overspread nearly the whole of Norway, and form the greater part of the boundary-line between the two countries. These mountains are known as the *Thulian* in the south, the *Dovre-field* in the centre, and the *Koelen* in the north. They have a very peculiar physiognomy. Instead of terminating upward in peaks or rounded masses, the summits have generally level surfaces of varying dimensions, and thus form an extensive series of table lands. Hence Pontoppidan, Bishop of Bergen, in his Account of Norway, in the last century, suggested the laying out of roads on the top of the mountains, an idea which seemed preposterous to readers ignorant of the aspect of the country. The suggestion might be carried out for considerable distances without encountering serious difficulty except from the snow.

7. The highest portions of the chain rises in *Skagestoltind*, on the north-east of Bergen, to the height of 8153 feet above the sea, which is upwards of 3000 feet above the line of perpetual snow in that latitude. The total extent of country elevated above the snow line is estimated to exceed 3500 square miles, the greater portion of which belongs to Norway. Some single snow-fields are larger than the county of Middlesex. The *Folge Fonden*, to the east of Bergen, is about thirty miles long, by from six to eighteen broad, at the height of 5400 feet, with a coating of permanent snow forty feet deep. Small houses, called *feld-stuer*, are built along the highland roads, as a refuge for travellers in snow storms.

8. The *Rivers* are very numerous, chiefly formed and sustained by the melting of the snows; but they are of little utility, except to float down timber, owing to their great rapidity, and the occurrence of waterfalls. The *Glommen*, the largest in Norway, enters the *Skager-rack*, after a course of four hundred miles, but is only ascended by ships for fourteen miles from its mouth. The *Gotha*, the largest in

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Sweden, discharges itself into the *Cattegat*; and has been made navigable to lake *Wener* by a canal, where the *Falls of Trollhatten* interrupt its course. The river here descends 130 feet in successive leaps, and forms the most magnificent of the European waterfalls. *Lakes* are also numerous, and of considerable size. Those of *Wener*, *Wetter*, and *Mälar*, in the south of Sweden, are the most important in Europe, out of Russia, and cover areas respectively equal to the counties of Norfolk, Nottingham, and Oxford.

9. The peninsula is particularly noted for its vast extent of *Woodland*, equal to three-fourths of the entire surface. The trees consist of beech, oak, maple, aspen, birch, fir, and Norway pine. The former are confined to the southern districts. The latter are characteristic of the country generally, and spread in immense forests over the mountains, darkening the horizon with their sombre hue. The pine-woods are excellent for masts and yards, owing to their length, lightness, and straightness; the juice supplies tar, turpentine, and pitch; and the inner bark, mixed with rye meal, furnishes a coarse bread in times of dearth. Most of the timber is brought to the coast on the breaking up of winter, when the streams have their depth sufficiently increased to float it down by the melting of the snow, and become furious torrents. But a very large amount distant from water-courses is of no service, from the impossibility of transport.

10. The useful *Metals*, lead, copper, and iron, are found in great abundance, especially the last. A considerable quantity of silver was once obtained, and some gold, but the produce is now unimportant. Cobalt, plumbago, and alum occur among other minerals; and quarries of granite, marble, and slate, are wrought in various parts of the country. In Sweden, iron is not confined to particular spots, but is diffused over considerable tracts. There are large hills composed almost entirely of the richest ore, one of which, *the mountain Gellivara*, in Lapland, is 1800 feet high; but its position, within the polar circle, far from the sea, and in an unpeopled wilderness, deprives it of its real value. *Swedish iron* is superior in ductility and malleability to any other. The best quality, particularly adapted for the manufacture of steel,

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is obtained from the mines of *Danemora*, in the neighbourhood of *Upsal*, and is almost wholly sent to Sheffield.

11. Long and rigorous winters, short and very hot summers, distinguish the *Climate*, with great humidity on the west coast. For seven months, or eight in the north, the ground is covered with hard snow; the lakes, rivers, and harbours, are frozen over; and the inhabitants travel with facility across them, and through the open country, in sledges drawn by horses or reindeer. The change to summer is effected with scarcely a trace of intervening spring; the ice and snow melt suddenly; leaves appear upon the trees with magical celerity; the cultivated vegetation progresses rapidly; and in July and August, the heat is often intense, while musquitoes are nearly as troublesome as in tropical countries. This extreme summer warmth is mainly caused by the great length of the days at that season. The longest day lasts nineteen or twenty hours in the south; several weeks in the north; and for nearly three months there is continuous daylight at the North Cape. The winters have equally long nights, relieved by brilliant displays of the Aurora Borealis.

12. The *Wild Animals* include the bear and wolf, formidable creatures when pressed by hunger, mostly confined to the wilder and more northern provinces; the ferocious wolverine, or glutton (also called quick-hatch and Hudson's-bay bear), in the same district, now become very scarce; the lynx, badger, various foxes, and the elk, the latter limited to the least frequented localities. Of the small animals, the most peculiar is the lemming, which, at irregular intervals, leaves its retired abodes in the mountains of Lapland, and proceeds in countless numbers across streams, torrents, and gorges, to the cultivated districts, where it commits great depredations, eating up the corn and every kind of vegetation in its way. The domesticated animals comprise the reindeer, upon which the Lapps depend for subsistence and clothing. The ass is unknown; sheep extend towards the polar circle; goats reach it; the horse passes beyond it; and dogs range to the most northerly site.

13. SWEDEN is divided into three great regions:—*Gothland* in the south; *Swealand*, or Sweden Proper, in the centre; and *Nordland*, which includes Swedish Lapland, in

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the north. These are subdivided into twenty-four *läns* or governments, as is shown in the following table.

Governments.	*Ancient Provinces.*	*Cities and Towns.*
SVEALAND.		
Stockholm	Upland and Sodermanland	STOCKHOLM, Carlberg, Marieberg, Drottingholm, Nortelge, Sodertelge, Vaxholm.
Upsala	Upland	Upsala, Sigtuna, Lofsta, Elfkarleby, Sodersfors, Danemora.
Westeraas	Westmanland	Westeraas, Sala, Norberg, Arboga, Köping.
Nyköping	Sodermanland	Nyköping, Strengnass, Gripsholm, Eskilstuna.
Oerebro	Nerike and Westmanland	Oerebro, Nora, Askersund.
Carlstad	Warmeland	Carlstad, Christinehamn, Ombergsheden, Oskarstad or Arvika, Philipstad.
Storra-kopparberg	Dalarne	Fahlun, Hedemora, Avesta, Mora, Husby.
Gefleborg	Gestrikland and Helsingland	Gefle, Soderhamn, Jarsso, Huddiksvall.
GOTHALAND.		
Linköping	Oestergothland	Linköping, Norrköping, Wadstena, Soderköping, Medevi, Skeninge, Motala.
Calmar, Jonkoping, Kronoberg	Smaland	Calmar, Westerwik, Borgholm. Jonköping, Ædelfors, Ekesjo. Wexio.
Blekinge	Blekinge	Carlscrona, Ronneby, Carlshavn.
Skaraborg	Westergothland	Mariestad, Lidköping, Skara Vanas.
Elfsborg, Gothenburg and Bohus	Dasland and W. Gothland	Wenersborg, Boras, Trollhatten, Amal. Gothenburg, Marstrand, Ny-Elfsborg, Uddevalla, Stromstad.
Halmstad	Halland	Halmstad, Warberg, Laholm.
Christianstad, Malmohus	Schonen	Christianstad, Engelholm, Cimbrishamn. Malmo, Ystad, Lund, Landscrona, Helsinborg, Ramlosa.
Gottland	Gottland island	Wisby.
NORRLAND.		
Norrbotten, Westerbotten	Westerbotten and Lappmark	Pitea, Lulea, Arjeplog, Gellivara, Jukkas, Jarvi, Umea, Asele, Sorsell.
Wester-Norland	Medelpad and Angermanland	Hernosand, Sundsvall.
Jamtland	Jamtland and Herjeadalen	Oestersund, Hede, Ijusnedal.

14. STOCKHOLM, the capital, lat. 59° 20′N., long. 18°E., is situated on a strait which connects lake Mälar with the Baltic, and contains a population of 101,502. The private houses are built on the mainland on either side; but the principal public buildings are placed upon three islands in the strait, named the *Stockholm*, "castle island," *Riddarholm*, "Knight's island," and *Halge-ant's holm*, "Holy Ghost island." They are connected with each other and

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the mainland by several bridges. The approach to the city from the sea is through a labyrinth of isles, and is defended by a strong fortress. *Gottenburg*, on the Gotha, near the Cattegat, is the largest provincial town, with 30,600 inhabitants, and an active commerce. *Upsal*, on the north of the capital, is a small inland city, of no interest except on account of its ancient university, connected with the great names of Linnæus, Scheele, and Berzelius. *Carlscrona*, on the south-east coast, is the ordinary station of the Swedish fleet, furnished with docks, building-slips, and formidable batteries. Population in 1860, 14,513.

15. Among the insular places, *Wisby*, the chief town of Gothland, on the west coast of the island, has a melancholy interest; and is one of the most remarkable sites in the north of Europe. It is a city of the middle ages, existing almost unchanged to the present day, yet so fallen in importance, that though the space within its walls is capacious enough for thirty or forty thousand inhabitants, it contains little more than 4000, who are badly lodged in little tenements built under edifices of great cost and magnificence. During the tenth and eleventh centuries, it was one of the most commercial cities in Europe, a leading member of the Hanseatic league; and still contains the remains of twelve churches erected at that time.

16. NORWAY is also divided into three principal regions:—*Sondenfields*, the southern ranges of hills, in the south; *Nordenfields*, the northern ranges of hills, central in relation to the country; and *Norrland*, the extreme north, including *Finmark*. These are subdivided into seventeen *amts*, or counties, as is shown in the following table.

Districts.	*Cities and Towns.*
SONDENFIELDS.	
Aggerhuus	Christiana, Drobak.
Smaalehnenes	Moss, Frederikshald, Frederikstad.
Hedemarken	Hof, Kongsvinger, Elverum.
Christians	Biri, Lessoe.
Buskerad	Drammen, Eger, Modum, Kongsberg.
Bradsberg	Skien, Porsgrund, Krageroe, Langesund, Brevig.
Nedenaes and Raabygdelaget	Arendal, Grimstad, Ritsoer.
Lister and Mandal	Christiansand, Mandal, Farsund, Flekkefjord.
Stavanger	Stavanger, Egersund.
Jarlsberg and Laurvig	Tonsberg, Holmstrand, Laurvig, Sandefjord, Fredriksvörn, Valloe.

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Districts.	*Cities and Towns.*
Nordenfields.	
Söndre-Bergenhuus	Bergen, Rosendal.
Nordre-Bergenhuus	Leganger, Viig, Indvig.
Romsdal	Christiansund, Molde.
Söndre Trondheim	Trondheim (Drontheim), Roraas.
Nordre-Trondheim.....	Levanger, Stordalen, Skogn.
Nordlandens.	
Nordland	Bodoe, Alstahang or Alstahong
Finmark	Tromsoe, Altengaard, Hammerfest, Wardoehuus or Vardoe, Vadsoe.

17. CHRISTIANA, the capital, is finely situated at the head of a long fiord on the south coast, surrounded with beautiful heights clothed with pine. It is a small city of 39,000 inhabitants, well-built and thriving, said to possess a greater number of people of literary tastes than any British town of

Christiana.

the same extent. *Bergen*, on the west coast, the commercial capital, is about the same size, and consists of a well-built town, with 25,000 inhabitants. It has a cathedral, college, and several public libraries, and is the great entrepôt of the Norwegian fisheries. More than fifty large vessels are annually sent from this port to the great fishery of the *Lofoden Isles*. The neighbourhood is very desolate, as is the whole west coast of Norway, presenting a succession of bare rocks and moors, with scarcely a grassy spot in summer, and only a few stunted trees in favourable sites. This sterility is mainly caused by the prevalence of north-westerly gales, which prevent the growth of trees to a distance of about twelve miles from the sea, and affect the vegetation nearly thirty miles inland. The produce of the fishery enables the inhabitants to pay for corn and other

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articles of necessity received from the different countries of Europe. *Drontheim*, the ancient capital, further north, built almost wholly of wood, is a busy commercial town, with 14,000 inhabitants. It has an old Gothic cathedral, once an object of great veneration to all Scandinavia, but much dilapidated by fire and time, where the sovereigns are still crowned as kings of Norway. *Tromsoe*, the chief town of *Finmark*, on an island within the Arctic circle, is only a village, but publishes a newspaper, probably the most northerly in the world. *Hammerfest*, still smaller, on another island, in lat. 70° 40′, is the most northerly town in Europe, with the dwarf birch growing in sheltered spots to about the height of a man. It is a central trading station in furs and fish.

18. The *Population* of the whole peninsula is estimated at 4,750,000, of which 3,430,000 belong to Sweden, and 1,320,000 to Norway. These are the least populous countries in Europe. The great mass of the people live in villages, or scattered homesteads, only a small proportion being town dwellers. The Swedes and Norwegians are of the same lineage as the Danes; and speak different dialects of the same language, the Scandinavian Gothic. The *Laplanders* in the north are a totally distinct race, belonging to the Mongolian division of mankind. They are of small stature, live chiefly in tents, and are clothed with the skins of reindeer.

19. The established *Religion* in both Sweden and Norway is Lutheranism, from which there are very few dissentients. Elementary instruction is more widely diffused than would be supposed from the scattered condition of the people. Reading is a very common in-door occupation during the long winter nights. Professor Forbes, when visiting an encampment of Laplanders, was surprised to find them possessed of well-cared-for books, and some of them were engaged in writing.

20. The *Manufactures*, which are chiefly iron founding and cotton works, are, with little exception, in the hands of foreigners, chiefly Scotch and English, but are nowhere extensive. Flax and wool are spun by the peasantry at home in winter, when out-door occupation is least demanded, or often impossible, and made into articles of clothing. They also make

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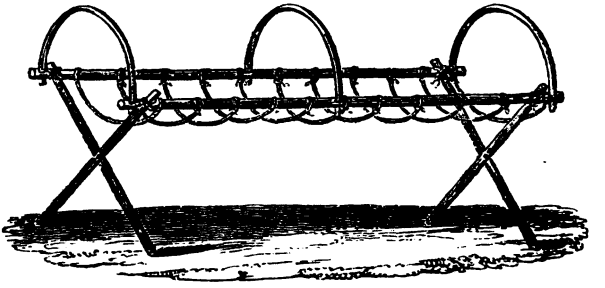
most of the furniture in their dwellings. *Agriculture* and dairy husbandry, mining, the fisheries, the felling of timber, its preparation for use or export in saw mills, the production of tar, pitch, turpentine, and cod-liver oil, with ship-building, are leading industrial pursuits. In Sweden, a surplus of corn is raised, but Norway imports for its own consumption. The dairy produce is everywhere excellent. Twenty thousand Norwegians annually visit the *Lofoden fishery*. The fish taken is a species of herring, which supplies much of the ordinary food of the people, and is very largely exported to the Mediterranean countries. London receives a vast proportion of its lobsters from the south coast of Norway. Saw mills are very numerous, established on the streams, the working of which is greatly facilitated by rapids and waterfalls.

21. The *government of Sweden* is a limited monarchy. Its Diet is composed of four co-ordinate chambers, those of the nobility, clergy, burghers, and peasantry, and meets once in every five years, but may be convened by the crown on extraordinary occasions. *Norway* has also a representative assembly invested with greater power, called the Storthing, which meets once in three years.

22. The small island of *St. Bartholomew*, in the West Indies, belongs to Sweden, and is its only foreign possession.



Lapland Bed, without its reindeer skins and canopy.

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RUSSIAN EMPIRE
ARCTIC OCEAN
EUROPE
ASIA
TARTARY
CHINESE EMPIRE
PERSIA
SEA OF OKHOTSK
SEA OF JAPAN
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RUSSIA IN EUROPE.

1. "God high, and the emperor afar off," is a proverbial saying common in the more remote Russian governments. It is used with reference to the immense extent of the empire, the immunity enjoyed by distant commandants from imperial inspection, and the temptation supplied thereby to be peculant or oppressive, which few have had the virtue to resist. The empire embraces the whole of eastern Europe, a south-west section of Asia, the whole of its northern countries, and a portion of North America beyond Behring's Strait. It extends, without including the latter district, 5200 miles from south-west to north-east, by 2000 from north to south; and is computed to contain 7,293,000 square miles. This is an area *eighty-two* times greater than Great Britain, thirty-five times greater than France, nearly double the extent of Europe, and equal to one-seventh of the land of the globe. But the population is very disproportionate to the surface, being only about 63,000,000, which is less than nine persons to a square mile, while Great Britain has a population of about 27,500,000, or nearly 300 to the square mile.

2. The varieties of *Climate* and productions in this enormous territory are numerous and striking. At its northern extremity the polar bear growls and the walrus splashes, in

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the neighbourhood of shores abandoned to icy desolation, while the reindeer browses on moss-grown treeless plains. At its southern limit the gazelle bounds, the bulbul sings, the camel tramps, the tree-frog climbs, and locusts swarm; while the vine, the olive, the pomegranate, the orange, the palm, and the plantain flourish. In southern Siberia a tropical and an arctic animal occupy the same ground at different seasons. The royal tiger, of the very same species roaming in the jungles of India, ranges in summer to the Altai mountains, and thus advances into the winter habitat of the elk and reindeer.

3. *European Russia* is that portion of the empire bounded generally by the Ural mountains on the east; the Baltic and its gulfs, with the Prussian and Austrian dominions on the west; the Arctic Ocean on the north; the Caucasus, Black Sea, and Danube on the south. This region stretches upwards of 1700 miles east and west, by about the same distance north and south. It has a superficial area of 2,100,000 square miles, equal to more than the half of Europe. The insular dependencies include *Oesel*, and the *Aland archipelago*, in the Baltic; the two islands of *Nova Zembla*, or "New Land," in the Arctic seas, ice-bound for the greater part of the year, and of no value except as fishing and fowling stations; and *Spitzbergen*, the "Peaked Mountains," a group of four considerable and several small islets, the most northerly land known, occasionally occupied even in the winter by a few Russian hunters.

4. The country belongs to the great plain of Europe, and forms its principal portion. Low rocky heights ramify over the north-western districts, *Finland*, *Olonetz*, and *Russian Lapland*; the *Valdai hills*, of limited extent, on the south of *Novgorod*, rise to the moderate elevation of 1200 feet; spurs from the *Uralian* and *Caucasian* chains diversify their neighbourhood; and the south-east coast of the *Crimea* is mountainous. The *Caucasus* belongs to the great mountain-system of Western Asia. The *Urals* are more directly European, though on the frontier. They stretch upwards of 1200 miles in the direction of the meridian, but with numerous breaks; and have their greatest height, 5390 feet, on the north-east of Perm. With these exceptions, the whole of this extensive country is a gently undulating level,

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and for hundreds of miles in succession almost a dead flat. Three great regions, *Northern*, *Middle*, and *Southern*, may be generally characterised.

5. The NORTH REGION, on the shores of the Arctic Ocean, is beyond the boundary of the cultivatable world, unfit for the permanent abode of man and domestic animals, being covered for nine months with hard frozen snow, which remains throughout the year, accumulated in masses. The solitude of the land is equal to its nakedness. The ear listens in vain for the hum of insects and the song of birds; and the cries of animal life of every description are few and far between. This dreariness led M. Bauer to think of the state of nature on the morning of creation, just before animals were called into existence. For some distance inland, the *Soil* at no great depth remains permanently hard as iron; but in summer, the surface thaws, the snows disappear, and a cryptogamic vegetation is revealed, either mosses or lichens. Still there are no trees except towards the boundaries of the following region, where diminutive, crippled, and straggling birches and firs form the van of the northernmost woods. Nothing can be more melancholy than the appearance of these outposts of the forests, covered with a coating of moss thicker than their stems, and mostly dead, unable to cope with the destroying breath of the north.

6. The MIDDLE REGION, of immense extent, has forests, marshes, pasturage, and the richest arable land, for its distinctive features. So vast and dense are the woods, that it has been said a squirrel might travel from St. Petersburg to Moscow, a distance of four hundred and fifty miles, without once touching the ground. In many of them the hand of man has not yet disturbed the operations of nature. In Lithuania, the forest of *Bialowicza*, with the village of that name near the centre, covers 135 square miles, and is imperial property. It contains a district which bears the name of *Niezeanow*, or the "Unknown Region," because it is rendered quite impassable from the multitude of trunks rooted up, and crossing one another in all directions. Pines, firs, and birches are by far the most abundant trees. In the governments of *Archangel*, *Olonetz*, and *Vologda*, more than eight millions of pines have been reckoned fit for masts, each

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being at least two feet and a half in diameter. Oaks, beeches, maples, poplars, and elms, appear in more southern districts. These immense forests are a great blessing in so rigorous a climate, as, besides supplying fuel, they form a shelter from the cold north winds. The *Woods* alternate with tracts of open country, consisting of morasses, pastures, and arable land of the richest description.

Moscow.

7. *Moscow* is seated upon a stratum of dark vegetable mould, called "black earth," from three to six feet deep, which occupies the surface uniformly, through a space more than three times greater than France. The soil requires no manure, and produces the immense amount of wheat which Russia pours into the granaries of Europe. It stretches in a broad belt from the river *Dnieper*, in a north-easterly direction, to the foot of the Urals, near Perm. In Lithuania and Poland the swamps and marshes are very extensive.

8. The SOUTH REGION consists of the treeless, monotonous tracts called Steppes, where a scattered population use turf and dried dung for fuel, and vast herds of semi-wild cattle and horses are sustained. The aspect of these steppes changes remarkably, with the season of the year, from prairie to desert. During the spring-rains, they are luxuriantly clothed with grass, and gay with wild flowers; but as summer ad-

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vances, with its heat and drought, the grass withers, the flowers fade; and, by the arrival of autumn, the entire vegetation is reduced to dust, which flies in clouds before the wind, or is raised aloft in huge columns by the whirling breeze. In winter the landscape exhibits a pathless expanse of snow, over which the *Mitel*, a north-east wind of almost incredible violence, blows at intervals. During its prevalence, the droves of horses cluster together in a circle, and form a compact mass, the better to resist its fury. But on the shores of the Black Sea, they have been known to be driven bodily before it, to perish in the water. East of the river Don, the steppes have but a scanty vegetation, owing to the soil being impregnated with saline particles; and salt lakes are numerous.

9. The *Volga*, the largest *River* of Europe, is entirely Russian, as well as the *Dnieper* and the *Don*, two first-class streams. The former issues from a small lake on the eastern slope of the Valdai hills, at an inconsiderable elevation above the sea, and follows a very winding course of 2,400 miles to the Caspian, for the direct distance from source to mouth is not more than 900. It drains, with its tributaries, one-fifth of Europe. The river flows in many places among beautiful hills, which contract its volume; but it nowhere forms rapids or waterfalls. It has always a considerable depth, which varies from seven to eighteen feet, and is navigable almost to its source. At *Astrachan*, towards its termination, when in flood, owing to the melting of the winter's snow, the vast stream has a width of nearly five leagues, and flows among a multitude of islands linked together by forests. It forms an extensive delta, and enters the Caspian by between sixty and seventy mouths. The Russians fondly call the Volga the "nursing mother" of the empire, owing to the great length of its navigation, its central position, and the value of its fisheries. The river is frozen over during a great part of the winter; but in the south there are always many openings, called the Lungs of the Volga, through which the air escapes.

10. The *Dnieper*, ancient *Borysthenes*, next in point of magnitude, and the third in rank of the European rivers, has a course of 1000 miles from the government of *Smolensk* to a gulf on the north-western side of the Black Sea. It has

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a noble appearance towards its termination, spreading out to the breadth of nearly a league, then parting into a number of channels, which wind through woods of oaks, alders, poplars, and aspens, whose vigorous growth bespeaks the richness of a virgin soil. Below *Kiev*, for upwards of a hundred miles, rocks in the bed of the river form rapids, and interrupt the navigation. In this part of its course, amid the wildest scenery, dwelt a race as wild, the *Cossacks* of the Dnieper, long independent, and prominent in the Russian, Polish, and Turkish wars. The *Don*, ancient *Tanais*, rises in the government of Tula, and flows 900 miles, without a waterfall or whirlpool, to the *Sea of Azov*. But numerous shallows, owing to sandbanks formed by the great quantity of sediment brought down by the river, interfere with its navigation.

11. The other rivers of consequence are the northern *Dwina*, *Mezene*, and *Petchora*, flowing to the Arctic ocean; the *Neva*, *Southern Dwina*, upper *Niemen*, and middle *Vistula*, tributary to the Baltic; the *Ural*, part of the boundary from Asia, entering the Caspian; the middle and lower *Dniester*, discharging in the Black Sea; and the *Pruth*, an affluent of the Danube, which divides Bessarabia from Moldavia, the Russian from the Turkish territories, the passage of which by the troops of the Emperor Nicholas led to the Anglo-French alliance against him.

12. A prodigious number of *Lakes* overspread the surface. They are freshwater expanses in the north-west, saline or brackish in the south-east. The great basins of the *Ladoga*, *Onega*, and *Saimas*, mutually connected, are the largest in Europe, covering areas respectively of 6338, 3280, and 1602 square miles; but their shores are low, and very unprepossessing. Their surplus waters are conveyed into the Gulf of Finland by the Neva, which discharges at a mean rate 116,000 cubic feet of water per second.

13. The rivers, lakes, and seas are connected by *Canals*, so that there is uninterrupted water communication between the Baltic, the Caspian, the Black Sea, and the White. But the entire country labours under the great disadvantage of having navigation suspended for a varying period in the winter, owing to the waters being ice-bound. In the north, the *Dwina* and the harbour of Archangel are frozen

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up for seven months of the year. The ports of the Baltic are closed for five, and ice of 3½ feet in thickness forms a firm pavement on the Neva at the capital. In the south, the shallow Sea of Azov, and the ports between Odessa and the Crimea, are almost always frozen during the months of January and February. At *Odessa* itself, the harbour is often so encumbered with drift-ice as to interfere with maritime operations.

14. Extending between 43° and 70° of north latitude, the *Climate* varies considerably. But it is everywhere colder than under corresponding parallels in western Europe, owing to the great length and severity of the winters, for the summers are excessively hot. The strongly contrasted temperature of the two seasons is the distinguishing feature of the climate, especially in the central and eastern districts. At *Astrachan*, the annual range of temperature is frequently from 100° Fahrenheit in summer, to 30° below zero in winter.

15. Nearly all the *Wild Animals* existing in other countries of Europe are found in different parts of Russia; and in addition, there are occasional examples of the Auroch, a huge and fierce bovine species, lingering in the Lithuanian forest of Bialowicza under imperial protection; and the Bactrian camel appears in the Crimea, and other southern districts, introduced from Asia often in the train of wandering tribes. Aquatic birds are numerous; and fish abound in all the lakes and rivers.

16. The *Natural Resources* of the country consist in a vast extent of fertile corn-growing land, minerals, woods, and fisheries. Iron is worked in Finland, and in various parts of the great plain; copper-sand skirts the foot of the Urals; but the mineral wealth lies chiefly on the Asiatic side of the chain. Coal is generally wanting, but the forests supply abundance of fuel, with timber for export, tar, pitch, turpentine, and potash. The preparation of some of these products goes back to a remote age, especially potash from birchwood. Hence the primitive Sclavonic name for April is *Beresosol*, or "birch ashes," in allusion to the month devoted specially to the employment. The *Fisheries* of the Volga and the Caspian are highly valuable. The principal objects of attention are four species of sturgeon, which are salted, while *Caviare*,

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the consumption of which is very great in Russia, is made from the roes, and *Isinglass* from the sounds, or swimming bladders. Sturgeons weighing 1200lbs. are sometimes taken.

17. European Russia is politically dividided into numerous governments, two of which, those of *Perm* and *Orenburg*, embrace large tracts on the Asiatic side of the Urals. They are in several instances of very great extent, that of Archangel alone considerably exceeding the entire area of the Austrian empire. Certain portions of the country, comprehending various governments, are known by distinct names, a classification which it is convenient to retain. These are:—I. The Baltic Provinces, including Finland; II. Great Russia; III. Little Russia; IV. West Russia, including Poland; V. South or New Russia; VI. East Russia; as shown in the following table:

I. BALTIC PROVINCES.

Governments.	Area, sq. m.	Pop. in 1858.	Chief Towns.
St. Petersburg	15,664	1,080,398	St. Petersburg, Cronstadt.
Esthonia	6,694	298,599	Revel, Hapsal.
Livonia	17,553	863.035	Riga, Dorpat.
Kurland or Courland	9,094	537,855	Mittau, Libau.
Finland	136,127	1,632,977	Helsingfors, Abo, Tornea.

II. GREAT RUSSIA.

Moscow	11,688	1,580,405	Moscow, Kolomna, Borodino.
Smolensk	20,372	1,084,481	Smolensk, Viasma.
Pskov or Pleskow	22,206	696,967	Pskov.
Tver	21,718	1,466,194	Tver, Torjok, Kiev.
Novgorod	43,968	812,454	Novgorod, Staraia-Russa.
Olonetz	50,022	285,945	Petrozavodsk, Olonetz.
Archangel	323,255	263,630	Archangel, Mezen, Onega.
Vologda	146,200	929,589	Vologda, Veliki-Oustioug.
Iaroslavl	17,149	928,445	Iaroslavl, Uglitch.
Kostroma	30,557	1,056,557	Kostroma.
Vladimir	17,658	1,221,720	Vladimir, Murom.
N. Novgorod	18,657	1,202,000	Nijni Novgorod, Arzamas.
Tambov	23,480	1,808,172	Tambov, Kozlov.
Riazan	15,024	1,894,077	Riazan, Skopin.
Tula	11,241	1,125,517	Tula.
Kalouga	11,496	1,006,671	Kalouga.
Orel	16,044	1,445,900	Orel, or Orlov, Eletz, Bolkhov.
Koursk	16,873	1,836,949	Koursk, Bielgorod.
Voronej	28,773	1,840,146	Voronej.

III. LITTLE RUSSIA.

Kief or Kiev	16,957	1,804,970	Kiev, Bogoslavl.
Tchernigov	19,085	1,401,879	Tchernigov, Nejin, Glukhov.
Poltava	22'568	1,753,144	Poltava, Kobyliaki.
Kharkov	17,956	1,502,139	Kharkov, Akhtyrka, Bielopolie.

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IV. WEST RUSSIA.

Governments.	Area, sq. m.	Pop. in 1856.	Chief Towns.
Wilna	24,893	840,379	Wilna, Kowno.
Grodno	12,112	827,200	Grodno, Brzesc-Litevski.
Vitebsk	16,533	748,524	Vitebsk, Polotsk.
Mohilev	17,510	873,888	Moghilev,
Minsk	41,183	983,138	Minsk, Bobruisk.
Volhynia	22,801	1,498,387	Jitomir, Bertitchev, Dubno.
Podolia	12,240	1,730,547	Kamienetz, Mohilev.
Bialystok	3,443	261,614	Bialystok.
Poland	46,362	4,696,919	Warsaw, Kalisch, Lublin, &c.

V. SOUTH OR NEW RUSSIA.

Iekaterinoslavl	25,208	1,039,597	Iekaterinoslavl, Nakhitchvan, Taganrog.
Kherson	23,356	1,083,852	Odessa, Kherson, Elizavetgrad.
Taurida	43,348	659,509	Sevastopol, Bakhtchiserai, Simferopol, Eupatoria, Kertch, Kaffa.
Bessarabia	16,878	990,274	Kichinev, Akerman, Ismail, Bender.
Don Cossacks	108,120	871,130	Tcherkask, Novo Tcherkask.

VI. EAST RUSSIA.

Kingdom of Kasan.

Kasan	[illegible]	[illegible]	Kasan, Tchistopol.
Viatka	53,061	2,051,944	Viatka.
Perm	57,821	2,012,308	Perm, Solikamsk, Bisaersk.
Simbirsk	24,246	1,118,605	Simbirsk, Syzran.
Penza	14,322	1,135,980	Penza, Saransk.

Kingdom of Astrakhan.

Astrakhan	86,530	414,526	Astrakhan, Krasnoiarsk.
Saratov	73,801	1,622,147	Saratov, Volsk, Sarepta.
Orenburg	138,869	1,919,590	Orenburg, Ufa, Uralsk, Zlata-oust.

18. The BALTIC PROVINCES, with FINLAND, extend along the shores of that sea, and of its northern gulfs. The former were wrested from Sweden by Peter the Great in 1721; the latter was acquired by conquest from the same power by the emperor Alexander I., in 1809. This division contains ST. PETERSBURG, the capital of the empire, in lat. 60° N., long. 31° E., seated on the low banks of the Neva, and some islands in the river, where it enters the eastern extremity of the Gulf of Finland. Little more than a century and a half ago, the site was a desolate swamp, now occupied by a city of 495,000 inhabitants, containing some of the most magnificent palaces and public buildings in Europe. The banks of the river are lined with stupendous granite quays; the streets are in general wide and regular, running in straight lines, and one, the *Nevski Prospekt*, is remarkable for its great length, extending upwards of two and a half miles. The principal part of the city is on the southern mainland. The grand edifices immediately adjoin the river, and consist of the Admiralty; the Imperial or Winter palace; the Palace of the Hermitage, with its fine Gallery

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of Pictures; the Marble palace, on the east; St. Isaac's church, and the colossal equestrian statue of Peter the Great, on a mass of granite, in an open area, on the west. St. Petersburg, owing to its low site, is subject to inundations, one of which, in 1824, swept away 8000 persons. *Cron-*

St. Petersburg.

stadt, its port, a strong fortress and naval arsenal, is on an island in the gulf, sixteen miles from the mouth of the Neva; and completely commands the approach to the city.

19. After the capital, *Riga*, on the southern Dwina, not far from its mouth, is the most important place in the Baltic provinces. It is the chief town of Livonia, from which great quantities of timber, corn, and hemp, are exported, brought by the river from the interior; and has about 71,000 inhabitants. *Dorpat*, a small inland town, in the same province, is the seat of a university, founded by Gustavus Adolphus of Sweden, with an observatory rendered celebrated by the astronomer, Struve. *Mittau*, of some literary note, is the chief town of Courland; and *Revel*, of Esthonia, a place of some antiquity on the coast, fortified and commercial. At *Narva*, in the government of St. Petersburg, Charles XII., with a small army of veteran Swedes, defeated the undisciplined host of Peter the Great, in the year 1700. *Helsingfors*, the present capital of FINLAND, on the north shore of the gulf, is chiefly of modern origin, guarded by the strong fortress of *Sveaborg*, consisting of seven fortified islands, and called the Gibraltar of the north. It was assailed with some success by the

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Anglo-French fleet, in 1855. *Abo*, the former capital of Finland, at the entrance of the Gulf of Bothnia, now a neglected place, has an antique cathedral of historic interest. Near *Tornea*, at the head of the gulf, close to the Swedish frontier, a mountain is much visited by travellers

Returning from Divine Service, Finland.

of different nations at midsummer, as the sun may then be seen all night from its summit.

20. GREAT RUSSIA includes an immense tract in the centre of the country, and on the north, which formed great part of the original territory of the empire. It contains *Moscow*, the former metropolis, with 370,000 inhabitants, on the small river *Moskva*, an affluent of the *Volga*. It is still the head-quarters and winter residence of the old nobility, and the place where the czars are crowned. The city has a most incongruous appearance, being half European and half Asiatic in the style of its buildings; but it had that aspect much more decidedly previous to its voluntary conflagration by the Russians in 1812, in order to expel the French. In the middle of the city stands the famous *Kremlin*, or citadel, on a height, the base of which is washed on one side by the river. It is nearly triangular in form, and two miles in circuit. The interior consists of a medley of palaces, churches, monasteries, arsenals, museums, and buildings of various kinds, erected without any attempt at unity of design, and exhibiting every variety of taste, grotesque, bar-

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baric, and pleasing. The great bell twenty-one feet high, twenty-two feet in diameter in the broadest part, and nearly two feet thick at the lower edge, weighing upwards of 190 tons, is an object of curiosity merely, being cracked and useless. Moscow is the centre of a vast inland commerce.

21. Great Russia is the most densely peopled part of the empire, and besides Moscow, contains a large number of towns of considerable size, but of no special interest, as *Tver*, *Smolensk*, *Jaroslavl*, *Tambov*, *Orel*, *Kalouga*, and *Tula*. The two latter towns have abundance of iron ore, with several large iron works, in their neighbourhood. *Novgorod*, near the north extremity of lake *Ilman*, a small decayed place, may be noticed for its former importance, retained to the middle of the sixteenth century. It was the head of an independent state, had a circuit of more than forty miles, with a vast population, and was so powerful as to originate the saying, "Who can resist God and Novgorod the Great?" *Nijni*, or Lower *Novgorod*, a distinct city, still flourishes at the confluence of the *Volga* and the *Oka*, and is celebrated for its great annual fair, in the months of July and August, the largest in Europe, and probably in the world. It is held on a low flat, between the rivers. Besides an enormous number of booths, erected for the occasion, there is a permanent market of stone, executed under the direction of General Batancour in 1817. It contains 2522 store-rooms, with as many chambers attached to them for the owners of the goods to live in. Buyers and sellers, common labourers, caravan drivers, idlers and pleasure seekers, average a daily attendance of from 200,000 to 300,000. They are men from the far east and west, Thibetians, Bokharians, Armenians, Greeks, Finns, Parisians, and English, who exchange the products of their respective countries, and form a Babel of tongues which completely overpowers the language proper to the locality. The value of the goods sold is upwards of £7,000,000. *Archangel*, on the *Dwina*, near the *White Sea*, is the most northerly port of Russia; and was the first Russian port entered by the English.

22. Little Russia, the original nucleus of the empire, lies directly south of the preceding district. It contains the first capital, *Kiev*, a large city on the *Dnieper*, which is here spanned by a suspension bridge, the work of an English engineer. The place is crowded with churches and convents,

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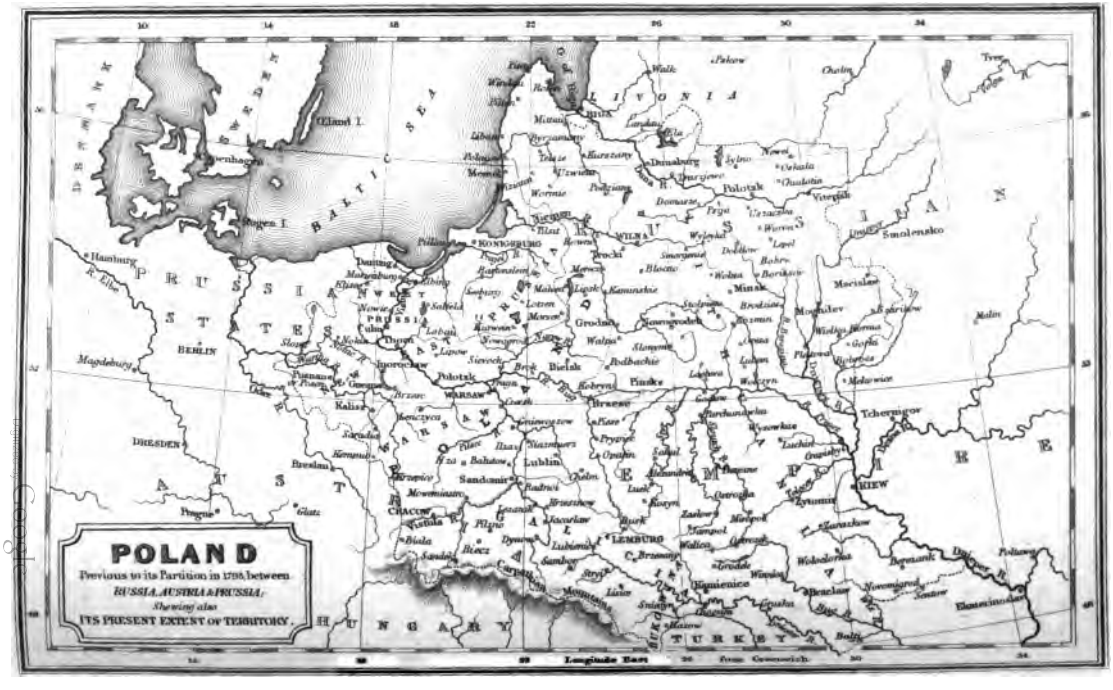
POLAND
Previous to its Partition in 1798, between
RUSSIA, AUSTRIA & PRUSSIA;
Shewing also
ITS PRESENT EXTENT OF TERRITORY.
BALTIC SEA
LIVONIA
PRUSSIA
STATES
AUSTRIA
HUNGARY
TURKEY
DENMARK
SWEDEN
Oeland I.
Copenhagen
Rugen I.
Hamburg
R. Elbe
BERLIN
Magdeburg
DRESDEN
Breslau
Prague
Glatz
Danzig
Elbing
Pillau
KONIGSBURG
Memel
Wilna
Grodno
Bielsk
Pinsk
Brzesc
Lublin
Sandomir
Kalisz
Kielce
Lemberg
Kamienice
Kiew
Tchernigov
Smolensko
Minsk
Polotsk
Dunaburg
Riga
Pskow
Chalm
Tyrn
Malin
Longitude East
from Greenwich

whose richly gilt domes and spires render the distant views imposing. It was long regarded as a kind of northern Jerusalem; and is still venerated by the Russians as a holy city, who repair to it in crowds on pilgrimage. Near *Pultowa*, a small town, is the battle-field where Charles XII., the conqueror at *Narva*, was overthrown by the conquered Peter the Great in 1709. On the top of a mound, a large white cross bears the inscription, "Here are interred the Swedes who fell in the great day of Pultowa."

23. WEST RUSSIA consists of the provinces obtained upon the infamous partition of Poland in 1772 and 1793, between Russia, Prussia, and Austria; and of the Kingdom of Poland, as constituted by the Congress of Vienna in 1815, and placed under Russian protection, but incorporated with the empire, under pretext of an insurrection, in 1831. *Warsaw*, the former Polish capital, on the left bank of the *Vistula*, with its suburb *Praga* on the opposite shore, ranks after Moscow in population, containing 160,000 inhabitants. There are said to be more Jews in the city than in any other in Europe. In the immediate neighbourhood is the superb castle of *Villanow*, occupied by the famous king, John Sobiesky, where he died in 1696. *Wilna*, on an affluent of the *Niemen*, the ancient capital of Lithuania, is also a considerable place, with a large Jewish population.

24. SOUTH RUSSIA embraces the country extending from near the *Danube*, along the shores of the *Black Sea*, to the *Caucasus*, including the *Crimean* peninsula. It was wrested from Turkey in the reign of Catherine II. *Odessa*, founded in 1796, on the north-western shores of the *Black Sea*, overhangs a large and beautiful bay, and ranks after St. Petersburg in importance as a port. The town contains about 108,000 inhabitants, and is scarcely more famous for its shipments of corn, than for its clouds of dust. *Bender*, a small place on the *Dniester*, is of note as the residence of Charles XII. after his defeat at Pultowa. *Cherson*, a considerable town of modern date, on the *Dnieper*, is of interest to Englishmen as the scene of the death of Howard the philanthropist, in 1790. An obelisk marks his grave in the vicinity, erected by the emperor Alexander. The latter ended his days at no great distance, at *Taganrog*, in 1825, a thriving port on the northern shore of the Sea of *Azov*.

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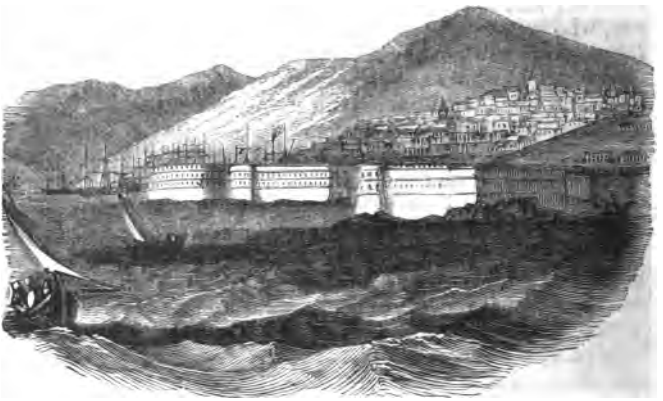
Simferopol, the present capital of the *Crimea*, is a small inland town of no interest.



Sebastopol.

Sebastopol, on a fine inlet of the south-west coast, once a military stronghold and naval arsenal, will be famous in future history for its siege by the combined forces of England and France, which reduced it to a heap of ruins. The siege commenced in October, 1854, and terminated in the September following. By the treaty of Paris, in 1856, Russia stands engaged not to construct or maintain any arsenals, naval or military, on any shore of the Black Sea. The Crimea is nearly equal in extent to twice the area of Yorkshire. It belongs principally to the region of the Steppes, but has beautiful and bold mountain scenery on the south eastern side. Its former capital when a Tartar Khanate, *Backtchiserai*, has a considerable Tartar population, and contains the palace of the Khans in good preservation.

25. EAST RUSSIA comprehends the ancient Tartar kingdoms of *Kasan* and *Astrakhan*, which were added to the empire in the sixteenth century by the arms of Ivan the Terrible. The city of *Kasan*, not far from the east bank of the *Volga*, is large and well built, the seat of a university, the see of an archbishop, a principal emporium for Siberian produce, and possesses considerable manufactures. *Astrakhan*, on an island in the Volga, forty miles above its mouth, is almost entirely built of wood, surrounded with fine or-

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chards and vineyards, which give it a pleasing appearance. It is the chief entrepôt of the commerce of Russia with Persia, Bokhara, and India, by means of the Caspian Sea.

26. According to a census taken at the accession of the present emperor, in 1855, the empire contains a total *Population* of 63,000,000, of whom about 60,000,000 are within its European limits; and are found in the greatest proportion in the central districts, especially around Moscow. This number, positively great, is very small in relation to the area of the country. No state in Europe presents such a variety of races; but they are referable to a few great groups. The vast majority of the people are of *Sclavonic* origin, as the Russians proper, the Poles and Cossacks, chiefly in the middle and western provinces. The Finns, Lapps, Samoiedes, and other tribes scattered over the north are of the *Tschoudic* or *Finnish* stock, while the Tartars, Turkomans, and Kalmucks, in the east and south-east, belong to the Mongolian variety of mankind. Esthonians, Lettons, and Kures in the Baltic provinces, are, perhaps, *mixed Sclavonic* and *Finnic*. In the same district are Germans, also planted in colonies on the Lower Volga, and in the southern governments, who, with a number of Swedes in Finland, represent the Germanic and Scandinavian branches of the *Teutonic* stock.

27. The established form of *Religion* is the Greek church, to which nearly all the Russians belong, with numerous proselytes among the other races; but some of the latter have been driven within its pale by regiments of Cossacks. A carnival season is observed, following Lent instead of preceding it, as in Italy. On the eve of Easter Sunday, a death-like silence prevails in the streets of Moscow, till suddenly at midnight it is terminated by the cannon of the Kremlin, and the bells of the churches. At this signal the city is illuminated; the people leave their dwellings; and with mutual felicitations of "Christ is risen," abandon themselves to gluttony and drink. Most of the Poles are Roman Catholics; the Germans, Swedes, and many of the Finns and Lapps, are Lutheran or Moravian Protestants; the Tatars and Turkomans are Mohammedans; the Kalmucks profess a species of Buddhism; and some northern nomadic tribes are idolators or fetishes.

28. The *nobles*, a large class, often in possession of im-

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mense estates, hold their titles by hereditary right, but have no political privileges. The *clergy* of the dominant church are, numerically and influentially, an important body. They are exempt from taxation and corporal punishment, are in general very ignorant, and often addicted to dissolute habits. The *burghers*, chiefly engaged in trade, with the *free agriculturists*, either cultivating their own lands, or tenants, or farm-labourers, form a considerable section of the population. The *military* and the *government employés* constitute likewise an immense aggregate. But still the great bulk of the nation, amounting to more than two-thirds of the entire people, are *serfs* or slaves, in a state of abject vassalage to the crown and the nobility. Though generally attached to the soil, they are in almost all other respects at the absolute disposal of their masters; and may be bought, sold, or exchanged, with little more ceremony than cattle, being in the eye of the law considered as *things*, not as *persons*.

29. There are seven *Universities*, those of St. Petersburg, Moscow, Dorpat, Wilna, Kharkov, Kasan, and Kiev. Some attention is paid by the government to education for the higher and middle classes in the important towns. But in relation to the masses, public instruction can scarcely be said to exist in Russia. The serfs are buried in the profoundest ignorance, and addicted to the grossest superstitions. They are consequently not conscious of their own degradation; are a careless race, contented with the coarsest diet; and arbitrary power has hitherto been in much less danger from them than from their lords.

30. Russia supplies the other countries of Europe with a very large amount of raw produce, as tallow, flax, hemp, corn, skin, furs, bristles, timber, copper, and iron. These articles are exchanged chiefly for raw cotton and silk, fine manufactured goods, wines, coffee, sugar, and other colonial produce. Manufactures of cotton, silk, and woollen fabrics, chiefly of the inferior kind, are carried on in the principal towns; and high duties are laid upon foreign goods of this description, with the view of protecting native industry. Arms of various kinds, and of admirable workmanship, are made; sail-cloth and cordage are produced for export; as well as the well-known Russia leather, valued for its colour and odour, largely used in bookbinding. The important seats

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of foreign commerce are Archangel, on the White Sea; St. Petersburg, Revel, and Riga, on the Baltic; Odessa, on the Black Sea; and Astrakhan, on the Caspian.

31. The *Government* is an hereditary despotism of the most absolute description. All power emanates from the sovereign, whose authority is without limit or control; and is presumed to be derived alone from God. His official title of *Samoderjetz*, or autocrator, signifies that he governs simply by his own will. Originally the sovereigns were called grand-dukes, which is still the style of the heir apparent, and other princes of the blood. They afterwards assumed the title of *czar*, another form of *Cæsar*, adopted from the Roman emperors. This was first used by Ivan III., who married a princess of the fallen imperial Byzantine line in 1472, and introduced the double-headed black eagle, of Byzantium, as the cognisance of Russia, which is still retained. Peter the Great first assumed the style of Emperor.

CENSUS OF THE RUSSIAN EMPIRE, TAKEN AT THE ACCESSION OF THE PRESENT EMPEROR.

Clergy of Russian church—enormous number of	510,000
That of the Tolerated Creeds	35,000
Hereditary nobility	155,000
Petty bourgeoisie, including discharged soldiers	425,000
Foreigners residing temporarily	40,000
Different bodies of Cossacks colonized on the Oural, the Don, the Volga, the Black Sea, the Baikal, with the Baschkirs, and the irregular Kalmucks	2,000,000
Population of the towns, middle and lower classes	5,000,000
" " country parts	45,000,000
Wandering tribes	500,000
Inhabitants of the Trans-Caucasian Provinces	1,400,000
" " Kingdom of Poland	4,200,000
" " Grand Duchy of Finland	1,400,000
" " Russian Colonies in America	71,000
	60,736,000

At the accession of the Emperor Nicholas, the census then taken gave only 51,000,000. This large increase in the space of thirty years may be readily understood when extension of territory is considered. Present extent amounts to 22,000,000 of square kilometres. The kilometre is five-eighths of a mile. Length of coast, 27,000 kilometres. The empire contains forty-two different peoples, divided into twelve principal races, the most numerous of which is the Sclavonian, which includes the Russians properly so called; the Poles, the Cossacks, and the Servian colonies of the Dnieper, inhabiting the finest and most important provinces.

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Constantinople.

TURKEY IN EUROPE.

1. The Turkish or Ottoman empire consists of a large portion of south-eastern Europe, south-western Asia, and north-eastern Africa, comprehending some of the most celebrated, best situated, and naturally fertile districts of the continents to which they belong. But the tie is very loose which connects a vast proportion of the territory with the authority of the same supreme head, the Sultan at Constantinople, who is merely acknowledged by annual tribute, or some other concession, as the Suzerain or liege-lord of extensive provinces, without right of interference in internal affairs.

2. The *European* division of the empire includes the largest part of the great south-eastern peninsula of Europe. It is bounded on the north by the Russian and Austrian dominions; on the south by Greece; on the west by the Adriatic Sea; and on the east by the Greek Archipelago, the Sea of Marmora, and the Black Sea, with their connecting straits. The country thus enclosed extends about 650 miles between its extreme northern and southern limits, by 700 miles between the farthest eastern and western; and has an area of about 203,000 square miles, including the *Islands* politically attached to it. The principal of these, *Candia*, the ancient *Crete*, at the south entrance of the Archipelago, has been in the possession of the Turks since the year 1669, when its capital of the same name was wrested from the Venetians after a siege of twenty years, the longest on re-

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TURKISH EMPIRE
AUSTRIA
RUSSIA
BLACK SEA
CASPIAN SEA
ITALY
MEDITERRANEAN SEA
ARABIA
AFRICA
TRIPOLI
LYBIA
BARCA
EGYPT
CRIMEA
PERSIAN GULF
REFERENCE TO THE PROVINCES
IN EUROPE
1 Bosnia
2 Servia
3 Walachia
4 Moldavia
5 Albania
6 Roumelia
7 Bulgaria
8 Thessaly
IN ASIA
1 Anatolia
2 Roum
3 Armenia
4 Karmania
5 Orfah
6 Kurdistan
7 Bagdad
8 Sevia
9 Sheharzond
10 Marash

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cord. The island has a length of 160 miles, but is very narrow. It contains towards the centre the classical *mount Ida*, celebrated for a cavern of great extent and intricacy, which answers to ancient accounts of the famous labyrinth of Minos.

3. The *Coast Line* of Turkey, on the side of the Adriatic, embraces the gulf of *Arta*, at its south extremity, off which the great naval battle of Actium was fought, between Augustus and Mark Antony, B.C. 31, which secured to the former the mastery of the Roman world. Several deep bays and gulfs also mark the opposite eastern coast, that of the Archipelago. This large offset of the Mediterranean, studded with islands, has on the north the gulfs of *Contessa* and *Salonica*, between which is the remarkable promontory of *Mount Athos*, called by the Greeks *Agion Oros*, and by the Franks *Monte Santo*, both names meaning "Holy Hill." It consists of a mountainous ridge, twenty-five miles in length by four in breadth, rising abruptly from the water, with its lower sides clothed with forests of oak, pine, and chestnut, attaining at the extremity the height of 6778 feet. From an early period, the ridge has been occupied by a number of Greek monks, who live in about twenty fortified monasteries, and attend chiefly to horticulture and rearing bees. The huge promontory is joined to the mainland by a low narrow isthmus, through which Xerxes cut a canal for the passage of his fleet, B.C. 480, to save the doubling of the headland, remains of which are still traceable.

4. The chief interest of the *Eastern Coast* lies in its close approach to the mainland of Asia. Towards the north-eastern extremity of the Archipelago, the channel of the *Dardanelles* opens, which is less than a mile in width at the narrowest part, and separates European from Asiatic shores. This strait, the *Hellespont* of antiquity, is renowned for historic associations, having been crossed by the armies of Xerxes and Alexander; and by the Turks on their first invasion of Europe. It follows a winding course of forty miles to the Sea of Marmora, ancient *Propontis*, a large lake-like expanse, called after *Marmora*, or *Marble Island*, within its limits, where that material abounds. At the farther end, another strait of about twenty miles leads to the Black Sea; and here again the shores of Europe and Asia are within a mile of each other. This is a fine natural canal, now called the *Channel of Constantinople*, anciently the *Thra-*

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cian Bosphorus, the banks of which are thickly strewed with palaces, villas, villages, woods, vineyards, and gardens; while castellated ruins occasionally add to the beauty of the scene.

5. The *interior* of the country consists of an extensive central nucleus of elevated plains and rugged highlands, from which a descending series of table-lands extend generally towards the coasts, intersected by various ranges of mountains, diverging from the same point. North-westward, stretch the *Dinaric Alps*, joining the great Alpine system of Europe. Eastward, the chain of the *Balkan* runs to the Black Sea. South-eastward, the mountain-chain *Despoto-Dagh* (ancient *Rhodopé*) extends into the plains which border the north coasts of the Archipelago. Southward, a range follows the direction of the peninsula into Greece, of which the classical mountain, *Pindus*, forms the southern extremity, with *Olympus*, *Pelion*, and *Ossa* as offsets on the Gulf of Salonica. None of the Turkish mountains reach the snow line, though snow lies on many till summer is far advanced. A few rise to 9,000 feet or more; but the general elevation is very much less. On the north-east, the country is a vast plain, the third in Europe in extent, comprehending the level regions of *Wallachia*, *Moldavia*, and *Bulgaria*.

6. The country is almost everywhere well-watered. The *Danube*, after forming the frontier from Hungary, has the whole of its lower course in the Turkish dominions; and forms, in many places, an expanse of water like a lake or inland sea. But as it approaches the Black Sea, the river divides into several branches, which flow between low swampy islands covered with bulrushes, and are scarcely navigable, except by small craft, owing to encumbering sandbanks. This grand stream, with its affluents, the *Save* on the Austrian frontier, the *Pruth* on the Russian, the *Morava* from Servia, and the *Sereth* from Moldavia, are the principal rivers in the north. In the south, connected with the Archipelago, are the *Maritza*, the *Struma*, the *Vardar*, and the *Salembria*, whose ancient names, the *Hebrus*, *Strymon*, *Axius*, and *Peneus*, often occur in classical literature. But they are not of important size, and are much reduced in volume in the summer months. Lagoons line the lower course of the Danube; small lakes are numerous in several of the provinces; and a few spacious ones are found on the Albanian highlands.

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7. The *Climate* is marked with considerable diversity. On the great north-eastern lowlands, the winters are extremely rigorous, and the summers correspondingly hot. But south of the Balkan, the temperature is in general more uniform; and lower than at places of the same latitude in Italy and Spain. Great and sudden changes are experienced at Constantinople, from the shifting of the wind to opposite quarters, north and south. A north wind blowing over the Black Sea gives coolness to the days of summer, with frost and snow to those of winter; while a south wind will render a December day uncomfortably warm, and is oppressively hot in the summer months. In the more southerly provinces, the climate is extremely genial and delightful.

8. *Forests* of oak, elm, beech, lime, and pine extensively clothe the northern highlands, while woods of apple, pear, cherry, and apricot trees appear on the Wallachian plains. More southerly, the sycamore, plane, maple, carob, walnut, and chestnut are the common trees, with luxuriant myrtles and laurels, gardens of roses, jasmine, and lilac. In the extreme south, olives, cotton, tobacco, oranges, lemons, citrons, figs, and pomegranates are produced in perfection. The vine is grown over the whole country, but the fruit on the banks of the Danube is far inferior to that obtained on the shores of the Archipelago.

9. The country politically comprehends the four *eyelats* or governments of *Roumelia, Silistria, Bosnia,* and *Jazayirs* or *the Islands,* besides the territories which are only nominally part of the empire, namely, *Montenegro, Servia, Moldavia,* and *Wallachia.* The two former governments are the most extensive, and are under the rule of Pashas of the highest rank. Minor divisions are into *Livas,* or *Sandjaks,* and districts of smaller dimensions. But *Turkey* is best known by its older geographical divisions of *Roumelia, Bulgaria, Thessaly, Albania,* and *Bosnia,* with the states just mentioned as but very slightly connected with the authority of the Sultan. The following table will show the chief towns:

Provinces.	Towns, with Population.
1. Roumelia	Constantinople, 700,000—Adrianople, 100,000—Salonica, 70,000—Philippoli, 30,000—Eski-Sagra, 18,000—Islivno, 20,000—Gallipoli, 17,000.
2. Bulgaria	Sophia, 50,000—Shoumla, 30,000—Rutschuk, 30,000—Sillstria, 24,000—Sistova, 20,000—Nikopoli, 20,000—Widin, 20,000—Varna, 16,000.
3. Thessaly	Yeni-shehr (Larissa), 25,000—Pharsalia, 6,000.
4. Albania	Scutari, 40,000—Janina, 38,000—Jacova, 18,000—Durazzo, 10,000.

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Provinces.	Towns, with Population.
5. Bosnia	Bosna-serai, 60,000—Zoornik, 14,000—Travnik, 9,000.
6. Servia	Belgrade, 30,000—Pristina, 10,000—Kragujevatz.
7. Wallachia	Bucharest, 80,000—Krajova, 8,000—Slatina.
8. Moldavia	Jassy, 25,000—Galatz, 36,000—Niamtz.
9. Montenegro	Cettigne.

10. Roumelia includes the country between the Archipelago and the Balkan. It contains the capital of the empire, Constantinople, called *Stamboul* by the Turks, in lat. 41° N., long. 28° 55′ E., finely situated on the western shore of the *Bosphorus*, at its south extremity, where the waters of the strait mingle with those of the Sea of Marmora. An inlet of the former washes the north side, and forms the harbour, called the *Golden Horn*, from its singular beauty and curving shape. The city is surrounded by walls, now in a ruinous condition. Seven gates lead into it from the harbour, seven from the Sea of Marmora, and six from the land. At one of the latter, the Top Kapoussi, or Cannon-gate, which formerly bore the name of St. Romanus, the last of the Constantines fell in the defence of his capital, and the Ottoman conqueror entered. The interior is a confused mass of narrow, winding, and dirty streets or lanes, crowded with wooden houses. But, as majestic mosques crown the summits of hills with their massy domes and lofty minarets, few places have a more magnificent appearance at a distance. Seven mosques are dignified with the title of Imperial, having had imperial founders. That of St. Sophia's, originally a Christian church, is the largest, but yields to the Solimanié, erected by Soliman the Magnificent, as a monument of architecture. The imperial palace, called Seraglio by the Franks, is a group of structures overlooking the Bosphorus and the opposite shores of Asia, rather more than a mile distant, on which stands *Scutari*, where numbers of our soldiers of the Crimean army are interred. *Constantinople* is the chief seat of the foreign trade of Turkey, and ranks after *London* and *Paris* in point of population, which is probably not far short of 700,000, including the suburbs.

11. *Adrianople*, next to the capital in size, derives its name from the Roman Emperor Adrian. It is an inland city, seated near the Maritza, in the midst of a fine plain celebrated for its roses, from which a considerable quantity of ottar of roses is prepared. *Gallipoli*, a port at the northern entrance of the Dardanelles, where morocco leather is

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extensively prepared, is of interest, as the first important post in Europe captured by the Turks. A spot near it bears the name of *Gaziler Iskelssi*, or the Victor's Harbour, in memory of their first landing from Asia, in the year 1354. In the same neighbourhood, during the late war with Russia, the British and French troops first encamped on Turkish soil. *Salonica*, at the head of a gulf of the Archipelago, is the largest provincial seaport, the seat of very extensive commerce, and has considerable manufactures of leather, cotton, carpets, silk, and metal goods. It represents the ancient *Thessalonica*, intimately connected with the travels and writings of the Apostle Paul. Of *Philippi*, in this region, which has the same interesting association, and was the scene of a great battle between Brutus, Cassius, and Mark Antony, there are only a few remains on a hillside, ten miles inland from the small port of *Cavallo;* and *Pella*, the birth-place of Alexander the Great, is reduced to scarcely distinguishable ruins.

12. BULGARIA comprises the country between the Balkan and the Danube; and has *Sophia* for its chief town, a large place in the western portion of the province, on one of the lines of road across the mountains. *Schoumla*, in the eastern part of the range, famous for its brass and iron manufactures, and strongly fortified, has more than once arrested the march of the Russian armies. *Widin*, *Rustchuk*, *Sistova*, *Nicopoli*, *Turtukai*, and *Silistria* are commercial and fortified towns on the south bank of the Danube, often mentioned in the wars with Russia. Opposite to Turtukai, on the north bank of the river, is *Oltenitza*, where the Turks overcame the Russian forces in 1853. *Varna*, the principal port of Turkey on the Black Sea, and an important fortress, was the place where the English and French armies embarked for the Crimea.

13. THESSALY lies on the west coast of the Archipelago, and consists of a garden-like valley environed with towering mountains. Its fertility, grand and beautiful scenes, have long been celebrated, especially the Vale of Tempe, a deep gorge between the ridges of Olympus and Ossa, through which the *Selembria* flows to the sea. It is still as renowned for its horses as when Alexander received his famous steed, Bucephalus, from its pastures. *Larissa*, the chief

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town, a place of considerable manufactures, is surrounded with groves of oranges, lemons, citrons, and pomegranates. Twenty miles to the south is *Pharsala*, memorable for the victory gained by Cæsar over his rival Pompey.

14. ALBANIA, divided into southern, middle, and northern, is a rugged district stretching along the Adriatic. It contains *Janina*, picturesquely seated on the shore of a spacious mountain lake, a large populous place while it remained the stronghold of Ali Pasha, in the early part of the century, but since gone to decay. *Scutari*, situated in a highly-fertile district, is now the most important town, and the centre of great inland trade. *Durazzo*, almost the only port of Turkey on the Adriatic, is the ancient *Dyrrachium*, at which passengers between Italy and Greece landed and embarked from and to *Brundusium*, in the days of the Roman empire. It carries on an active trade in British manufactures by way of Trieste.

15. BOSNIA is a north-western district, including in its government that portion of *Croatia* which belongs to Turkey, and the province of *Herzegovina*, so called from *Herzog*, "duke," the title of its princes previous to the reduction of the country by Soliman the Magnificent. *Bosna-serai*, the capital, is a large trading and manufacturing town, called the Damascus of the north, from its beautiful situation and numerous gardens. But *Travnik*, from its central position and strong citadel, is the residence of the pasha.

16. SERVIA, a nearly independent principality, extends along the south bank of the Danube, by which it is separated from Hungary, and comprehends nearly the whole basin of the Morava, one of its principal affluents. The people are mostly peasants, occupy villages in the gorges of the mountains, or in the depths of the forests. They have preserved their Sclavonic nationality in its full integrity, and possess a literature rich in popular poetry. Owing to successive insurrections in the early part of the century, they now elect their own sovereign, who has the style of prince; are uncontrolled in internal affairs; but are under the authority of the Sultan as to external relations, to whom a small annual tribute is paid. The Turks also garrison a few frontier towns, chiefly *Belgrade*, once a large and flourishing city, now decayed, seated on the Danube opposite to its confluence with the Save. It is conspicuous in the story of the past for many bloody struggles for its possession; and

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is of some present interest, as the most advanced outpost of Mahommedan power towards Europe in general. *Kragojevatz*, a central town, is the seat of the native Servian government, otherwise wholly unimportant.

17. WALLACHIA and MOLDAVIA, north of the Danube, though separate provinces, have a common natural character, being great levels; and are identical in their inhabitants, language, religion, and history. They are quite independent in affairs of internal administration, elect their own hospodars, or governors; but the Sultan is recognised as the lord-paramount. *Bukharest*, the Wallachian capital, and *Jassy*, the Moldavian, have a large number of churches, but most of the houses are mean wooden cabins, scattered over extensive spaces, in consequence of gardens being interspersed. The former has an evil reputation, as one of the most dissolute places in Europe, all classes being inveterate gamblers. The latter, once a Roman town, has it name from *Jassiensis*, the nineteenth legion stationed at it. *Galatz*, on the north bank of the Danube, is the common port of both principalities, and a chief steam-packet station.

18. MONTENEGRO, the "black mountain," designates a scanty territory on the north of *Albania*, in which its inhabitants, though claimed by the Sultan as subjects, have maintained themselves in perfect independence for four centuries, aided by the natural difficulties of the country. The surface presents a succession of wild limestone ridges, occasionally diversified with lofty peaks, but resembling in some parts a sea of enormous waves turned into stone. Its rugged aspect may be inferred from a proverbial saying, that "when God was in the act of distributing stones over the earth, the bag that held them burst, and let them all fall upon Montenegro." The government is vested in hereditary chieftains, who take the title of *Vladika*, a "prince" or "ruler," assisted by a council of elders. The people, a fierce and uncivilised race, are distinguished by intense hatred of the Turk and of the Pope. Their chief town, *Cettigne*, a mountain village, and the residence of a Greek archbishop, is distant a few hours' journey from the Austrian port of *Cattaro*, where produce is exchanged for arms, spirits, and manufactures.

19. The *Population* of European Turkey is commonly

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stated at 15,000,000. This number was returned when a census was taken by the government in 1844; but it is considered by many as being far too high. The *Sclavonic* races of *Bulgaria, Servia, Bosnia, Croatia, Herzegovina,* and *Montenegro* form much the largest body, speaking dialects of the Sclavonian language. Next are the *Græco-Latin* inhabitants of *Wallachia* and *Moldavia,* who call themselves *Rumanyos,* or Romans, and are descended from the Roman colonists planted among the ancient Dacians, speaking a language substantially derived from the Latin. The *Turks,* of Asiatic origin, rank next in number, who spurn that name as one of reproach; and style themselves Ottomans, or Osmanli, from the founder of the empire, Ottoman, or Osman. The *Albanians,* frequently called *Arnauts,* supposed to be descended from a tribe of the ancient Illyrians, are also numerous, as well as the *Greeks* proper, who are principally found in the capital, the large towns, and southern districts. *Armenians, Jews,* and *Gypsies* make up the remainder of the population.

20. The *Turks,* the politically dominant people, are supposed to be decreasing in number. They are generally grave, solemn, and taciturn—proud, sensual, phlegmatic, and indolent. Yet they are capable of vigorous exertion in great emergencies; and, when thoroughly roused, their passions are terrible, and their cruelty remorseless. On the other hand, hospitality, honesty, and truthfulness are universally ascribed to them. Most of their usages are the very reverse of our own. Shaving the head is with the Turks a custom, with us a punishment. We take off our gloves before the sovereign, they cover the hands with their sleeves. We enter an apartment with the head uncovered, they enter with the feet bare. With us the women commonly appear in gay colours, and the men in sombre; with them it is exactly the reverse. In our rooms the roof is white, and the walls are coloured: in theirs the walls are white, and the ceiling coloured. In our fashionable circles, dancing is considered an accomplishment; they deem it a disgraceful employment. They seclude their females, while with us, women have the same liberty as men.

21. In *Religion,* all the Turks, with a large proportion of the Albanians and Bosnians, are Mohammedans. The former especially are strict observers of the fasts, ablutions, and quintuple daily prayers enjoined by their creed. The

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Sclavonic races, Moldo-Wallachians, and Greeks proper, are members of the Greek church, under the jurisdiction of the Patriarch of Constantinople.

22. The *Government* is an hereditary despotism, but the daughters of the Sultan never succeed to the throne, nor can a daughter transmit to her male offspring any right to the supreme power. The highest title of the Sultan is *Padishah*, father of all the sovereigns of the earth, analogous to king of kings. He is also styled Vicar of God; Successor of the Prophet; Pontiff of Mussulmans, or Commander of the Faithful; Refuge of the World; Shadow of God; and the Man-slayer. These titles have either obvious Mohammedan allusions, or are common Orientalisms. The last refers to the unlimited power formerly enjoyed by the sovereigns over the lives of their subjects. It has now become a dead letter; for, by edict in 1839, all classes were formally guaranteed in the possession of their lives and liberties, unless convicted of crime. In administering the affairs of the empire, the Sultan is assisted by thirteen ministers, at the head of whom is the Grand Vizier. The cabinet council is called the *divan*, from the fact of its meetings being first held in a room of the seraglio, fitted with a divan, or wooden bench, placed along the wall, covered with cushions. The descriptive terms applied to the government—the *Porte*, and the *Sublime Porte*—are derived from the practice of issuing imperial edicts from the principal porte, or gate, of the imperial residence; and from the ancient usage of Oriental sovereigns and sheikhs transacting important business at the gates of towns and palaces. The term *court*, used in the same relation by the western nations, had a similar origin.

23. The Turkish *language* is much interlarded with Arabic and Persian words; and the alphabet is the same as the Arabic, with a few additional letters. The characters are written from right to left, in a diagonal direction. It is easy to speak, but difficult to read, as the vowels are generally omitted, while no marks of punctuation are observed. A knowledge of it may be dispensed with in European Turkey; but Greek, Albanian, Bulgarian, or Wallachian is necessary according to the district visited. The most useful of the European languages in all the countries on the eastern shores of the Mediterranean, is the Italian, and next the French.

24. There are four main routes between England and

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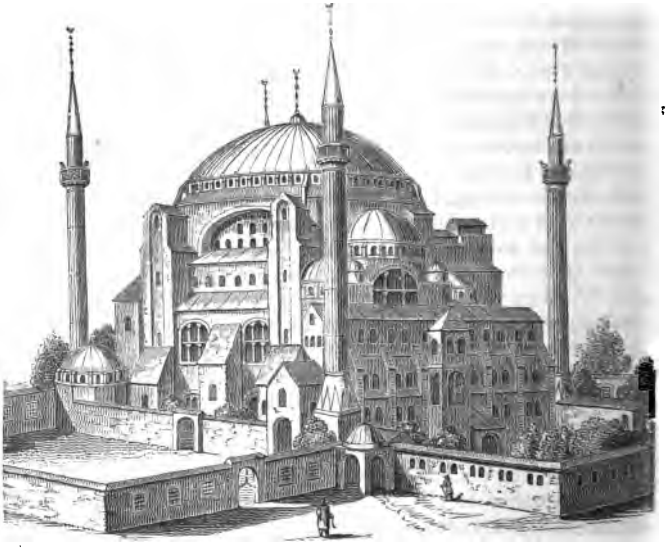
Turkey. 1. From *London, vid Ostend, Cologne, Dresden,* and *Prague,* to *Vienna,* in about seventy-two hours; and thence to *Constantinople,* by the *Danube* and *Black Sea* steamers, in about seven days; or leaving the *Danube,* the traveller may proceed with post-horses from *Belgrade* to *Constantinople.* The tatars (couriers) perform this distance, 627 miles, in seven days; but Mr. Layard, in 1842, accomplished it in the extraordinarily short space of five days, to the admiration of the Turks. 2. From *London* by the same route to *Vienna,* and thence to *Trieste* in about five days; and from *Trieste* to *Constantinople* in seven days, by the Austrian Lloyd's steamers. 3. From *London* to *Southampton,* and thence by the Peninsular and Oriental Company's steamers, by *Gibraltar* and *Malta,* to *Constantinople,* in about fifteen days. 4. From *London* to *Boulogne, Paris,* and *Marseilles,* and thence, by the French steamers, to the *Levant,* in about twelve days. A passport is required to enter the dominions of the Sultan, though it is not always demanded.



Santa Sophia, Constantinople.

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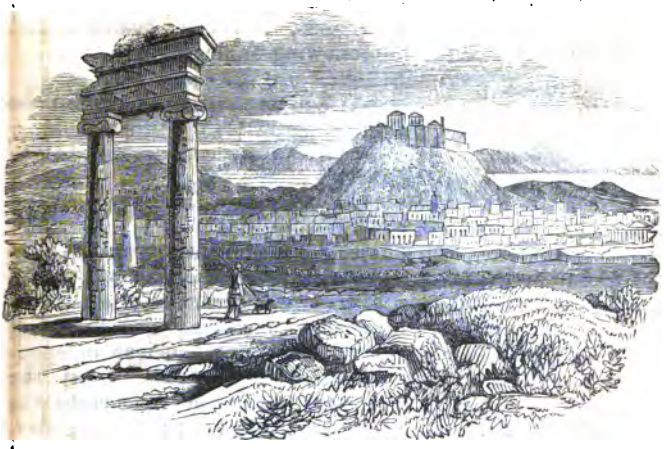

Athens.

GREECE AND THE IONIAN ISLANDS.

1. GREECE is one of the youngest and least important of the states of Europe dignified with the style of a kingdom, but has the oldest historically renowned name. Its modern independence dates from the year 1829, when, in consequence of a bloody insurrection, followed by the armed intervention of the great European powers, it was separated from the rule of Turkey, and became a constitutional hereditary monarchy in 1832.

2. The country comprises the south extremity of the great Peninsula, chiefly occupied by Turkey, with very numerous islands on the eastern coast, forming the Greek Archipelago. Its greatest extent is about 200 miles from north to south, by 160 from east to west. Including the islands, the area amounts to 15,000 square miles, equal to half the size of Scotland. The coast line is very extensive for so small a territory, owing to a series of bays and gulfs deeply invading the mainland. On the west, the gulf of Lepanto so closely approaches that of Egina on the east, as to leave only a narrow tract between them, scarcely four miles across, forming the *Isthmus of Corinth*. The games in honour of Neptune, celebrated on the isthmus, received the name of *Isthmian*

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from that circumstance. *Greece* may therefore be considered as consisting of three portions, *Northern*, *Southern*, and *Insular*, as divided in the following Table:

Natural Divisions.	Principal Towns.
NORTHERN GREECE	Athens, 32,000—Livadia, 9,000—Thiva (ancient Thebes), 5,000—Lepanto, 3,000—Missolonghi,
SOUTHERN GREECE (Anciently called PELOPONNESUS.)	Nauplia (Napoli di Romania), 15,000—Corinth, 2,000—Patras, 7,000—Tripolitza, 12,000—Misitra (ancient Sparta), 4,000—Navarino, 3,000.
INSULAR	Islands of Negropont (Eubœa), 60,000—Syra (Hermopolis), 18,000—Hydra, 20,000—Spezzia, 8,000—Naxos, 10,000—Anoros, 12,000—St. Nicolo, 15,000.

3. The region, as a whole, is pre-eminently beautiful, rendered so by imposing mountains, fertile basin-shaped plains, bold headlands, inlets of azure sea, bright skies, and a transparent atmosphere. Fine and picturesque remains of splendid edifices, coeval with the era of ancient independence, and sites memorable for great deeds, invest the scenery with peculiar interest. However degenerate the present population, in comparison with their noble ancestry, the natural productions of the country maintain their former celebrity. Olives are still as distinguished for their excellence as when the trees sheltered "Plato's retirement;" and *Mount Hymettus* vindicates its ancient fame for aromatic shrubs, bees, and honey. The whole vegetation of the south European zone thrives luxuriantly—oranges, citrons, vines, and myrtles, the tobacco and cotton plants, and the mulberry-trees for the silk-worm, from which the produce of silk is considerable. Along the southern shores of the *Gulf of Lepanto*, the dwarf-grape, or *currant*, is an important object of culture; and is extensively sent in the dried state to furnish a prime ingredient in well-known English fare.

4. NORTHERN GREECE, or *Hellas proper*, now called *Livadia*, immediately borders on Turkey, and is traversed by a range of mountains from that country, forming the southern extremity of the great chain of the ancient Pindus. It contains the classical heights, *Mount Elatea* (ancient *Cithæron*), 4,156 feet; *Zagora* (*Helicon*), 4,500, and *Lyakura*, (ancient *Parnassus*), 8,068; with the still loftier *Guiona* (*Axiros*), 8,620 feet, the highest point of Greece. The ancient states of *Attica*, *Megara*, *Acarnania*, *Ætolia*, *Doris*, *Locris*, *Phocis*, and *Bœotia* were in this section of the kingdom. ATHENS, the capital, in lat. 37° 58′ N., long. 23°

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46′ E., occupies a plain on the eastern side, bounded by hills, and watered by the Cephissus and Ilissus, small streams dried up in summer, which flow to the Gulf of Egina. It contains 32,000 inhabitants, a university, a new royal palace of immense dimensions, built of the marble of Pentelicus, and is connected by a good road with its port, the *Piræus*, at the distance of five miles. The present city is almost wholly modern, and only remarkable for its former greatness, with existing monuments of antiquity. The most important of these remains is the *Acropolis*, or citadel, built on a rocky eminence, which contains within its walls the ruins of the Parthenon, the glorious temple of Minerva, tutelar goddess of the Athenians. *Mars' Hill*, at a short distance, is of interest as the place where the Apostle Paul addressed the people; and as the seat of the Areopagus, on the eastern side, the highest judicial tribunal of ancient Athens.

5. Twenty-five miles on the north-east of Athens is the *Plain of Marathon*, where the Greeks defeated the Persians B.C. 490. About the same distance on the north-west is *Platæa*, now called *Kokla*, the scene of a similar triumph, B.C. 479. Due west of Athens, in the Gulf of Egina, is the island of *Salamis*, now *Koluri*, where the Athenians, under Themistocles, destroyed the fleet of Xerxes, B.C. 480. The famous *Pass of Thermopylæ*, where the Spartans died resisting the Persian host, is on the north-east coast, Mount Œta on one side, the sea on the other. *Thebes*, the city of Pindar and Epaminondas, is now represented by the poor village of *Thiva*; and *Delphi*, renowned for the temple and oracle of Apollo, by that of *Kastri*. In recent times, the small town of *Missolonghi*, on the northern side of the Gulf of Lepanto, acquired notoriety from its sieges during the war of independence; and as the scene of Lord Byron's death, in 1824. The gulf gives its name to the great naval action fought off its mouth in 1572, when Don John of Austria nearly annihilated for the time the Turkish navy.

6. SOUTHERN GREECE is the ancient *Peloponnesus*, now called the MOREA. This term is derived from the Greek *morus*, a mulberry tree, and has been applied to the district either owing to the abundance of these trees there, or to some fancied resemblance in its shape to that of the mulberry

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leaf. The ancient states of *Achaia*, *Elis*, *Messenia*, *Laconia*, *Argolis*, and *Arcadia* were in this division of the kingdom. Its chief town at present, *Napoli di Romana*, or *Nauplia*, at the head of a gulf of that name on the east coast, was the capital of the whole country for some years prior to the selection of *Athens*. Its fortress, on the top of a lofty and precipitous rock, upwards of 700 feet above the sea, is deemed impregnable, and has been called the Gibraltar of Greece. *Navarino*, a small place on the south-west coast, is memorable for the battle fought on the adjoining waters in 1827, when the Turkish and Egyptian fleets were destroyed by the combined British, French, and Russian squadrons. The once great cities of *Corinth*, *Argos*, and *Mycenæ*, are either mere villages, or ruins. *Sparta* has been restored in part from the same desolation.

7. Insular Greece consists of the long narrow island of *Negropont* (*Eubœa*), which so closely approaches the mainland as to admit of a bridge being thrown across the channel; the group of the *Cyclades*, a name signifying "circular," applied to them from being arranged in a kind of circle around Paros; and the western and northern *Sporades*, or "scattered" islands, which depart from the arrangement. They vary greatly in their character, some being dry, bare, and scorched volcanic masses, while others are beautiful and fertile, adorned with an endless variety of evergreens, wild flowers, and fruits. The most remarkable are *Paros*, where fine statuary marble is obtained; *Antiparos*, containing a celebrated grotto in the limestone rock, consisting of large connected chambers, abounding with dazzling white stalactites; and *Santorin*, a centre of volcanic action. The towns of *Syra* and *Hydra*, in islands of the same name, are places of commercial importance.

8. The *Population* of the kingdom very slightly exceeds 1,000,000. About one fourth of the number are islanders. The mass of the people are Greeks, who, vain of their ancestry, style themselves Hellenes. They are not, however, regularly descended from the old inhabitants of the country, but the offspring of a crossing of Hellenic with Latin and Sclavonic blood. Their *language* bears a close resemblance to the ancient Greek, but is called the Romaic, as they acquired the name of Romans while in subjection to the

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Roman empire. *Arnauts*, or *Albanians*, are numerous in the north, and in several of the islands. The Greeks universally belong to the Greek church, and are in general slavishly devoted to the grossest superstitions. The inhabitants of the coast towns are active commercialists, said to be given to sharp practices. They are also expert seamen, but prone to be piratical, and to act the part of wreckers, as opportunity offers.

9. The IONIAN ISLANDS, situated on the west and south coasts of Greece, close in shore, form a distinct state, under the protection of Great Britain. They consist of *Corfu* and *Paxo*, northern; *Santa Maura*, *Cephalonia*, *Thiaka* (*Ithaca*), and *Zante*, central; *Cerigo*, southern. Their united area is about 1100 square miles, and their total population 226,698, which is 6000 less than that of the town of Birmingham. The people are for the most part Greeks, and belong to the Greek church. All the islands are mountainous, abound with beautiful scenery, and are in parts very fertile, producing olives, grapes, and currants in abundance. The town of *Corfu*, strongly fortified, on the east coast of the island of that name, is the seat of the general government, possesses a university, and contains about 17,000 inhabitants. *Paxo*, a mere speck in size, is the scene of a wild legend respecting the cessation of oracles, related by Plutarch, and referred to by Milton:—

> "The lonely mountains o'er,
> And the resounding shore,
> A voice of weeping heard and loud lament."

Santa Maura once formed part of the mainland, from which it was separated by cutting a canal through the connecting isthmus, now a shallow lagoon. The island is the only one of the series in which the wolf is found, while the jackal is common to the whole. *Cephalonia* has for its capital feature the *Black Mountain*, with a summit 4,500 feet above the sea, usually covered with snow through six months of the year. The name refers to the dark forests of pines which once clothed its slopes, now largely crippled by conflagrations. *Thiaka* is the renowned *Ithaca* of Homer, the paternal kingdom of Ulysses, and has its scenery correctly described in the "Odyssey." *Zante*, from its exquisite

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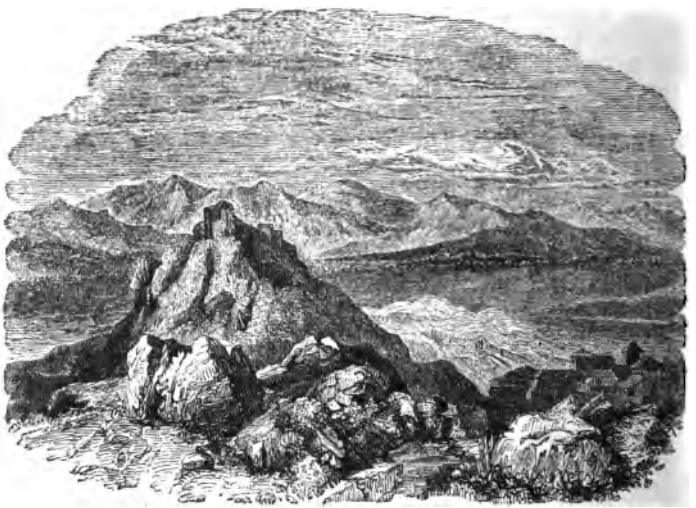
beauty and extreme fertility, has long been styled the "Flower of the Levant." Far out at sea, in spring time, the fragrance of its aromatic plants and flowering vineyards may be perceived. *Cerigo* abounds with large natural caverns, and produces honey in great abundance.

10. The islands were held by the Venetians for four centuries, from whom they passed to the French, in 1797, and were captured by the British in 1809. The *Government* is administered by a Lord High Commissioner, appointed by the British crown. There is a legislative assembly, consisting of a senate, and a house of deputies. *Corfu*, *Cephalonia*, and *Zante* return ten members each to the latter; *Santa Maura*, six; *Paxo*, *Thiaka*, and *Cerigo* two each, making a total of forty-two. The senate consists of five members, nominated by the executive government, but three of them must be taken from the popular representatives.



Areopagus, or Mars' Hill, Athens.]

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ASIA
ATLANTIC OCEAN
ARCTIC OCEAN
NORTH PACIFIC OCEAN
INDIAN OCEAN
AFRICA
EUROPE
RUSSIAN EMPIRE
CHINESE EMPIRE
MONGOLIA
ARABIAN SEA
BORNEO
PAPUA OR NT GUINEA
Longitude East

TABULAR VIEW OF ASIA.

Countries.	Chief Towns, etc.
ASIATIC RUSSIA.	
SIBERIA, WESTERN	Tobolsk, Omsk, Tomsk, Krasnyarsk, Ekaterinburg, Nevyansk, Barnaul, Kolyra, Beresov.
„ EASTERN	Irkoutsk, Yeniseisk, Nertchinsk, Yakutsk, Kiakhta, Kamschatka, Okhotsk.
TRANSCAUCASIA	*Comprehending* the Provinces of Georgia (*cap.* Tiflis), Mingrelia (*cap* Anaklia), Imeritia (*cap.* Koutais), Russian Armenia (*cap.* Erivan).
CIRCASSIA	Anapa and scattered villages.
ISLANDS	Kurile, Aleutian, and Liakhov Isles.
ASIATIC TURKEY.	
ASIA MINOR	Smyrna, Kutaya, Scutari, Brusa, Kara-Hissar, Karaman, Koniyeh, Marash, Kaisariyeh, Angora, Sivas, Tokat, Sinope, Trebisond, Kerasun, Tarsus, Adana.
ARMENIA & KOORDISTAN	Erzeroum, Kars, Van, Bayazid, Kerkook, Erbil.
MESOPOTAMIA AND BABYLONIA.	Diarbekir, Orfah, Racca, Mosul, Bagdad, Bassora, Hillah.
SYRIA AND PALESTINE	Damascus and Beyrout, Aleppo, Sidon, Antioch (*now* Aintab), Tripoli, Acre, Palmyra and Baalbec (*ruins*), Jerusalem, Hebron, Nablous, Bethlehem, Nazareth.
ISLANDS	CYPRUS, RHODES, SCIO, TENEDOS, SAMOS, PATMOS, MITYLENE,
ARABIA	Mecca, Medina, Jiddah, Muscat, Sana, Mocha, Aden, Petra.
PERSIA	Ispahan, Teheran, Hamadan, Tabreez, Saree, Balfroosh, Yezd, Mushed (in Khorassan), Kermanshah, Shiraz, Bushire, Kerman, Lar, Persepolis (*ruins*).
BELOOCHISTAN	Kelat, Sarawan, Cutch-Gundava.
AFFGHANISTAN	Caubul, Candahar, Ghuznee, Jellalabad, Herat.
TURKESTAN OR INDEPENDENT TARTARY	Bokhara, Samarcand, Balkh, Khiva, Khokaun.
BRITISH INDIA.	
BENGAL PRESIDENCY	Calcutta, Benares, Dacca, Serampore, Moorshedabad, Allahabad, Hurdwar, Delhi, Agra, Bhurtpore, Meerut, Cawnpore, Patna, Plassey, Juggernaut.
Incorporated States, Bengal Presidency.	
OUDE	Lucknow, Oude, Fyzabad.
PUNJAUB	Lahore, Amritsir, Mooltan, Peshawur.
NAGPORE OR BERAR	Nagpore, Ruttunpoor.
ASSAM	Ghergong, Gowhatti, Goulpara.
Protected States under the Bengal Presidency.	
HYDERABAD OR NIZAM'S DOMINIONS	Hyderabad, Aurungabad, Golconda, Assaye, Ellora.
RAJPOOTANA	Jeypoor, Ajmeer, Oodeypore, Jhodpore.
GWALIOR OR SCINDIA'S TERRITORY	Gwalior, Oojein.
INDORE OR HOLKAR'S TERRITORY	Indore, Bhopal.

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TABULAR VIEW OF ASIA.

Territories.	Chief Towns, etc.
BOMBAY PRESIDENCY	Bombay, Poonah, Surat, Sattara and Bejapoor (*the Mahrattas*), Ahmednuggur, Baroche.
Incorporated States under the Bombay Presidency.	
SINDE AND CUTCH.....	Hydrabad, Kurrachee, Shikarpore, Meeanee, Sukkur, Tatta, Bhooj, Mandavee.
MADRAS PRESIDENCY ...	Madras, Arcot, Tanjore, Tranquebar, Trichinopoly, Calicut, Mangalore, Masulipatam, Ootacamund.
Protected States under the Madras Presidency.	
MYSORE	Mysore, Seringapatam, Bangalore, Cochin (in Travancore).
GUZERAT OR TERRITORY OF THE GUICOWAR ...	Baroda, Ahmedabad, Cambay.
**** For other British Provinces in Hindostan, see *India beyond the Ganges.*	
CEYLON	Colombo, Kandy, Trincomalee, Point de Galle.
INDEPENDENT STATES.—	
CASHMERE	Serinagur, Islamabad, Shupeyon.
NEPAUL	Gorkha, Khatmandoo, Malebum.
BOOTAN	Tassisudon, Dosen, Punukha.
PORTUGUESE POSSESSIONS...	Goa, Diu, Damaun.
FRENCH POSSESSIONS	Pondicherry, Yanaon, Karical, Chandernagore, Mahé.
INDIA BEYOND THE GANGES.	
BURMAN EMPIRE	Ava (or Burmah proper), Amarapoora, Bhama.
SIAM.....	Bankok, Yuthia, Chan-ti-bon.
ANNAM, COCHIN CHINA, AND CAMBODIA	Tonquin (or Annam proper), Kachao, Hué (capital of Cochin China), Saigon (cap. of Cambodia).
LAOS STATES.....	Changmai, Lanchang.
MALAY TRIBES	Perak, Pahang, Johore, &c.
BRITISH PROVINCES ..... (Attached to the Bengal Presidency).	Singapore, Malacca, Penang, Assam, Chittagong, Aracan, Pegu, Rangoon, Tennasserim Provinces (*cap.* Moulmein).
CHINESE EMPIRE.	
CHINA PROPER	Pekin, Nankin, Canton, Foo-chew-foo, Amoy, Ningpo, Shanghai, Chusan, Hongkong (now British), Swatow.
THIBET.....	Lassa, Ladakh, Little Thibet.
COREA	King-ki-tao, Hanching.
MANTCHOORIA	Moukden, Kirin-Oola, Saghalin.
LITTLE BOKHARA ..... (In Chinese Tartary.)	Yarkand, Kashgar, Khoten, Hami.
MONGOLIA	Oorga, Goulja, Maimachen.
LOO CHOO ISLANDS	Napakeang, Solon-noor, Kow-keu-khoton, Gouldje.
FORMOSA (Island)	Tae-wan, and scattered villages.
JAPAN	Jeddo, Miako, Osaka, Nangasaki, Matsmai, Hakodadi and considerable Islands.
EAST INDIAN ISLANDS.	
LACCADIVE AND MALDIVE ARCHIPELAGOES.	Andaman and Nicobar groups. *For the other Islands see* OCEANIA.

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UNIVERSITY CALIFORNIA

Camels and Travellers.

ASIA.

1. This great division of the globe, the largest and most diversified, was the first peopled, and is by far the most populous. It is nearly five times the size of Europe; exceeds considerably North and South America taken together; comprises one-third of all the known land of the terrestrial surface, and contains at least one-half of the human race. The mountains also are higher than those of any other region; the plateaus are loftier and more extensive; the depressions are greater; and both the botany and zoology are unrivalled in number and importance of species.

2. Asia has a maritime *Frontier* on three sides, consisting of the Arctic ocean on the north, the Indian on the south, and the Pacific on the east. Westward, the boundary is formed by the mainland of Europe, the Caspian, Black, Mediterranean, and Red Seas; and a very small portion of Africa between the two latter basins. The extreme points are *Cape Severo-Vostochnoi*, the north extremity of *Siberia*, lat. 78° 20′ N.; *Cape Romania*, the south extremity of the

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Malayan peninsula, lat. 1° 20′ N.; *Cape Baba*, the most western point of *Asia Minor*, long. 26° 5′ E.; and *East Cape*, on *Behring's Strait*, long. 170° W. The continent thus very closely approaches the equator, and passes considerably within the polar circle.

3. From north to south, following the meridian of 100°, Asia extends 5,400 miles; and from east to west, following the parallel of 40°, 5,600 miles. But proceeding diagonally from south-west to north-east, or from its junction with Africa at the isthmus of Suez to Behring's Strait, the distance is not less than 6,700 miles. The superficial area is estimated at 17,500,000 square miles. This vast mass of land differs in its configuration from the other terrestrial divisions. It is less fragmentary than Europe; not so compact as Africa; and maintains a proportion between its length and breadth, while America extends chiefly in the direction of the meridian.

4. The surrounding oceans extensively indent the shores, and form large *Seas*, *Bays*, and *Gulfs*. But those belonging to the Arctic basin are of little commercial value, being ice-bound through the greater portion of the year. Connected with the Pacific ocean, there are the *Gulf of Anadir*, the *Sea of Okhotsk*, the *Japanese*, *Yellow*, and *Chinese Seas*, with the Gulfs of *Tonquin* and *Siam*. The Indian ocean has for its branches the *Bay of Bengal*, the *Arabian Sea*, the *Persian Gulf*, and the *Red Sea*. Of these, the two latter are the only Asiatic examples of close or inland seas, properly so called, being entered by very narrow mouths. The others have either broad openings, or are accessible by numerous channels between the islands which enclose them.

5. An immense number of *Islands* adjoin the continent, and occur chiefly in chains and groups. The *Aleutian* islands stretch somewhat connectingly between Asia and America. The long narrow island of *Saghalien*, the *Kurile*, and *Japanese* chains, the *Loo-Choo* group, with *Formosa* and *Hainan*, are on the eastern coast; *Ceylon*, the *Andaman*, *Nicobar*, *Maldive*, and *Laccadive* clusters, are on the south; the desolate isles of *New Siberia* are on the north; and westward, in the Mediterranean, are *Cyprus*, *Rhodes*, and several in the *Archipelago*. Though true Asiatic insular dependencies,

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Sumatra, Java, Borneo, the *Philippines,* and other Malaysian islands, are now classed with the Polynesian and Australasian, as forming a separate division of the globe under the name of *Oceania.*

6. The interior of the Continent comprises a series of *Lowland Plains,* of which the most important are those of *Siberia, China, Burmah, Northern India, Turkestan,* and *Syria,* with the renowned levels of ancient *Mesopotamia,* and *Babylonia.* They vary in their character from sandy deserts, or desolate wastes, to districts of the richest vegetation; and from a burning temperature to one which keeps the subsoil constantly frozen. The plain of *China,* extending to about 500 miles inland from the *Yellow Sea,* and that of *Northern India,* which includes the greater part of the basin of the *Ganges,* are the most densely peopled portions of Asia. A great part of the plain of *Turkestan,* around the *Caspian Sea* and lake *Aral,* is below the level of the sea. Two grand highland systems may be distinguished, south-western and central.

7. The *South-western highland region* comprehends great part of the countries between the Black Sea and the Caspian Sea on the north, the Mediterranean and the Persian Gulf on the south. Table-lands, with a mean elevation of from 3,000 to 4,000 feet, occupy the interior of *Persia* and *Asia Minor,* and are connected with chains of mountains diverging in various directions from *Armenia* as a kind of central nucleus. The principal ranges are *Taurus,* running into Asia Minor, and sending off a southerly prolongation under the name of *Lebanon* into Syria; the *Zagros* mountains, which stretch along the left of the *Tigris* to the Persian Gulf; the *Caspian* mountains, which skirt the southern shores of that sea; and the *Caucasus,* which extends from thence to the Black Sea, and there forms the boundary between Asia and Europe. *Mount Elburz,* belonging to the last-named range, rises to the height of 18,493 feet, and is the culminating point of the south-western highland region, or the Tauro-Caucasian mountain-system. Little inferior in elevation, 17,260 feet, while of unsurpassed interest, is the somewhat solitary *Ararat,* locally called the "Mountain of Noah," and the "Mountain of the Ark." It stands near the junction of the Persian, Turkish, and Russian dominions;

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and thus forms the colossal boundary-stone of three great empires.

8. The *central highland region*, often called *High Asia*, is a vast protuberance in the heart of the continent, bounded and intersected by ranges of stupendous mass of elevation, the highest in the world. The parallels of 28° and 53°, and the meridians of 73° and 120°, define the extreme limits of this remarkable district. Its southern border is formed by the *Himalaya Mountains*, on the north of India; the western by the *Belur-tagh*, or *Cloudy Mountains*, which overlook the plains of *Turkestan;* the northern, by the *Altai Chain*, on the Siberian frontier; the eastern, by the *Khinghan*, *In-shan*, and *Yung-ling* ranges, in *China;* while intermediate to the Himalaya and Altai, are the parallel chains of the *Thian-Chan* and *Kuenlun*. The country thus enclosed and intersected is not of uniform elevation. The mean height in the north is from 3,000 to 4,000 feet; but in the south, the whole of *Thibet* attains the astonishing elevation of from 12,000 to 17,000 feet. The loftiest mountains are those of the *Himalaya*, a name which signifies "the abode of snow." Some of its passes, through which alone Thibet can be reached from India, ascend to 18,000 feet, and are largely used as commercial routes, though numbers annually perish in them, from the combined influence of the cold, and the rarity of the atmosphere. Many peaks attain to 25,000 feet; and one, *Mount Everest*, in *Nepaul*, reaches the extraordinary height of 29,000. This is the highest point of the terrestrial surface at present known.

9. The two highland regions described, though decidedly distinct, are yet connected. A prolongation of the Himalaya extends into Afghanistan under the name of the *Hindoo-Koosh*, from whence the *Paropamisan Mountains* stretch westerly, and link together the elevated plateaus of Central and Western Asia. The subordinate ranges of the continent are the *Ghauts* in India; the *Urals*, which form part of the boundary between Asia and Europe; and several chains in *Eastern Siberia*.

10. Active *volcanoes* are very rare in Asia, considering its extent; but they are both numerous and formidable in the islands. Apart from the peninsula of *Kamschatka*, there are only two known examples on the continent, those of

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Peshan and *Hotcheou*, both in the Chinese empire. They are upwards of 1,500 miles from the nearest point of the ocean, and are remarkable exceptions to the general rule of the proximity of volcanoes to the sea.

11. Several of the *Rivers* are the largest belonging to the Old World, having a length of nearly 3,000 miles, and in two instances somewhat exceeding that extent. The most important are the *Obi*, *Yenesei*, and *Lena*, in the north, flowing to the Arctic ocean; the *Amoor*, *Hoang-ho*, and *Yang-tse-Kiang*, in the east, entering the Pacific; and the *Irrawady*, *Brahmapootra*, *Ganges*, *Indus*, and joint *Tigris* and *Euphrates*, in the south, proceeding to the Indian ocean. The northern rivers are very sluggish, owing to the slight declivity of the Siberian plain. They abound with fish, but are frozen up through great part of the year. The southern rivers are generally rapid, and periodically overflow their banks from the melting of the snows in the mountains in spring, and the seasonal rains. A considerable proportion of the river-drainage of Asia never reaches the ocean, but is conducted to inland seas or lakes without outlets. Thus the *Amoo* or *Jihoon*, the *Syr* or *Sihoon*, flow into lake *Aral*; the *Ural* and *Kour* enter the *Caspian*; and the *Jordan* terminates in the *Dead Sea*.

12. The *Lakes* are very numerous, and occasionally of immense size. The *Caspian Sea*, so called from its salt waters and vast extent, is a true lake, without an outlet, the largest in the world, situated on the European frontier, but chiefly Asiatic. It covers an area of 120,000 square miles, equal to the united area of all the British isles, and has great depth, while the surface is about 100 feet below the level of the Black Sea. The name is derived from the *Caspii*, a people anciently living on its shores. *Lake Aral*, also called a sea, lying to the eastward, is a spacious expanse of 21,000 square miles, but shallow and diminishing, owing to the waste by evaporation exceeding the supply brought in by the rivers. It was for the first time explored in the years 1846-8 by the Russian government, by means of schooners built at Orenburg, and transported in pieces over the intervening steppe, when the Islands of the Czar were discovered towards the centre, which had previously been unknown to the *Kirghiz* on the shores.

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13. Other inland collections of salt water of importance are lakes *Van*, in Armenia; *Urumiah*, in Persia; and the *Dead Sea*, in the south of Palestine. The latter is physically and historically a most remarkable body of water, forty miles long, by eight and a half broad at the greatest, of very considerable depth, and with a surface depressed 1,312 feet below the level of the Mediterranean. Its waters hold in solution such a quantity of saline matter, that the human body will not sink in them, nor are they readily disturbed by the wind. The paucity of fish, with the desolation of the shores, originated the name of the Dead Sea. But it is called by the Arabs *Bahr el Lout*, the Sea of Lot, in allusion to the great natural convulsion mentioned in his history, of which it was the scene. Among the fresh-water expanses, *Lake Baikal*, in *Siberia*, is, as far as we at present know, the largest of the Old World, covering 14,000 square miles; and the *Sir-i-kol*, on one of the central plateaus, is the loftiest on the face of the globe, at the height of 15,000 feet.

14. Extending from the neighbourhood of the equator to far within the polar zone, and rising centrally near the northern tropic from lowlands to highlands, thousands of feet above the line of perpetual snow, the greatest extremes of temperature are experienced. The *Climate* may be distinguished generally as hot and moist in the south; hot and dry in the south-west; cold and dry on the central tablelands; and extremely severe over the entire north, much more so than in corresponding latitudes of Europe and America. This greater degree of cold arises in part from the high wall of the Himalaya Mountains preventing the hot air of the tropics from proceeding northward; and in part from the flatness of the northern countries offering no obstruction to the icy blasts from the Arctic Ocean.

15. Asia surpasses every other division of the globe in the number and importance of its *Animal Tribes*. It alone possesses the tiger, the type of the sanguinary development; and has, in common with Africa, the lion, elephant, and rhinoceros. On the shores of Lake Aral the tiger endures the hard frosts of winter; and in the south of Siberia the reindeer and the camel meet. The highest ranger of the quadrupeds is the yaik, or Thibetan ox, which can scarcely exist in summer at the elevation of 8,000 feet; and has been met with in small herds at the height of 19,000. The gavial,

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or crocodile of the Ganges, is the prominent saurian; the python of India, the principal ophidian, sometimes of enormous length; and the small cobra-de-capello of the same region, bites with deadly venom. Birds with splendid plumage abound, but are deficient in song. The parent stock of our domesticated fowls run wild in the woods, with the peacock and the pheasant; and our beasts of burden and draught have probably descended from the kiang, or wild horse of Thibet, and the wild ass of Beloochistan.

16. The *Vegetable* productions are not less varied, remarkable, and useful. The most peculiar form is the banyan tree of India, the lateral branches of which send down shoots which take root,

"And daughters grow
About the mother tree,"

forming a considerable grove.* Timber for ship-building, and ornamental woods, occur abundantly in the southern and south-eastern countries, with plants furnishing articles of food, clothing, luxury, and medicine. The tea-plant flourishes in *China, Japan,* and *Upper Assam;* coffee on the highlands of *Yemen;* bananas in the tropical districts; rice all over the south; the cotton, mulberry, and leguminous plants in various places; the sugar-cane in *China;* pepper on the *Malabar* coast; cinnamon in *Ceylon;* the cocoa-nut extensively in *India;* rhubarb from *Persia* to *China;* camphor in *China* and *Japan;* caoutchouc and gutta percha in the *Malay Peninsula.* The vine, cherry, peach, apricot, and most of our important fruit trees, with many beautiful flowering plants, are importations from Asia, where they grow wild; as are also the camellia, azalea, China-aster, damask-rose, hydrangea, and chrysanthemum.

17. Asia possesses large and varied stores of *Mineral* wealth, but only partially developed. Diamonds and other precious stones are found in *India* and *Siberia;* gold, copper, iron, and platinum in the *Ural Mountains;* gold, silver, iron, lead, and the finest porphyries in the *Altai;* quicksilver in *Ceylon, Thibet, China,* and *Japan;* kaolin or porcelain clay, and zinc, in *China;* coal in *China, Japan, India,* and *Asia Minor,* and salt in most countries.

* Forbes, in his "Oriental Memoirs," describes a banyan tree on the Nerbudda, which in the time of Nearchus covered five acres, and still extends more than two thousand feet in circumference, measured round the principal stems.

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18. The *Population* is supposed to reach 650,000,000, very unequally distributed. *India*, *China*, and *Japan* are densely peopled, while inhabitants are very thinly scattered over *Arabia*, *Syria*, *Turkestan*, *Mongolia*, and *Siberia*. The races of the south and south-western districts, Hindoos, Afghans, Beloochees, Persians, Arabs, Jews, Turks, Turkomans, Kurds, Armenians, and Georgians, belong, by physical conformation, to the Caucasian or symmetric variety of mankind. The Chinese, Japanese, Samoides, and other Siberian tribes, with the people of India beyond the Ganges, except a few Malays in the extreme south, correspond to the Mongolian type.

19. In *Religion*, the great majority, perhaps 400,000,000, are Buddhists; 120,000,000 are Brahminists; and 60,000,000 are Mohammedans. The remainder are Jews, Christians of various communions, with a few Fire-worshippers, and some heathen tribes in the extreme north.

Bedouin Arabs.

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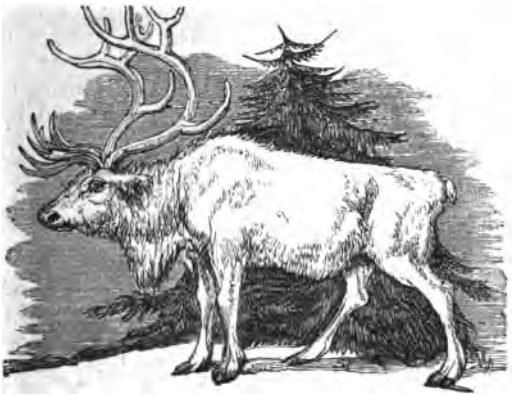

Reindeer.

RUSSIA IN ASIA.

1. Asiatic Russia comprises two detached parts of the continent, very dissimilar in extent, features, and climate—the great region of *Siberia* in the north, and the comparatively small *Trans-Caucasian* territory in the south-west.

2. Siberia extends about 4,000 miles from the European frontier on the west, to the Pacific Ocean on the east; 1,900 miles from the Chinese empire on the south to the furthest north; and contains an area of above 5,000,000 square miles: thus being one-third larger than the whole of Europe. The name is derived from *Siber*, formerly the capital of a small Tartar state on the banks of the *Obi* and *Irtish*.

3. The country is traversed from the far south to the Arctic Ocean by three great rivers; the *Obi*, with its affluent, the *Irtish*, western; the *Yenesei*, with its leading branch, the *Angara*, central; and the *Lena*, with its tributary, the *Aldan*, eastern. Besides *Lake Baikal*, large, clear, and crescent-shaped, towards the Chinese frontier, an immense number of pools, with very extensive marshes, occupy the surface. Rivers, lakes, and swamps are frozen hard as iron through the long winters.

4. The vast proportion of the area consists of dreary and sterile lowlands. Though large tracts are covered with forests of pine, larch, and birch, yet for hundreds of miles only a few bushes and saline plants appear in the western steppes,

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while the entire north has no wooded vegetation whatever, and presents nothing but moss when the snow is off the ground. But valuable animals find subsistence on the mossy plains; the rein-deer and elk; the fur-bearing species are also widely distributed, the sable, ermine, and beaver; the neighbourhoods of the *Ural* and *Altai Mountains* are rich in copper, iron, gold, silver, platinum, and precious stones, and employ above 120,000 men; fish are very abundant, with aquatic and gallinaceous birds, and the eastern coast is frequented by whales.

5. The *Climate* is more rigorous than that of any other region permanently occupied by man. In ordinary winters, mercury remains a solid body for two entire months; and even in summer, graves of any depth cannot be dug without the aid of fire. The surface thaws in the brief warm summer; grain is then sown and reaped, while useful vegetables are raised; but, below an inconsiderable depth,—three or four feet—the soil is constantly frozen throughout the year, in some regions to the depth of 380 feet.

6. There are no towns of important size; and all would be utterly insignificant but for the public offices, the mining, metallurgical, and manufacturing works established by the Russian government.

	Chief Towns.
Western Siberia ..	Tobolsk, Omsk, Tomsk, Krasnoyarsk, Ekaterinburg, Nevyansk, Barnaul, Kolyva, Beresov.

7. Tobolsk, on the *Irtish*, near its confluence with the *Tobol*, the largest town of Siberia, contains 20,000 inhabitants; and is much frequented, lying on the inland commercial thoroughfare between Europe and China. The private dwellings are almost all of wood. *Omsk*, on the Irtish, *Tomsk*, a thriving commercial town, on an affluent of the Obi, and *Krasnoyarsk*, the seat of government in the department of Yenesei, are the present heads of government. *Ekaterinburg*, with 15,000 inhabitants, the first town which the traveller reaches on entering Siberia; and *Nevyansk*; are mining, smelting, and manufacturing towns at the foot of the *Urals*. *Barnoul* and *Kolyva* have the same character in relation to the Altai. Prisoners sent to Siberia are chiefly employed in the mines. *Beresov*, on the Obi, is a small wood-built place, rendered of interest as the abode of many illustrious exiles.

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Here Menzikoff, the favourite of Peter the Great, ended his days in 1713.

8. The knowledge of the mineral wealth of the Urals dates from the time of Peter the Great; and *Ekaterinberg*, the mining capital, has its name from his wife, Katherine. The prosperity of the region originated with Nikiti Demidoff, the ancestor of the present noble Russian family of that name, whose portrait is a favourite subject of artistic labour, usually represented grasping a sturdy staff, as the untiring explorer of the mountains. The woods of the Demidoffs, near *Nevyansk*, so essential to the working of the furnaces, cover an immense extent, and are still untouched over a wide area, where the elk has not been disturbed. *Ekaterinburg*, on the margin of the lake of Iset, is inhabited chiefly by merchants who own and work the mines, labourers employed in them, and lapidaries engaged in cutting and polishing the precious stones with which the region abounds. These are all Russians or foreigners, none of the native Bashkirs and Voguls understanding the value of the mineral products of their country.

9. The *Mineral* riches of the *Altai Mountains*, principally silver, with gold from the sands, lead and copper ores, jaspers and porphyries employed in the arts, were not fully opened until a very recent date, though the first mine was commenced by the son of the Demidoff already named, in 1728. A few years afterwards, the works were begun which have grown into the present town of *Barnoul*, the focal point of the Altaic mines, the seat of their administration, and the chief smelting place. The small town of *Kolyva* has an immense establishment for cutting and polishing the jaspers and porphyries, which are worked into tables, vases, chimney-pieces, columns, and transferred to Europe.

	Chief Towns.
EASTERN SIBERIA	Irkutsk, Kiakhta, Nertchinsk, Yakutsk, Okhotsk, Petropaulovski, (Kamschatka).

10. IRKUTSK, an agreeable place near the south extremity of lake *Baikal*, is the seat of government, has upwards of 18,000 inhabitants, a handsome cathedral, nine churches, and several public buildings. It is in active communication with *Kiakhta*, about 200 miles to the south-east, on the

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Chinese frontier, where the Pekin merchants and the Russian traders exchange their goods. A long wooden building serving as a mart, denotes the actual frontier. A narrow door on the northern side opens into the Russian dominions, and an opposite one into the Chinese. At sunset a bell is rung; transactions then terminate, and both parties retire within their respective boundaries. Near at hand is a verst-post, giving the road distance from St. Petersburgh, 5,693 versts, so that the Russians there are nearly equidistant from their own capital and the earth's centre. *Nertchinsk*, further east, upon one of the upper branches of the Amoor, is in the midst of the silver and lead mines of the Altai. *Yakutsk*, on the Lena, 1100 miles north-east of Irkutsk, is a principal seat of the trade in furs, and in ivory obtained from the walrus of the Arctic ocean, largely also from the fossil remains of extinct elephants and rhinoceroses, strangely abundant in such high latitudes. *Okhotsk*, and *Petropaulovski*, (the town of St. Peter and St. Paul) the capital of *Kamschatka*, are small ports on the Pacific ocean trading with Russian America. Kamschatka is a peninsula, traversed from north to south by a high chain of mountains, of which five are volcanic. The inhabitants, few in number, and of repulsive habits, live by fishing and hunting.

11. The principal articles exported from Siberia to China are furs and peltry, coarse cloths manufactured in Russia, and finer foreign kinds, rich stuffs, tanned hides, Russia leather, and hardwares. The goods are conveyed along the rivers in summer, and over land by sledges, drawn by dogs or reindeer, in winter. They might be transported all the way from St. Petersburg to Kiakta by water; but owing to the long intervals during which navigation is suspended, three summers would be required for the transit. Trade is entirely conducted by barter. The Chinese bring teas, raw and manufactured silk and cotton, all kinds of porcelain, ornamental furniture, artificial flowers, fans, toys, ginger, rhubarb, and musk. Great part of the raw cotton is employed in packing up the porcelain. Camels are chiefly used in the transport of the merchandise. It is four or five days' journey from Pekin to the great wall, and forty-six from thence across the Mongolian desert to Kiakhta.

12. The total *Population* of this vast region very little exceeds that of our own metropolis, or 3,000,000. Some-

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what more than half a million belong to the dominant Russian race. The remainder consist of semi-civilised or wholly barbarous tribes of Ostiaks, Samoiedes, Tungusians, Kirghis, Yakuts, Kamschatdales, and Tschukstchi. The latter, at the north-east extremity of the continent, are quite independent. Heathen superstitions prevail, and the practice of tattooing is occasionally met with. Hunting and fishing furnish the means of subsistence.

13. The conquest of Siberia was commenced in 1579 by Yermak, an adventurous Cossack of the Don, who, after overthrowing the small Tartar state on the Irtish, accidentally fell into the river, and was drowned by the weight of his own armour. Gradually, trading posts with small garrisons were pushed eastward; the forts of Tobolsk, Tumen, and Tara, were founded as the nuclei of towns; Cyprian was appointed the first archbishop in 1621, and in 1711 the conquest was completed by the reduction of the whole peninsula of *Kamschatka*. Recently, by cession from China, the limits of eastern Siberia have been extended to the lower course of the *Amoor;* and the mouth of that river is becoming the principal Russian station on the Pacific ocean.

14. TRANSCAUCASIA, or the South-western portion of Asiatic Russia, extends from the high mountain ridge, between the Caspian and Black Seas, to the Ottoman and Persian frontiers, and is a fine and beautiful territory, containing many fertile and well-watered mountain-valleys, embellished with luxuriant vegetation, cypresses, palms, plantains, and vines, except on the shores of the Caspian, where there are barren plains, sandy, saline, or bituminous. This portion of the Russian dominions includes *Georgia*, covering more than 18000 square miles, with a population of 400,000, mostly Christians of the Greek church; once an independent kingdom; *Mingrelia* and *Imeritia*, or ancient *Colchis*, westward; a portion of *Armenia* in the south, and the province of *Shirvan*, eastward. The latter is between seven and eight hundred miles long, and from eighty to two hundred and fifty miles broad, and contains the remarkable fire-fields of its capital, *Baku*, which consist of soil saturated with naphtha, here and there in a state of ignition. *Tiflis*, on the river Kour, the capital of Georgia, is the residence of the Russian governor-general, and is celebrated for its hot baths; it was

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nearly destroyed by the Persians at the close of the last century, but has been gradually rebuilt, and now contains 30,000 inhabitants; it has manufactures of carpets, silks, and shawls, and in peaceful times is an emporium for the commerce of Turkey, Russia, and Persia. *Erivan*, population 11,500, the chief town in Russian Armenia, lies in the midst of an extensive plain northward of the majestic Ararat. It is an irregularly built dirty town, but carries on a considerable trade by means of caravans, has a strong fortress, and is the seat of the Armenian patriarchate. About eighty miles S.E. of Erivan is the small town of *Nakhshivan* ("first place of descent"), where, according to Armenian tradition, Noah fixed his first residence on issuing from the ark.

15. The total population of the Caucasian Region is estimated at 2,500,000. The young female Georgians and Circassians, with those of other tribes renowned for their beauty, have long been subject to forcible abduction, or disgraceful sale by their own parents, in order to recruit the harems of Constantinople. The practice has been formally abolished, but still continues to some extent; indeed, the girls themselves have been found to prefer being sold at Constantinople, with the chance of becoming a sultana, to partnership in the serf-hut of a Cossack. It has been mostly during the present century that the Russian conquests in this region have been made. But while many of the mountaineers are only nominally reduced, being still governed by their own chiefs, others in more impracticable parts of the Caucasus have maintained perfect independence. The capture of prince Schamyl in 1859, the oldest, ablest, and most successful enemy of the Russians, will perhaps terminate further resistance.

16. Three groups of ISLANDS belong to Asiatic Russia, namely the *Kurile Islands*, which extend in a long line of 900 miles from Cape Lopatka and Jesso in Japan; the *Aleutian Islands*, chiefly volcanic, in the Northern Pacific; and the *Leakhov* or New Siberian Islands, in the Arctic Ocean, where the Russians obtain abundance of fossil ivory. The long and narrow Island of *Saghalien*, of which the northern portion has recently been brought under the sway of Russia, is apparently very fertile, and chiefly inhabited by a rude Japanese race called the Ainos.

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Ladies of Damascus.

TURKEY IN ASIA.

1. The Asiatic portion of the Ottoman empire is much more extensive than the European, but contains, in proportion to the area, a much smaller number of people. It comprehends the countries at the far extremity of the Mediterranean, on its northern and eastern shores, and has for its continental boundaries the Caucasian provinces of Russia on the north-east, Persia on the east, and Arabia on the south. The region has an extent of about 1,400 miles, following a diagonal line from Constantinople to the head of the Persian Gulf, and of 900 miles from the south extremity of Palestine to the Russian frontier on the Black Sea. The area is certainly not less than 450,000 square miles.

2. No part of the globe is invested with so much interest. It was the scene of most of the important events in the early history of the world recorded in the Scriptures; the seat of the great Assyrian and Babylonian empires, connected also with the exploits of Cyrus and Alexander, and largely with the arts, learning, and enterprise of ancient

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Greece and Rome; but above all, is its south-western portion, distinguished as the spot chosen by God for the special revelation of himself to mankind, and for the advent of the Saviour of the world.

3. Four great geographical regions may be distinguished: *Asia Minor; Turkish Armenia* and *Kurdistan; Al Jezireh*, or *Mesopotamia*, and *Irak Arabi*, or *Babylonia; Syria* including *Palestine*.

4. ASIA MINOR is a peninsula projecting westward from the main mass of the continent, between the waters of the Black Sea on the north, the Greek Archipelago on the west, and the Mediterranean on the south, with many insular adjuncts. Elevated plains occupy great part of the interior, intersected and bounded by ranges of mountains, leaving only narrow tracts of lowlands between them and the shores. The table-lands are treeless, though forming fine pastures; but the slopes and inferior crests of the mountains are richly clothed with noble woods, which largely overspread the maritime lowlands. Forest-clad heights bordering on the Black Sea, the Turks style the "Sea of Trees," from which the Ottoman navy is recruited.

5. The country possesses productive mines of copper and argentiferous lead-ore; and coal of excellent quality is found in abundance close to the shore of the Black Sea, in the neighbourhood of *Erekli*, ancient *Heraclea*. The coal-field extends from seventy to eighty miles, and belongs to the true carboniferous formation. It is worked under the direction of Englishmen, and is of obvious importance to steam navigation on the eastern waters.

6. The political divisions of Asia Minor consist of six Eyalets or Governments, each under a Pasha.

Governments.	Chief Towns.
ANATOLIA ..	Kutaya, Smyrna, Scutari, Brusa, Kara-Hissar, Adalia.
KARAMANIA..	Koniyeh, Kaisariyeh.
MARASH ..	Marash, Malatia, Angora.
SIVAS	Sivas, Tokat, Amasiyah, Sinope.
TREBISOND ..	Trebisond, Kerasun.
ADANA	Adana, Tersoos (Tarsus).

7. *Kutaya* (the ancient *Cotyæum*), on one of the high in-

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land plains, between Constantinople and Aleppo, with upwards of 50,000 inhabitants, may be considered the capital of Asia Minor, as the pasha has military jurisdiction over the whole country within the barrier of the Euphrates. It was the place appointed by the sultan for the residence of Kossuth, and the other Hungarians who took refuge in his dominions. *Smyrna*, one of the most important cities in the east, and the largest in the peninsula, stands at the head of a gulf of the *Archipelago*, and contains a population of 140,000, among whom are merchants of almost all nations. It has been celebrated by its Turkish name, as "Ismir the Lovely," the "Ornament of Asia," the "Crown of Ionia," but is as often designated "Infidel Smyrna," although one of the seven churches of the Apocalypse. Trade is extensively carried on with most parts of Europe in various commodities, especially dried fruits, the annual export of which is enormous. *Scutari*, on the *Bosphorus*, is the Asiatic suburb of *Constantinople*, and has about 60,000 inhabitants. The name is a corrupted Persian word, signifying a courier; and the place has long been the starting post of couriers and caravans bound for inland Asia, from the capital. *Brusa*, celebrated for its 365 mosques, its thermal waters, gardens, and its splendid situation at the foot of *Mount Olympus*, was partially reduced to ruins by the terrible earthquake of 1855. It was the ancient capital of *Bithynia*, under the name of *Prusa*, the asylum of Hannibal, the residence of the younger Pliny, and the first capital of the Ottomans. In our own day, Abd-el-Kader, upon being liberated by the French, had here his assigned abode. *Kara-Hissar*, a considerable town near the source of the *Meander*, is the chief site of the production of opium; its full name is *Afium Kara Hissar*, or the "Black Castle of Opium." *Adalia* is an active port on the Mediterranean.

8. *Koniyeh*, on a fertile plain, with considerable manufactures, and meerschaum quarries in the neighbourhood, is the *Iconium* of history; it was the capital of the Sultans of the Seljukian dynasty, and then an important town, but now in comparative decay; near the modern town, in 1832, the Turks were signally defeated by Ibrahim Pacha. *Kaisariyeh* (the *Cæsarea* of the Romans), a very ancient and considerable city, numbering about 400,000 inhabitants, is now

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in comparative decay, with a population of only 30,000. Near it is the high mountain *Arjish Tagh*, the ancient *Argæus*.

9. The other towns of the peninsula are not important, except *Sivas*, capital of the western portion of Asia Minor, a considerable town; *Tokat*, a great centre of inland commerce, which ranks next to Smyrna; *Angora* (the ancient *Ancyra*), in the pashalik of *Marash*, population 50,000, famed for its silky-haired goats; and *Trebisond*, the principal port on the *Black Sea*, and once a place of great importance. *Sinope*, a little port on that coast, nearly opposite Sebastopol, acquired a mournful celebrity at the outbreak of the Crimean War, from the merciless destruction of a small Turkish force by the Russian fleet. *Kerasun*, similarly situated, represents *Cerasus*, from whence Lucullus introduced the first cherries into Italy (hence the German name Kirschen). *Adana*, the seat of government for the pashalic of this name, is a small town, population 10,000, on the river Selhoon, surrounded by vineyards and groves of mulberry, olive, and peach trees. *Tersoos*, a decayed place, on a river of the same name, the ancient *Cydnus*, is the *Tarsus* where St. Paul was born. *Amasiyah*, once the principal city of *Pontus*, now insignificant, gave birth to Mithridates and Strabo.

10. The ISLANDS adjoining the peninsula are *Samos*, *Scio*, *Mitylene*, *Patmos*, and several others in the *Archipelago*—the latter famous as the scene of the Apostle John's exile: *Cyprus* and *Rhodes*, in the Mediterranean, both once flourishing, but now comparatively desolate. Rhodes was anciently celebrated for its brazen Colossus, one of the seven wonders, erected 288 B.C., and thrown down by an earthquake 227 B.C. Rhodes was the stronghold of the Knights of St. John from A.D. 1309 to 1522, when they were dislodged by Sultan Soliman the Magnificent, after a long siege. Houses still bear on their fronts the arms of noble families in France, Spain, Italy, and Germany, the former residences of the knights, which are now converted into wretched shops.

11. TURKISH ARMENIA and KOORDISTAN border on the territories of Russia and Persia. The surface of the former consists of lofty plateaus and mountainous ridges, with

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deep intervening valleys, overlooked by the frontier mass of Ararat. The *Euphrates* and the *Tigris* have their sources in this district, and annually overflow their banks in the low lands to which they descend, owing to the melting of the snows in spring, accumulated in winter on the high grounds. *Koordistan* is a southerly continuation of the Armenian highlands on the left or east bank of the Tigris; *Lake Van*, with a circuit of 200 miles, and upwards of 5000 feet above the sea, belongs equally to the two provinces.

Governments.	Chief Towns.
ERZEROOM	Erzeroom.
KARS	Kars.
VAN	Van, Moosh, Betlis, Bayazid.
KERKOOK	Kerkook, Erbil.

12. *Erzeroum*, the seat of a great trade with the East, on the thoroughfare from Constantinople to Georgia and Persia, is a very considerable town, with thirty-six khans, and one of the largest custom-houses in the Ottoman Empire; it stands on a plain at the elevation of 6000 feet, and has a very severe climate. *Kars*, a small town of 12,000 inhabitants, 110 miles to the north-east, obtained notoriety during the Crimean war, owing to its gallant though unavailing defence by General Williams. *Van* is a somewhat flourishing place on its great lake, population 15,000; *Moosh*, the capital of the pashalik, is an ill-built town, with only 5000 inhabitants. *Bayazid*, a decayed town, near the base of Mount Ararat, is now only remarkable for the ruins of its magnificent monastery. The other towns are all inconsiderable. *Erbil*, formerly *Arbela*, gives its name to the battle fought in its neighbourhood B.C. 331, when Darius, with the Medo-Persian empire, was overthrown by Alexander the Great.

13. AL JEZIREH, or MESOPOTAMIA, includes the country between the Euphrates and the Tigris, from their upper sources, where they are most apart, to the district where they begin to approach each other; and IRAK ARABI, or BABYLONIA, extends from thence to the confluence of the rivers, stretching also along the Shat-el-Arab, the name of the joint stream, to its entrance into the Persian Gulf.

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They form one geographical region, mountainous and undulating, where it borders on Armenia, with forests of pine, oak, maple, chesnut, and terebinth clothing the hills; but, for the most part, consisting of a series of levels, the renowned plains of Assyria and Babylonia. The character of these plains varies from alluvial deposits on the banks of the rivers periodically overflowed, to permanent marshes and to sandy or stony tracts, often impregnated with bitumen and salt—true deserts—inhabited by the roving Arab, wild ass, and ostrich.

14. On the sides of the two great rivers, once the scenes of high culture and the residence of mighty potentates, the spectacle is now most melancholy, presenting the relics of ancient greatness in the ruins of fortresses, mounds, and dams, erected for the defence or irrigation of the country. The date groves, vineyards, parks, and gardens of antiquity are chiefly represented by a boundless growth of reeds, rushes, and sedges, while herds of buffaloes tenant the jungle.

Governments.	Chief Towns.
DIARBEKIR	Diarbekir, Mardin.
ORFAH..	Orfah, Bir, Racca.
MOSUL..	Mosul.
BAGDAD	Bagdad, Hillah, Bassora.

15. *Diarbekir*, "*the Tents or Dwellings of Bekir*," so called from the name of an Arab chieftain, is on the Upper Tigris, seated on a mass of basaltic rock, of which the walls and houses are largely built. It is the *Amida* of the Romans, and is frequently styled by the Turks, *Kara* (black) *Amid*, from the dark colour of the basalt. It has suffered much from the predatory incursions of the Kurds, but still contains 40,000 inhabitants, fifteen mosques with minarets, many mesjids, baths, and khans, with some few of its once very numerous cotton manufactures. Its former extensive trade with Syria, Asia Minor and Koordistan, has been annihilated by the want of protection. *Mardin*, the Roman *Maride*, on an affluent of the Euphrates, deemed the capital of the Jacobite Christians, has a population of 20,000. It presents a very striking appearance, occupying the sides of a lofty hill, crowned by a

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citadel of exceedingly difficult access. The houses are placed in ranges above each other, like the seats of a Roman amphitheatre; the streets are so many successive terraces; and the lateral passages from one to another are flights of steps, like similar cross streets at Malta.

16. *Orfah*, the ancient *Edessa*, remarkable for its springs, which finally reach the Euphrates, is an important place, of great interest and beauty, containing upwards of 30,000 inhabitants. The houses are all of stone; the streets are constructed with a paved causeway, on each side of a channel for running water; and trees are common in them, affording an agreeable shade in the hot season. It is considered by the Jews and all orientals as identical with "*Ur of the Chaldees*," the original seat of the patriarch Abraham. *Bir*, a small town to the westward, on the great river, is one of the most frequented points of passage for caravans, which occasionally number 5,000 camels, and are conveyed across in large boats. *Racca*, some distance below the left bank, now insignificant, was a flourishing place under the Caliphs, and the favourite residence of Haroun-al-Raschid; of whose palace some remains may still be seen.

17. *Mosul*, on the western side of the Tigris, with a population of 40,000, is the centre of an extensive caravan trade, and had formerly some important manufactures. Those fabrics which first received the name of muslins, *mosuline*, as gold tissue, silks, and fine cottons, were so called from Mosul, either from being extensively produced there, or conspicuous in its commerce. The country on the opposite side of the river, for some miles lower down, is covered with mounds, which mark the site of the once mighty *Nineveh*, the ruins of which, by the energy and perseverance of Mons. Botta, the French consul at Mosul, and Mr. Layard, have so largely enriched the museums of London and Paris.

18. *Bagdad*, on both banks of the Tigris, is a walled city, entered by six gates, three in each division, with a circuit of about five miles. While the capital of the Caliphs, it was the Mohammedan Athens, and had an immense population. Few traces of its former greatness remain, and the inhabitants, after numbering in our own

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time 110,000, have been thinned by plague, flood, and famine, to little more than half that number. After repeated contests with the Persians, it was finally reduced by the Turks under Amurath IV., in 1683. *Hillah*, on the Euphrates, is a small place, of about 10,000 inhabitants, highly interesting as being within the limits of ancient Babylon. Ruins of the great city occupy both sides of the river, north and south of the modern town. *Bassora*, on the *Shat-el-Arab*, "*river of the Arabs*," a majestic stream, formed by the confluent Euphrates and Tigris, is an actively commercial port, with a population of 50,000. Merchant vessels of 400 tons burden, can come up to the city from the Persian Gulf. Hence it has become the great emporium for all the Indian commodities which enter Asiatic Turkey.

19. SYRIA, including PALESTINE, extends along the whole eastern shore of the Mediterranean to an indefinite line inland towards the basin of the Euphrates. A narrow strip of lowland on the coast, and vast plains assuming more of the desert character as they become interior, with an intermediate range of mountains, characterize the region. The grand range divides into the two branches of *Lebanon*, nearest the coast, and *Anti-Lebanon* more inland, which enclose between them the fine longitudinal valley called by the ancients *Hollow Syria*, in which are the magnificent remains of *Baalbec*. The Anti-Lebanon rises the highest, that is to 10,000 feet, in *Mount Hermon*. Both branches terminate on the northern border of *Palestine*; but there are prolongations in lower ridges southward, on both sides of the *Jordan*, forming the mountains of *Gilead*, and the hills around *Jerusalem*. Of the old cedar forests, a venerable grove remains on Lebanon, at the height of 6,200 feet.

20. The two principal rivers, the *Orontes* and the *Jordan*, take their rise in the highlands, and are fed by the melted snows. The former flows northward through Hollow Syria to the Mediterranean; and the latter southward, forming the *Lake of Tiberias*, on its passage to the Dead Sea. Owing to the difference of level, the climate varies greatly. "The Lebanon," say the Arabian poets, "bears winter on his head, spring on his shoulders, and autumn in his bosom, while summer lies sleeping at his feet."

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Governments.	Chief Towns.
ALEPPO ..	Aleppo, Antakia, Scanderoon.
DAMASCUS ..	Damascus, Homs.
SIDON	Sidon, Beyrout, Tripoli, Acre, Jerusalem, Hebron, Nablous, Bethlehem, Nazareth.

21. *Aleppo*, seventy miles from the Mediterranean, and about the same distance from the Euphrates, on the verge of the desert, is a great eastern mart, and caravan thoroughfare. It is one of the finest towns in Syria, and is famed for the elegance of its houses and the beauty of its garden. Though dreadfully ravaged by earthquakes in the present century, it still contains a population of 70,000 souls. English merchants have resided here since the reign of Queen Elizabeth; and were the first to make known to the western nations the wonderful remains of *Palmyra*, or "Tadmor in the wilderness." *Antakia*, a poor town on the *Orontes*, represents the great and voluptuous *Antioch*, the capital of the *Seleucidæ*, and the place where the Christian name originated. *Scanderoon* is a small port on the Mediterranean.

22. *Damascus*, the oldest of existing cities, stands on an extensive, fertile, and well-watered plain, at the eastern base of *Anti-Lebanon*, and contains 150,000 inhabitants. Its artizans were formerly renowned for the manufacture of sword-blades; and sabres of inferior quality continue to be made, with gold and silver ornaments, silks, cotton cloths, and coarse woollen cloths for the cloaks universally worn by the Syrian peasants. Damascus is the true capital of Syria, as the head-quarters of the army, the residence of the commander-in-chief; and its pasha ranks with the highest officers of the empire. *Homs*, ancient *Emesa*, is a clean compact town of 20,000 inhabitants, built chiefly of basalt, situated on the east bank of the *Orontes*.

23. *Sidon*, or *Saida*, the mother city of *Phœnicia*, celebrated in the classic pages of Homer and others, is now a small town, from which commerce has departed to the more northern ports, *Beyrout*, with 45,000 inhabitants, and *Tripoli* with 10,000. The pasha resides at *Beyrout*. It is also the great Protestant mission station; and has many European mercantile firms. The principal article of ex-

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port is raw silk raised in the *Lebanon*, which is rapidly becoming a vast mulberry garden. The imports supply the markets of Damascus. *Acre*, on a beautiful bay near *Mount Carmel*, is a fortified decayed town, remarkable for the bloody struggles for its possession as the Key of Palestine. It was successfully attacked by the British fleet in 1840. *Jerusalem*, in lat. 31° 46′ N., long. 35° 13′ E., is situated about twenty-seven miles from the Mediterranean, at the elevation of 2,200 feet above the sea. It stands on part of four small hills nearly surrounded by deep ravines, and is inclosed with Gothic embattled walls, about two miles and a half in circuit, overlooked eastward by the *Mount of Olives*. Its most conspicuous edifice, the Mosque of Omar, (see our vignette) occupies the site of Solomon's Temple, and is one of the finest buildings in the Mahommedan world; it is considered by the Moslems as inferior in sanctity only to the Kaaba at *Mecca*. The church of the Holy Sepulchre, the great object of attraction to crowds of superstitious Greeks and Latins, was built originally by Helena, the mother of Constantine the Great, and destroyed by fire in October, 1808. In its place the present structure was erected, chiefly at the expense of the Greeks, assisted by the Russians. There is now a Protestant Church, mutually sustained by England and Prussia. Jerusalem contains a population of rather more than 13,000, of whom 6,000 are Jews, and 4,000 are Turks. *Hebron*, twenty miles to the southward, with 10,000 inhabitants; and *Nablous*, forty miles to the north, with 8,000, are about the only places in Palestine which have any air of prosperity. There are large soap-works at the latter, and the production of oil is extensive. *Bethlehem* and *Nazareth* are now little more than considerable villages.*

24. Asiatic Turkey is said to have a population of 16,000,000, of whom the great majority are in Asia Minor. The Turks are supposed to number 10,000,000, the Armenians 2,000,000, the Greeks 1,000,000, the Kurds 1,000,000, the Arabs 900,000. The remainder are Turkomans, Tartars, Jews, Druses, Syrians, and Chaldeans. The Non-Mahommedans are chiefly Armenian and Greek

* For a complete geography of the Holy Land see, "Kitto's Scripture Lands," a companion volume to the present.

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Christians, with a few members of the Jacobite, Nestorian, and Latin churches; the Druses of Lebanon appear to have no form of religion at all; while the Yezides, scattered through northern Mesopotamia and Kourdistan, combine parts of almost every form, with devil-worship.

The *Maronites* occupy the hill country between Beyrout and Tripoli, called *Kesrouan*, and live in villages round the convent of *Kannobin*, the seat of their patriarch. Being divided into various tribes, each cultivates his own little territory. They live peaceably and frugally in the bosom of their families, and beneath their humble roof the Christian traveller meets with a hospitable welcome. The sound of bells and the pomp of processions attest the full liberty of conscience here enjoyed by the Christians. Two hundred monasteries rigorously adhere to the rules of St. Anthony, and numerous hermits have taken up their abodes in the grottoes and caverns of Lebanon. The Maronites derive their name from Maron, a saint of the fifth century, whose proselytes, having been stigmatised as heretics, sought refuge in the Kesrawan. After long braving the Saracen and the Turkish power, they were reduced at last by Sultan Murad III. in 1558, who penetrated into their country, compelled them to acknowledge his supremacy, and to pay a yearly tribute. In every other respect they remained uncontrolled. They have been received into the communion of the Roman church, which, however, connives at their retaining some of their old opinions and practices, and particularly at the marriage of their priests. Their numbers are about 150.000. The Maronites recognise no distinctions of rank, have scarcely any form of government, and settle peacefully among themselves the disputes which elsewhere afford such a handle to governors to plunder and oppress their people. In personal quarrels, however, they exercise the barbaric right of vengeance, their religion having failed to impress upon them the most essential part of its morality, the forgiveness of injuries. They are all armed, and, when their strength is called out, can muster 35,000 men. Their monks cultivate the ground, and practise all the necessary handicraft trades. The priests are supported by the bounty of their flocks, which they are obliged to eke out by the cultivation of land, or the prosecution of a trade; even the bishops have only revenues equal to about £60 sterling a-year. But for this poverty the clergy are compensated by the great respect paid to them by the people, who kiss their hands whenever they meet them.

Great Mosque of Omar.

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An Arab Feast.

ARABIA.

1. Arabia, a vast peninsula, occupies the south-western corner of Asia, between Asiatic Turkey on the north, the Arabian Sea on the south, the Persian Gulf on the east, and the Red Sea on the west. Though comprising not less than 900,000 square miles, it has no navigable river, and only a few permanent streams. With a hot, dry climate, the greater part of the country consists of irreclaimable sandy or stony wastes; but where cultivation is possible, some valuable products are obtained, as coffee, senna, castor-oil, dates, gums, and balsams. The locust is the pest of this region.

2. The *Inhabitants*, apart from the coasts, are mostly true Bedouins, nomadic in their habits, supporting themselves by their herds and the transport of goods, but prone to be predacious. They are divided into tribes, each governed by its own sheikh or emir; possess the finest horses in the world; and have an invaluable beast of burden in the camel, aptly styled the ship of the desert, without which goods could not be conveyed across the oceans of sand. The population is merely conjectural, and has by some been rated at

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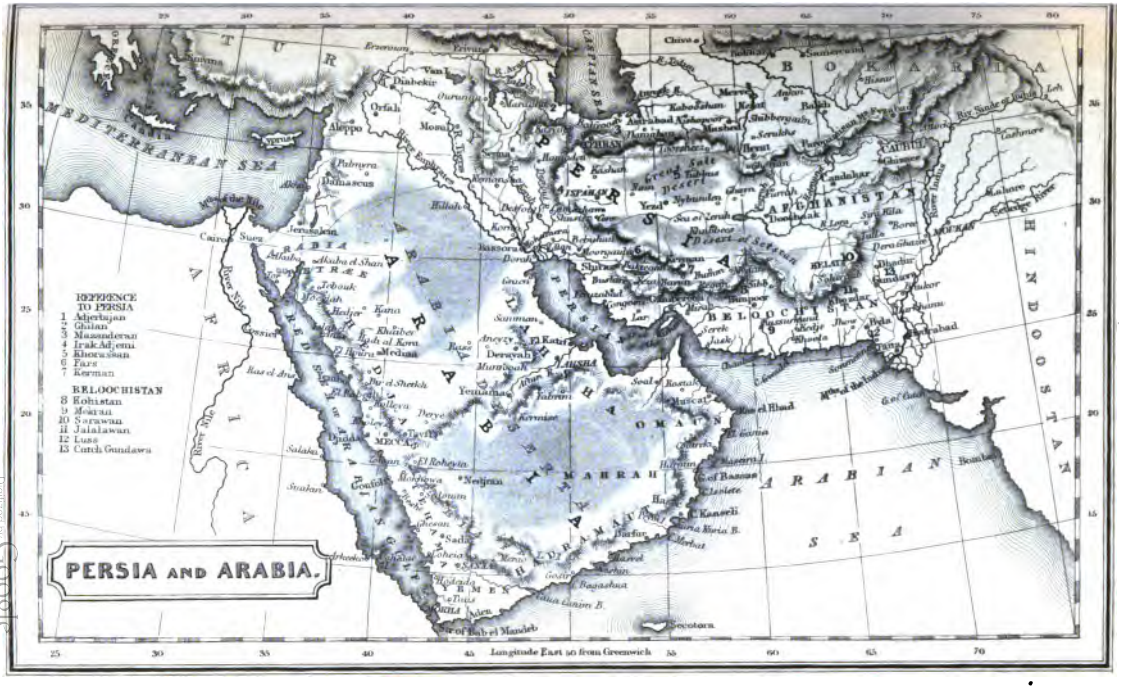
PERSIA AND ARABIA.
REFFERENCE TO PERSIA
1 Adjerbajan
2 Ghilan
3 Mazanderan
4 Irak Adjemi
5 Khoorassan
6 Fars
7 Kerman
BELOOCHISTAN
8 Kohistan
9 Mekran
10 Sarawan
11 Jalalawan
12 Lus
13 Cutch Gundawa
MEDITERRANEAN SEA
ARABIA
PERSIA
BOKARIA
AFGHANISTAN
BELOOCHISTAN
HINDOOSTAN
ARABIAN SEA
Longitude East 10 from Greenwich

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12,000,000, which probably exceeds the reality. There are no very definite political divisions; but certain districts have particular names, of which the principal are the peninsula of *Sinai*, *Hedjaz*, *Yemen*, and *Omaun*.

3. The peninsula of SINAI lies between the two northern forks of the Red Sea, the *Gulf of Suez* on the west, and of *Akaba* on the east. Its interest is entirely historical and sacred. A plateau in the north, called the desert of *El-Tih*, or the "Wandering," has doubtless obtained that name from the wanderings of the children of Israel in the region. The mountains of Sinai in the south, from one of which the Law was given, are sombre granite masses, the loftiest of which rises to the height of 8,850 feet. There are about 4,000 Bedouins in the peninsula, who act as guides and guards to travellers; and some twenty-four monks, who entertain them in the convent of St. Catherine, at the base of the so-called *Jebel Mousa*, or *Mount Moses*. North-east of the peninsula are the extraordinary remains of *Petra*, the rock-hewn capital of ancient *Edom*.

4. The HEDJAZ, or "Land of Pilgrimage," also called the "Holy Land of Arabia," is a district on the eastern side of the Red Sea, and a dependency of the Porte, though the authority of the Sultan is more nominal than real. It contains *Mecca*, the birth-place of Mahomet, an open town two days' journey from the coast, with about 30,000 inhabitants. The Kaaba, or mosque, the great point of attraction, is an oblong, massive structure of rough stone, in the centre of a square, and encircled by a covered colonnade. The original edifice having gone to decay, it was entirely rebuilt in A.D. 1627. A great pilgrimage, called the *haj*, takes place in Mecca annually; and, as Mohammed's followers are enjoined to visit this holy city at least once in their lives, the caravans of pilgrims from all parts of Asia and Africa, and especially from Turkey, are countless; this is the great occasion of traffic, as every caravan brings with it the produce of its country for the purposes of exchange. *Medina*, 250 miles to the north-east, the place of the prophet's death and burial, is a smaller town, but-walled, containing a similar mosque, where his tomb is an object of veneration. The date-groves on the outskirts of the city are particularly famous. *Jiddah*, the port of Mecca, has a small fanatical

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Moslem population, recently chastised for the barbarous murder of some British and French residents. *Yambo*, the port of Medina, is a place of some importance, and has a considerable transport trade. Here the authority of the Pasha of Egypt ceases, and that of the Turkish Sultan begins.

5. YEMEN, a highland district in the south, is under the rule of an Imaum, who has *Sana* for his capital, an inland town, which lies in a beautiful valley. This region is identical with the *Arabia Felix* of the old geographers. It was supposed by the ancients, that the precious commodities they received by way of Arabia were native products, instead of Indian imports; and hence arose the designation of *"Araby the Blest."* *Mocha*, on the Red Sea, the chief port, gives its name to the best coffee, the great article of export. The coffee shrub is not a native of Yemen, but was transfered thither from Abyssinia in the fifteenth century. The berry first became commonly known in England in the reign of Charles II. *Aden*, near the southern extremity of the peninsula, is a small British possession, obtained in 1838, for the purpose of making a coal depot and stopping-place for steamers between Suez and Bombay. It has now the best harbour on the coast of Arabia.

6. OMAUN, on the east coast, has *Muscat* for its capital and principal port; and hence the chief is usually, but erroneously, called the Imaum of Muscat. It is the seat of an extensive commerce, exporting, hides, horses, asses, dates, and salt, and importing the necessaries and luxuries of life, chiefly corn and cloth. Population presumed to be 60,000. The Imaum, an ally of the British, has possessions on the east coast of Africa; and claims the sovereignty of the shores of the Indian ocean from thence to the Indus.

7. The Arabs have a great name in history. Issuing from their native deserts under the early successors of Mahomet, they spread their faith and tongue to the shores of the Atlantic on the west, and to the waters of the Ganges on the east. The Arabic language is now vernacular in Syria, Mesopotamia, Egypt, Nubia, Barbary, part of Persia, parts of the Malabar and Coromandel coasts; and is extensively used in central and eastern Africa. Traces of it are found largely in the Spanish, and more or less in other European dialects. Our highest naval title, "*admiral*," is Arabic.

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Bushire.

PERSIA.

1. The kingdom of *Iran*, as Persia is styled by the natives, extends between the Caspian Sea on the north, and the Persian Gulf on the south, and from the Ottoman dominions on the west to the Afghan and Beloochee states on the east. The distance at the greatest is about 700 miles in the former direction, and 850 miles in the latter; and the area is roughly estimated at 500,000 square miles.

2. The *Persian Gulf*, a large arm of the Arabian Sea, with which it is connected by a narrow strait, stretches thence 600 miles to the mouth of the Shat-el-Arab, and has a breadth varying from 100 to 250 miles. Its shores and islands are largely subject to the Imaum of Muscat. The island of *Ormuz*, referred to by Milton, is near the entrance of the gulf:—

> "High on a throne of royal state, which far
> Outshone the wealth of Ormuz or of Ind—
> Satan exulting sat."

The Portuguese had possession of it from 1507 to 1622. It was then the receptacle of the riches of India and the manufactures of Europe; but is now nearly desolate, and would be entirely so but for its rock-salt and sulphur.

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Near the Arabian shores of the gulf, pearl-oysters are obtained by diving.

3. The central and eastern districts of Persia, comprehending by far the larger part of its area, form a vast plateau, elevated from 3,000 to 4,000 feet. The whole of this region is sternly desolate, consisting of sandy and salt deserts, blasted with utter barrenness. Masses of bare rock, enclosing valleys without streams or trees, alone break the monotony of the landscape. Westward, where the country is watered by the tributaries of the Tigris, it yields the rich fruits, flowers, roses, and wine, so renowned in oriental poetry. Northward, between the Caspian and the range of *Elburz*, the greatest vegetable luxuriance is exhibited. The range skirts the southern shores of that sea; and rises 14,700 feet in the volcanic Peak of Demavend, east by north of Teheran.

4. Eleven provinces are commonly enumerated:

Provinces.	Chief Towns.
IRAK AJEMI	Teheran, Ispahan, Hamadan, Casbin.
AZERBIJAN	Tabreez, Urumiah.
GHILAUN	Reshd.
MAZANDERAN ..	Saree, Balfroosh.
KHORASSAN	Mushed, Yezd.
PERSIAN KURDISTAN	Kermanshah.
KHUZISTAN	Shuster.
ASTRABAD	Astrabad.
FARS	Shiraz, Bushire.
KERMAN	Kerman, Gombroon.
LARISTAN	Lar.

5. *Teheran*, the present capital of Persia, in lat. 35° 40′ N., long. 51° 30′ E., is a mud-walled city, four miles in circuit, on a barren plain at the southern base of Elburz. It contains 130,000 inhabitants, but this number is greatly reduced in summer, owing to the intense heat, as the court and all who have the means betake themselves to cooler sites. It was chosen for the metropolis because of its contiguity to the native possessions of the reigning dynasty. *Ispahan*, the ancient capital, in a fertile plain, 4000 feet above the ocean level, has an equal population, if not greater, but once contained nearly a million of souls, and was proverbially ac-

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counted "half the world." Its stone and seal-cutters are famed for their workmanship. But deserted marble halls, ruined houses, and neglected gardens, bear witness to decay. *Hamadan*, on the site of the old Median capital Ecbatana, is the principal mart on the caravan route to Bagdad. *Casbin* is renowned for its manufacture of ornamental tiles.

6. *Tabreez*, thirty miles east of the lake of Urumiah, has a population of 80,000, engaged to some extent in the silk trade. The lake, intensely salt, has a circuit of 300 miles, with the small town of *Urumiah* on the western side. The name of the province, *Azerbijan*, signifies the "country of fire." It refers to the fire-fields of Baku, which are now within the Russian frontier, and perhaps to the circumstance that the district was the original seat of the Guebres or fire-worshippers.

7. *Ghilaun* is a small and very unhealthy province; notwithstanding which, its capital, *Reshd*, is one of the most flourishing towns in Persia, and contains 50,000 inhabitants. *Mazanderan*, another low and unhealthy province, comprises several considerable towns, of which *Saree*, with a population of about 30,000, is the capital, and *Balfroosh*, a straggling town in the midst of a forest, population upwards of 100,000, is the largest.

8. *Mushed*, in Khorassan, towards the deserts of Turkestan, has some celebrity for its sword-blades, as well as other works in steel, which is imported from India. Iron of Russian make is conveyed hither by mules from the ports on the Caspian. *Yezd*, on an Oasis of the great eastern salt desert, is a commercial station between central and western Asia. Caravans from Cashmere, Caubul, Herat, and Bokhara, are met here by merchants from the west, for the exchange of commodities.

9. In the province of FARS is the once famous but now decayed city of *Shiraz*, situated in a beautiful neighbourhood, and possessing the tombs of Sadi, the moral philosopher, and Hafiz, the lyric poet. Its manufacture of otto of roses is considerable. About thirty-five miles to the north-east is the site of *Persepolis*, a city where the Medo-Persian kings occasionally appeared in their greatest splendour. Alexander is said to have set fire to the palace (then of Darius) with his own hand. Pillars and

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enormous blocks of marble remain. *Astrabad* is a port near the south-east corner of the Caspian Sea; *Bushire* and *Gombroon* are ports on the Persian Gulf, the former the more important.

10. *Kermanshah*, the capital of Persian-Kurdistan, is a modern well-built fortified town, with a population of 30,000, and a thriving trade in carpets, swords, cottons and fruits. *Shuster*, in the province of Khuzistan, is now a place of small importance, population between 8,000 and 10,000. *Lar*, with a population of 12,000, is the chief town of an arid maritime province, which was once an Arabian kingdom. It has manufactures of arms, gunpowder, and cotton.

11. The *Population* of Persia is supposed to amount to 13,000,000, divided into two classes, one fixed, and another erratic. The fixed class, or the inhabitants of cities, towns, and villages, considerably exceeds two-thirds of the whole. These are the Persians proper, admirable horsemen, excelling also in the manufacture of light articles, as jewellery, pottery, brocades, shawls, and carpets. They are a very mixed race, sociable, polite, and vain, hence styled the French of the east. The erratic class consists of bold tribes of various origin—Arabs, Kurds, Turks, Afghans, and descendants of the old Persians—who claim lordship over the uninhabited districts, dwell in tents, have their respective summer and winter quarters, are pastoral and military in their habits.

12. In *Religion*, the majority of the people are Mohammedans of the Shea sect; most of the wandering tribes belong to the Sonnee division; and there are numerous Suffees, or Mohammedan free-thinkers, with many Jews, some Armenian and Nestorian Christians, and a few fire-worshippers. The *form of government* is perfectly despotic, under a Shah. It is most oppressively administered, and violent disturbances are very common, checking industry, and disposing many to look with a favourable eye to Russian aggrandisement on the northern frontier. What was once, for a considerable period, the mightiest empire in ancient times, is now one of the weakest of modern states.

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BELOOCHISTAN.

1. This extensive territory, which is considerably larger than Great Britain, lies on the shore of the Arabian sea, from Persia to the mouth of the Indus, and extends about 300 miles inland. Ranges of bare and rocky mountains run parallel to the coast, dividing tracts of sandy desert, intersected by a few watercourses, which are visited with sudden torrents in the rainy season, but are dry through the greater part of the year. From March to November the heat is terrific, not exceeded, perhaps, in any other part of the world.

2. The country is divided into six provinces, which are occupied by many distinct tribes, half-barbarous, mostly nomadic, and all Mohammedans. The western portion is almost exclusively inhabited by the *Belochees*, who speak a corrupt Persian dialect. The Eastern portion is peopled chiefly by the *Brahoes*, who speak a dialect of Sanscrit origin. The coast is thinly inhabited by a miserable and savage race, living almost entirely upon fish, as did their progenitors in the days of the ancient Greeks, who sailed along it in the time of Alexander, and called them *Ichthyophagi*, or fish-eaters. The principal chieftain is the Khan of *Kelat* (the capital of Beloochistan), a town of 20,000 inhabitants, in the north-east, inclosed by a mud wall, and seated at an elevation of more than 8,000 feet above the sea. Almonds, melons, and dates are plentifully produced in the neighbourhood. The town was taken by the British in 1839. The province of *Cutch-Gandava*, with an area of 10,000 square miles, traversed by the principal routes from Scinde into Afghanistan, and *Sarawan*, which has an area of 15,000 square miles, are next in importance to Kelat.

3. It was through Beloochistan that Alexander led his army on retiring from his expedition into India, one of the most remarkable enterprises ever accomplished. The troops marched by night, for the fine soft sand was so hot by day that it blistered the feet. But it often happened at day-dawn that they were far from a watering-place, and had to travel on exposed to the full solar glare; with great magnanimity and equal sagacity, the commander refused to drink of some brackish water, only sufficient for himself, brought in a helmet, and poured it out upon the sand.

The gross pop^{n} of Beloochistan is estimated at 500,000.

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AFGHANISTAN.

1. The land of the Afghans is immediately north of the preceding district, and corresponds to its desert character on the borders. But in the east, and especially the north-east, it is a region of grand mountains, being penetrated by the *Hindoo-Koosh*, or Indian Caucasus, a westerly prolongation of the Himalayan chain, with summits rising far above the snow-line, which send down streams from the melted snows. The Caubul river flows eastward to the Indus, which it joins opposite Attock, and the Helmund westward, to a great lake on the Persian frontier.

2. *Afghanistan*, equal in size to France, has a Mohammedan population of 6,000,000, divided into tribes more or less independent, and of different character. Some are pastoral nomades; others are predatory; all are fierce and warlike, uniting for defence against a common enemy.

States.	Chief Towns.
CAUBUL	Caubul, Candahar, Ghuznee.
HERAT	Herat.

3. *Caubul*, a considerable city, on a river of the same name, contains about 60,000 inhabitants, and has a vast bazaar, with

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a strong citadel. In its immediate vicinity is the tomb of Baber, the founder of the Mogul empire in India. The city was occupied by British troops in 1839, for the purpose of reinstating Shah Soojah on the throne. But they were compelled to withdraw in the depth of winter, in January 1842, in consequence of a general rising of the population, under a treacherous outbreak of the chiefs, when Sir W. Macnaughten and Sir A. Burnes were murdered, and 4,700 men at arms, with 7,500 camp followers, were massacred in their retreat through Khoord Caubul Pass. Fresh forces soon entered the country, recaptured the capital, ravaged the citadel and bazaar, but retired in the autumn. *Candahar*, a very ancient city, about 200 miles to the south-west, with a population variously estimated at 50 and 100,000, has manufactures of arms, silks, and woollens, and is a principal mart between Persia and India. The approach to Candahar from the eastward, lies through the great Bolan Pass. *Ghuznee*, a mean village, but with a strong fortress, was once a vast city, the capital of Mahmoud, whose empire extended from the Ganges to the Tigris. His tomb remains. Its sand-wood gates, carried off by him from the temple of Somnauth, in Guzerat, were returned thither by the British in 1842, after an absence of seven centuries. *Jelalabad*, seventy-eight miles east-north-east of Caubul, a fortified but mean town of 3000 inhabitants, is famous for the heroic resistance made there in 1842 by the British troops under Sir Robert Sale.

4. *Herat*, a fortified town in the north-west, with 60,000 inhabitants, is situated in a rich and beautiful valley, and has considerable commerce. It has alternately belonged to Caubul and Persia, but is now independent.

5. Few countries are of more difficult access than Afghanistan. The route from India leads through narrow and savage mountain defiles, in which the snows of winter lie long and deep. The *Khyber Pass*, thirty miles long, is the only practicable road between Caubul and the Punjaub; and the *Bolan Pass*, sixty miles long, the only practicable one between Candahar and Scinde. On the side of Turkestan, the thoroughfares cross the *Hindoo-Koosh*, at heights of 11,000 and 12,000 feet. Dreary wastes of sand lie along the Persian frontier.

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A Tartar Courier.

TURKESTAN.

1. **Turkestan**, often called **Independent Tartary**, lies between Asiatic Russia on the north, Persia and Afghanistan on the south, the Caspian Sea on the west, and the Chinese empire on the east. It is a region of immense extent, equal to the united area of France, Spain, Belgium, Holland, and Germany; but has little natural interest, and less political importance.

2. The country consists mainly of dry, undulating, treeless plains, with which wastes of loose sand intermingle; and there are many morasses, and small salt pools. It contains the extensive lake *Aral*, to which the rivers *Amoo* and *Sir* descend from the uplands of central Asia. The former is the *Oxus* of the ancients, and the latter the *Jaxartes*. The chief cultivable grounds and woodlands are found in the neighbourhood of these streams.

3. The people, vaguely supposed to number from five to eight millions, are branches of the great Turkish family. Hence the name, Turkestan, which signifies the *stan* or country of the Turks, as Afghanistan and Beloochistan are severally countries of the Afghans and Beloochees. Among the stationary population, who are principally in the south, silk,

cotton, and wool are raised for export; silk and cotton goods, with some hardwares, are produced, and an extensive commerce is maintained by caravans with Persia, Russia, and India. The northerns are mostly nomades, dwell in tents, rear cattle, goats, and sheep, and traffic in slaves.

States.	Chief Towns.
Bokhara	Bokhara, Samarcand, Balkh.
Khiva	Khiva, Ourjend.
Khokaun	Khokaun, Tashgend.
Kirghiz Hordes.	

4. *Bokhara*, the capital of the most important state, is one of the most commercial towns of interior Asia, with 100,000 inhabitants. They are chiefly Mohammedans, fiercely fanatical; but Jews also are numerous. Here our countrymen, Colonel Conolly and Captain Stoddart, were barbarously murdered by order of the Ameer or Khan, which led to the dangerous mission successfully accomplished by Dr. Wolff, in 1845, to ascertain their fate. *Samarcand*, the capital of Tamerlane, still containing his tomb, with the astronomical observatory of Ulugh Beg, is in ruins. *Balkh*, the birth-place of Zoroaster, and the capital of the Greek kingdom of Bactria, founded by Alexander's successors, has more completely fallen. But it is venerated as the "mother of cities," being locally regarded as one of the oldest.

5. *Khiva*, at the head of a khanate, on the Amoo, is the greatest slave-mart in Turkestan. The town is surrounded with a broad embankment of earth, higher than its houses, which has a deep moat outside. *Ourjend* is a place of trade with Russia. *Khokaun*, on the *Sir*, has about 60,000 inhabitants; and *Tashgend* half that number. The *Kirghiz*, separated into Great, Middle, and Little Hordes, in the north, chiefly of the Mongol race, are said to number 450,000 tents or families.

6. The *Climate* of Turkestan is remarkable for its strongly contrasted temperature. In summer all vegetation is burnt up; eggs may be baked in the sand; and the thermometer rises to 108° in the shade, and 144° in the sun. In winter it sinks to from 12° to 35° below zero. The troops of Tamerlane were frozen to death on the banks of the Sir; and in 1839-40 a Russian expedition against Khiva was frustrated by the cold, which cut off the camels and many of the soldiers.

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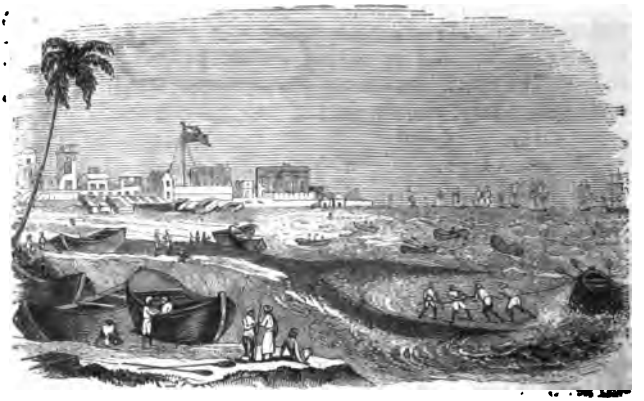

Madras Roads.

INDIA.*

1. INDIA, also called *Hindoostan*, is the central peninsula of southern Asia, bounded by the Himalaya mountains on the north, and enclosed generally in other directions by the Indian ocean, or its great arms, the Bay of Bengal on the east, the Arabian Sea on the west. It has an extent of 1,900 miles from north to south, and 1,500 from east to west, where the greatest breadth occurs, but narrows gradually to the southern extremity, where the width is comparatively inconsiderable. The area contains upwards of 1,400,000 square miles, largely overspread with deserted capitals, depopulated towns, and wonderful antiquities, while still crowded in many parts with inhabitants, remarkable for singular diversities of language, manners, and religion.

2. NORTHERN INDIA, apart from the huge bordering wall of the Himalaya, which belongs equally to Thibet, is an immense lowland of very varying character. Eastward, along the source of the Ganges, a vast space is occupied with the richest alluvial soil, and clothed with luxuriant vegetation, forming the best-cultivated and most thickly

* A popular volume on the History and Geography of India, is Bohn's "India pictorial, historical, and descriptive," with 100 illustrations, 1854, 5s.

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peopled portion of the country. But westward of Delhi, and thence to the mouth of the Indus, the cultivated land bears no proportion to the sterile wastes, which only yield coarse grasses and jungle shrubs after the periodical rains, and become a complete desert in the hot season. From the river Sutlege to the Runn of Cutch the entire district is known by the names of *Thur*, or Desert, and *Maroosthulli*, the Region of Death.

3. The gigantic ridge of the *Himalaya*, rising abruptly fron the plains of Bengal upwards of five miles above the sea, chiefly pours southward the meltings of its snows; and gives to northern India three noble Rivers, the *Ganges*, *Brahmapootra*, and *Indus*. Of these, the first place is due to the *Ganges*, as of equal magnitude with the other two, while far more completely Indian, and of greater utility, traversing the most densely inhabited parts of the country. It descends from the southern slope of the highland rampart, receives affluents larger than the Rhine, gives employment to at least 300,000 boatmen, and discharges itself through many channels into the Bay of Bengal. The *Brahmapootra* rises on the north side of the grand ridge, and flows chiefly in Thibet, but enters India in the lower part of its course, and mingles with the Ganges at its mouth. The *Indus* likewise rises in Thibet, but breaks earlier through the mountains, receives the waters of the Punjaub, and descends to the Arabian Sea. The three rivers periodically overflow, owing to seasonal rains, and inundate vast tracts of country.

4. SOUTHERN INDIA, or the country south of the Nerbuddah river, is the peninsula proper, originally called the *Deccan*, a term derived from the Sanscrit, signifying the south. The eastern side of the peninsula is commonly styled the *Coast of Coromandel*, and the western the *Malabar coast*. The interior is for the most part a plateau, divided by river-valleys into a series of table-lands. Its longitudinal edges are crowned with the eastern and western Ghauts, secondary ranges of mountains, running parallel to the two coasts. The term *Ghaut* is Sanscrit, and refers to the passes by which the ranges are crossed. It strikingly corresponds to our word "gate," both in form and meaning. The central table-lands are called *Bala-ghaut*, "above the passes;" and the maritime lowlands *Payan-ghaut*, "below the passes."

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5. The *Rivers* of southern India are of far inferior note to those of the northern. The *Godavery*, the largest, *Kishna*, and *Cauvery*, flow to the east coast: the *Taptee* and *Nerbudda* enter the Gulf of Cambay on the western.

6. The *Vegetation* of the country is very varied and exuberant. Magnificent forests are general, containing teak-trees used for ship-building, palms, banyans, tall bamboos, and jungle grasses, with tree-ferns and orchideous plants. The banyan is a sacred tree with the Hindoos, and occasionally attains an immense magnitude. We have already mentioned a very large one growing on the banks of the Nerbudda; another, near Patna, spreads over a diameter of 370 feet, and the circuit of the supporting stems measures 920 feet. The cultivated products include rice, the common food; cotton, the common wear; the banana, sugar-cane, pepper, indigo, coffee, and tobacco plants, with the poppy for opium. Great part of the raw cotton, with almost all the opium, is sent to China. The tea-plant is cultivated in various Himalayan districts.

7. The large *native Animals* comprise: the elephant, wild in the forests and jungles, but generally domesticated; the rhinoceros, in the north-eastern parts of Bengal; the tiger, generally; the lion, in the north-west; the camel and wild ass, in the desert region; the bear, in all the wooded highlands; the buffalo, wild and tame, everywhere respected as a sacred animal; varieties of deer, and monkeys in great numbers; goats and sheep in Cashmere, celebrated for the fineness of their hair and wool. The ox is the most common beast of burden, with the camel in the north-west. Horses and elephants are chiefly used for war and riding.

8. The *Minerals* comprise iron, coal, and rock-salt; some gold, silver, tin, and copper; and various precious stones, found in the alluvial soil and in the beds of the rivers. The diamond mines of Golconda, once famous, are now exhausted and deserted. The Koh-i-Noor diamond, the largest known example, was found on the banks of the Godavery in 1550. It once belonged to the great Mogul, subsequently to Runjeet Sing, and upon the fall of the Sikh empire became the property of Queen Victoria.

9. The *Monsoons* are remarkable features of the cli-

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mate, common also to neighbouring regions. These are north-east and south-west winds, which blow for nearly half the year in the same direction, and regularly succeed each other. The term is derived from the Malay *moussin*, signifying a season. The north-east monsoon begins towards the end of October with heavy squalls, and continues to the end of March. It brings rain to the Coromandel coast, lasting usually about two months. The south-west monsoon commences about the middle of April, later from south to north, continues till September, and brings rain to the Malabar coast. Copious rains also fall with this monsoon on the great Gangetic plain.

10. India is *politically* distributed into British possessions; territories under the rule of native princes subject to British control; a few independent states; and small districts held by the French and Portuguese. BRITISH INDIA comprises considerably more than half the country, with nearly three-fourths of the population, and the finest provinces. It is divided into *three Presidencies*, each under a governor appointed by the crown, whose supreme representative is the governor of Bengal, with the style of viceroy.

Presidencies.	Chief Towns.
BENGAL	Calcutta, Benares, Lucknow, Patna, Delhi, Meerut, Cawnpore, Moorshedabad, Dacca, Lahore, Agra, Allahabad, Hurdwar, Juggernaut.
MADRAS	Madras, Calicut, Arcot, Tanjore, Trichinopoly, Tranquebar.
BOMBAY	Bombay, Surat, Poonah, Kurrachee.

11. The BENGAL PRESIDENCY, in the north, embraces the old territories of *Bengal Proper*, *Orissa*, *Behar*, *Allahabad*, *Oude*, *Delhi*, *and* the *Punjaub*. CALCUTTA, the splendid capital of British India, and residence of the viceroy, in lat. 22° 23″ N., long. 88° 28″ E., stands on the left bank of the *Hoogly*, one of the mouths of the Ganges, about a hundred miles from the sea, and contains upwards of 500,000 inhabitants, Asiatics of almost all nations, with a small proportion, less than a tenth, of Europeans. It is defended by Fort William (so named in honour of William III.), capable of accommodating a very large garrison. While an infant

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settlement of the English, the place was taken in 1756, by Surayah Dowlah, a native prince of Bengal, who confined 146 of its defenders in a small, close dungeon, afterwards called the Black Hole, where 123 perished in a night, from want of air, with great heat and thirst; an act which was speedily avenged. The trade of Calcutta is immense, and many native merchants are very wealthy. The name is compounded of *Kali*, a goddess, and *Cuttah*, a temple.

12. *Benares*, on the Ganges, with a population of 400,000, is a place of great trade, and annually visited by crowds of pilgrims, as a sacred city of the Hindoos, and chief school of the Brahmins. It has very peculiar architectural features. It swarms with beggars, who prey upon the pilgrims and the aged rich, who come here to die under the impression that the sanctity of the place will save their souls. *Lucknow*, the capital of OUDE, is one of the finest cities of India, with palaces, mosques, gilded cupolas and minarets of dazzling whiteness, and 300,000 inhabitants. The brave resistance of the small English garrison during the recent mutiny, under most desperate circumstances; its relief by Havelock; and the capture of the city by Lord Clyde, are events fresh in our memory. *Patna*, on the Ganges, of about the same size, is a great seat of commerce in linen fabrics, indigo, saltpetre, and other products.

13. *Delhi*, on the Jumna, once the capital of the Mogul empire, and till recently the residence of the fallen dynasty, had a population of nearly two millions in the days of its prosperity, and of 200,000 prior to late disturbances. It was the stronghold of the rebellious sepoys till taken by storm by the British troops under Sir Archibald Wilson, after a long siege, in 1857. *Meerut*, where the mutiny broke out, is a small place (population 29,000) about fifty miles to the north-east; and *Cawnpore*, one of the principal military stations in India, population 108,000, where the greatest horrors of the mutiny were perpetrated in 1857, under the direction of Nena Sahib, is at the same distance south-west of Lucknow. *Moorshedabad*, north of Calcutta, and *Dacca*, on the north-east, each with about 100,000 inhabitants, are large manufacturing towns, noted for cotton and silk weaving, and the finest muslins in the world. *Plassey*, south of Moorshedabad, is famous for Col. Clive's victory,

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in 1757, over Surajah Dowlah, who in the previous year had smothered so many English at the Black Hole of Calcutta.

14. *Lahore* is the capital of the PUNJAUB, or the country of the "five rivers," the Jhelum, Chunab, Ravee, Beeas, and Sutlege, affluents of the Indus. It is also called the country of the Sikhs, a once dominant religious sect, who were conquered after severely contested battles, and their territory annexed to the British empire in 1849. *Agra*, on the Jumna, with more than 80,000 inhabitants, has one of the finest specimens of Mahommedan architecture in existence, the Taje-Mahal, a mausoleum erected by the Mogul emperor Shah Jehan for his wife. It is wholly of white marble, inlaid with precious stones.

15. *Allahabad*, with a population of 65,000, is situated at the junction of the Jumna and Ganges, and on that account is deemed sacred by the Hindoos, and visited by pilgrims. It is the capital of one of the most populous and productive provinces of British India, and comprises *Bundelcund*, formerly noted for its diamond mines. *Hurdwar*, near the issue of the Ganges from the mountains, is also a place of annual pilgrimage, at which time a great fair is held, and upwards of two millions of people sometimes assemble. *Juggernaut*, with a temple 200 feet high, long the scene of fearful rites,* is on the coast of Bengal, a landmark from the sea.

16. The MADRAS PRESIDENCY extends over an area of about 145 square miles, along the east coast of the peninsula, and has a population exceeding thirteen millions. It comprises the *Northern Circars* and the *Carnatic;* and embraces also a portion of *Malabar*, which lies on the west coast. *Madras*, or *Fort St. George*, the capital, with its immediate suburbs on the Coromandel shore, contains upwards of 400,000 inhabitants. Though the seat of a vast foreign commerce, it is a most inconvenient place for shipping, owing to the want of a proper harbour, and the violence of the surf, which renders landing dangerous. It was the first British settlement in India, founded in 1639. *Calicut*, a trading town on the opposite coast, population 30,000, was the landing-place of Vasco de Gama, in 1498, the first European who reached India by the Cape of Good Hope.

17. The BOMBAY PRESIDENCY, the third seat of the

* For an account of these fearful rites, see *Fosteriana*, p. 137, *et seq.*

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British government in India, stretches along the western coast, and embraces portions of the old provinces of *Aurungabad*, *Bejapoor*, *Khandeish*, and *Guzerat*, with *Scinde* on the Lower Indus. Though the smallest of the three Presidencies, it includes, with *Scinde*, an area of more than 120,000 square miles, and a population of nearly ten millions. *Bombay*, the capital, on a small rocky island, separated from the mainland by a narrow strait, and stongly fortified, has a population of 250,000, and is the principal place for shipbuilding, its harbour and docks being the finest in India. It has acquired great importance since the establishment of communication with England by the Red Sea route, as the first port of India reached by the outward-bound steamers, and the last left on the homeward voyage. The name is a compound of the Portuguese *bom*, good, and *bahia*, harbour or bay. The islands of *Elephanta* and *Salsette*, in the neighbourhood, are much visited on account of their extraordinary cave-temples. *Surat*, with 135,000 inhabitants, formerly a place of great importance, is now chiefly remarkable for its hospital for sick, maimed, and aged animals. *Poonah*, a large and important town, was formerly the capital of the Mahratta empire. In its neighbourhood are many of the hill-forts, celebrated in the annals of Indian warfare. *Meanee*, a village of Scinde, six miles north of *Hyderabad*, is the scene of Sir Charles Napier's famous victory in 1843. *Kurrachee*, at the extreme western point of India, is the terminus of the submarine cable, recently laid down, which brings the country into telegraphic communication with England, by way of the Arabian and Red Seas.

18. The principal STATES RULED BY NATIVE PRINCES, but more or less *controlled* by Great Britain, and *tributary*, are as follows:—

States.	Chief Towns.
NIZAM'S DOMINIONS	Hyderabad, Aurungabad, Golconda.
BERAR	Nagpoor.
MAHRATTAS ..	Sattarah, Bejapoor.
THE MYSORE ..	Mysore, Seringapatam, Bangalore.
TRAVANCORE ..	Trivandrum, Cochin.
BARODA	Baroda.
RAJPOOTANA ..	Jeypoor, Jhodpoor, Oodeypoor.
SCINDIAH	Gwalior.

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19. *Hyderabad*, finely situated on the table-land of the Deccan, is a large Moslem city, with a population (including the suburbs) of 200,000. Its artisans are especially noted for the cutting of precious stones. The British Residency is a magnificent building, with apartments for state receptions hung with scarlet cloth, bordered with gold, ornamented with gorgeous chandeliers and gigantic mirrors. The staircase is the grandest in India, each step being a block of the finest granite. In former times, on a single reception night, the lighting of the whole establishment used to cost £1000; and, at entertainments, Nách girls were commonly introduced, some of whom have been known to wear £30,000 worth of jewels. The Nizam has a regiment composed entirely of females, who perform all the military duties of men. *Aurungabad*, a large city, with 60,000 inhabitants, was the favourite residence of Aurungzebe. Near it are the magnificent temples of *Ellora*, and within forty miles of it is *Assaye*, famous for the victory gained there by Wellington. *Golconda*, once the capital of an independent kingdom, and famous as the depository of diamonds found in the neighbourhood, is still used as the Nizam's treasury.

20. *Nagpoor*, within the territory of the Deccan, is a considerable city, with about 110,000 inhabitants. *Seringapatam*, on the Mysore table-land, now unimportant, with a population of only 30,000, was the capital of Hyder Ali, and his successor, Tippoo Saib. The latter fell at one of the gates when the city was taken by General, afterwards Sir David Baird, and Col. Wellesley, afterwards Wellington, 1799. *Bangalore*, some distance to the northward, is a salubrious and strongly-fortified town, head-quarters of the British Resident; pop^{n} 60,000. *Cochin*, in Travancore is famous for its magnificent forests of teak and other timber, and is the only port south of Bombay in which large vessels can be conveniently built. *Baroda*, the capital of the Guicowar's dominions, is a place of considerable trade, with a population of 140,000.

21. *Rajpootana*, or *Rajasthan*, is a large and important tract of country in northern India, comprising the region of the Great Desert and the Aravella Mountains. The Rajpoots are a warlike and haughty race, altogether superior to the general population of Hindoostan. It was for many years ably governed by the late Lieut. Col. Tod.

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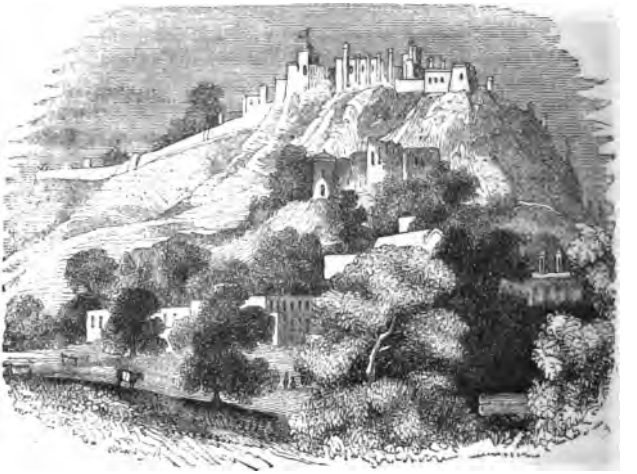
Its chief town is *Jeypoor*, with a population of 60,000. On the west side of the Aravalli is *Jhodpoor*, a fortified town; population 60,000. *Gwalior*, near the centre of India, is celebrated for its strong rock fortress, population 50,000.



Fort of Gwalior.

22. The INDEPENDENT STATES are *Cashmere*,* *Nepaul*, and *Bhotan*, on the southern slopes of the Himalaya. The two latter are wild and mountainous districts, inhabited by a hardy energetic race, superior to the Hindoos in general. The former is an elevated valley, almost severed from the rest of the world by enclosing highlands, and celebrated in prose and poetry for its natural beauty, genial climate, and textile fabrics. Rarely are rude winds and storms experienced; the finest fruits and flowers are produced; and the shawls of Cashmere are renowned for purity of colour and style of execution. They are chiefly made near its capital, *Serinagur*, a town said to have a population of 40,000. Our word shawl is a corruption of the native term for the fabric, *dushchala*.

23. Five small detached districts form the *French* government of *Pondicherry*, a place on the Coromandel coast, 85 miles south of Madras, population 30,000; and the *Portuguese* retain *Goa*, on the western seaboard, once a splendid

* By a recent treaty Cashmere is bound to present six shawls annually to Queen Victoria, and is so far tributary.

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seat of trade, with 200,000 inhabitants, now decayed, with a population of only a few hundred; they have also a little settlement in Guzerat.

24. The following are some travelling distances from Calcutta:—

To	Miles.	To	Miles.	To	Miles.
Agra	839	Dacca	177	Mooltan	1450
Allahabad	544	Delhi	956	Moorshedabad.	118
Aracan	475	Ganjam	369	Mysore	1178
Ava	1150	Gwalior	805	Nagpore	722
Bareilly	805	Hyderabad.	902	Patna	340
Benares	460	Juggernaut	311	Pondicherry	1130
Bombay	1301	Lahore	1342	Poonah	1200
Caubul	1761	Lucknow	649	Seringapatam	1170
Candahar	1781	Madras	1030	Surat	1238
Cape Comorin	1470				

In the names of places, *abad*, *patam*, *poor*, or *pore*, signify a dwelling, city, or town; *cot*, *cotta*, *gotta*, a port; *gunge*, *gung*, *gang*, a market-place; *war*, *warra*, a region or country; *giri*, *gherri*, a mountain or hill; *ab*, or *aub*, water, river, or lake; *nuddy*, a river; *nil*, blue; *maha*, great. Some illustrations are, Hyder*abad*, Hyder's town; Seringa*patam*, town of Sriranga, a name of Vishnoo; Nag*poor*, town of serpents; Raj*warra*, country of the Rajpoots; Nil*gherries*, blue mountains; *Mahanuddy*, great river; Dou*ab*, two rivers; Punj*aub*, five rivers.

25. India is supposed to contain a *population* of 180,000,000 souls, of whom rather more than 130,000,000 are in the British possessions. The aborigines, or Hindoos, form the vast majority. They have no political or physical unity; but consist of races as distinct in appearance, language, customs, and religion, as the nations of Europe. The term Hindoo is from the Persian for black. Hindoostan, therefore, signifies the country of the blacks. But, though the people are generally much darker than the Persians, there are great differences of colour. Some are actually fair, others have an olive or copper hue, and others are intensely sable. They excel in various mechanical arts, especially in carving and in cotton, silk, and woollen fabrics.

26. Besides the aboriginal tribes, there are many foreigners; Afghans in the north-western provinces: Arabs, Syrian Christians, Parsees or Persians, and Jews, on the

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west coast; Portuguese in the same region; a few French and Danes on the east coast; and the dominant British, widely distributed, but numerically unimportant, with Anglo-Indians, of mixed British and Hindoo descent. The south-west coast is remarkable for its black and white Jews. The black Jews are not distinguishable by complexion from the natives, and have been in the country from time immemorial. There is reason to believe that they were established at Kadangular, a coast-town of Cochin, in the third or fourth century of our era. They possess a copper grant from the Prince of Malabar, conferring the place upon them soon after that date; and have a plain Synagogue, containing five copies of the Pentateuch, beautifully written on vellum, and kept in silver cases. The White Jews, or Jews of Jerusalem, are said to have arrived at a much more recent date.

27. The ancient *Language* of the Hindoos, that of their sacred books, or the Sanscrit, is not vernacular, but cultivated by the learned. It is the parent of upwards of twenty distinct living languages, chiefly spoken in the northern and central districts. Six languages, not of the Sanscrit family, are spoken in southern India. The Hindustani, the tongue of the Mohammedan natives, who are widely diffused, is generally understood throughout the country, and is, therefore, the most useful to Europeans.

28. The predominant *Religion* is that absurd, debasing, and cruel superstition, *Brahminism*, which is professed by full five-sixths of the people. Four great castes or classes are distinguished among its adherents, who are bound never to change caste, or marry into another. But practically the castes have greatly run into each other, except in the case of the highest, that of the Brahmins or priests. *Buddhism* prevails towards the eastern Himalaya. *Mohammedanism* is the creed of a large number in the northern, central, and southern provinces. In some parts of the country Brahminism appears allied with Buddhism, and an odd compound of Brahminism and Mohammedanism is professed by the Sikhs. *Fire-worship* lingers among the Parsees, and *Devil-worship* marks the Shamar tribes of the extreme south. Their country is covered with pyramids of mud, plastered and whitewashed, with the figure of a devil delineated in front, commonly that of a hag devouring children. Each pyramid serves as a temple, called a *pe-kovil*, or devil's-house.

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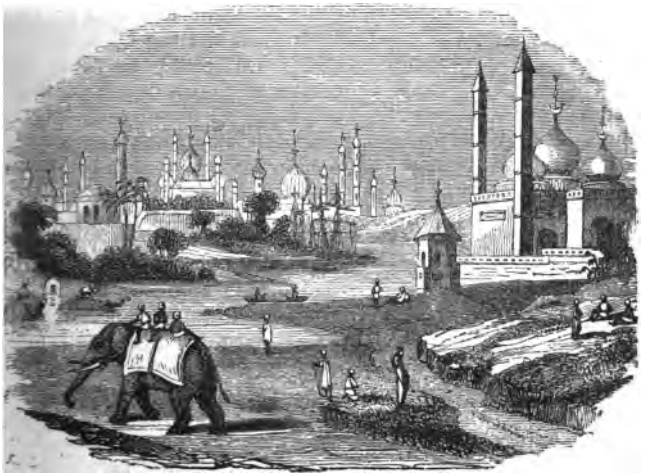
29. India has no important insular dependency except *Ceylon*, off the south-east extremity, an oval-shaped island, with an area of about 24,000 square miles, and a population estimated at 1,250,000. It forms a distinct colony of the British crown, and contains *Colombo*, the colonial capital, on the west coast, population 30,000; *Kandy*, the native capital, towards the centre; and *Point de Galle*, a strong fortress and a calling station for steamers, on the south. The island is remarkable for stupendous antiquities of an entirely unknown age, but reared by a people considerably advanced in civilization. It produces very fine woods, is the principal district for the growth of cinnamon, abounds with precious stones, and has a celebrated pearl-fishery.

30. The *Laccadive and Maldive archipelagoes* form a long chain of small and low coral isles and reefs to the south-west of Malabar. They are richly clothed with palm and cocoa-nut trees, which, with fish and coarse shells, afford the chief support to the few scattered inhabitants. In nearly the same latitude, are the *Andaman* and *Nicobar* groups, which belong to Denmark. They yield timber, cocoa-nuts, and beautiful shells; but the climate is unhealthy.



City of Lucknow.

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Bankok, in Siam.

INDIA BEYOND THE GANGES.

1. The south-eastern peninsula of Asia, sometimes styled the *Indo-Chinese Peninsula*, and *Further India*, has the Chinese empire on the north, the Strait of Malacca on the south, the Bay of Bengal on the west, and the Chinese Sea on the east. It is a region of singular conformation, abruptly dwindling from a breadth of 800 miles to a long narrow projection, little more than 60 miles wide, where the greatest contraction occurs. Including this projection, known as the *Malayan Peninsula*, the entire length from north to south is about 1800 miles. The south point is the southerly extremity of Asia. The area is not less than 500,000 square miles.

2. A considerable part of the country is very imperfectly known to Europeans. Its main mass appears to be traversed longitudinally by ranges of mountains, which divide the surface into several great valleys, each drained and watered by a grand river descending from the highlands of Thibet. The *Irawaddy*, on the west, flows into the Bay of Bengal, and forms an extensive delta; the *Meinam*, in the centre, enters the Gulf of Siam; and the *Cambodia*, on the east, discharges into the Chinese Sea. They periodically

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overflow, and flood a vast extent of the surface. Many of the houses, or rather huts, are therefore built upon piles; and a large number of the people permanently reside in junks, or in dwellings so constructed as to be capable of floating.

3. *Forests* of fine and hard timber-trees densely cover the country, containing also ornamental, scented, and resinous woods. The vegetable products exported consist of teak, ebony, and sandal-wood, gamboge, caoutchouc, gutta-percha, pepper, betel-nuts, and sugar. Gamboge, or camboge, the well-known paint, has its name from the province of Cambodia or Camboja; it is gum-resin obtained from the bruised leaves and twigs of a tree growing there. Gutta-percha is the concrete juice of the taban, a large forest-tree. The *animals* correspond generally to those of India. Those of a white colour are deemed peculiarly sacred; no native meets a white cock without saluting him, and the white monkey is also reverenced. But the white elephant receives the highest honours; he takes rank after princes of the blood, and a tuft of his hairs has figured in Siamese presents to Queen Victoria.

4. The territory is politically distributed as follows:—

States.	Chief Towns.
BURMAN EMPIRE	Ava, Amarapoora.
EMPIRE OF ANNAM ..	COCHIN CHINA, Hui, TONQUIN, Cachao, CAMBODIA, Saigon.
KINGDOM OF SIAM.. ..	Bankok, Yuthia.
COUNTRY OF THE LAOS..	Changmai, Lanchang.
MALAYA	Perak, Pahang, Johore.
BRITISH POSSESSIONS ..	Assam, Aracan, Tenasserim, Pegu, Malacca, Singapore, &c.

5. BURMAH, on the north-west, has been much reduced in extent by large cessions of territory to the British, obtained during the two wars ending in 1826 and 1854. The maritime region is called *Pegu*, and the inland territory *Burmah proper*. Besides the dominant Burmese, many distinct tribes are enumerated, but all Buddhists in religion, low in the scale of civilisation, and under a perfectly despotic form of government. *Ava*, the capital, on the *Irawaddy*, consists of low houses thatched with reeds, temples and royal dwellings

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excepted, and contains 50,000 inhabitants. *Amarapoora*, "town of immortality," immediately contiguous, has 30,000, and the same character. It is built on the banks of a large and deep lake, and, on account of the number and variety of boats, and the height of the surrounding mountains, has been compared to Venice. *Rangoon*, formerly the principal sea-port in the Burman Empire, was stormed and captured by the English in 1852, and is now numbered with the British possessions.

6. ANNAM, on the east coast, consists of three principal districts, once separate kingdoms, *Tonquin* in the north, *Cambodia* in the south, and *Cochin China* intermediate. Besides native races similar to the Burmese, there are Malay colonies who profess Mahommedanism, with Portuguese emigrants from Malacca, and many Chinese. *Hué*, the capital, in Cochin China, is a small maritime town of 30,000 inhabitants, strongly fortified. *Cachao*, in Tonquin, the largest town of the empire, abounds with gold, silver, copper, and iron, and is supposed to have a population of 150,000; and *Saigon*, in Cambodia, the most commercial place, has 100,000. The French now hold possession of it.

7. SIAM, in the south, extends around the gulf of that name, and embraces the lower basin of the Meinam river. The people, like their neighbours, are remarkable for slavish respect to social superiority and primogeniture. No inferior stands before a superior; and even younger brothers kneel when addressing their elders, or handing them anything they have asked for. Siamese ambassadors introduced to Queen Victoria a few years ago, instantly went down on hands and knees on entering the presence, and hobbled along to the foot of the throne, to the disturbance of English gravity. There are two kings with prodigiously long names, whose respective duties have not been clearly defined. Both are intelligent men, understand English; and while one has a band that can play God save the Queen, the other is anxious for the latest Nautical Almanac. *Bankok*, the capital, on the *Meinam*, near its mouth, has a population of 100,000, more than one third of which live on "the floating town," which consists of bamboo rafts, each containing from eight to ten huts, with boats alongside. *Yuthia*, the former capital, forty miles higher up the river, is a large town with

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a vast royal palace, but was ruined by the Burmese in 1767, since when it has ceased to be of any importance. A treaty of commerce with Siam was negociated by Sir John Bowring in 1855.

8. The LAOS COUNTRY is mountainous, and entirely inland, enclosed by the three preceding states, with China on the north. The people (about 100,000) consist of independent tribes under chiefs whose government is patriarchal, are a superior race, peaceable, honest, and industrious, very musical, and graceful dancers. They sing to the tones of the bamboo organ and sonorous woods; and dance, holding garlands of flowers and lighted torches in their hands. The wealthy Siamese have commonly Laos women for their wives. The chief town is *Changmai*, on the Meinam, population 25,000. MALAYA comprises the southern portion of the narrow projection known as the peninsula of Malacca, and consists of about ten small ill governed states, scantily inhabited by Malays, barbarous and piratical.

9. The BRITISH POSSESSIONS consist of the territories of *Assam*, *Chittagong*, and *Arracan*, in the north, the two latter maritime, formally ceded by Burmah in 1826, but previously occupied; the provinces of *Yeh*, *Tavoy*, *Mergui*, and *Tenasserim*, central, on the coast, acquired by conquest at the same time; the district of *Pegu*, intermediate, including *Rangoon*, conquered and ceded in 1852; and the small territory of *Malacca*, in the south, received from the Dutch in 1825, in exchange for Bencoolen in Sumatra. The insular dependencies are *Penang*, the island of the betel-nut palm, obtained in 1785; and *Singapore*, the town of the lion, which was taken possession of by Sir Stamford Raffles in 1818. All the British possessions are included in the PRESIDENCY of BENGAL. *Assam*, which lies in the valley of the Brahmapootra, and is very fertile and well watered, contains large forests of the tea plant, which here grows wild on the high grounds, the lower ones being frequently inundated by the river. An English company has been formed for its cultivation, and has been so far successful that we may look forward to the time when we shall be in some degree independent of the Chinese. *Arracan*, which was taken from the Burmans by the English in 1824, is a swampy, unhealthy place, but with good harbours in the Bay of Bengal. It

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has a population of about 250,000, and yields a revenue of some £40,000. The town of *Malacca* is of interest from its Anglo-Chinese college, founded by Drs. Morrison and Milne. *Singapore*, which, till its occupation by the British, was an insignificant place, now contains 70,000 inhabitants, is the emporium for goods from all parts of the world, has a vast trade, and completely commands the best and most frequented route between India and China. The little isle of which it is the capital being at the south extremity of the Asian mainland, has the native name of *Ujong Tanna*, or the Land's End.

10. The total population of the Trans-Gangetic peninsula is supposed to be not less than 20,000,000, all Buddhists in religion, except the Malays and Europeans, and generally far inferior to the Hindoos and Chinese, the bordering nations.

Cochin Chinese Lady and Mandarin.

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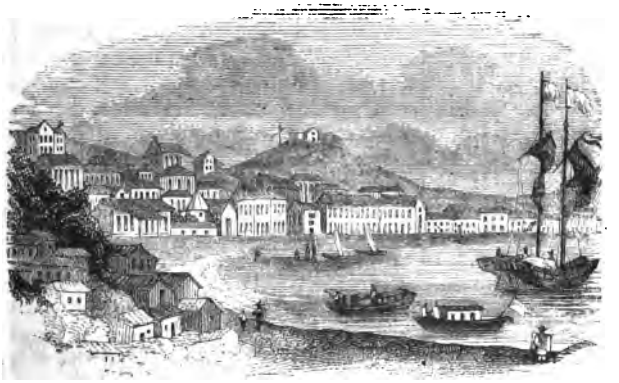
CHINESE EMPIRE
AND
JAPAN.
RUSSIAN EMPIRE
MONGOLIA
CHINA
THIBET
SANDY DESERT
PACIFIC OCEAN
CHINA SEA
BAY OF BENGAL
CALCUTTA
Nertchinsk
Kiakhta
Karakum
Kouloun
Peking
Nankin
Canton
Hoang Ho R.
Yang tse Kiang R.
Longitude East from Greenwich
REFERENCE TO THE PROVINCES
1. Shensee
2. Shansee
3. Petcheli
4. Shantung
5. Gan hoey
6. Honan
7. Hoenan
8. Setchuen
9. Kweichow
10. Yunnan
11. Quangtung
12. Quangsee
13. Kiangsee
14. Fokien
15. Tchetchiang



Macao.

CHINESE EMPIRE.*

1. The Chinese dominions embrace a very large portion of central and eastern Asia, equal to nearly one-third of the entire continent, or 5,300,000 square miles, thus considerably exceeding the whole area of Europe. The empire has therefore the native title of *Teen-hea*, "Under Heaven," in allusion to its vast extent. But though the south-eastern section is most densely peopled, more than half the surface is either a solitude, or very scantily inhabited.

2. China itself, the proper home of the Chinese people, stretches along the east coast of Asia, and has an extent of about 1,500 miles from north to south, by the same distance from east to west, with an area of 1,400,000 square miles. The maritime frontier is formed by the Pacific Ocean and its branches, the Yellow Sea on the north, so called from the colour of the water, arising from sediment, and the Chinese Sea on the south, remarkable for its hurricanes. The continental boundaries are the subject territories on the north and west, with the states of the Indo-Chinese peninsula on the south.

3. About one-half the *surface* of the country, chiefly on the western side, consists of mountains, some of which have

* A full and popular account of the Chinese Empire and neighbouring Kingdoms will be found in Bohn's "China, Ava, Birman Empire, Siam, and Annam, with 100 Illustrations. Lond. 1853, 5s."

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snow-capped summits, but with fertile valleys between them, while their slopes and the subordinate ranges are cultivated on the terrace principle, and clothed with fruit-trees, flowering plants, or edible vegetation. The other half is an alluvial and well-watered plain, forming the most productive granary in the world, and the seat of some of its largest cities, said to be occupied by 100,000,000 people. The low and swampy tracts are cultivated as rice grounds, while those which are dry and firm are carefully irrigated for various produce. Extremes of temperature prevail, notwithstanding which the *climate* is generally salubrious.

4. Two mighty *Rivers* strikingly distinguish the physical geography: the *Hoang-ho*, or *Yellow river*, called "*China's Sorrow*" by one of the emperors, from the frequent bursting of the banks; and the *Yang-tse-kiang*, river of the *Son of the Ocean*, both of which traverse the country from west to east. They rise not far from each other in Thibet, separate to a distance of nearly a thousand miles, approach in their lower course, and enter the Yellow Sea very little more than a hundred miles apart. The Yang-tse-kiang is the largest river of the Old World, and the richest of the globe in vast cities, industrious human beings, and wide margins of cultivated and extremely fertile lands. Its total course is about 2,500 miles, and it is said to be navigable for 800 miles by vessels of considerable burden, indeed it was ascended for 200 miles by ships of the line during the British expedition of 1842. The largest *lake* is Tong-ting, in the swampy province of *Hou-quang*, the "country of lakes;" this has a circumference of 300 miles.

5. The wild *Animals* are unimportant, and the commonly domesticated races extremely few; for animal food, with the exception of hogs, dogs, rats, mice, and fish, is little used; and where population is so dense, men perform the work of horses. But the country has a superb flora, and a most useful cultivated *Vegetation*. In the warm south, there is rice, the sugar cane, cocoa palm, and China orange; the temperate region furnishes the tea and cotton shrubs, with the mulberry-tree for the silk-worm; and in both these, with the colder north, wheat and millet are raised, with a great variety of pulses, and oil-giving plants. The prominent *Minerals* are silver, copper, tin, lead, iron, quicksilver, and zinc, with coal, and the porcelain clays.

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6. China is divided into eighteen provinces, six maritime, and twelve inland.

Maritime Provinces.	Area in sq. miles.	Population in round numbers.	Chief Towns.
PE-CHEE-LEE ..	58,949	28,000,000	Pekin, Tien-sin-foo.
SHANG-TUNG ..	65,104	29,000,000	Tsi-nan-foo, Tong-chew-foo.
KIANG-SU ..	44,500	38,000,000	Nankin, Shang-hai.
TCHE-KIANG ..	39,150	26,300,000	Hang-chew-foo, Ning-po.
FO-KIEN	53,480	14,780,000	Foo-chew-foo, Amoy.
QUANG-TUNG ..	79,456	19,200,000	Canton, Macao.
Inland Provinces.			
SHAN-SEE.. ..	55,268	14,000,000	Tai-yuen-foo.
SHEN-SEE.. ..	67,400	10,000,000	Si-gnan-foo.
KAN-SU	86,608	15,000,000	Lan-tchew-foo.
HO-NAN	65,104	23,000,000	Honan-foo, Kai-fong-foo
GAN-HWY ..	48,461	34,000,000	Ngan-king-foo.
HOU-PEE	70,450	27,300,000	Woo-tchang-foo.
HOU-NAN	74,320	18 600,000	Tchang-cha-foo.
KIANG-SEE ..	72,176	30,500,000	Nan-tchang-foo, King-te-tshin.
QUANG-SEE ..	78,250	7,300,000	Kwei-ling-foo
KWEI-CHEW ..	60,554	5,300,000	Kwei-yang-foo.
YUN-NAN.. ..	107,969	5,500,000	Yun-nan-foo.
SE-CHEW-EN ..	166,800	21,500,000	Tching-too-foo.

In the names of provinces and towns, *foo*, *chew*, and *hien*, are terms of rank, *foo* denoting the first rank, *chew* the second, and *hien* the third. *Pe* signifies north, *nan* south, *tung* east, *see* west, *king* court, *ho* and *kiang* river, *shan* mountain, *hoo* lake. Hence *Pe-king* means the north court, and *Nan-king* the south court, at different periods imperial residences, *Shan-tung* denotes east of the mountains, *Shan-see* west of the mountains, and *Hoo-nan* south of the lake. The names of towns and cities of the "Celestial Empire" are of little general interest to Europeans excepting the few which are associated with historical events.

7. *Peking*, or as it is now usually spelt, *Pekin*, the capital, in lat. 39° 42′ N., long. 116° 30′ E., occupies a plain on the *Peiho* river, near the north-eastern frontier, and is supposed to contain nearly two million inhabitants. It consists of two distinct and regularly built cities, one chiefly occupied by Tartars, the dominant race, the other by Chinese. The former contains the residence of the emperor, a vast pile, and is hence called the imperial town. Both are surrounded with high castellated walls about fifteen miles in circuit. The capital of the "central flowery land" has

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been jealously guarded from foreign intrusion. A peaceful combined embassy of the British and French was recently repulsed with bloodshed from the mouth of the Peiho. The representative of the United States succeeded in reaching the city; but was received far more in the condition of a prisoner of state than a welcome guest. The Russians have, however, long enjoyed a limited intercourse with Pekin. To *Tien-sin*,, the port of Pekin, on the Peiho, a place of immense trade, Lord Elgin advanced with a naval force, and negociated the treaty of 1858.

8. *Nankin*, on the Yang-tse-Kiang, with more than 300,000 inhabitants, formerly the capital, occupies probably a greater space than any other existing city; but it is largely covered with ruins, or under cultivation. The famous porcelain tower is a pagoda of nine stories, 200 feet high. There are manufactures of silks and nankeens. The latter word, derived from the name of the city, passes current among us as pure English. *Canton*, on the Choo-kiang, called by Europeans the Canton river, was the only place at which foreigners were allowed to trade, till, by treaty in 1842, the four ports of *Shanghai*, *Amoy*, *Ningpo*, and *Foo-chew-foo*, were thrown open to the British. The river for several miles is crowded with barges containing whole families that have no other residence; population probably a million. *Macao*, on an island at the mouth of the river, is a Portuguese town. Its site was granted by the Chinese emperor in 1586, in return for assistance afforded against pirates. In the neighbourhood, a cave and garden are shown as the favourite resort of Camoëns, where part of his poem, the Lusiad, was written.

9. *Shanghai*, scarcely known twenty years ago, has rapidly become a great emporium of foreign trade. In 1856, the fourteenth year after the opening of the port to Europeans, the exports amounted to nearly £12,000,000. The city has a fearful tomb in the Baby Tower. Here poor parents bring their children, when dead, and throw them in at a window, without enquiry being made as to how life became extinct. When the tower is full, the proper authorities burn the heap, and spread the ashes over the land. *Amoy*, seated on an island, is the next in mercantile importance, but *Foo-chew-foo*, which stands in the centre of the geat tea district, is much larger, and has a population exceeding half a million. *Ningpo*, in the province of Tche-kiang, is a very beautiful town,

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with a considerable trade in silks and teas. The capital of the province is *Hang-chew-foo*, visited by Marco Polo nearly six centuries ago, and called by him, *Kinsai*; it still answers to his description, as one of the finest and most considerable cities in the empire. It is the great customhouse of the interior, intersected by numerous canals, on which are thousands of junks, brightly painted and brilliantly varnished. The population is very large. Though carefully guarded, a "special" of the Times gained admission in 1858. *Si-gnan-foo* is noted for the discovery by some workmen, in 1625, of a monumental stone buried in the earth outside the walls of the city. It was a dark-coloured marble tablet of large dimensions, bearing on one side an inscription in old Chinese, and also some other characters quite unknown. The stone was publicly exhibited, and visited, among others, by some Jesuit missionaries. The strange characters proved to be those in use among the ancient inhabitants of Syria, resembling the kufic, commonly employed in inscriptions. They were interpreted into a testimony to the existence of a Christian mission in China in the seventh century.

10. The *Population* of China, according to official census, exceeds 360,000,000. In spite of its fertility, and the amazing industry of the people, the country is vastly overcrowded; and the labouring classes are in general miserably poor. Their poverty has often driven them into brigandage, and mainly caused the rebellion which has for a series of years convulsed the empire. It has also extensively stimulated emigration, for Chinese are now spread over all the adjoining countries and islands of Asia, and form an important item in the population of Calcutta, Australia, and California.

11. Immemorially the people have lived under the same laws and institutions; and their *Civilisation* goes back historically several thousand years. But either from incapacity to advance, or obstinate adherence to the habits of their ancestors, or vanity, they have remained stationary; and while beforehand with Europeans in some points of knowledge, have lagged far behind them in their practical application. Thus printing, gunpowder, and the mariner's compass, were first known to the Chinese. But their printing is by blocks instead of moveable types; gunpowder was not applied to fire-arms till taught this employment of it by the westerns; and the compass has not rendered them bold

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or skilful navigators. In works requiring patient industry, dexterous or delicate handling, as the production of porcelain, artificial flowers, fans, carvings, and in general tillage, they are unsurpassed. By the former quality they have succeeded in some vast undertakings, as the great wall and canal, rather than by engineering skill.

12. The *Great Wall* encloses the country on the north, and was constructed in the reign of Hiang-ti, 213 years before Christ, to protect the frontier from the incursions of the Tartars. It extends through nearly 19° of longitude from the shore of the Yellow Sea westward, over mountains and rivers, a distance of nearly 1,500 miles, ending amid almost impassable rocks and extensive deserts, and is undoubtedly one of the most stupendous monuments of human industry extant. The wall consists of an embankment of earth, raised upon a basis of stone, and cased with stones or bricks. There are towers and gates at intervals of every 300 feet, fortified and garrisoned. The height varies, but may average 20 feet. The thickness at the base amounts to 25 feet, and at the top to 15. Many parts are now in ruins; and when the strongest, it did not always answer its design. In 1618, the Mantchoo Tartars broke through, and placed the present dynasty on the throne.

13. The *Great Canal* extends from north to south through the Chinese lowland, and facilitates communication between the more productive provinces and the capital. It answers, too, the purpose of drainage in swampy, and of irrigation in dry districts. Cut through a generally level surface of light alluvial soil, its construction required little mechanical ingenuity, but involved vast labour, as it is sufficiently broad and deep to accommodate vessels of considerable burden. It is, however, carried in places across rising grounds by excavations, and over depressions by artificial mounds and locks. From Hang-chew-foo, where the canal commences on the south, to the town of Lin-chin, where it terminates on the north, falling into the river-system connected with Pekin, the distance in a straight line exceeds 500 miles, and probably its whole length amounts to more than 700. The southern portion of this great work was executed in the seventh or eighth century, but the northern part was made in the thirteenth, by Kublai Khan and his successors, when the Tatar dynasty removed the imperial residence from Nankin to Pekin.

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14. The Chinese belong to the *Mongolian Race;* small eyes and feet, and protuberant lips, are the admired types of the women, sleek corpulency of the men. Respect for parents and the aged, the general subordination of juniors to their seniors, and charity to the poor, are prevailing virtues. But these are counterbalanced by many vices and barbarities besides the paralysing deformity of artificially-made small feet among the women, a process which often proves fatal. Infanticide is common in the case of females; children are sold by parents into a kind of domestic slavery; daughters are doomed to dishonour by their mothers; delinquents in prison are abominably ill-treated; and captives in war are horribly butchered. No people are more undisguisedly or completely sensual. They live entirely to cater for the stomach. Edible birds' nests, the great luxury with the rich, used in soup, are imported from Java and the adjoining Archipelago. A collection of Chinese food, forwarded from Shanghae, through Sir John Bowring, may be seen at the South Kensington Museum. Some specimens of tobacco are marked, "Mild, for Women."

15. The *Form of Government* is despotic, under an emperor. It is administered by mandarins, who are appointed by him, solely from the literary class. In *Religion*, its literati profess Confucianism, or philosophical atheism; and the uneducated follow Buddhism. But all classes are idolaters, abjectly superstitious, though without the slightest apparent earnestness, except in relation to what has been called the "worship of ancestors." The *Language* is monosyllabic and uninflected, and as it consists of upwards of 80,000 written characters, it is necessarily of very difficult acquirement. Few of the common people can read, although *education* is afforded with every possible facility, and academical merit is almost the only road to government appointments. Yellow is the imperial colour, and none but relatives of the sovereign are allowed to wear yellow girdles. The Thibetians apply to China the name of *Gyanak*, or the *Great Black*, from the predominance of black, or dark blue, in the dress of the people; India they call *Cyagar*, or the *Great White*, from the general hue of the costume; and Russia they style *Cyaser*, or the *Great Yellow*, for some unknown reason, perhaps the prevalence of light auburn hair.

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16. Tea and raw silk are the staple articles of export. From soil, climate, cheap labour, and the practice of two thousand years, China has a natural monopoly in the production of tea; and not only supplies its own 415,000,000, but the whole world beside, Japan and Tonquin excepted. The black tea district is in the province of Fo-kien; the green tea in Kiang-nan, with Tche-kiang and Gan-hwy. The article made its appearance in England about the year 1650; and after the lapse of rather more than two centuries, we take upwards of 76,000,000 lbs. per annum. When the duty upon tea was at the highest, it yielded an annual revenue of £6,000,000, about three times greater than the whole revenue of the state when Pope wrote the lines alluding to Queen Anne.

> "Here now great Anna, whom these realms obey,
> Does sometimes counsel take, and sometimes tea."

These lines have been quoted to prove that our original pronunciation of tea was "tay."

17. Insular China includes the large island of *Hainan* on the south coast, 180 miles in length and 70 in breadth; *Hong Kong*, "sweet waters," a rocky island at the mouth of the estuary leading up to Canton, now a British colony; *Formosa*, "beautiful island," a name applied to it by the Portuguese, occupied on the eastern side by Malays, 250 miles in length and 80 in breadth; and *Chusan*, held for four years by British troops, to enforce the stipulations of the treaty of Nankin, but restored to the Chinese in 1845. *Hong Kong*, about fifteen miles in circuit, was surrendered to Great Britain by the Chinese in 1842; *Victoria*, its capital, 100 miles from Canton, and 40 from Macao, has an excellent harbour, and upwards of 30,000 inhabitants.

18. The Subject Territories of the Chinese empire embrace a vast extent of dreary desert country, occasionally crossed by trading caravans, and sparingly occupied by nomadic Mongol or Tartar hordes.

Territories.	Chief Towns.
Corea	King-ki-tao
Mantchooria ..	Kirin-Oola, Moukden.
Mongolia	Ourga, Maimachen, Karakorum.
Chinese Turkestan	Kashgar, Yarkand, Aksou.
Thibet	Lassa.

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19. COREA, a peninsula separated from northern China by the Yellow Sea, is the seat of a separate kingdom, wholly sealed to European intercourse. Its capital is *King-ki-tao*. The sovereign acknowledges dependence by an annual tribute. MANTCHOORIA, a mountainous and forest region, extends from the Great Wall to the river Amoor, governed by a viceroy who resides at *Kirin-Oola*, the original seat of the present imperial dynasty. The emperors, with their families, are still buried at the chief town, *Moukden*.

20. MONGOLIA, to the westward, separated from Mantchooria by the Thian-chan mountains, is the largest table-land in the world, consisting chiefly of deserts, including a portion of the great *Gobi*, inhabited by wandering pastoral tribes, descendants of the fierce warriors who under Ghengis Khan overran the finest part of Asia; its capital, *Ourga*, is a large trading town towards the Russian frontier, with a population of 70,000. *Maimachen* is close to the boundary, opposite the Russian frontier town Kiakhta. *Karakorum* was the capital of the vast empire established by Genghis Khan.

21. CHINESE TURKESTAN comprises the two districts of *Thian-chan-pe-loo* and *Thian-channan-loo*, meaning the country north and south of the Celestial mountains. The former is often called Sūngaria, and the latter Little Bokhara. *Kashgar* and *Yarkand*, two frontier cities on the west, are considerable places, and carry on a large trade with the inland tribes of Asia. The natives are independent in internal affairs; but a Chinese military governor at *Aksou* collects a revenue.

22. THIBET, the loftiest plateau of the globe, is situated between Independent Tartary on the west, Mongolia on the north, Chinese Tartary on the east, and Hindostan and Burmah on the south. The climate is cold, and little fitted for grain; but it yields rich pastures, and the fine wool used in Cashmere shawls. A remarkable feature is the *Valley of Brahmapootra*, in which is lake Paltch, a ring of water five miles broad, around an island 100 miles in diameter. Here is found the yak, a singular and useful animal, between the buffalo and the horse. Thibet has a spiritual sovereign, the Grand or Dalai Lama, held sacred throughout eastern Asia, who has an immense temple near *Lassa*, the capital of upper Thibet and residence of the Chinese viceroy. The city has a population of more than 80,000. LITTLE THIBET, on the north-west, is a small state, wholly independent.

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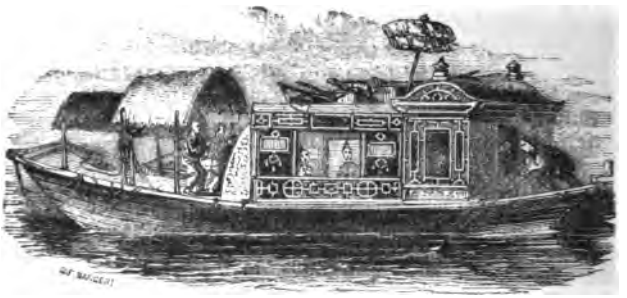

Japanese Pleasure Boat.

JAPAN.

1. The insular Japan empire, separated from the east coast of Asia by the Japanese Sea, and the narrow strait of Corea, consists of a chain of four large islands stretching from north to south, *Niphon*, *Yesso*, *Sikoke*, and *Kiusiu*, with many minor adjuncts. They are eminently fertile, picturesque, and populous; but subject to the drawback of being studded with active volcanoes, and rocked by awfully destructive earthquakes. The highest mountain is *Fuei*, a slumbering volcano, 12,000 feet above the level of the sea, covered with perpetual snow. As the outlying station of a mighty and wealthy continent, its commercial depôt towards the countries on the opposite coasts of America, these islands have acquired great importance since the germs of nations have been planted there, by the gold discoveries in California and British Columbia. The name Japan is said to mean in Chinese the "sun-rising," or "East-country," indicating the position of the Chain in relation to China.

2. The islands, happily placed by nature in a climate resembling that of the south of France, but tempered by a freer circulation of sea-breezes, include more than twice the area of Great Britain and Ireland. They have great *mineral wealth*. The metals, gold, silver, iron, and especially copper, are found singularly pure. Precious stones are abundant, pearls, agates, jaspers, and cornelians; but no diamonds occur. But it is far more important to know that coal of

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good quality is found in many parts, and is in common use, for by its existence in this region, the chain of steam communication round the earth's surface can be made complete. From the opposite shores of California to Japan, it is about twenty days' journey for the ocean steamer—nearly as long a period as such a vessel can carry her own fuel; and hence, after making the voyage, if no further supply could be obtained, the hope of establishing steam navigation across the Pacific ocean could not be realised, unless ships approximating to the Great Eastern in size were employed.

3. An ample, rich, and varied *Vegetation* clothes the islands. It comprises pines, firs, cypresses, oaks, and noble old cedars; most of our own wall-fruit trees; the white mulberry for silkworms, and the paper mulberry for writing paper; the camphor-tree; ginger, pepper, the varnish-tree, whence comes the gum that makes the famous Japanese lacquered work; and a profusion of beautiful flowers, lilies, carnations, camellias, and gardenias, wild in the waste places. The people raise the best rice in the world, tea, hemp, flax, tobacco, all kinds of grain, and most of our culinary vegetables. They very rarely taste flesh-meat, but subsist mainly on fish and rice. Tea is almost the universal drink.

4. The *Population* has been estimated as high as forty millions; and certainly many parts of the country are very densely peopled, the cities being veritable human ant-hills. The Japanese belong to the Mongolian family of nations, but have its distinctive conformation far less decidedly developed than the Chinese. They have made considerable advances in civilisation; possess fine roads, regularly divided into miles twice the length of ours, marked by milestones; build noble bridges; have fire-brigades and fire-escapes; calculate eclipses with exactness; construct good telescopes, mathematical instruments, clocks, watches, and carpenter's tools; engrave and carve wood to perfection; excel in lacquering, bronzing, and gilding; and possess a cheap literature. On the other hand, they have no carpets or fire-places; and glaze their windows with oiled paper, shells, or mica. They squat on stools, sleep on stuffed mats or carpets, with wooden pillows; and their day clothes, which are somewhat similar for both sexes, and consist of loose trowsers and long robes, (similar to those figured at page 354,) are their

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only night-coverings. They wear straw sandals, shoe their horses with the like material, and mats serve as doors to their dwellings. Men and women bathe promiscuously. Women blacken their teeth, paint their cheeks, dye their lips, and pluck the hair from their eyebrows.

5. There are two emperors of Japan; one spiritual, the other temporal. The *Spiritual Emperor*, supposed to be heaven-descended, is nominally the chief ruler, but has in reality no power at all. On his person the sun must not shine, nor the wind blow; neither must he ever touch the earth. Hence his palace is carpetted throughout with the softest mats, and he can only leave it in a litter, or carried on men's shoulders, shaded by umbrellas and fans. His condition is precisely that of a prisoner of state, waited upon by spies, and subject to restrictions in what he eats, wears, and does, which would be intolerable to most human beings. The *Temporal Emperor*, in whom all the powers of the state centre, is descended from the old commanders-in-chief, who displaced the spiritual ruler from the throne, under the pretext that it sullied his sanctity to meddle with secular affairs. The form of government is a despotism, practically hereditary; and the laws are horribly severe. There are upwards of 200 feudal princes who govern districts, maintain troops, and have considerable power. The *Religion* is nearly identical with that of the Chinese, but Buddhism prevails more extensively. The Japanese are forbidden on pain of death to go into foreign parts.

6. *Jeddo*, the capital of the empire, on the east coast of *Niphon*, an island which extends 800 miles, is one of the largest and finest cities in the world, covering more ground than London, with a population of at least 2,000,000. It occupies the head of a gulf, and lines its margin continuously for about ten miles, the greatest width being about seven miles. The streets are broad, clean, and admirably drained. Some of them are lined with peach and plum-trees, which, when in blossom, present a gay and lively appearance. The citadel, where the temporal emperor resides, has alone accommodation for 40,000 souls; and some houses of the princes and nobles will entertain 10,000. A river traverses the eastern part of the city, which is crossed by a bridge of enormous length. This is the Hyde Park

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Corner of Japan, as from the bridge all distances are measured along the roads throughout the empire. *Miako*, the residence of the spiritual emperor, and the former capital, is a large inland and commercial city, five hundred miles to the south-west, with an army of priests. It is the seat of literature and science, and has the entire superintendence of religion and education. Its population is reported at half a million.

7. *Osaka*, at the mouth of the river on which Miako is situated, one of the principal ports of the empire, with a population of 150,000, seems to be the Paris of Japan, as Jeddo is its London. It is an attractive place of resort for the wealthy and fashionable, who repair to it for relaxation and gaiety. Here are the most celebrated theatres, sumptuous tea-houses, and extensive pleasure gardens. *Yesso*, a large island to the northward of Niphon, occupies the furthest extremity of the Chinese Archipelago, with a very cold climate. High and snow-covered mountains rise above its shores, and the snow lingers even on the lowlands from November till May. Its chief city is *Matsmai*, the capital of a feudal prince, a place of some importantance, with a population of 50,000. *Nangasaki*, on the west coast of *Kiusiu*, is a delightful town of 50,000 inhabitants, intersected by a canal spanned by thirty-five bridges, fifteen of which are handsomely constructed of stone. The place is kept scrupulously clean, and the environs have great scenic beauty. Here the Dutch, till recently the only Europeans permitted to trade with Japan, have long had a factory, on a little fan-shaped islet, under rigorous supervision.

8. By treaty, negociated by Lord Elgin, in 1858, the ports of *Nangasaki*, *Hakodadi*, and *Kanagawa*, the latter fifteen miles from Jeddo, were thrown open to British subjects July 1, 1859; and *Nee-e-gata*, or, if found unsuitable, another convenient port, on January 1, 1860. From the 1st of January, 1862, British subjects will be allowed to reside at *Jeddo*; and from the 1st of January, 1863, at *Osaka*, for the purposes of trade. The treaty is written in English, Japanese, and Dutch, the latter version to be considered the original.

9. The island of Loo Choo, midway between Japan and

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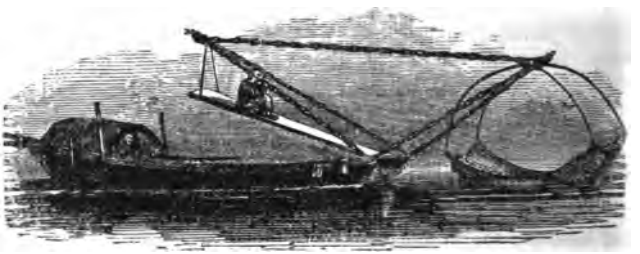
Formosa, about four hundred miles from the coast of China, belongs to the empire of Japan, but maintains relations with the court of Pekin. It extends about seventy miles in length, by fifteen in average breadth, and is surrounded by between thirty and forty small islets and coral reefs. The population is upwards of 50,000, almost all dwelling in two principal towns, *Napa Kiang*, and *Shui-di*. The climate is delightful, the soil fertile, and the people gentle and friendly. They are Japanese in their origin, look to Japan for protection in time of need, and have a garrison of Japanese soldiers quartered among them. On the other hand, the schoolmasters are all Chinese, the descendants of emigrants; and the chief authority of the island receives formal investiture from a Chinese commissioner. This is done more out of deference to an ancient usage than from any real obligation, as Chinese visitors are repulsed from the island, while Japanese have full liberty and equal rights with the natives. The southern half of the Island of *Saghalien*, separated from Yesso by the Strait of La Peyrouse, also belongs to Japan. The northern portion, as before stated, belongs to Russia. The inhabitants, called Ainos, are a rude, inoffensive people, chiefly employed in the salmon fisheries, which are here very productive.



Japanese Fishing Boat.

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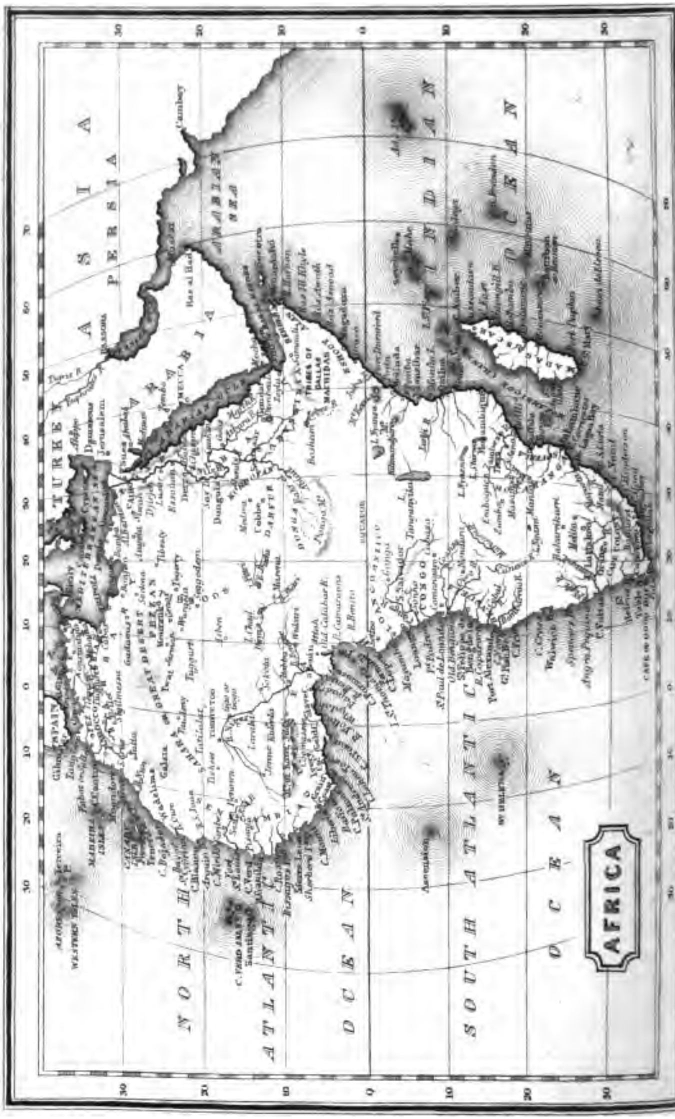

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TABULAR VIEW OF AFRICA.

Countries.	Chief Towns, etc.
NILE COUNTRIES.	
EGYPT.	
Bahari or Lower Egypt.	Cairo, (with Boulak), Alexandria, Rosetta, Damietta, Aboukir, Suez, Siwah.
Vostani or Middle Egypt	Medinet-el Faioum, Benisouef, Ghizeh.
Said or Upper Egypt ...	Siout, Assouan, Girgeh, Kenah, Esneh, Edfou. Thebes, Denderah.
NUBIA	Sennaar, Khartoum, Derr, Dongola, Ipsamboul (Temples of).
KORDOFAN	El Obeid, Koldagi, Takale.
ABYSSINIA	Gondar (in *Amhara*), Antalo, Adowa, Axum (in *Tigré*) Aukobar (in *Shoa*).
BARBARY STATES.	
MOROCCO	Morocco, Fez, Mequinez, Mogador, Tangier, Salee Tetuan, Ceuta, Tafilet.
ALGERIA	Algiers, Constantina, Bona, Oran, Philippeville.
TUNIS	Tunis, Kairwan, Carthage (Ruins of), Porto-Farina.
TRIPOLI AND BARCA.....	Tripoli, Dernah, Mesurata, Tolometa.
FEZZAN	Mourzouk, Zuela, Ghât.
WESTERN AFRICA.	
SENEGAMBIA	Bathurst, Forts St. James and St. Louis.
UPPER GUINEA.	
Sierra Leone	Freetown, Regents Town.
Cape Coast Castle (on the *Gold Coast*).....	Fort William, Fort Victoria.
Dahomey	Abomey, Ardrah, Whidah.
Ashantee.....	Coomassie.
Benin	Benin, Waaree.
Biafra	King Bells Town.
Liberia, (*Grain Coast*)...	Mourovia.
LOWER GUINEA.	
Loango.....	Loango (or Boualt).
Congo	St. Salvador.
Angola.....	St. Paul de Loanda.
Benguela.....	St. Philip de Benguela.
CENTRAL AFRICA.	
SAHARA OR THE GREAT DESERT.....	Tuat or Twat, Gadames, and a few other Oases.
SOUDAN OR NIGRITIA,	
Timbuctoo	Timbuctoo, Kabra.
Bambarra	Sego, Yamina, Silla, Sansanding.
Darfur	Kobbi, Kubcabia, Zeghawa.
Houssah (the Fellatahs)	Kano, Saccatoo, Kashna, Katagoom.
Bornou	Bornou, Kouka, Birnie, Angornou, Affagay.
Borgou	Boussa, Kiama, Niki.
Yarriba	Eyeo, Bohou, Katunga, Abbeokouta.

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TABULAR VIEW OF AFRICA.

SOUTHERN AFRICA.

Countries.	Chief Towns, etc.
CAPE COLONY.	This is now divided into twenty Electoral Districts, ten Western, and ten Eastern, the Chief Towns of which, in nearly all cases, bear the same name as the Districts.
Western Districts	Clanwilliam, Malmesbury, Stellenbosch, Paarl, Worcester, Swellendam, Beaufort (West), George, Caledon.
Eastern Districts.....	Colesberg, Graaf-Reinet, Uitenhage, Cradock, Somerset, Albany, Fort Beaufort, Port Elizabeth or Algoa Bay, Albert, Victoria.
British Kaffraria	King William's Town, East London (the Port.)
Natal.....	Pieter-Maritzburg, D'Urban or Port Natal, Ladismith, Richmond, Albert.
BOER REPUBLICS.	
Orange River Sovereignty, *now called* Orange Free State ...	Bloemfontein, Smithfield, Fauresmith, Winburg Harrismith.
Transvaal Republic	Mooi-Riversdorp or Potchefstroom, Rustenberg Zoutpansberg.
KAFFIRLAND PROPER and the Regions inhabited by the Kaffres, Hottentots, Betjouanas, Zulus, Bushmen, and other Native Tribes.	Namaqualand (Great and Little), Betjouana Land, Zulu Land, the Griquas, Basutu Land, Damara Land, Ovampo Land, the Kalihari Desert, etc.

EASTERN AFRICA.

ZANGUEBAR.....	Zanzibar, Magadoxo, Melinda, Mombas, Quiloa, Patta, Lamoo.
ADEL OR SOMAULI.....	Zeyla, Berbera.
MOZAMBIQUE	Mozambique, Quillimane, Sofala, Delagoa Bay.
MONOMOTAPA OR MOCARANGA	Sena, Tête, Manisa, Zimbao.
CAZEMBE	Cazembe.

AFRICAN ISLANDS.

In the North Atlantic Ocean.	The Madeiras, Canaries, Cape Verd, Fernando Po, Princes Island, St. Thomas', the Azores.
In the South Atlantic Ocean.	Annabon, Ascension, St. Helena, St. Matthew, Tristan d'Acunha Group.
In the Indian Ocean	Madagascar, Bourbon (now Réunion), Mauritius, Comoro Isles, Rodriguez, Seyschelles, Amirante Isles, St. Mary's, Socotra, &c.

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AFRICA.

1. AFRICA, separated from Europe by the Mediterranean, and only connected with Asia by the narrow isthmus of Suez, is an enormous peninsula of the Old World, enclosed by the Indian ocean on the east, and the Atlantic on the west, which unite their waters at the south extremity. It extends 5,000 miles in length, by an extreme breadth of 4,600 miles; and has a superficial area estimated at about 12,000,000 square miles. The name, Africa, was originally confined by the Romans to the province of Carthage. It was afterwards extended to Libya, and finally to the whole continent. The insular dependencies, though not numerous, are of interest; and to these a separate section is devoted.

2. The extreme points of the main land are *Cape Serra*, in Tunis, on the north, lat. 37° 20′ N.; *Cape Agulhas*, on the south, lat. 34° 45′ S.; *Cape Guardafui*, on the east, long. 51° 20′ E.; and *Cape Verd*, on the west, long. 17° 28′ W. Thus nearly the whole mass of Africa lies within the torrid zone—a principal cause of the excessively hot climate, and the extended area of arid soil. Descriptive terms occurring in the geographical nomenclature, chiefly of Portuguese, Dutch, and Arabic origin, are *verd* green, *blanco* white, *roxo* red, *niger* black, *corrientes* currents, *agulhas* a needle, *bajador*

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round, *wady* a valley, *ras* a cape, *berg* and *jebel* a mountain, *oasis* a fertile spot, *karroo* an arid plain, *ain* a well or spring, *kraal* a village, *belad* a country.

3. Africa strikingly differs in its *physical features* from the other great divisions of the globe. There is scarcely an inlet of the sea of any important extent. Hence, while three times the size of Europe, it has a far inferior length of coast-line, though completely surrounded by water except for about seventy miles at the isthmus of Suez. It is also eminently characterised by a greater proportionate extent of desert surface and fewer rivers than the other continents. Precious stones likewise, so frequent in other tropical regions, are here of rare occurrence; and the metals, though met with in different quarters, are nowhere abundant. No active or extinct volcanoes have hitherto been found; and Africa is much less frequently agitated by earthquakes than Europe, Asia, and America.

4. The principal *Mountains* are the *Atlas chain*, which runs parallel to the north-western coast, at no great distance from it, rising nearly to the snow-line in *Morocco*; the plateau of *Abyssinia*, culminating in *Abba Jareed*, at the height of 15,200 feet; the ridges of *Kong*, of moderate elevation, in Upper Guinea; the loftier *Cameroons* around the *Bight of Biafra*; the *ranges of Cape colony*, visited at their summits with keen frosts and heavy snow-falls; the *Peak of Teneriffe*, in the Canary Islands, so called, and *Kilimandjaro*, permanently snow-capped, on the eastern side, south of the equator, supposed to attain the height of 20,000 feet, the highest known point of Africa, probably connected with the *Mountains of the Moon*, south of Darfur.

5. The broad belt of desert, called the *Sahara*, extending from the Atlantic to the basin of the Nile, is the most remarkable feature in the physiognomy of the continent. It has an area of 2,500,000 square miles, equal to ten times the extent of Germany; and only a few Oases around wells and springs interrupt the sterility. The surface consists either of bare rock, stones, hard clay and gravel, or of sand so loose and fine as to shift with every breath of wind that blows. Nothing is there to be seen, for leagues and leagues,

> "But barren earth and the burning sky,
> And the blank horizon round and round."

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A very large proportion of the surface is never refreshed with rain or dew; and hence the region answers to its full Arabic name, *Sahara-bela-ma*, "the desert without water," or *Baha-bela-ma*, "the ocean without water." There are routes across it, traversed by trading caravans, very circuitous in general, as the relative position of the springs, not the bearing of the place proceeded to, determines the line of march. Southern Africa has also its frightful wildernesses, one of which, the *Kalahari*, long defied the efforts of explorers to advance from the Cape colony beyond the southern tropic, till the happy thought occurred to Dr. Livingston of skirting it on the eastern side, instead of attempting the direct passage.

6. The *Nile*, the largest *River*, flows northward to the Mediterranean, and is the only African stream of the slightest consequence in that direction. Though known for thousands of years, its source remains to be determined. But it is certainly near the equator, and will probably be found in snow mountains or a spacious lake. The main branch, *Bahr el Abiad*, or White River, receives the inferior branch, *Bahr el Azrek*, or Blue River, from Abyssinia; and after the junction of the *Tecazze* from the same region, the Nile has no other affluent to its mouth, through a course of 1,500 miles. It consequently diminishes in volume northward owing to the strong evaporation, and the quantity of water drawn off for irrigation. The cataracts of the river are more properly rapids. Its annual rise and overflow are occasioned by seasonal rains in the upper part of its basin. Its waters never putrify, and its deposits of mud and slime, besides their great value in fertilization, are manufactured into bricks and tiles.

7. The other rivers are the *Senegal*, *Gambia*, *Niger*, *Zaire* or *Congo*, *Orange* or *Gariep*, entering the Atlantic; and the *Zambesi* flowing to the Indian ocean. The latter river is remarkable for its "smoke-resounding falls," a native allusion to the spray and roar. The cataract, described by Livingston, its only European visitor, is of a perfectly unique kind. "If one imagines," he remarks, "the Thames filled with low, tree-covered hills immediately beyond the tunnel, extending as far as Gravesend; the bed of black basaltic rock instead of London mud; and a fissure made therein from one end of the tunnel to the other, down through the

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key-stones of the arch, and prolonged from the left end of the tunnel through thirty miles of hills, the pathway being 100 feet down from the bed of the river instead of what it is, with the lips of the fissure from 80 to 100 feet apart—then fancy the Thames leaping bodily into the gulf, forced there to change its direction, and flow from the right to the left bank, and then rush boiling and roaring through the hills, he may have some idea of what takes place at this the most wonderful sight I ever witnessed in Africa."

8. Small *Salt* and *Soda Lakes* are numerous; and there are some extensive fresh-water formations. The *Tchad*, in central Africa, surrounded with a belt of almost impenetrable tall grasses; the *Dembea*, in Abyssinia, through which the Nile has its course; the *Ngami*, in southern Africa; the *Tanganika* and *Nyanza*, towards the equator, lakes of the largest class, were reached by Captain Speke in 1857-8. The last-named he conceives to be the long-sought source of the Nile.

9. The most important *Gulfs* are those of Guinea, Saldanha, Sofala, Sydras, Cabes and Suez; the *Bays* are Delagoa, Algoa, and Table Bays; the *Straits*, those of Mozambique, Bab-el-mandeb, and Gibraltar. The principal *Capes* are Verd, Good Hope, Coast Castle, Formosa, Blanco, Bojador, Nun, Vega, Palmas, Three-points, Negro, Conienses, Delgado, Guardafui, Lopez, and St. Paul.

10. The *Zoology* of Africa is remarkable for the varying scale on which animal life is exhibited, from the tiny black mouse, scarcely weighing a quarter of an ounce, to the old bull elephant of two tons. It comprises species which make the nearest approach to the organisation of man, the chimpanzee, and the enormously strong gorilla, both in the woods of Upper Guinea and Senegambia, but rare. The formidable quadrupeds muster in great force in the south, some of which range to the north: lions, leopards, hyenas, rhinoceroses, elephants, and buffaloes, with hippopotami and crocodiles. Towards the southern tropic, and thence northward as far as exploration has advanced, vast herds of zebras, gnus, gemsboks, quaggas, steinboks, elands, giraffes, are met with, sometimes migrating in search of pasture, when severe drought compels them to quit customary haunts, indiscriminately mingled with troops of ostriches in company. Cobras,

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scorpions, and puff-adders are the dread reptiles. The hippopotamus, giraffe, and gorilla, are peculiar to Africa. The elephant is not domesticated as in Asia.

11. *Locusts*, and *Termites*, or *white ants*, are a great scourge, from their prodigious numbers. The most extraordinary insect is the *tsetse-fly*. On man its bite has no more effect than that of a flea; but domesticated stock, horses, cattle, and dogs, it surely kills; and travellers have lost all their draught-oxen and horses by it, and had their personal safety endangered from the want of means of conveyance. The strangest circumstance is, that wild quadrupeds, however kindred to its victims, as zebras and antelopes, are either not attacked, or are unharmed, as they feed undisturbed in the localities of the insect. The tsetse appears to be confined to particular spots in the central regions of southern Africa—hills where there are bushes or reeds—which it never quits. The natives know the localities, and avoid them.

12. The *Vegetation* in the great northern desert is confined to a few thorny and stunted plants, with the date palm in the Oases. But the countries of the Nile have coppices of acacias; thickets of the prickly pear; various cassia plants in abundance, from the leaves of which senna is prepared; the papyrus reed; and the coffee shrub, which grows wild in Abyssinia. Fine forests clothe the landscape in the basins of the Senegal, Gambia, and Niger, where there are rainy seasons, consisting of acacias yielding gum-arabic, huge boababs and cotton trees, with tall gramineous plants. The boabab has the largest trunk of all known trees, occasionally measuring 100 feet in girth, and is supposed to attain the greatest age. In the Cape colony there is a great variety of beautiful heaths and geraniums. The principal objects of culture in the Nile valley are wheat, dhourra, a corn resembling millet, maize, rice, bananas, yams, cotton, flax and tobacco.

13. Among the *Minerals*, natron is comparatively abundant, though a rare deposit in other countries; and salt is widely distributed, though in some districts it is wholly wanting. The Atlas range appears to have great metalliferous wealth, for considerable quantities of copper have been obtained by the French in Algeria. The mountains of

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Kong yield gold, and the precious metal is widely, though sparingly, diffused in the form of fine grains or dust in the alluvial soil.

14. The *Climate* is remarkable for a fiery temperature, especially in the northern half. This is the effect of various causes besides a tropical position, as the prevalence of sandy soil, and the nakedness of an immense extent of the surface, no forests protecting it from the glare of a vertical sun. The subordinate causes are, the high mountain chain towards the Mediterranean which prevents the egress of the north wind, the absence of a chain on the north-east to interrupt the currents of air which have passed over the warm tracts of Arabia, and the general want of inlets of the ocean to admit the cool sea breezes to the interior. The mean annual temperature at Massowah in Abyssinia is 87°, the highest hitherto recorded in any part of the globe.

15. The *Population* is usually estimated at 60,000,000, though by some at 100,000,000, divided into many small nations and smaller tribes, very largely out of the pale of the most ordinary civilisation. The northerns, from the parallel of 20° to the Mediterranean, belong generally to the Caucasian family, and consist of Moors, Berbers, Arabs, Copts, and Abyssinians, with the modern French. South of the parallel to the Cape colony, races of the Ethiopic or Negro family appear, who form the distinctive population of the continent. Many depart widely from the true negro physiognomy; and the Hottentots, Caffres, and Bechuanas, of the extreme south, are by some considered a perfectly distinct variety.

16. But few of the Africans are strictly nomadic in their habits. The great majority dwell in towns and villages, under the government of hereditary rulers. While largely despotic, the chiefs submit important affairs to the decision of an aristocracy, composed of elders, who are summoned to a kind of open-air parliament. The singular fact has been revealed by Livingston, that *female influence* is predominant in social and political relations among some of the negro tribes. No explorer in any other region has ever stumbled upon such a discovery as this; and he was for a long while hard of belief, till, as the result of frequent in-

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quiry, he found it to be true. Among all uncivilized people hitherto known, the women have invariably been found to be little more than the drudges and pack-oxen of the men; but in a part of Nigritia, the lady-blacks have decidedly the upper hand. If a young man marries a woman of another village, he removes to the house of his bride; and it is his duty not only to treat his mother-in-law with the greatest respect, but to supply her with fire-wood through the remainder of her days. In cases of separation, it is the wife who divorces the husband, the children going along with the mother; and in almost all the ordinary transactions of life, whether making a contract or sitting in council, the female is supreme.

17. Mohammedanism is the prevailing *Religion* of the north Africans, and the inhabitants of the east coast. A very corrupted form of Christianity, debased by barbarities and superstitions, is professed by the Copts in Egypt, and the Abyssinians. But Fetishism, or the worship of animate and inanimate nature, with homage to the spirits of departed relatives, is characteristic of the negro nations. Clay figures of the lion and crocodile are set up, and blocks of wood, rudely carved with the human face. When unsuccessful in any pursuit, or particularly anxious about any object, they assemble before these images, and beat drums to render them propitious. In an uncontaminated condition the negroes are remarkably kind, and as industrious as occasion requires. But those in contact with Europeans have been greatly depraved by the slave trade, and engage in wars with each other for captives to sell into bondage.

18. Africa, though so contiguous to Europe, and grand in history—the cradle of the Hebrew race, and the scene of Greek and Roman prowess under an Alexander, a Scipio, and a Cæsar—is still to a great extent in its central regions a *terra incognita*, a land of mystery to the white man, with vast spaces which his foot has never trod, nor his eye seen. The case is the more remarkable, as our own ships have sailed along the shores for three hundred years, while a portion of the northern coast-line is daily overlooked by a British garrison on the rock of Gibraltar, and strips of land in the west and south have long formed a part of our col-

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nial empire. Terrible deserts, wild tribes, and the want of navigable passage from the ocean inland, have contributed to impede discovery.

19. The annals of *European enterprise* in Africa revive the memory of gallant-hearted men who lost their lives in the task of exploration, which, in such a region, requires the courage of a lion and the endurance of a camel. The names of Ledyard, Horneman, Oudney, Clapperton, Denham, Richardson and Overweg, occur in the list of those who have fallen victims either to the climate or the hardships of their pilgrimage. But a more melancholy enumeration may be made. Major Houghton perished, or was murdered, in the basin of the Gambia. The admirable Mungo Park was killed in an attack of the natives, at a difficult passage of the Niger. The same fate befel Richard Lander in the lower course of the river. Major Laing was foully slain in his tent, at a halting-place in the Sahara. John Davidson was assassinated soon after passing the fringe of the desert. Dr. Cowan and Captain Donovan disappeared in the wilds of the south, no doubt by violence; and but recently Dr. Vogel perished in the same way in the country eastward of Lake Tchad. Still the solution of the problem of Central Africa cannot be long delayed.

Crossing the Nile on a bundle of rushes.

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Citadel of Cairo.

COUNTRIES OF THE NILE.

EGYPT, NUBIA, KORDOFAN, ABYSSINIA.

1. Egypt, the connecting link between Africa and the civilised world, extends from the Mediterranean on the north to Nubia on the south, a distance of about 500 miles. It has the Libyan desert on the west, where no definite line forms the boundary, with the upper part of the Red Sea on the east. This sea, an arm of the Indian Ocean, occupying a long narrow trough, is supposed to have its name from the reddish hue of its coral reefs, which are very abundant, and distinctly seen at a great depth through the singularly clear water. It has become to England a most important maritime highway; and is regularly traversed by steamers conveying the India mails and passengers, outward and homeward bound. A railway transfers them to and fro between *Suez* at its head, and *Alexandria* on the Mediterranean.

2. Egypt consists of two natural divisions:—the *Delta* and *the Valley of the Nile*—which include nearly all the cultivable land of the country. The *Delta* is formed by the bifurcation of the river a few miles below *Cairo*, where it

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divides into two branches, eastern and western, the former of which reaches the sea at *Damietta*, the latter at *Rosetta*. The space between them is a low alluvial plain, in the form of a triangle, or of the Greek letter Δ, stretching about ninety miles from the bifurcation to the sea, and widening gradually to the breadth of about eighty miles. The soil is a deposit of the river, together with that of plains extending some distance on the exterior side of the branches, remarkably rich and fertile, the formation of which goes back to pre-historic times. Here are the principal rice grounds of Egypt.

3. The *Valley of the Nile* extends from the apex of the triangle, or commencement of the delta, to the first cataract, at *Assouan*, on the Nubian frontier. It is enclosed on both sides by ranges of rocky hills, which are apart from each other distances varying from less than two miles to more than ten. The space susceptible of irrigation from the stream, or the width of the cultivable portion, is said to average five miles. The *Nile* enters Egypt from Nubia 3,900 feet broad, and diminishes as it flows onward, being reduced to 2,900 feet a little above Cairo. The *Rosetta* branch is 1,800 feet wide at the mouth, and the *Damietta* only 800. Apart from the districts mentioned, Egypt is a region of sandy levels, rocky wastes, and salt marshes, with only a few fertile spots in *Wadys* or narrow ravines eastward, and *Oases* westward, where springs are found.

4. Both the delta and the valley are largely laid under water by the annual *overflow of the Nile*. It begins to rise towards the close of June, and goes on increasing to the end of September. After remaining stationary for a time, the inundation gradually retires, and by the close of November the river is again confined to its own channel. Upon the land being left dry, grain is sown, and the fields which have been manured by the layer of rich soil deposited on them, produce the most abundant crops, while by means of canals and locks, a supply of water is retained for artificial irrigation. The entire fertility of Egypt depends upon this yearly outburst of the stream, as rain only occasionally falls in the maritime districts, and becomes increasingly rare on receding from the sea.

5. Depending for its rise upon the *tropical rains*, which

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are sometimes less than usual, and sometimes greater, the Nile varies in its height and capacity to benefit the country. Dearth is always more or less the effect of the river not attaining to a certain level; on the other hand, should it rise only a few feet above it, houses are swept away, cattle are drowned, and great damage ensues. The lowest serviceable inundation is reckoned at eighteen cubits of $21\frac{7}{18}$ inches each, at which height the canals are cut; nineteen is tolerable; twenty, good; twenty-one, sufficient; twenty-two fills every canal, and is perfect; but twenty-four would involve whole villages in destruction. A small island in the river, near Cairo, contains the *Nilometer*, a graduated column rising from a well, by which the daily amount of the rise is ascertained. This is proclaimed by four criers, in particular districts of the city, every morning.

6. Three general divisions of the country are recognised:—

Divisions.	Chief Towns.
BAHARI, MARITIME OR LOWER EGYPT ..	Cairo, Alexandria, Rosetta, Damietta, Suez, Siwah.
VOSTANI, MIDDLE EGYPT	Ghizeh, Medinet-el-Faioum, Benisouf.
SAID, UPPER EGYPT. ..	Siout, Girgeh, Esneh, Assouan, Edfou, Thebes.

Lower Egypt comprehends the delta, and extends from the sea to Cairo; *Middle Egypt* is the district from Cairo to Manfalout; and *Upper Egypt* stretches from Manfalout to the Nubian border.

7. *Cairo*, the capital, situated on the east bank of the Nile, in lat. 30° N., long. 31° 18′ E., is the largest city of Africa, probably containing 300,000 inhabitants, and a place of great trade. It is surrounded by a wall, possesses a citadel, with many beautiful mosques, and upwards of a hundred minarets, which give it an imposing appearance at a distance. But the illusion vanishes on entering the town, as the streets are so extremely narrow that two camels cannot pass abreast, and no windows look into them, which produces a dismal effect. On the opposite bank of the river, but more to the south, is *Ghizeh*, famous for its *Pyramids*, the largest of which, the great *Cheops*, covers an area of more than thir-

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teen acres, and rises higher than the cross of St. Paul's. It consumed in building 89,000,000 cubic feet of stone, according to the estimate of a living architect; and could not now be erected for less than £30,000,000. At a short distance is the wondrous *Sphinx*.

8. *Alexandria*, the chief port and residence of the foreign consuls, with a population of 60,000, is on the coast, near the site of the old city founded by Alexander the Great, which became one of the largest and wealthiest in the ancient world. The chief vestiges of it are Pompey's Pillar, ninety-four feet high, and Cleopatra's Needle, two granite obelisks, one prostrate, the other erect. *Rosetta*, near the mouth of the west branch of the Nile, is a small town, supplying Cairo with fruit from its gardens. Here was found the famous "Rosetta inscription," now in the British Museum. The castle, bay, and island of *Aboukir*, now called Nelson island, the scene of his decisive defeat of the French fleet in 1801, are in the immediate neighbourhood. *Damietta*, near the mouth of the east branch of the Nile, a decayed town, has excellent rice grounds round it. *Suez*, at the head of the western fork of the Red Sea, is little more than a walled village, but has good anchorage, and is thriving rapidly, from its connection with the route to India. It has an hotel for the accommodation of passengers. *Siwah*, an Oasis in the Libyan desert, fertile, pleasant, and populous, has remains of the temple of Jupiter Ammon, visited by Alexander the Great.

9. In VOSTANI, or "Middle Egypt," the towns of most note, besides *Ghizeh*, are *Medinet-el-Faioum* (the ancient *Arsinoe*), situated in a fertile valley, and *Benisouf*, a military station, which has extensive cotton-mills, alabaster quarries, and a population of about 5,000; but, though well supplied with mosques, its bazaars are very indifferent.

10. *Siout*, the largest town in "Upper Egypt," lies on the western bank of the Nile, and is the starting point for the caravans proceeding to the interior. It has handsome mosques, and its environs are very pleasing. *Girgeh*, on the left bank of the Nile, is an unimportant town, but its neighbouring scenery, which intermingles the fan and date-palm, Indian corn, and the sugar-cane, make it very attractive. *Assouan* (the ancient *Syene*) is the frontier town of

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Egypt, and lies immediately below the first of the six cataracts of the Nile. Near it are extensive granite quarries.

11. Of the old capitals of Egypt in the time of the Pharaohs, no important remains are extant of *Memphis*, but the site is identified as the village of *Metrahenny*, a few miles from Cairo, on the opposite side of the Nile. Vast monuments of *Thebes*, the most celebrated and magnificent of the ancient capitals of Egypt, are at *Luxor*, *Karnac*, and *Med-amou*, villages on the right bank of the river, with the necropolis of the city at *Gournah*, and the tombs of the kings near *Medinet-abou*, on the left bank. The mummies brought to Europe have been taken from this necropolis. *Denderah*, *Esneh*, and *Edfou*, with two islands in the river, *Philæ* and *Elephantine*, have remarkable architectural remains of a former age, and especially ancient rock-cut temples.

12. The present *Population* of Egypt, by census 1859, is 5,125,000, consisting of Arabs, by far the largest class; Copts, a mixed race, descended partly from the original inhabitants; Turks, politically dominant; and Franks, or European settlers. The Copts profess Christianity, but nine-tenths of the people are Mohammedans. The Arabic language is the one in general use.

Among singular *Usages*, that of the artificial hatching of eggs is peculiar to this country, and is of very ancient date. The Copts collect the eggs of fowls and geese from the peasantry in immense numbers, place them in ovens, and supply the markets with chickens by the process. It is said to be successful to the extent of two-thirds. Floating bee-hives are also common on the Nile; the bees range the banks by day, in the direction in which the boats are proceeding which contain the hives, and return to them at night.

13. The principal objects of *Cultivation* are rice, wheat, sugar, cotton, flax, indigo, and dates. Ivory, ostrich feathers, and slaves, brought from the inland countries of Africa, are exchanged for European products in the markets. There are cotton *manufactures*, but the monopolising spirit and arbitrary conduct of the government check private enterprise; besides which, it is said that the dryness and heat of the climate are obstacles, as was shewn in the instance of a large

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cotton factory established at *Siout*, where the dust insinuated itself into every part of the machinery, so as to impede its motion; the heat warped and split the wood-work, and the dryness of the air occasioned the snapping of the threads. The country is under the rule of a despotic hereditary pasha, nominally subject to the Ottoman sultan, but practically independent; his authority is paramount over Nubia and Kordofan.

14. NUBIA, far larger than Egypt, lies to the south, and corresponds in part to the ancient *Ethiopia*. It is circuitously traversed throughout by the Nile; and is a region of burning sand or shingle, except in the vicinity of the river, to about its junction with the Tecazze. Southward of that point, the country has an entirely different character. Being within the range of the tropical rains, it abounds with arborescent grasses, mimosa forests, and parasitical plants. In the far south, the Nile proper is formed by the junction of the White and Blue rivers. *Khartoum*, a modern town, near the confluence, is the seat of the Egyptian government, and the residence of a British consul. The chief town in *Lower Nubia* is *Derr*, near which, on the side of the Blue river, are the ancient *Temples of Ipsamboul*, cut out of the solid rock, and fronted by six colossal figures about seventy feet high. The population of Nubia is estimated at 3,000,000.

15. KORDOFAN, a district to the west, is a collection of oases, with *El Obeid* for the chief town. It was conquered, along with Nubia, by the troops of Mohammed Ali, under command of his second son, Ismael Pacha, 1819—22, accompanied with dreadful atrocities. The inhabitants consist of Nubians proper, a very finely moulded dark-skinned race, with tribes of Arab lineage, and negroes in Kordofan. Crocodiles and hippopotami are in all the waters; elephants, rhinoceroses, lions, and giraffes occupy the plains. The hippopotamus in the Zoological Gardens, London, was taken young on the banks of the White Nile, in 1849.

16. ABYSSINIA, south of Nubia, is for the most part a grand plateau, elevated from 6000 to 8000 feet, which serves as a platform for mountains towering very nearly to the height of Mont Blanc. Narrow lowlands intervene between it and the Red Sea, on which the heat is almost insufferable, while the Alpine interior has an agreeable tem-

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perature. Rain in perfect deluges descends on the highlands from April to October, giving rise to numerous rivers, large lakes, and great vegetable luxuriance. Flowering and fragrant plants are almost everywhere in profusion; lemon and orange-trees grow in the woods; and the coffee-shrub occurs both wild and cultivated. Pop^{n} probably 4,000,000.

17. The country once formed a single powerful kingdom, with *Axoum* for its capital, now reduced to insignificance, but with obelisks and other monuments of ancient date. There are at present the small separate states of *Tigré*, *Amhara*, and *Shoa*, which have for their chief towns respectively: *Adowa* and *Antalo; Gondar* and *Ankobar;* all unimportant places, with less than 10,000 inhabitants. The people consist of races descended from the old Ethiopic stock of Arab origin, but neither of pure blood. There are many Jews, and true negroes in a state of slavery. Christianity, corrupted into Jewish, and even pagan practices, is the general religious profession. The Abyssinians are very low in the scale of civilization, and some are in a state of positive barbarism.

Damietta.

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BARBARY STATES.

MOROCCO, ALGIERS, TUNIS, TRIPOLI.

1. The country to the west of Egypt, stretching along the Mediterranean to the Atlantic, occupied by the above four states, has the general name of Barbary, derived from the *Berbers*, who held possession of it previous to the Arab conquest. The old inhabitants are now represented by the *Kabyles* and *Shellukhs*, chiefly in the Atlas range, the *Tuaricks* and *Tibboos* in the Sahara. In allusion to its relative position to Egypt, the country has also the Arabic name of *el Moghreb*, "the west," while the people are *el Moghrebbins*, "the west-men." Algeria, being somewhat central, is called *Moghreb-el-Ansat*, "the middle west;" and Morocco is *Moghreb-el-Aksa*, "the far west."

2. The maritime region has a coast-line of upwards of 2,000 miles, many parts of which, long abandoned to desolation, were highly fruitful in ancient times. They sent corn to the granaries of Rome, and still earlier supplied the wants of the citizens, fleets, and armies of Carthage. The interior has for its prominent feature the great range of Atlas, which runs generally parallel to the shore from Cape Ghir on the Atlantic to the Tunisian territory, and with

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prolongations to the Gulf of Sidra. It is the boldest towards the western extremity, where *Miltsin*, 11,400 feet, and other lofty peaks, frequently glitter with snow, under the glow and fervour of an African sun. Between these mountains and the Sahara, the country has the name of *Belad-el-Jerid*, or the land of dates; and but for the date-palm, it would be uninhabitable, forming part of the desert itself. Groves of the tree supply food, protect from the burning sun and hot southern winds, and in their shade the orange, lemon, pomegranate, olive, and vine are reared.

3. The *horses of Barbary* are renowned for temper, speed, and endurance. Taken by the Moors to Spain, from them have descended the noble chargers known as Spanish barbs, the importation of which improved the breeds of our own country. From Barbary also, we have the favourite fragrant plant, mignonette, received by way of France in the first half of the last century, and now naturalized. The Barbary lion, noted for a thick mane, very common in Roman times, is restricted to the slopes of the Atlas, where the number has been reduced by the rifle, since the French occupation of Algeria.

4. The four political divisions have no definite inland limits.

States.	Chief Towns.
MOROCCO	.. Morocco, Fez, Mequinez, Mogador, Rabat, Tangier, Ceuta.
ALGERIA	.. Algiers, Constantina, Bona, Oran.
TUNIS ..	.. Tunis, Kairwan.
TRIPOLI	.. Tripoli, Barca.

5. MOROCCO, the *Mauritania* of ancient geography, extends from the neighbourhood of Cape Nun on the Atlantic to the river Mulluvia flowing into the Mediterranean. It is naturally the finest and most fertile territory, occupied by a population of 9,000,000, mainly Moors, probably of mixed Berber and Arab lineage. They are an indolent, proud, and sensual race of fiercely intolerant Moslems. There are many Jews, who have the trade of the country chiefly in their hands, and contrive to grow wealthy, though most grievously oppressed. They are compelled to take off their slippers on passing a Mosque, or would otherwise be mal-

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treated by the rabble. The only manufacture of any importance is that of *morocco leather*, supposed to derive its valuable qualities from the kind of bark employed in tanning it. The head of the government, an emperor or sultan, has absolute authority over life and property; he claims descent from Mohammed, and is widely regarded as the true caliph and visible head of the faithful.

6. *Morocco*, the capital, is seated on a plain clothed with palms, at the base of the Atlas range, and is surrounded by a wall six miles in circuit. But much of the interior is open ground, and the population is said not to exceed 50,000. *Fez*, much larger, and a place of great trade in silk, wool, morocco leather, indigo, and cochineal, contains 100,000 inhabitants, living in wretched houses; and *Mequinez*, which is the royal residence, has 56,000. *Mogador* and *Rabat* are ports on the Atlantic. The latter, at the mouth of a small river, has an imperial dockyard, and stands opposite to *Sallee*, now a decayed place, but once the stronghold of corsairs, who were the terror of merchantmen in the English Channel. *Tangier*, near the entrance to the Mediterranean, pleasantly situated on the Strait of Gibraltar, is the residence of the foreign consul. A vast quantity of merchandise is imported here for the northern parts of Morocco; and all the postal business of the country passes through it. The town came into the possession of England in 1662, as part of the dowry of Catherine, queen of Charles II.; but it was abandoned in 1683, on account of the expense of its occupation. Its name is a corruption of the Berber word *Tanjah*, a place amidst vines. *Ceuta*, a strong fortress directly opposite Gibraltar, and some small settlements on the coast, belong to Spain; and is a place to which criminals and political delinquents are banished.

7. ALGERIA, now a province of France, extends eastward from the preceding territory to that of Tunis, and corresponds generally in its limits to the ancient kingdom of *Numidia*. The population, amounting to perhaps 3,000,000, consists of native Berber races, and French military and civilians. *Algiers*, the capital, has its name from *Al-gezira*, the island, an insular spot in the harbour, now connected with the main land by a mole, and strongly fortified. The city was formerly the seat of an independent dey, and notoriously a piratical stronghold. It was chastised by the English,

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under Lord Exmouth, in 1816; and taken by the French in 1830, who gradually mastered the adjoining territory. But it required an immense military force to effect the conquest, and subsequently to keep the native tribes in subjection, till the capture of their bravest leader, Abd-el-Kader, in 1847, compelled them to succumb. Algiers is now Europeanised, and has 30,000 inhabitants. Good roads have been made in the country; mining works established; and lands, once waste, brought under cultivation. Its chief rivers are the *Isser*, *Shellif*, *Zowa*, and the *Mulul*, which bounds this country towards Morocco. *Constantine*, the ancient *Cirta*, a fortified city, is noted for its Roman remains. The population, formerly considerable, is now reduced to 20,000. *Bona*, another fortified town, which was nearly destroyed by the French in 1832, is now a very thriving and populous place, with a large proportion of Europeans, and has regular steam communication with Marseilles. *Oran*, long in the hands of the Spaniards, taken by the French in 1830, has a strong fort and battery, with an excellent harbour at *Mers-el-Kebir*, about three miles distant.

8. TUNIS, eastward of Algeria, much the smallest state, with one of the finest climates in the world, but without drinkable water, excepting what falls from heaven, answers to the territory of ancient Carthage, the *Africa Propria* of the Romans, and one of their great granaries. It contains a population of 2,000,000, under the government of an hereditary bey, nominally dependent upon Turkey. *Tunis*, the capital, is a large and very commercial city near the north coast, with 130,000 inhabitants, of whom a large proportion are Jews. The site of the city of Carthage, about thirteen miles distant, presents nothing but confused stones, the remains of its stupendous aqueduct and subterranean works. There are fine vestiges of the Romans in various parts of this locality. *Kairwan*, a considerable and sacred Moslem town, is next to Tunis in trade and population; it has the finest mosque in northern Africa, which is held to be particularly sacred, as containing the tomb of Mahomet's barber. *Porto Farina* is the ancient *Utica*, where Cato slew himself.

9. TRIPOLI, with BARCA, a dependency, extends from the Tunisian to the Egyptian border. Though it presents the most desert aspect of the Barbary states, it contains a popu-

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lation of 1,500,000, ruled by an hereditary pasha, who owns allegiance to the Ottoman sultan. The name is properly *Tri-polis*, "three cities," alluding to three Carthaginian towns which shared the country between them. *Barca*, a barren and desert country, was anciently called *Penta-polis*, "five cities," Greek colonies in possession of it; one of the five was *Cyrene*, of which the ruins have lately been discovered. *Tripoli*, the capital, on the coast, a well-built city, with some interesting remains of antiquity, is the starting-point of trading caravans and enterprising travellers, proceeding through Fezzan, across the Sahara, southward to lake Tchad, and south-westward to Timbuctoo. Population, 25,000.

WESTERN AFRICA.

SENEGAMBIA—UPPER GUINEA—LOWER GUINEA.

1. SENEGAMBIA embraces the basins of the *Senegal* and *Gambia rivers*, and extends along the coast to about an equal distance north and south of *Cape Verd*, reaching about 500 miles into the interior. It is extensively clothed with forests of acacias which yield the gum-resin of commerce; has a very hot and humid climate; and is subject to the visitations of the harmattan, an extremely dry wind blowing from the direction of the Sahara. This wind is experienced at intervals during the months of December, January, and February; and though pernicious to vegetation, and disagreeable to the senses, it is conducive to health, by removing humidity from the atmosphere after the long rainy season, and banishing the epidemics engendered by it.

2. The country contains many small negro communities,—the principal of which are the *Foulahs*, the *Mandingoes*, and the *Jalofs*,—besides some Moors, and Europeans at their settlements. *Bathurst*, the head-quarters of the British, is a small town on an island at the mouth of the Gambia, and has many trading ports in connection with it up the river. *St. James' Fort*, twenty-five miles from the mouth of the same river, is another British settlement. *St. Louis*, the capital of the French settlement, with a population of 12,000, is at the mouth of the Senegal, and has for its chief trading dependency *Goree*, on an island near Cape Verd. The Portuguese

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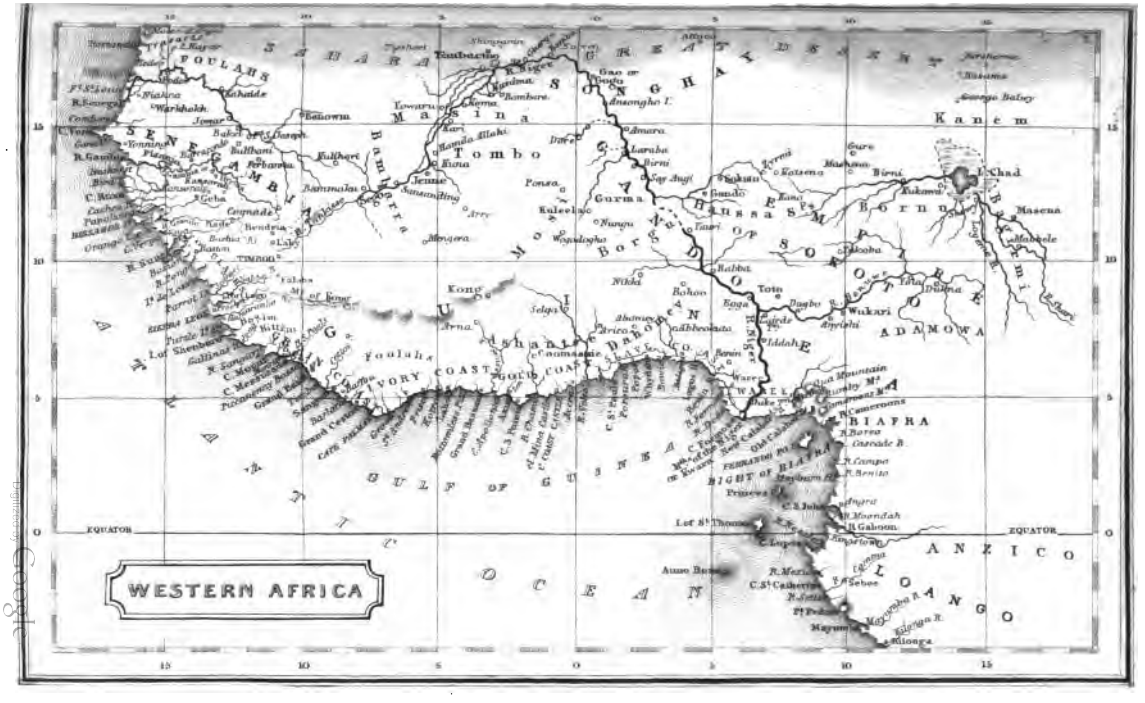
WESTERN AFRICA
SAHARA
SONGHAY
GREAT DESERT
FOULAHS
MANDINGOES
TIMBUCTOO
Tombo
Gourma
Borgoo
Bornou
Kanem
Lake Chad
HAUSSA
SOKOTO
ADAMOWA
Kong
Mountains
Yoolahs
IVORY COAST
GOLD COAST
BIGHT OF BIAFRA
BIAFRA
GULF OF GUINEA
ATLANTIC OCEAN
ANZICO
LOANGO
EQUATOR
Cape Palmas
Cape Three Points
Cape Formosa
Cape Lopez
Cape St Catherine
Cape St Paul
Fernando Po
Princes I.
St Thomas
Annobon
Gaboon R.
Camma R.
Benin R.
Old Calabar R.
Bonny R.
Nun R.
Niger R.
Binue R.
Kong Mountains
Timbuctoo
Houssa
Sackatoo
Wurri
Yola
Kano
Bornou
Kukawa
Birni
Kouka
Masena
Mahbele
Lake Chad
Lake Tchad
Lake Dibbie
Lake Bahr el Ghazal
Lake Fittri
Lake Bahr el Abiad
Lake Bahr el Arab
Lake Bahr el Homr
Lake Bahr el Salamat
Lake Bahr el Gazal
Lake Bahr el Ahmar
Lake Bahr el Azrak
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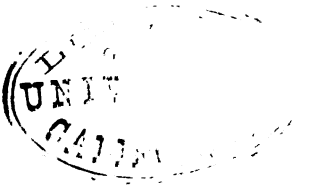
Lake Bahr el Azrak



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have also several factories. Gums, bees-wax, ivory, teak, dye-woods, and hides, are the principal exports. Crocodiles and hippopotami are very numerous in the Gambia.

3. UPPER GUINEA extends along the coast from the preceding district to the *Bight of Biafra*, and includes the country inland to the mountains of Kong, with the lower course of the Niger, called *Quorra* by the natives, and *Joliba* in the upper part of its basin. It is in parts a very pestilential region, owing to the immense quantity of decomposing vegetation on the mud-banks of the rivers. Negro tribes, excessively barbarous and sanguinary, form the states of *Ashantee*, *Dahomey*, *Benin*, *Eboe*, and others, chiefly in the interior. Europeans occupy maritime stations at *Sierra Leone*, and along the seaboard, portions of which are known as the *Grain*, *Ivory*, *Gold*, and *Slave coasts*. These divisions were made by the early navigators from the products obtained at the respective sites. The Grain coasts supplied the species of pepper called "grains of Paradise," now procured principally from the East Indies.

4. SIERRA LEONE, "lion's hill," is a peninsula, with *Freetown* for its capital, and has a total population of 56,000, consisting largely of liberated slaves. The settlement was commenced by private philanthropy in 1787, but has been a regular British colony since 1807. It is unfortunately so fatal to European life as to be often called "the white man's grave." *Liberia*, part of the Grain coast, with *Monrovia* for its capital, named after President Monro, is a settlement founded by some citizens of the United States in 1822, for the purpose of removing thither free persons of colour. It is now an independent negro republic, with a president, senate, and house of representatives. It extends along the sea-shore about 250 miles, contains 5,000 colonists, and 20,000 natives, and is a flourishing colony. *Elmina*, and some other stations on the Gold coast, belong to the Dutch. *Cape Coast Castle*, a spacious fortress with a native town adjoining, is British, nearly on the meridian of Greenwich, containing the grave of the poetess L. E. L. The most important product now obtained by Europeans from Upper Guinea is palm-oil, derived from the *Elais Guineensis*. Thousands of tons are annually brought to England, and used in the manufacture of composite candles. Its other trade is chiefly in red-wood, wax, ivory, and gold-dust.

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5. ASHANTEE, which extends along the northern part of the Gold coast, and for between two and three hundred miles into the interior, is the most important native state in Western Africa. *Coomassee*, with 15,000 inhabitants, is its capital. DAHOMEY, on the Slave coast, is a fertile country, inhabited by a warlike people; among the army is a troop of 5,000 negro females, well entitled it is said to the name of Amazons. Both these kingdoms are seats of almost incredible barbarities.

6. LOWER GUINEA, a territory belonging to the Portuguese, intimately connected with the slave-trade, consists of the maritime provinces of *Loango*, *Congo*, *Angola*, and *Benguela*. They extend a considerable distance inland, *Cassanga*, a principal settlement, being about 300 miles from the coast. But some of the colonists have a much more interior location, residing at solitary posts called *Feiras* or fairs, which are visited by the natives as trading stations.

St. Salvador is the principal town of Congo. *St. Paul de Loanda*, on the coast of Angola, is the capital and residence of the governor-general. It was founded in the year 1578, and contains about 8,000 inhabitants. Here Livingston re-appeared to European knowledge in 1854, after being long buried in the obscurity of Central Africa, and found but one Englishman in the place.

CENTRAL AFRICA.

SAHARA, SOUDAN OR NIGRITIA.

1. This portion of the continent stretches across it, south of *Sahara*, the Great Desert, from *Senegambia* on the west to *Kordofan* on the east; and includes the central basin of lake Tchad, with the greater part of the basin of the Niger, from which river the whole region derives its name of *Nigritia*. Eastward the country is sandy, sterile, and very thinly occupied; but westward it is fertile, luxuriantly so along the rivers, and well peopled with negro tribes, or with races of mixed Negro, Berber and Moorish origin. SOUDAN, or in full, *Belad-el-Soudan*, better known to Europeans as *Nigritia*, is the country of the negroes, the original seat of that variety of the human race.

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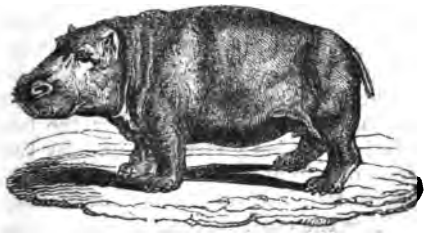
2. The political divisions of Central Africa are very numerous, but not entitled to detail here. Among the places of importance or interest, *Timbuctoo* may be mentioned, situated on the skirts of the Sahara, within a few miles of the Niger, to which a mysterious greatness was formerly attached, and the population supposed to be more than 100,000.* This has been completely dissipated by the visit of Dr. Barth, who resided there seven months, and found it surrounded by a decayed wall little more than two miles in circuit, enclosing mud houses generally one story high, with three mosques. It is, however, the centre of a considerable caravan trade, and has some productive sulphur mountains in its immediate vicinity. At *Sego*, said to have 30,000 inhabitants, Mungo Park first saw the Niger, broad as the Thames at Westminster; and at *Boussa*, just below the Cataracts, population 12,000, he was killed by the natives while descending the river in a canoe. *Soccatoo*, the chief town of the Fellatahs, who are Mohammedans, was the scene of Captain Clapperton's death. There are many other towns along the banks of the Niger, some of considerable activity, but not much is known of them. *Nyffé*, on the eastern bank, is the chief seat of the cotton manufacture, and of negro industry in general. Its capital, *Rabba*, is famous for its mats. *Eyeo*, on the western bank, capital of the extensive and fertile kingdom of *Yarriba*, is a large town fifteen miles in circumference, and a royal residence. The king has such a vast number of wives, that he boasts they would reach, linked hand in hand, from one end of his kingdom to the other. But many of them are employed as menial servants, carriers of burdens, and royal guards on state occasions.

* See a curious account of Timbuctoo, in *Fosteriana*, p. 373, *et seq.*



Hippopotamus.

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SOUTHERN AFRICA.

CAPE COLONY—BRITISH CAFFRARIA—NATAL—ORANGE RIVER SOVEREIGNTY.

1. The tropic of Capricorn may be regarded as defining the northern limit of southern Africa. At this point the continent extends east and west about 13,00 miles, and stretches nearly 700 miles to the southern extremity. This region includes very varied scenes, from the true wilderness to park-like landscapes, but it has not been by any means fully explored. Yet even where desolation is most complete, the traveller may be brought to a stand, as was Gordon Cumming, by the exquisite air-plant, with its bright scarlet hues, growing in the crevice of a granite block. "In the heat of the chase," says the modern Nimrod, "I paused spell-bound to contemplate with admiration its fascinating beauty."

2. *Cape Colony* embraces the country between the south coast and the Gariep or Orange river on the north and north-east; and has its name from the Cape of Good Hope, which forms the south-western extremity of the continent. It has an area of about 300,000 square miles: but a vast proportion of it is either tenanted by herds of ruminants and other wild animals, or very sparingly occupied by the Boers and native tribes. High plains between chains of mountains appear in the interior, remarkable for change of aspect with successive seasons. They are clothed with sudden and apparently spontaneous vegetation, affording abundant pasturage immediately after the heavy rains, but are reduced to perfectly sterile wastes by the summer heats. Torrents of rain at uncertain intervals, with droughts often very protracted, intervening, are disadvantages of the climate apart from the coast region.

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3. The colony consists of two divisions, western and eastern, which are subdivided into electoral districts, and again into fiscal and magisterial sections. It has a representative constitution under a governor appointed by the British crown. The eastern division has a lieutenant-governor.

	Chief Towns.
WESTERN DIVISION..	Cape Town, Stellenbosch, George Town.
EASTERN DIVISION ..	Graham's Town, Uitenhage, Port Elizabeth.

The total population, including British Caffraria, now amounts to about 300,000, one third of whom are whites, chiefly English, Germans, and descendants of the old Dutch settlers, called boers or boors; the other two-thirds consist of native tribes, Hottentots, Bushmen, and Caffres, with Malays and Negroes. There are also many so-called Africaners, the offspring of foreigners by native women.

4. *Cape Town*, the capital, in lat. 33° 55′ S., long. 18° 21′ E., thirty miles north of the promontory from which the name is derived, stands on the south shore of Table Bay, and at the foot of *Table Mountain*, 3,760 feet in height. This huge tabular rock often wears a veil of white mist at its summit, commonly called the Table-cloth, which is indicative of an approaching storm. The town is strongly fortified and regularly built, the streets crossing each other at right angles, many of them shaded with rows of trees. It possesses an astronomical observatory, several fine government buildings, a college, museum, public library, botanic gardens, and five banks; and the streets are lighted with gas. It is a place of great trade, and contains 25,199 inhabitants, of whom about one-third are blacks. *Stellenbosch*, the capital of the division of its name, twenty-five miles east of Cape Town, has 3926 inhabitants, and a Wesleyan establishment. *George Town*, called by the natives *Naango*, was once a place of some importance, as the principal slave market of the district, but is now in decay: population 1934.

5. *Graham's Town*, the capital of the eastern division, 600 miles east of Cape Town, population 5432, is almost wholly British; and at a distance of ninety miles has *Port Elizabeth*, or *Algoa Bay*, a very thriving town, with 4793 inhabitants, for its chief shipping place. *Uitenhage*, the capital

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of the district, twenty miles from Port Elizabeth, and 500 miles from Cape Town, situated on a large well-watered plain, is a neat and flourishing town, with about 5000 inhabitants. Corn, wine (especially Constantia), hides, ivory, fruit, and wool, are the important exports of the colony.

6. The grand altar-like mountain which overlooks Cape Town and Table Bay, was discovered by the Portuguese under Bartholomew Diaz, in the year 1486. Owing to the terrible storms encountered in its neighbourhood, he denominated the cape to the southward, *Tormentoso*, a name which his sovereign changed to that of *Cabo de Bona Esperanza*, Cape of Good Hope, as of better augury. Ten years later, Vasco-da-Gama passed round the southerly projection of the continent, and opened the maritime highway to the shores of India. In the reign of James I., two commanders of the English East India Company formally took possession of the country, but no attempt was then made to found a settlement. In 1650, it was colonized by the Dutch, and remained in their hands nearly a century and a half, during which time the boers or farmers spread themselves in the interior. In 1795, the dependency was captured by a British armament. After being restored to the Dutch in 1802, it was retaken by the British in 1806, and permanently annexed to the empire.

7. British Caffraria, a district along the coast on the east of the Cape colony, though not incorporated with it, extending over an area of about 4000 square miles, is subject to the governor of the Cape. It forms a kind of border territory between the regular British settlements and the independent Caffres, and was so constituted at the close of the Caffre war in 1847. Many missionary settlements—Church of England, Wesleyan, and Independent—are established here. No native chief exercises authority within its limits. *King William's Town*, which has numerous public buildings, is the capital, and sufficiently flourishing. The number of whites in the whole territory is probably not more than fifty thousand.

7. Natal, on the coast of the Indian ocean, extending about a hundred miles inland, with an area of 25,000 square miles, was made a British settlement by private enterprise in 1824, but not proclaimed a British colony till May 12, 1843; it is now a dependency of the Cape, under a lieutenant-governor. A considerable number of emigrants have

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proceeded to it from the mother country, and are very thriving; the population, in 1858, was 108,655, of whom 102,105 were native Zulus, and 6,550 were whites, rather more than half of these being British, the remainder Dutch. It possesses great natural resources, abundance of wood and water, coal and iron, a fertile soil, and a climate on the coast adapted to the cultivation of the sugar-cane, cotton, indigo, coffee, arrow-root, the pine-apple, and all the cereals. Sugar mills have lately been erected, which are working with great success. Natal forms a diocese of a colonial bishop of the Church of England. The elephant and rhinoceros, which were formerly abundant here, have retired to the interior; but the alligator is still found in the rivers, and the boa, and other large serpents, are by no means uncommon. *Pieter-Maritzburg*, near the centre of the province, is the seat of government; and *D'Urban*, or Port Natal, on a fine lake-like bay, the port. The Natal coast was so called by Vasco-da-Gama, the Portuguese navigator, from its discovery on Christmas-day, the festival of the nativity.

8. The ORANGE RIVER SOVEREIGNTY, or "Orange Free State," is a large but very undefined territory, north-east of the Cape colony, and west of Natal, chiefly inhabited by the *Betchuana tribes*, who dwell in towns of some magnitude, and have large herds of cattle, the robbing of which from each other is a principal occupation, and the cause of frequent wars among them. The Dutch boers rule them with an iron hand. These, a sturdy, brutal, and rapacious class, disliking the restraints of British government, emigrated at various times beyond colonial limits, and have been allowed to form themselves into an independent republic. They compel the natives within reach to do their bidding, assemble from their homesteads to punish the refractory, and have violently opposed the opening of the country to the north, whether by missionaries or hunters, in order to keep the traffic in ivory and hides in their own hands. Livingston's station, previous to his grand tour, was desolated by them, owing to his preliminary journeys; and his life would undoubtedly have been taken had he been present at the time. The chief town is *Bloemfontein*, about 150 miles north-west of *Colesberg*, on a tributary of the Modder river. It contains about 150 houses, a Dutch Episcopal and Roman Catholic church, and in 1857 sold in

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its market 2200 bales of wool. The extensive district north of the Vaal river, also inhabited by emigrant Dutch Boers, has been lately acknowledged as an independent State by the British Government, and is called the *Trans-Vaal Republic;* the chief town is *Potchefstroom.* Between the mouth of the Orange River and the tropic of Capricorn, in the Namaqua country, lies the small island of *Ichaboe,* for some years the principal source of the guano imported into Great Britain.

EASTERN AFRICA.

1. Northward of Natal are the Sofala and Mozambique coasts, extending from *Delagoa Bay* to *Cape Delgado,* a length of nearly three thousand miles. They are in the hands of the Portuguese, who have a few small settlements where the slave trade is carried on, and to which criminals are transported from Portugal. *Sena,* on the *Zambesi,* is one of the principal towns in the interior; and *Tete,* likewise on the Zambesi, is the most interior station, about 300 miles from the port of *Quillimane,* a pretty village, at the mouth of the river. *Sofala,* south of the Zambesi, is supposed to be the *Ophir* of Solomon. The town of *Mozambique,* on an island to the north, with the fort St. Sebastian, which mounts eighty guns, is the capital of the Portuguese possessions in East Africa, and the residence of the British consul. It was once a considerable town, but is now decayed, and little more than a Portuguese slave mart.

2. The sovereignty of the Imaum of Muscat, in Arabia, prevails along the whole coast from Cape Delgado to the equator. *Zanzibar,* the capital of his African possessions, on an island, is a very extensive town, containing a palace, arsenal, large mosque, with several smaller, many stone-built houses, and more mud huts; the whole surrounded by a mud wall.

3. From the equator to the entrance of the Red Sea, there are numerous native *Galla* and *Somauli tribes,* whose ports are annually visited by Hindoo merchants from Guzerat, for the purpose of exchanging their products for odoriferous gums, myrrh, ostrich-feathers, and other articles. Among these ports are *Berbera,* on a deep bay in the gulf of Aden, where a great summer fair is held, and *Zeyla,* near the frontier of Abyssinia. The inland country is for the most part unexplored, indeed there is scarcely any part of the world so imperfectly known as the interior of this region.

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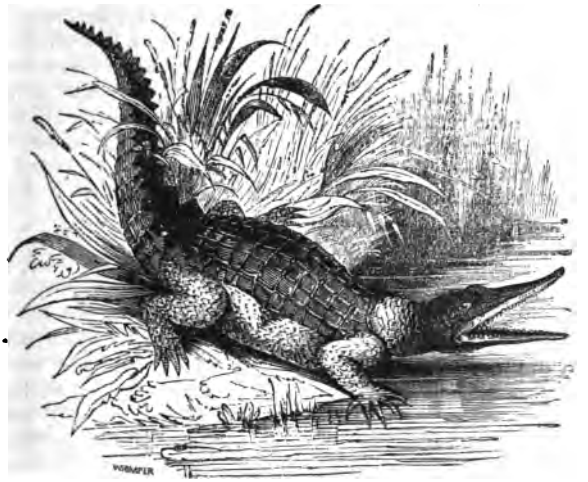

Crocodile of Madagascar.

ISLANDS OF AFRICA.

NORTH ATLANTIC OCEAN.

1. *Madeira*, and the smaller *Porto Santo*, adjoining, with a cluster of rocky islets, lie off the north-west coast of Africa, at a considerable distance, and belong to Portugal. The principal island is a lofty mass of basitical rock, about 100 miles in circuit, rising in *Pico Ruivo* to the height of 6,000 feet, renowned for its picturesque beauty, fertile soil, and fine climate. The name is derived from *madera*, "wood," and alludes to the forests which once clothed the surface. The myrtle and geranium flourish here in their native wildness. The population amounts to 116,000, of which *Funchal*, the chief town, on the south coast, has 25,000. They are mostly Portuguese, engaged in the culture of the grape and the wine trade; but the principal wine merchants are English, and there are always a considerable number of English invalids in the island.

2. The *Canary Islands*, to the south, much nearer the

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main land, consist of *Gran Canaria, Teneriffe, Fuerteventura, Palma, Lancerota, Gomera*, and *Ferro*, with a few others, all of volcanic origin, belonging to Spain. They were once famed for canary birds, whence the name. *Teneriffe*, the largest, contains the seat of government at *Santa Cruz*. It is remarkable for its peak, or volcano, dormant for more than half a century, which rises to the height of 12,236 feet, and was used as an astronomical station by Professor Piazzi Smyth, in 1856, at the head of an expedition from England. The islands have a population of 200,000, all of Spanish descent, engaged in raising fruits and cochineal, which, with wine, vanilla, and archil, are the principal exports.

3. The *Cape Verd* group, off the promontory of that name, belong to Portugal, of which ten are inhabited by about 40,000 negroes and mulattoes, with a few whites. The principal places are *Porto Praya*, with an excellent harbour, in the island of Santiago; and *Mindello*, in St. Vincent, the seat of government, and a coaling-station for steamers bound to or from the southern seas. The island of *Fogo* is formed almost entirely of the slopes of an active volcano, rising to the height of 9,159 feet. The name *verd*, "green," was applied to the archipelago and the promontory by early voyagers, owing to the immense quantity of sea-weed afloat in the neighbourhood.

4. *Fernando Po*, in the Bight of Biafra, close to the main land, is a small mountainous island, formerly a British settlement, for the suppression of the slave trade, but abandoned on account of its insalubrity, and ceded to the Spanish government. The town of *Clarence* contains a small population of liberated slaves, a few mercantile establishments, and the grave of Richard Lander, the explorer of the Niger. In the same neighbourhood are *Prince's* and *St. Thomas Islands*, Portuguese possessions. The latter is directly on the equator.

II. ISLANDS IN THE SOUTH ATLANTIC OCEAN.

1. *Annabon*, in lat. 2° S., is claimed by both Spain and Portugal, without either interfering with the small native population.

2. *Ascension Island* is a very solitary British possession, nearly 1000 miles from the nearest point of Africa, and 500 miles from St. Matthew's, the nearest shore. It re-

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ceived the name from being discovered on Ascension-day, 1501, by the Spanish. This volcanic islet, only eight miles long by six broad, was first occupied by Sir G. Cockburn, to aid in the surveillance of Napoleon at St. Helena. The post has since been maintained as a victualling station for ships returning from the east, and for the squadron engaged in suppressing the slave-trade. It has long been noted as the great resort of turtles. There is a small garrison, and some negroes.

3. *St. Helena* is even more solitary, being 680 miles from Ascension Island, the nearest coast. It is a rugged, dark volcanic rock, twenty-eight miles in circumference, rising from six to twelve hundred feet, so precipitously from the sea, that the interior is only accessible at four points. But wherever there is water, and springs are numerous, the surface is clothed with very rich verdure. Here Napoleon arrived as an exile in 1815, resided at Longwood to his death in 1821, and was buried in Geranium Valley, from which his remains were removed to Paris in 1840. The island originally belonged to the Dutch, who ceded it to the East India Company in 1673; but it has long been a regular colony of the British crown. *Jamestown*, strongly fortified, with a handsome church, and many good official residences, is the only town and port on the Island. The population of St. Helena does not exceed 5,500, about one third of whom are whites, the remainder negroes and coloured people.

III. ISLANDS IN THE INDIAN OCEAN.

1. *Madagascar*, one of the largest islands in the world, stretches along the east coast of Africa, from which it is separated by the Mozambique channel. It extends nearly 1,000 miles from north to south; has an area of 200,000 square miles, and is supposed to have a population exceeding 3,000,000. A distinct, energetic, and warlike people, originally confined to one of the central provinces, are dominant over the rest of the natives, a feebler race, despised, oppressed, and enslaved. The *Hovas*, as the lords paramount are called, are a gifted variety of the great Malay family, in appearance a fine people, with high foreheads indicating intellectual capacity, and firm pensive countenances expressive of strong will. The reduced tribes are apparently of negro extraction.

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2. The shores of the island are low, flat, and swampy, largely lined with shallow lakes, or clothed with close woods, jungles of tall grasses, and giant water-weeds. The whole of this region is unhealthy, and has been very fatal to foreigners, owing to the malaria engendered by the combined influence of intense summer heat, decomposing vegetation, and the stagnant waters. One of the provinces on the east coast the natives themselves style *Matitanana*, signifying "the land of death;" and the neighbouring Isle of *St. Mary's* is known in the records of colonisation as the "dead island" of the Dutch, and the "graveyard" of the French. But the interior parts of the country are salubrious, consisting of a broad and high tract of table-land, crossed by various mountain-chains, on the tops of which ice is sometimes formed, and sleet storms descend.

3. Madagascar was discovered by the Portuguese in the year 1506. They soon afterwards circumnavigated the island, touched at it repeatedly on their voyages to India, and attempted to form settlements on the coast, along with the Dutch and French. But no European nation had any regular connection with the native authorities prior to the year 1816, when the British governor of the Mauritius, Sir Robert Farquhar, put himself into communication with Radama, king of the *Ovahs*, by an embassy, with a view to the suppression of the slave trade. Intimate political, commercial, and religious relations were established. But soon after the death of that sovereign, who was poisoned by his wife, in 1828, they were abruptly broken off by his successor, and all foreigners were compelled to quit the island. It is only of late years that commercial intercourse has been allowed. The capital, *Tanana-rivo*, "the city of a thousand towns," centrally situated, notwithstanding its ambitious name, is not larger than a small English borough.

4. *Bourbon*, now called *Réunion*, 400 miles to the eastward, an island of volcanic origin, is a colony of France, containing 108,000 inhabitants, nearly two-thirds of whom are slaves. It produces sugar, coffee, cloves, tobacco, cocoa, pepper, saltpetre, and ebony, largely for export. One of its several volcanoes, *Piton de la Fournous*, is 7,218 feet high, still active, and the lava thrown out covers a great part of the island. *St. Denis*, on the north coast, is the chief town.

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5. *Mauritius*, 100 miles north-east of Bourbon, is a British possession, taken from the French in 1810, and formally ceded at the peace of 1814. It was discovered by the Dutch, and named in honour of Maurice, Prince of Orange, but during the French occupation, it was called the *Isle of France*. It has very beautiful natural scenery, with a warm but healthy climate, and fruitful soil. Sugar is the principal produce, but it has also excellent coffee, indigo, cotton, and ebony. Population 100,000, of whom more than one-half are negroes; and the whites are chiefly of French descent. *Port St. Louis*, the capital, has about 26,000 inhabitants. *Rodriguez* island, 300 miles to the east; the *Seychelles* cluster, 1000 miles to the north; and the *Amirante Isles* in their neighbourhood, chiefly valued for the land turtles found there; are all included in the government of the Mauritius.

6. The *Comoro* isles are situated in the Mozambique channel, midway between Madagascar and the African coast. Though tributary to Portugal, they are governed by their own chiefs. The largest of the group is *Comoro*, which is ninety miles in circumference, and contains 30,000 inhabitants; but the most flourishing is *Johanna*, the central island, 3800 feet above the sea, well wooded and watered.

7. *Socotra*, near the mouth of the Red Sea, inhabited by Arabs, is famed for producing the finest aloes in the world. The Imaum of Muscat claims the sovereignty.

Date Palm

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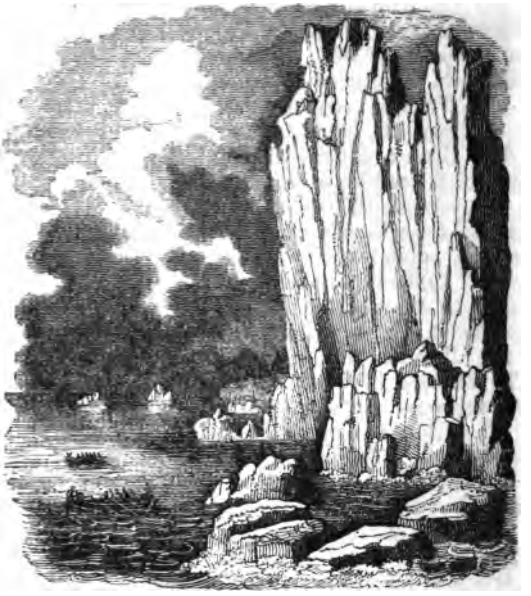

Arctic Regions.*

AMERICA.

1. AMERICA is a vast mass of land stretching in a meridional direction nearly from pole to pole, almost completely severed centrally into two portions, *North* and *South*, by the close approach of the Atlantic and Pacific oceans at the isthmus of Panama, where they are less than thirty miles apart. It is commonly styled the Western Continent, from its relation to the prime meridians of European geographers; and also the New World, from the comparatively recent date of its discovery. The name commemorates, somewhat improperly, *Amerigo Vespucci*, a Florentine adventurer. He reached the shores of South America in 1499, while Columbus had been there in the previous year, August, 1498. And still earlier, in May, 1497, Sebastian Cabot,

* For an Account of the ARCTIC and ANTARCTIC REGIONS see p. 504 *et seq.*

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from Bristol, made the coast of Labrador, and was the first discoverer of the mainland. But to Columbus the merit entirely belongs of being the first to venture across an untraversed ocean, find his way to dependencies of the great continent, the West Indian islands, and to reveal the existence of a world before unknown.

2. The western continent has the Arctic ocean on the north; the Atlantic on the east; the Pacific on the west; and the waters of the two latter basins blend at the south extremity. It extends 10,000 miles in length, from Point Barrow on the north, to the Strait of Magellan on the south. The breadth is very varying, 3,200 miles at the greatest in the northern division, following the parallel of 51°, and nearly the same in the southern, from Cape Blanco in Peru, to Cape St. Roque in Brazil; but intermediately, the railway stretching from Aspinwall on the Atlantic, to Panama on the Pacific, measures only about 50 miles, and follows a circuitous course. The direct distance between the termini is 38 miles; and at the narrowest point, the isthmus has only a width of 28 miles as the crow flies.

3. North America, including Greenland, the Arctic, and West India Islands, contains an area of 8,500,000 square miles; and South America 6,500,000, making a grand total of 15,000,000. The two portions correspond in having a generally triangular form; but the northern has by far the most irregular outline, and a correspondingly greater length of maritime frontier, being broken by many large oceanic inlets. It has 24,000 miles of coast, whilst the southern division has but 13,600, giving for the whole line of the shores an extent of 37,600 miles. The principal inlets, *Hudson's Bay*, the *Gulf of St. Lawrence*, the *Gulf of Mexico*, and the *Caribbean Sea*, are on the side of the Atlantic; and only one of any importance occurs on that of the Pacific, namely, the *Gulf of California*.

4. With few interruptions, ranges of *Mountains* traverse the western side of the entire continent from north to south, and form the grandest longitudinal chain on the face of the globe. From the borders of the Arctic ocean, the *Rocky Mountains* extend to the great table-land of Mexico, and rise to the height of 16,000 feet in *Mount Brown* in British America. Parallel to this, there is a less persistent

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coast range, running under various names, from the extremity of the Californian peninsula northward to Russian America, where *Mount St. Elias* attains the height of 17,860 feet, the highest point of the continent apart from the Andes. In California, the coast range sends off a spur to the eastward, the *Sierra Nevada*, which unites with it again; and between the two lies the valley of the Sacramento river, the remarkable gold-bearing region. Between the Sierra Nevada and the Rocky Mountains, the country is an elevated plain, largely a desert, containing the *Great Salt Lake* of Mormon celebrity.

5. The highland system noticed is prolonged by the plateaus of Mexico and Central America, studded with lofty and irregularly disposed volcanic cones, to the *Isthmus of Panama*, where a break or depression occurs, now intersected by a railway, and surveyed for a ship canal. But immediately to the south the *Andes* commence, which traverse in an unbroken line the western side of South America to its far extremity, never more than a hundred miles from the sea, and sometimes forming the coast-line. The chain consists, in different parts of its course, of a single ridge, and of two or three parallel ranges which enclose high table-lands, and form at the points of reunion a confused aggregation of masses, or mountain knots. In the south, where there is only a single ridge, the width is very inconsiderable. The average is perhaps seventy miles; but in Bolivia it extends to 400. The volcano of *Aconcagua*, in Chili, 22,296 feet, is the loftiest summit, and the highest point of the New World.

6. The other mountains of the continent are of moderate elevation. They consist of the *Alleghanies* or Appalachian system, extending from the Gulf of St. Lawrence to the southern United States; the rounded *Ozark hills* in Texas; the Venezuelan coast chain, a branch of the Andes; the *Sierras of Parime* in Guiana, which divide in part the basins of the Orinoco and the Amazon; and the ranges in Brazil, between the Rio de la Plata and the east coast.

7. The loftiest and most powerful *Volcanoes* of the globe are in the western continent, largely in connection with the Andes. Forty-six are enumerated in the chain, of which forty-one are said to be in action. Several are cones of pro-

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digious magnitude, as *Pichincha*, rising to the height of 15,920 feet, *Cotopaxi* 18,890, and *Antisana* 19,120 feet. In central America and Mexico there are forty-seven, thirty of which are active. On the west coast of North America there are five; in the West India islands three; and Iceland, with the island of *Jan Mayen*, which lies to the north-east of it, has active volcanic sites. The Andean volcanoes do not in general discharge lava, but volleys of stones, clouds of ashes, and torrents of water, accompanied with mud. Nowhere are earthquakes more common or tremendous than in Chili, Peru, Venezuela, and Mexico.

8. But vast *Lowlands* eminently characterise the natural geography of the western world in both of its divisions. The whole of North America, between the Alleghanies and the Rocky Mountains, and from the Gulf of Mexico to the Arctic ocean, is an immense plain, comprehending more than 2,000,000 square miles, of very varying character. Eastward, towards the base of the Alleghanies, and the shores of Hudson's Bay, the country is undulating, and generally wooded; westward, at the foot of the Rocky Mountains, a tract occurs covered with granitic sands, constituting a true desert; but the great central valley, watered by the Mississippi and Missouri, is a region of grassy treeless levels, called *Savannahs* or *Prairies*, with forests on the banks of the rivers. Heathy or bushy prairies are distinguished, which contain springs, and have shrubs, wild vines, grass, and flowers; also dry, or rolling prairies, without swamps or pools, and with a wavy surface, simply clothed with grass and floral verdure; and moist or wet prairies, abounding with pools left in hollows by the floods of the rainy season, which have a rank gramineous vegetation. Examples of the second class are the most common and extensive, occupied by vast herds of bisons, wapiti, and deer.

9. The *southern division* of this continent corresponds to the northern in having a great central plain. It extends from north to south, between the Andes on the one hand, and the mountains of Guiana and Brazil on the other, with a mean height very little above the sea level. Northward are the *Llanos*, or local fields of Venezuela, on both banks of the Orinoco, largely inundated in the rainy season, afterwards clothed with giant grasses, and then scorched to per-

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fect desolation in the hot dry months. Centrally lie the *Selvas*, or forest plains of the *Amazon*, covered with woods, the growth of thousands of years, which have become almost impenetrable fastnesses by the interlacing of enormous parasitical plants, with here and there open patches of grass and marsh lands. The area covered by these magnificent forests has been calculated as twelve times that of Germany. Southward stretch the *Pampas*, or treeless plots of the La Plata states, exhibiting during part of the year a crop of the rankest herbage, consisting of grass, clover, and thistles twelve feet high, with extensive sandy and stony spaces doomed to perpetual sterility by saline impregnation. Horses and horned cattle, turned adrift by early European settlers, both in the pampas and llanos, have since multiplied to millions in a wild state.

10. America has the grandest *Rivers* of the globe, as to length of course, size of basin, volume of water, and extent of navigation, several of them having a length of from two to four thousand miles. They are developed on the eastern side of the continent, and flow into the Atlantic, owing to the great chain of mountains which traverses the western seaboard. The *St. Lawrence*, *Mississippi*, *Missouri*, and *Rio del Norte*, are Atlantic rivers, in the northern division; and the *Magdalena*, *Orinoco*, *Amazon*, *Tocantins*, and *La Plata*, in the southern. Only a few insignificant streams descend to the Pacific Ocean, except the *Colorado*, *Columbia*, and *Fraser*, from North America, which, though locally important, are inconsiderable compared with those previously mentioned. The Arctic Ocean receives the *Mackenzie*, *Coppermine*, and *Great Fish* rivers, ice-bound during more than half the year. The mouth of the latter was probably the scene of the last agonies of the more enduring members of the Franklin expedition.

11. The *Mississippi*, "father of waters," is joined by its principal affluent, or rather master-flood, the *Missouri*, "mad river," an allusion to its turbulence, in the vicinity of St. Louis. The joint stream, which may be called the "Mississippi-Missouri," is the second river in the world in magnitude, and the first in length, which exceeds 4,100 miles. The *Amazon* has a somewhat shorter course, namely 3550 miles; but it drains a greater extent of surface, in a region remark-

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able for excessive humidity, discharges a far larger volume of water, and ranks as the greatest river of the globe. Francis Orellana, a Spaniard, first accomplished the descent from Peru in 1539. To the distance of 2000 miles in a direct line from the ocean, there is depth sufficient for vessels of almost every description. But flowing through a country very scantily occupied by rude tribes, there are fewer vessels on the Amazon throughout the year than appear in a single day on the Mississippi-Missouri.

12. The north of the continent is remarkable for the number and extent of its *Lakes*, the largest of which form great part of the boundary between Canada and the United States, and have the following dimensions:—

	Length. Miles.	Breadth. Miles.	Circuit. Miles.	Area. Sq. Miles.
Lake Superior ..	360	140	1,500	30,000
„ Huron ..	250	190	1000	25,000
„ Michigan..	260	55	800	20,000
„ Erie ..	280	63	700	10,000
„ Ontario ..	180	60	500	7,000

Lake Superior is the largest known collection of fresh water, and the five Canadian lakes, taken together, are believed to contain more than half the fresh water in the world. They are mutually connected, and discharge by the St. Lawrence into the Atlantic. Between Lake Erie and Ontario, the connecting river *Niagara*, here divided mid-stream by the Goat Island, and precipitated over a ledge of rocks, forms the celebrated *Falls*, by a perpendicular descent of 164 feet, with a breadth of about 1000 feet on the United States side, called the American falls; and a depth of 158 feet, with a breadth variously stated at from 1,800 to 2,000 feet, on the Canadian side, there called "the Horseshoe fall." The roar of this magnificent waterfall can be heard at a distance of from fifteen to twenty miles, and its cloud of spray seen at a distance of ninety miles. A second series of noble expanses stretches from Canada to the neighbourhood of the Arctic Ocean, passed in winter in sledges over the ice. South America is singularly deficient in large lakes; but has a fine sheet of water, *Lake Titicaca*, at the high elevation of 12,790 feet, on the table-land of Bolivia.

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13. The *Native Animals* are mostly peculiar, and far inferior to corresponding species of the Old World. None occur at all comparable in bulk to those huge pachyderms, the elephant, rhinoceros, and hippopotamus. Quadrupeds of the formidable class are chiefly represented by the jaguar, confined to South America; the puma, ranging northward to the United States; the bison, popularly, but erroneously, called buffalo, common to the open grounds on both sides of the Rocky Mountains; the wolf; and three varieties of the bear. Rodents, or gnawing animals, include the beaver and musquash in the north, and the chinchilla in the south, where also edentata, or toothless animals, are numerous, comprising sloths and armadilloes, with a great variety of quadrumanous tribes. The latter are distinguished from the monkeys of Asia and Africa, by being more gentle, and having mostly prehensile tails, answering the purpose of a fifth hand. The alligator, boa, and rattle-snake are the dangerous reptiles. In the Andes the Condor is found, the largest of all birds that take wing, and the highest flier. Previous to the era of European colonisation, our domesticated animals were quite unknown beyond the Atlantic.

14. The *Vegetation* is unrivalled for variety, size, and splendour, consisting of palms and arborescent ferns, mahogany, logwood, and dye-trees, within the tropics; with the tulip-tree, sugar-maple, and giant pines, further north. The region of the Amazon is the most enormous woodland in the world. Trees of different species are here so close together, and so united by climbing plants, as to form a vegetable wall requiring the hatchet to open a pathway; and were it not for the rivers, the monkeys might travel hundreds of miles without touching the ground. Among the important food plants, the potato, maize, banana, and cacao, with tobacco, are natives of the New World; while wheat and the other kinds of corn, rice, the bread-fruit, sugar-cane, coffee-shrub, pine-apple, and the cotton-plant, are gifts to it from the Old. The first wheat was sown in Mexico, and consisted merely of a few grains, accidentally found by a slave of Cortes, among some rice taken for the support of his army.

15. Both North and South America have a rich and varied *Mineralogy*, and have furnished an extraordinary amount of the precious metals. In the annexed table, the

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countries are stated in the order of their comparative mineral wealth.

Diamonds	Brazil, at present the chief source of supply.
Other Precious Stones	Brazil, New Granada, Chili, Peru.
Gold	California, New Granada, Brazil, Mexico, Chili, Peru, Bolivia, British Columbia.
Silver	Mexico, Bolivia, Chili, La Plata.
Tin and Mercury ..	Peru, Mexico.
Copper	Chili, Peru, Mexico, Canada, United States.
Lead	United States, Mexico.
Iron	United States, Mexico, New Brunswick, Nova Scotia.
Coal	United States, Nova Scotia, New Brunswick, Vancouver's Island.
Salt	La Plata, Brazil, United States, Central America, New Granada.

Humboldt calculated, from mining records, that between the years 1499 and 1803, Mexico, Peru, and Brazil, produced gold and silver of the value of £1,248,000,000 sterling.

16. In consequence of high mountains in the tropical districts, the *Climate* is there torrid, temperate, and frigid, within a limited horizontal distance. But that of North America generally, on the side of the Atlantic, and centrally, has a lower mean annual temperature than European countries in corresponding latitudes. The chief causes of this difference seem to be, the direction which the warm water of the Gulf Stream takes from the shores; the prevailing south-west winds, which waft the air warmed by contact with it; the cold polar current which brings down the icebergs of Greenland to the coasts of Labrador and Newfoundland; and the absence of mountains in the direction of the Arctic Ocean to arrest the chill northern blasts. The climate of South America is generally hotter than that of the north, as it has a much greater extent of surface within the tropics. The rain-fall is remarkable for unequal distribution; for while it descends in perfect deluges on the plains of the Amazon, little or none is

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experienced on the coast of Peru. This arises from the clouds drifted from the Atlantic by the trade wind being intercepted by the lofty wall of the Andes.

17. The *Population* of the whole American continent is supposed to amount to 53,000,000, consisting of: Indians and a few Esquimaux, the indigenous people; the descendants of Europeans, chiefly British, Spanish, and Portuguese; African negroes; and Mixed races. The proportions are stated as follows:—

Indians and Esquimaux	9,000,000
Europeans by descent, and Settlers	31,000,000
Negroes	6,000,000
Mixed races, European and Indian, European and Negro, Indian and Negro ..	7,000,000

The Esquimaux, in the far north, correspond to the northern Asiatics, and are probably of the Mongolian family. The Indians, rapidly diminishing, constitute a distinct variety of the human race; and though varying in colour from deep bronze to light cinnamon, they are identified by certain physical correspondences, while their languages, verbally most discordant, have a common structural band of union.

Bison, or American Buffalo.

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CALIFORNIA

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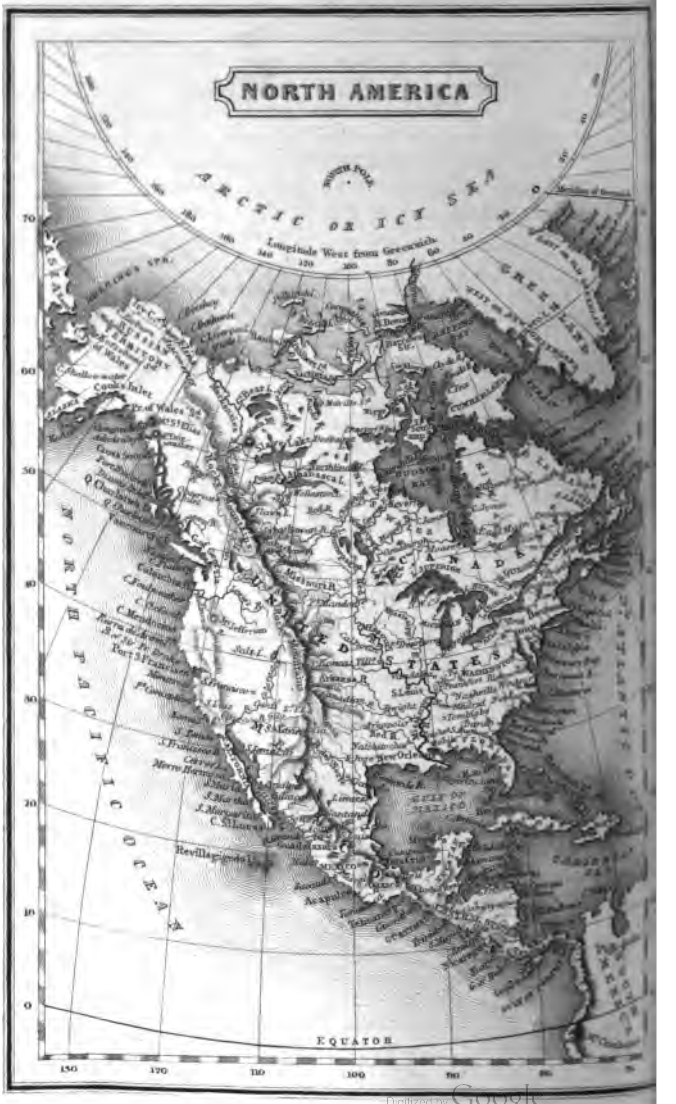
NORTH AMERICA
ARCTIC or ICY SEA
NORTH POLE
Longitude West from Greenwich
EQUATOR
PACIFIC OCEAN
ATLANTIC OCEAN
GREENLAND
CANADA
UNITED STATES
MEXICO
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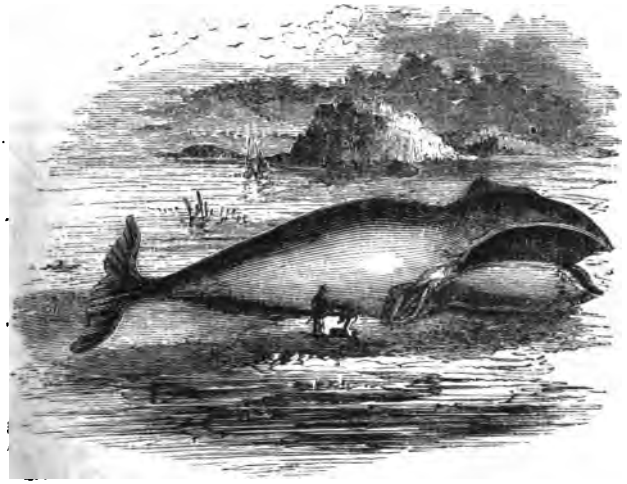
NORTH AMERICA.



Whale-fishing.

DANISH AMERICA—*GREENLAND, ICELAND.*

Mentioned already under "Foreign Possessions of Denmark," at p. 255.

1. GREENLAND, fringed with glaciers, which cover great part of the interior, is either a vast insular dependency of the American continent, on the north-east, or a series of islands so compacted by the ice as to seem continuous; which it is of these has not yet been ascertained. It is one of the most inhospitable regions of the globe, devoid of animal life through great part of its extent, and incapable of supporting it. The extremes of temperature are considerable between winter and summer. The sea freezes in January, and the cold is so intense, that the inhabitants live in holes under ground, covered with turf; while in July the thermometer stands at 84° Fahrenheit even in the shade, and musquitoes abound. The Danes have a few small settlements on the western coast, formed in the early part of the last century, with about 9,500 inhabitants, of whom about 150 are of European descent, and the rest Es-

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quimaux. Seal, fox, and reindeer skins, furs, eider-down, train-oil, whalebone, and fish, are the chief products; these are exported chiefly to Denmark, in exchange for clothing, spirits, iron, &c.

2. *Godthaab*, in South Greenland, is the oldest station; it was founded in 1723 by the Moravian missionary, Hans Egede, whose name has been given to the principal place in north Greenland, *Egedes-minde*, which is on the south shore of Disco Bay. *Godhavn*, in Disco island, is the centre of the most important fishery, off which the last letters received from Franklin and his crews were written. *Upernavik*, in lat. 72° 48′, is the most northerly permanent little town in the world.

3. Iceland, 200 miles from the east coast of Greenland, is an island about one-fifth larger than Ireland, very desolate, but of great natural and social interest. Snow-fields and glaciers appear in close connection with volcanoes, often in tremendous action; and with geysers, or hot springs, at a boiling temperature. *Hecla*, the most celebrated volcano, was in eruption in 1846. The *Geysers*, in the neighbourhood, are in action at intervals, and throw up jets of boiling water, clear as crystal, to the height of 70 or 80 and sometimes 150 feet. The Aurora Borealis, or Northern Lights, are here seen in all their brilliancy, almost every clear night during the winter. The island has no trees except thickets of stunted birch, willow, and ash, rarely rising above ten feet. But a large quantity of drift-wood is brought to the shores by the polar current, and used for building and fuel. It comes probably from inland Asia by the Siberian rivers, and gets afloat on the Arctic Ocean.

4. Iceland was colonised by bold voyagers from Norway in the ninth century, and now contains a population of 64,600. *Reikavik*, the capital, on the south-west coast, though a mere village of 900 inhabitants, has a line of comfortable houses ranged along the shore, belonging to Danish merchants, with native cabins scattered behind and on either side. There is a public library of 8000 volumes, which are lent out to read, and consequently travel to all parts of the island. Every Icelander can read and write; and some have very considerable literary cultivation. Thorlaksen's translation of Milton's "Paradise Lost"

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into Icelandic, is said to be the best version of it ever executed in any language. Generally, the people dwell in cabins as small as possible, to exclude the cold. The walls are from four to five feet thick; the windows scarcely suffice to admit a ray of light, and the roofs are so low that the young children are often set upon them in summer as a playground. Dr. Henderson relates that travelling in the winter season, when the snow was on the ground, he sometimes found himself riding over the dwellings.

5. The business of collecting Iceland moss, a lichen of medicinal value, as well as an article of food, is a summer employment of the women. They migrate in bands to the remote parts of the island where it grows, under the care of experienced matrons, and dwell for the time in tents amid scenery of the wildest description. The moss is boiled, dried, and pounded, then made into bread, or used mixed with milk. Fishing, preparing hides, the care of flocks, and gathering the down of the eider-duck, are the chief occupations of the men. Three reindeer introduced from Norway, in 1770, have multiplied into wild herds in the interior. Commercial intercourse existed between Iceland and England at an early period. Records prove that English ships visited the island as far back as 1423, and that Icelandic ships frequented the ports of England two centuries earlier, in 1224.

RUSSIAN AMERICA.

1. The north-east corner of the continent, bounded inland by the meridian of 141°, with a strip of maritime territory extending southward to about the parallel of 54°, is included in the Russian empire, and separated by the above limits from British possessions. The country thus defined is more than twice the size of France, but is wholly uninhabitable by civilised man apart from the coasts, to which the Russians are confined. There are scattered Esquimaux and Indians in the interior, who trade with their nominal masters in furs and skins. The most valuable fur is obtained from an oceanic animal, the sea-otter, now become rare, owing to the numbers captured. *New Archangel*, on Sitka Island, 650 miles north-west of Nootka, is the principal Russian settlement, with about 1000 inhabitants.

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BRITISH NORTH AMERICA.

1. The British dominions in North America extend from the Atlantic to the Pacific, and from the United States to the Arctic Ocean, and include the Arctic Islands by right of discovery. They consist of *Canada; New Brunswick; Nova Scotia* and *Cape Breton; Prince Edward's Island; Newfoundland; Hudson's Bay Territory,* now called *New Britain; Vancouver's Island;* and *British Columbia.* The total area is not less than 2,500,000 square miles, equal to considerably more than half Europe. On the south, the boundary from the United States is the parallel of 49°, between the southern extremity of Vancouver's Island and Lake Superior, thence through the centre of the great lakes, and down the St. Lawrence to the parallel of 45°, where it leaves the river, and follows a very irregular course to the Atlantic.

2. CANADA extends on both sides of the St. Lawrence at the parallel of 45°, about sixty miles above Montreal, and thence along the north bank of the great lakes to their western extremity, a distance from east to west of 1400 miles. Its limits in other directions are very vague; but the area may be reckoned at not less than 400,000 square miles. The country was first colonised by the French

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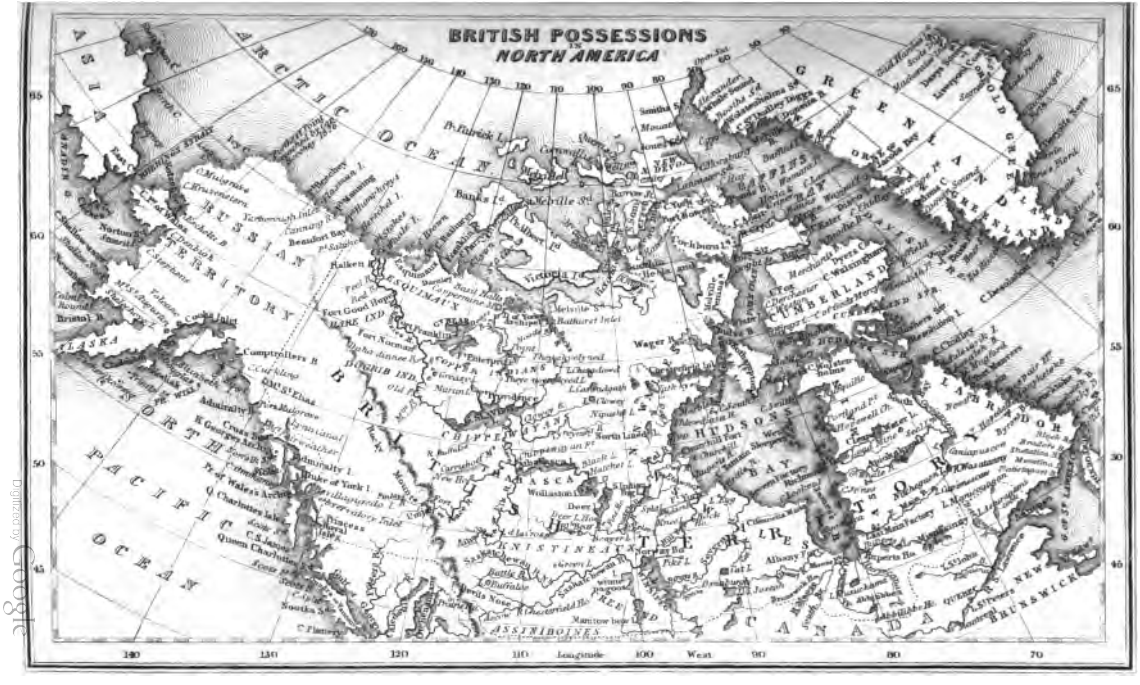
BRITISH POSSESSIONS
IN
NORTH AMERICA
ARCTIC OCEAN
PACIFIC OCEAN
ASIA
RUSSIAN TERRITORY
ALASKA
NORTH
BRITISH
ESQUIMAUX
COPPER INDIANS
CHIPPEWAYANS
ARASCA
KNISTINEAUX
ASSINIBOINES
HUDSONS BAY
CUMBERLAND
LABRADOR
GREENLAND
CANADA
NEW BRUNSWICK
Longitude
West

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in 1608. It remained in their possession to the year 1759, when Quebec was taken by the British, and the whole territory conquered in 1760.

3. No region of equal size commands more extensive or convenient water communication. The great *Lakes* are comparable to inland seas for extent of surface and depth. Ships of the first class ascend the St. Lawrence to Montreal, a distance of 600 miles from its mouth; and by means of its great branch, the *Ottawa* and the Rideau canal, the navigation is continued to Lake Ontario. The latter is connected with Lake Erie by the Welland canal, thereby avoiding the impassable *Falls of Niagara*. Throughout British North America in general, lakes and rivers are so numerous, that the journey between Montreal and far distant stations in the fur countries, 3000 miles and upwards, may be performed almost entirely by water. Traders proceed in light vessels, which are transported across the narrow and low water-partings, called portages, from the French *porter*, to carry.

4. Originally a primeval forest, the surface is still largely covered with dense woods, though the settler's axe has long been busy in clearing the ground for agriculture, and the annual export of *timber* is immense, while no little havoc has been occasioned by fires, both accidentally and intentionally kindled. The magnitude of the trees bears witness to the fertility of the soil; they consist of varieties of oak, elm, ash, poplar, birch, and pine, the latter the most numerous. The sugar-maple is also very common, and valued for its saccharine juice. The tree is tapped in spring; the sap is boiled down and clarified, and yields about five per cent. of sugar. Timber, pot and pearl ashes, fur, skins, grain and flour, are the principal exports.

5. The country was formerly divided into two provinces, separated generally by the Ottawa river, and called *Lower* or *Eastern Canada*, and *Upper* or *Western Canada*, each with a distinct executive and legislative. But in 1840, the provinces were united under a single governor, appointed by the crown, who is also governor-general of British America, with a legislative council summoned for life, and a house of assembly elected for four years. All the other regularly established colonies have local legislatures and lieutenant-

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governors. The old divisions are conveniently retained in popular speech:—

	Chief Towns.
Lower or Eastern Canada ..	Quebec, Montreal, Three Rivers.
Upper or Western Canada ..	Toronto, Kingston, Bytown, Hamilton.

6. *Quebec*, the political capital, in lat. 46° 48′ N., long. 71° 11′ W., is very grandly situated on the north bank of the St. Lawrence, and has been called the Gibraltar of America, being strong by nature and art. It consists of an upper and lower town; and contains 65,000 inhabitants. The citadel crowns the summit of Cape Diamond, 350 feet above the river, and has the upper town immediately adjoining, while the lower town lies at the base of the cliffs. On the heights, (which the British scaled in the night), the battle was fought, in 1759, which wrested the city from the French, and proved fatal to the commanders on both sides, General Wolfe and the Marquis de Montcalm. *Montreal*, formerly the Indian village of Hochelaga, now the commercial capital, occupies an island in the St. Lawrence, and has a population of 77,380, chiefly of French origin and Roman Catholics. Their cathedral is one of the largest on the American continent. The Victoria tubular bridge, conveying a railway across the river, completed in 1859, after the designs of Mr. Robert Stephenson, is nearly two miles in length. It has been constructed with special reference to sustaining the enormous pressure of the ice annually brought down by the stream. The town called *Three Rivers* ranks after Quebec and Montreal, and lies between those cities, on the western bank of the St. Lawrence, at the influx of the St. Maurice. It is one of the oldest towns in Canada, mostly built of wood, and formerly had a brisk fur and timber trade. Population 7,000.

7. *Toronto*, on the north-west bank of Lake Ontario, located on a fine harbour, is a well-built and prosperous town of 45,000 inhabitants. By means of the electric telegraph and railroads, it is connected with all the principal cities of America. Towards the close of the last century, the site was a dense forest, on the border of which there was a solitary Indian wigwam. *Kingston*, a naval arsenal of Great Britain, situated on the north-east shore of the lake, has

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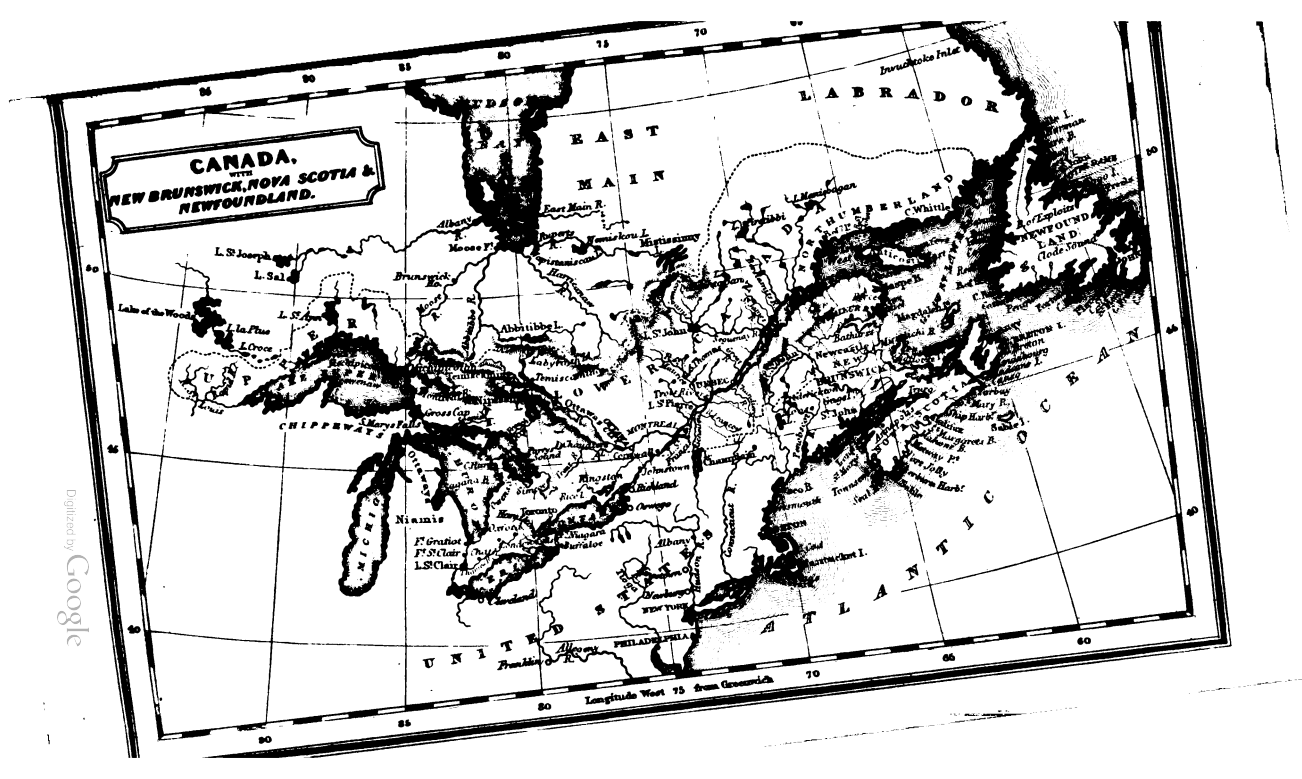
CANADA,
WITH
NEW BRUNSWICK, NOVA SCOTIA &
NEWFOUNDLAND.
LABRADOR
EAST MAIN
ATLANTIC OCEAN
UNITED STATES
Longitude West 75 from Greenwich
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12,000 inhabitants, and occupies the site of the old French fort of Frontenac. It is near the issue of the St. Lawrence, where it expands and forms "The Lake of a Thousand Islands," but, in reality, no less than 1692 islets were counted by the Commissioners employed in fixing the boundary with the United States. *Ottawa City* (formerly called *Bytown*), on the Ottawa river, has a population of 10,000, and has been thought eligible, from its central situation, to be the legislative capital of the colony. The crown, to whom the question was recently referred by the colonial legislature, decided in its favour; but the decision having given great dissatisfaction, it is in abeyance, and has to be reconsidered. *Hamilton* is a new and thriving town at the head of lake Ontario, with good roads, and a fertile country; populat[a] 30,000, of which a large proportion are Dutch and German settlers.

8. The total *Population* of Canada very closely approaches 2,000,000, consisting mainly of British settlers in the west, and the descendants of the French in the east. The latter speak French, interlarded with many English words. There are aborigines mostly on the borders of the great lakes, exclusively Chippewayans and Iroquois. The *Climate* is distinguished by strong contrast between summer and winter, which are most marked in Lower Canada, with great and sudden changes of temperature, very trying to the constitution of Europeans till accustomed to them. For about five months in the winter the navigation of the St. Lawrence is suspended; and occasionally at Quebec the ice becomes a compact thoroughfare across the stream.

9. New Brunswick, a small territory of 28,000 square miles, lies on the gulf of St. Lawrence, between Canada on the north, Nova Scotia on the south, and the United States on the west. It is more densely clothed with forest-trees than any other part of British America, and produces very lofty pine-trees, which supply masts to the British navy; it is also well supplied with river, lake, and sea-fish of all kinds, and possesses important mineral wealth, especially very fine seams of coal, and excellent salt springs. *Fredericton*, a small town on the river St. John, with 6000 inhabitants, is the seat of government; but *St. John* is the most important place, with 15,000 inhabitants, and a commodious harbour on the bay of Fundy. The population of

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the province, upwards of 200,000, consists of: Acadians, the descendants of French colonists; Anglo-Americans, sprung from the royalists who emigrated from the United States at the declaration of Independence; British settlers; and a few Indians. This district was for some time included with Nova Scotia under British rule, but was made a separate colony in 1783.

10. NOVA SCOTIA, a peninsula connected with New Brunswick by a very narrow isthmus, and CAPE BRETON, a closely adjoining island, form a single colonial dependency, with a total area of 18,700 square miles, and a population exceeding 250,000. The people are of very varied descent, French, Anglo-Americans, English, Scotch, Irish, Germans, and Swiss, with a few Indians and negroes, mutually tolerant, hospitable, and enterprising. Both peninsula and island are adapted to yield a large amount of agricultural produce. They also possess extensive stores of coal, gypsum, iron, and other minerals, and have valuable fisheries of cod, haddock, herrings, and mackerel. The coal is worked for local use, the supply of the Cunard steamers, and export to the neighbouring districts. *Halifax*, the capital, on the south coast of the peninsula, has a fine harbour, large dockyard, and military hospital, with 25,000 inhabitants. It is one of the principal Trans-Atlantic stations of the British navy, 2700 miles from Liverpool, and 280 from Boston; a railway to connect it with Quebec is in progress, which will save the tedious navigation of the gulf of St. Lawrence. The name of Nova Scotia occurs in a charter granted by James I. It was subsequently French, and called *Acadie*, but captured by the British in 1710, and finally ceded by the peace of Utrecht, in 1713. *Cape Breton* was captured by Boscawen, in 1758, and finally ceded in 1762.

11. PRINCE EDWARD'S ISLAND, a small crescent-shaped tract, is situated in the south part of the Gulf of St. Lawrence, separated by a narrow channel from New Brunswick, Nova Scotia, and Cape Breton. It contains little more than 2000 square miles, and a population of 60,000, chiefly British, and for the most part Scotch. Its shores are so indented by inlets, that no part of the interior is more than eight miles from the sea. The climate is salubrious, and the

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field and garden produce very varied. *Charlotte-town*, the capital, a small place of 4000 inhabitants, is on the north coast. The island has its name from Edward, Duke of Kent, (father of Queen Victoria,) who was for a time commander-in-chief in British America.

12. NEWFOUNDLAND, one of the largest islands of the continent, with an area of 57,000 square miles, is on the east side of the Gulf of St. Lawrence, and closely approaches the coast of Labrador at its north extremity. The interior is dreary in the extreme, a region of lakes, pools, swamps, thickets, and bare tracts, from which a few lingering aborigines have recently disappeared, in consequence of famine. But the neighbouring seas are singularly productive, and render the island a valuable possession. The *Population*, amounting to about 100,000, chiefly occupy the south and east coasts, contiguous to the fishery of the Great Bank. Though a British colony, the Americans and French have rights of fishery, and of curing their produce on certain unoccupied points of the shore. The French have also exclusive possession of the small isles of *St. Pierre* and *Miquelon*, under agreement that no fortifications are to be erected there. *St. John's*, the capital of Newfoundland, on the extreme south-east coast, has 20,000 inhabitants, with a spacious and secure harbour. It is the nearest point of the western world to the British Isles, being within 1656 miles of Valentia, on the west coast of Ireland. The two places have been selected as the termini of a submarine cable for telegraphic communication. The Newfoundland dogs are a highly-prized breed for size, courage, and sagacity.

13. The *Great Bank*, a long-celebrated fishery, is not a sandbank, but composed chiefly of rocky masses. It is, in fact, a vast submarine plateau, estimated to extend 600 miles in length and 200 in breadth, the sides of which descend precipitously, as appears from the sudden and great increase in the depth of the water. The island itself is an integral part of the Bank, elevated above the waves. Hither shoals of small capelin and lance attract the larger cod-fish, which have been captured for centuries in prodigious numbers, without the supply at all diminishing. The cod-fishery opens at the beginning of June and lasts till the middle of October, giving employment to thousands of vessels. Dense fogs are common over the bank, occasioned by

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the meeting of the warm Gulf stream and the cold polar current in the neighbourhood.

14. The icy coast of *Labrador*, included in the government of Newfoundland, is the chief seat of the seal-fishery; and when the bays are open, from June to September, they are visited by agents of mercantile companies in numerous craft for the purpose of conducting it. There are some permanent stations on shore, where parties are left through the long winter to procure furs, with a few Esquimaux families, and settlements of Moravian missionaries. At *Nain*, one of their settlements, the principal and the oldest, founded in 1771, the mean temperature of the year is 7° below the freezing point, though at no higher latitude than Edinburgh.

15. NEW BRITAIN is the immense region hitherto known as the *Hudson's Bay Company's Territory*, from that body having had for nearly two centuries a monopoly of the fur trade. It is also called Rupert Land, from the original charter of incorporation having been granted in 1670, under the auspices of Prince Rupert. But the right to exclusive trade being about to cease in the present year (1860), the name of *New Britain*, proposed by authority, will henceforth be adopted. The country, equal to nearly half Europe, extends from the United States boundary to the Arctic Ocean, and from Hudson's Bay to Russian America. It is largely a region of lakes, rivers, swamps, and inhospitable land, interspersed with fine woods, diminutive in the north, but stately in the south, where also are beautiful tracts of open prairie ground.

16. *York Factory*, near the western shore of Hudson's Bay, the principal depôt of the Company, occupies a dreary site, subject to the most intense winter cold. The thermometer sometimes descends to 50° below zero, equal to 82° of frost, and brandy freezes in rooms supplied with a constant fire. The Beaver furnishes the main staple of the fur trade, owing to its abundance and the large demand for the article. The Martin ranks next in importance, and has the finest fur of any land animal in America; it is usually sold as sable. Animals of the weasel kind, foxes, the musquash or musk rat, wolves and bears, are also abundant, and supply valuable skins. Trading stations are distributed at wide distances westward to the Rocky Mountains, and northward to the

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neighbourhood of the Arctic Ocean. The *Red River Settlement*, the most considerable, is chiefly agricultural, situated to the south of Lake Winnipeg. Numerous tribes of Indians are scattered throughout the country, small and continually diminishing, with Esquimaux in the north.

17. VANCOUVER'S ISLAND and BRITISH COLUMBIA, on the west coast of the continent, were constituted a distinct colonial dependency in 1858. The island has its name from Captain Vancouver, who first surveyed the shores. It extends about 270 miles in length, by from 40 to 50 in breadth, close to the mainland, and is supposed to have an Indian population of 17,000 souls. Tracts of fertile soil, fine timber, abundance of good coal of easy access, and a wholesome climate, adapt it for the abode of civilised man. Its colonisation commenced in the spring of 1843. *Victoria*, the small rising capital, is on a sheltered harbour of the south coast. *British Columbia* embraces the mainland to the Rocky Mountains, between the United States territory on the south, and the parallel of 55° on the north. The area included amounts to nearly 200,000 square miles. Adventurers have of late years rushed to it, owing to the discovery of gold in the alluvial deposits of the Fraser river. But independent of auriferous wealth, a very large extent of the country is suited by climate and natural productions to civilised occupation.

White Bear.

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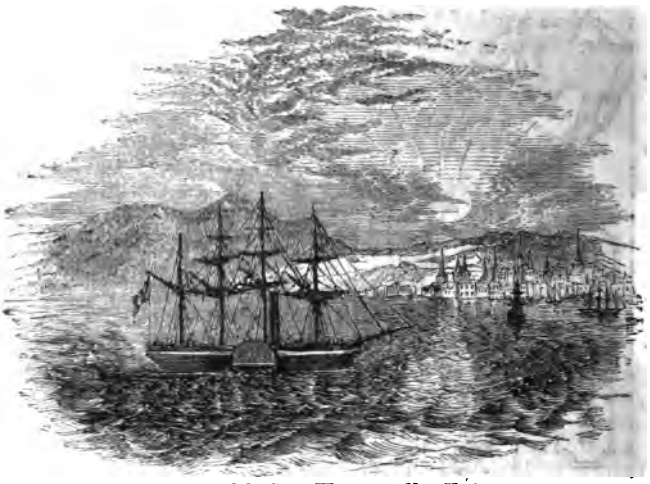

Arrival of the Great Western at New York.

UNITED STATES.

1. This great Trans-Atlantic republic occupies the middle portion of North America, extending between the British possessions on the north, and Mexico on the south, and from the Atlantic Ocean on the east to the Pacific on the west. The line of division from British America has already been indicated. On the side of Mexico the boundary is formed by the river Gila entering the head of the Gulf of California, and the Rio del Norte flowing into the Mexican Gulf. The territory has an area of nearly 8,000,000 square miles, successively gained as follows:—

	Square Miles.
Area of the Republic at the peace of 1783 ..	820,620
Louisiana, obtained by purchase in 1803, added about	899,579
Florida, acquired in 1819, added	66,900
Texas, admitted in 1846, added	318,000
Oregon Treaty, added	308,052
Treaty with Mexico in 1848, added	522,955
	2,936,166

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UNITED STATES
CANADA
QUEBEC
NOVA SCOTIA
NEW BRUNSWICK
TEXAS
MEXICO
GULF OF MEXICO
Longitude West from Greenwich
REFERENCE TO STATES & TERRITORIES
1 Maine
2 New Hampshire
3 Vermont
4 Massachusetts
5 Rhode Island
6 Connecticut
7 New York
8 Pennsylvania
9 New Jersey
10 Delaware
11 Maryland
12 Virginia
13 Ohio
14 Illinois
15 Indiana
16 Kentucky
17 North Carolina
18 South Carolina
19 Georgia
20 Tennessee
21 Missouri
22 Louisiana
23 Mississippi
24 Alabama
25 Michigan
26 Wisconsin
27 Arkansas
28 Florida
29 Iowa
30 Minnesota
31 Nebraska
32 Kansas

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2. The long-settled districts, containing most of the great centres of wealth and civilisation, are on the Atlantic plain, a generally level region but slightly elevated above the ocean. It extends only a few miles inland in the north, but gradually expands southward to 150 miles or more in the Carolinas, and has still greater breadth along the coast of the Gulf of Mexico. There are extensive low swamps in the latter region, teeming with alligators, and visited by millions of migratory water fowl, with monotonous tracts of sand, called Pine-Barrens, from forests of gigantic pines.

3. The *Appalachian Mountains* form the back ground of the plain, stretching from north-east to south-west, or from the state of Maine to that of Alabama, and exhibiting very fine scenery. They consist of numerous parallel ridges, known as the *Alleghanies* in Virginia and Pennsylvania; the *Catskill Highlands* in the state of New York; the *Green Mountains* in Vermont, from their mossy summits and wooded slopes; and the *White Mountains* in New Hampshire, from the line of exposed rock. A few summits attain the height of 6,400 feet. Westward the country falls by a gradual descent to the apparently interminable grassy prairies of the "far west."

4. The *Rivers* flowing direct to the Atlantic are not considerable. The more important are the *Connecticut*, dividing New Hampshire from Vermont, and intersecting Massachusetts; the *Hudson*, confined to the state of New York; the *Delaware*, on the frontier of New Jersey and Pennsylvania; the *Susquehanna*, chiefly in Pennsylvania; and the *Potomac* in Virginia and Maryland. Of these, the Hudson has the most extended line of navigation, and is celebrated for the Rhine-like scenery of its banks where it forces the passage of the Catskill highlands.

5. The great river of the country, the *Mississippi-Missouri*, belongs to the Atlantic system, but flows to the basin of the Mexican Gulf. The *Mississippi* rises to the westward of Lake Superior, and follows a winding course of 1800 miles from north to south to its junction with the *Missouri*. The latter has a course of 2,900 miles to the same point from its sources in the Rocky Mountains; and from the confluence above St. Louis, the joint stream travels 1200 miles to its mouth below New Orleans, making the

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total length 4,100 miles, following the Missouri branch. Upon the melting of the snow, which accumulates in winter to a considerable depth in the upper part of its basin, the river begins to rise, and when at its highest inundates a vast extent of country. Some of its affluents are themselves noble streams, as the *Arkansas* and *Red river* on the right bank, the *Ohio* on the left, *La Belle Rivière* of the early French colonists. The first steamer appeared on these waters in the year 1810.

6. The United States share with Canada the navigation of the great *Lakes*, and command the whole basin of Lake Michigan. There are many smaller examples in the highland region of the north-east, one of which, *Wenham Lake*, well known in London by its ice, is in the south-east of Massachusetts. Lakes and rivers, connected by canals, extend water-communication far and wide; and numerous intersecting railways now bring very distant places within easy journeys of each other. The longest canal measures 363 miles, and extends from the Hudson river to Lake Erie, and by another of 324 miles from Lake Erie to the Ohio, there is uninterrupted inland navigation from New York to New Orleans. At the commencement of the year 1858, the railways had a total extent of 26,210 miles, thus exceeding the equatorial circumference of the globe.

7. The useful *Metals* occur in great abundance, especially iron and lead; and there are immense deposits of coal in nearly all its known varieties. Some gold has long been obtained in Virginia, North Carolina, and Georgia. But from San Francisco the shipments of the precious metal, the produce of California, amounted to the value of 322,393,856 dollars, in the interval between April 11, 1849, and December, 31, 1856. It is remarkable that the first discovery of gold in this region was made in little more than a month after it had been obtained by cession from Mexico. The country so richly auriferous is a longitudinal tract watered by the Sacramento and San Joaquin rivers. In 1858, California had 132 quartz-crushing mills, and 550 mining ditches having an aggregate length of 2,901 miles.

8. The republic, which is federal, at present consists of 33 States, 1 District, and 5 Territories, or 6 including the Indian territory.

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North-Eastern, or New England States.

States.	Square Miles.	Population last Census, 1850.	Capitals and Chief Towns.
Maine	32,628	583,169	Augusta, Portland, Bangor.
* New Hampshire	9,411	317,976	Concord, Portsmouth, Manchester.
Vermont	10,212	314,120	Montpelier, Burlington.
* Massachusetts	7,500	994,514	Boston, Lowell, Salem, Worcester.
* Rhode Island	1,340	147,545	Providence, Newport.
* Connecticut ..	4,764	370,792	Hartford, Newhaven.

Northern, or Middle States.

* New York ..	46,085	3,097,394	New York (and Brooklyn), Albany, Buffalo, Rochester, Troy.
* New Jersey ..	8,320	489,333	Trenton, Newark, Paterson.
* Pennsylvania ..	44,000	2,311,786	Harrisburg, Philadelphia, Pittsburg.
* Delaware ..	2,120	91,532	Dover, Wilmington, Lewes.

Southern States.

* Maryland ..	13,959	583,034	Annapolis, Baltimore.
* Virginia	64,000	1,421,661	Richmond, Norfolk.
* NorthCarolina	43,800	869,039	Raleigh, Wilmington.
* South Carolina	28,200	668,507	Columbia, Charleston.
* Georgia	62,000	906,185	Milledgeville, Savannah.
Florida	53,786	87,445	Tallahassee, Pensacola.
Alabama	50,722	771,671	Montgomery, Mobile.
Mississippi ..	47,151	606,526	Jackson, Natchez.
Louisiana ..	46,431	517,762	Baton Rouge, New Orleans
Texas	237,321	212,592	Austin, Galveston

Western States.

Arkansas	52,198	209,897	Little Rock, Van Buren.
Tennessee ..	45,000	1,002,614	Nashville, Memphis.
Kentucky ..	40,500	982,405	Frankfort, Louisville, Lexington.
Ohio	39,964	1,980,427	Columbus, Cincinnati, [ton. Cleveland.
Michigan ..	56,243	397,654	Lansing, Detroit.
Indiana	33,809	988,416	Indianapolis, Madison.
Illinois	55,405	851,470	Springfield, Chicago.
Missouri	67,380	682,044	Jefferson, St. Louis.
Iowa	50,914	192,214	Iowa City, Dubuque, Burlington.
Wisconsin ..	53,924	305,391	Madison, Milwaukee.
California, 1856	188,981	507,067	Sacramento, San Francisco, Benicia.
Minnesota, 1858	83,000	150,042	St. Paul.
Kansas, in 1858.	120,000	75,000	Leavenworth.

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	Square Miles.	Population last Census, 1850.	Capitals and Chief Towns.
District.			
Columbia . ..	50	51,687	Washington.
Territories.			
Oregon, in 1857 ..	175,000	43,000	Salem.
Utah, in 1850.. ..	187,923	11,380	Fillmore, Salt Lake City.
New Mexico	210,744	61,547	Santa Fé.
Washington, in 1857	110,000	10,000	Olympia.
Nebraska, in 1856..	335,000	10,716	Omaha.
Total,			23,968,111

To these may be added, Indian Territory, between Texas and Kansas, allotted by the States to the native Indians, who have been driven from their original grounds. Area, 225,000. Inhabitants, 342,508.

Since 1850, when the above census was taken, the population of the U.S. is said to have increased one-third, and now probably amounts to nearly 35 millions.

The States marked with an asterisk are *the original thirteen provinces* which declared themselves independent in 1776, and whose independence, after a contest of nearly eight years, was acknowledged by Great Britain in 1782. Territories may be described as states in embryo, to be recognised when a certain amount of population has been attained. In the meantime they can send delegates to Congress, who have the right to speak, but not to vote. The district of Columbia, around the federal capital, comprising about 50 square miles, is under the immediate government of Congress.

9. *Virginia*, the oldest of the states, has its name from the virgin Queen Elizabeth; *Maryland*, from Henrietta Maria, queen of Charles I.; the *Carolinas*, and *Charleston*, from *Carolus*, Charles II.; *Louisiana*, from Louis XIV. of France; *Pennsylvania*, from Penn the Quaker, who bought the territory of the Delawares, and *sylva*, a wood; and *Georgia*, from George II. *Vermont* has its name from the French *verd*, green, and *mont*, hill; *Florida*, from *Pasqua Florida*, or Palm Sunday, the day on which it was discovered by the Spaniards.

10. Virginia, which, as we have already said, is the oldest English settlement of the Union, was granted to Sir Walter Raleigh by Queen Elizabeth; but the first actual occupation of the English in North America was in 1607, at *Jamestown*. Virginia is a well-wooded and fertile territory, with inexhaustible mines of iron, and surpasses all other states in the production of tobacco; but is still a slave state.

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Richmond, on James River, at the lower falls, picturesque and healthy, with numerous fine public buildings, and a population of 30,000, is the capital, and *Norfolk*, near Chesapeake Bay, the principal port.

11. *Washington*, the capital of COLUMBIA, and the political capital of the United States, in lat. 38° 53′ N., long. 77° 1′ W., on the left bank of the Potomac, is the ordinary residence of the president and the foreign ambassadors, the seat of government, and the site of the annual session of the legislature. It contained a population of 3,200 in 1800, and of 40,000 in 1850. The capitol, or house of Congress, containing halls of the senate and representatives, with offices of the executive, is a noble building, surmounted by a massive dome, with an imposing colonnade in front. Among many other fine public edifices, the Smithsonian Institute deserves particular mention. Thirteen miles below the city, on the opposite side of the river, is *Mount Vernon*, the residence of General Washington, with his tomb in the grounds.

12. NEW YORK, the commercial capital, situated on the south extremity of Manhattan island, at the mouth of the Hudson, is the largest and most flourishing city of the Union and of the whole western continent, ranking with the great capitals of the globe. It contained in 1855, (including its suburbs, *Brooklyn*, on Long Island, the seat of the U.S. navy-yard, and *Williamsburg*,) a population of 643,030, now probably increased to 900,000; and is the centre of an immense inland and coasting trade, with a vast foreign commerce. Washington was here inaugurated the first President of the United States. The city, founded by the Dutch, was originally called New Amsterdam, and received its present name in honour of the Duke of York, afterwards James II. It has many fine public buildings, among which may be mentioned the Custom-house, the Exchange, Trinity Church, the Courts of Law, the Astor Library (especially valuable for its contents), the Bible House, Columbia College, the University, the Free Academy, the Crystal Palace, the New State Arsenal, and the Croton Aqueduct, which brings water a distance of forty miles. Besides these, the warehouses and shops are on a scale of great magnificence. Several parks ornament the

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city, and in the centre of one stands the City Hall, built of white marble. *Albany*, a large commercial town, the capital of the state of New York, on the Hudson, 145 miles from the city, has more than 60,000 inhabitants. *Buffalo*, a handsomely built town, situate at the head of the Erie canal and Niagara river, is the chief emporium of the trade on Lake Erie; population, 65,000. *Rochester*, situated on both sides the Genesee river, on the site of three considerable falls, may be called the city of flour-mills. *Troy*, on the river Hudson, is chiefly engaged in the shipping trade, but has manufactories of machinery and hardware.

Philadelphia.

13. *Philadelphia*, on the broad Delaware, the second city in extent, and the metropolis of PENNSYLVANIA, containing a population of 450,000, is the first in wealth and refinement, public buildings, charitable institutions, and mineral resources. It contains the United States Mint, which has branches at New Orleans, San Francisco, and other places; Girard College, for the education of orphans, which

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commemorates the name of a citizen who bequeathed an enormous fortune for the purpose; an Observatory; fine public Library; and a Museum. In the old state-house the declaration of independence was signed in 1776. *Harrisburg*, the capital of Pennsylvania, is delightfully situated on the Susquehanna, and has some fine official buildings. *Pittsburg*, on the Ohio, with a most commanding river navigation, is the head quarters of the iron manufacture, the Birmingham of America. It consisted, in 1800, of only a few cabins, with a population of 1600, and has now a prodigious number of mills, foundries, steam-engines, and factories, with a population of 110,000.

14. *Baltimore*, the metropolis of MARYLAND, on the Petapsco, flowing into Chesapeake bay, the third city in size, with a population of 210,000, is the largest in the slave-holding states. The name is derived from Lord Baltimore, to whom the country was granted by charter of Charles I., but the city itself was not founded till the year 1729. It is famous for the beauty of its women, and for its fine public buildings, especially the Washington Monument, a noble Doric column of pure white marble, 196 feet high, surmounted by a colossal statue. The chief trade is in flour and tobacco. *Annapolis*, the capital of the state, is a small town on the Severn, twenty-eight miles from Baltimore. Population 2792. It contains a fine state-house, in the senate chamber of which General Washington resigned his commission at the close of the Revolutionary war.

15. *Boston*, with a population of 165,000, the chief town of MASSACHUSETTS, beautifully situated on a small peninsula in Massachusetts Bay, with a fine harbour, commands a large inland trade, being connected by railroads, canals, and navigable rivers with many important towns. Though it ranks only fourth in extent, it is second in a commercial point of view, and first in literary eminence and historic interest. It has fine public buildings, especially its State-house. The Pilgrim Fathers landed here, some of them emigrants from Boston in Lincolnshire, whence the name of the city; and the first blood in the struggle for independence was shed in the vicinity. A cenotaph embalms the memory of the celebrated Benjamin Franklin, one of its citizens. *Lowell*, twenty miles from Boston, with large cotton factories,

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lyceums, reading-rooms, and upwards of 38,000 inhabitants, now regarded as "the Manchester of America," had only a few dwellings in the year 1820. *Charlestown*, connected with Boston by three bridges, stands on a lofty peninsula, the centre of which is occupied by *Bunker's Hill*, celebrated for the battle fought there during the revolutionary war. It has fine public buildings, and a large library. *Cambridge*, united to Boston by two bridges, contains Harvard University, the largest and best in the United States, with a capital library; population 14,000.

16. *New Orleans*, in LOUISIANA, on the eastern shore of the Mississippi-Missouri, near its mouth, and 109 miles from the sea, is a fine city, and the commercial emporium of the cotton trade, with 150,000 inhabitants; but unhealthy. *Baton Rouge*, the capital of Louisiana, with a college, is a small and unimportant town. *Cincinnati*, on the OHIO, the "Queen of the West," has 200,000 inhabitants, and exhibits a surprising example of rapid growth, as it was but a small log-built village at the commencement of the present century. It is a place of great commerce, located in a beautiful valley, has many fine public buildings, including a Roman Catholic cathedral and an observatory, extensive vineyards, producing wines said to equal those of France; and is the largest pork-market in the world.

17. CALIFORNIA, which was first colonized by the Spaniards, became, in 1822, a province of Mexico, and, in 1848, was ceded by Mexico to the United States. It lies south of Oregon, and extends westward from Utah and New Mexico, to the Pacific, its greatest length being about 700, and its breadth 330 miles. A large portion of the state is traversed by mountain ridges. The population consists chiefly of Europeans from the older states of the Union, and various parts of Europe, especially Great Britain, who for some years past have been attracted in shoals by the prolific gold mines discovered on the western slope of the Sierra Nevada. There is also a quicksilver mine at *New Almaden*, about thirteen miles south of *San José*, which is supposed to be the richest in the world. The soil is very fertile, freely producing the cereals, potatoes, and fruit; and fish are fine and abundant. *Sacramento City*, the capital of California, and the miners' principal depot, is a commercial

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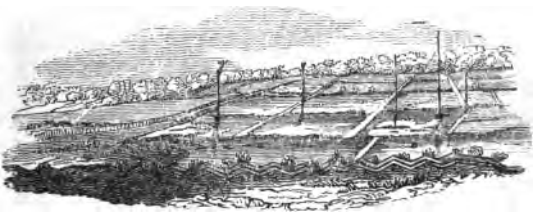
port of easy access for large vessels; but the great commercial metropolis is *San Francisco*, population 60,000. situated on a bay of its name, which is the principal and most flourishing port. The entrance to it is through a strait one mile in width and four miles long, called the "Golden Gate." *Benicia*, a name which has lately become familiar as the cognomen of the American pugilist, is situated on Karquenas strait, and has an arsenal, a navy-yard, and large docks. It is one of the several new towns in this district, and is named after Benicia, near Troy, in the state of New York.



Rice-fields of South Carolina.

18. For the many other cities of importance, and among them the following, the reader is referred to his map and gazetteer. *Charleston*, the metropolis of SOUTH CAROLINA, and the largest city in the Slave States, a well-built and picturesque town; population 41,000. *Mobile*, the principal port of ALABAMA, and the chief cotton mart of the United States, with a population of 21,000. *St. Louis*, in MISSOURI, the only large town in the centre of the Union; population 100,000. *Louisville*, on the Ohio, in KENTUCKY, remarkable for its mammoth cave, eight or nine miles long; population 50,000. *Detroit*, in MICHIGAN, upon the line of frontier between Canada and the United States; population 21,000. *Chicago*, in ILLINOIS, called the Prairie state, is the shipping depot of an immense and fertile region, which thirty years ago was the head quarters of wolves, with scarcely any white inhabitants; now it has a population of 100,000, and is the greatest corn-exporting place in the world.

19. The total *Population* of the United States, according to the seventh census in 1850, with some slight additions

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for 1856-8, as shown in the preceding table, is nearly twenty-four millions. It has since been largely augmented, both by natural increase and the influx of emigrants. The bulk of the people are of British origin; but there are many of French extraction in Louisiana, Dutch in New York, and German in Pennsylvania, with a sprinkling of Chinese in California. In the slave-holding states there are upwards of 3,200,000 Negroes in bondage; principally in Virginia, the Carolinas, Georgia, Alabama, Mississippi, Louisiana, Tennessee, and Kentucky. Of the ancient lords of the soil, the Indians, whose fathers waged so long and fierce a conflict for its possession with the Anglo-Saxon emigrants, few are left in the New England states; but a few linger on the borders of the great lakes. Other remnants have gone westward, where there are still some formidable tribes, but these are annually diminishing from the combined influence of war, small-pox, rum, and the encroachments of the white man on their hunting grounds. The total number scattered through the mighty wilderness is estimated at about 400,000.

20. The old north-eastern states, especially Massachusetts, are the chief seats of *Manufacturing industry:* cottons, woollens, linens, and hardwares. But *Agriculture* is the principal pursuit of the Southern and Western states, and ordinarily requires little skill, owing to the abundance of fertile land. Besides wheat and the common kinds of grain, *maize* is very largely raised in Tennessee, Kentucky, Ohio, Virginia, and Indiana; *flax* and *hemp* in Kentucky; *tobacco* in Virginia, Tennessee, Kentucky, North Carolina, and Maryland; *sugar* in Louisiana; *cotton* in the Carolinas, Georgia, Alabama, Louisiana, and Mississippi; and *rice* in the swampy districts of the southern coasts. After supplying the home demands, the annual export of cotton amounts to upwards of 3,820,000 lbs. The first seeds of the plant were sown in Georgia in the year 1786.

21. The *United States* form a federal republic under the government of a President, and a Congress consisting of a house of Senate and a house of representatives. The Constitution, as now established, went into operation March, 1789. Each state is independent in the management of its internal affairs, but sends two senators to Congress for

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general purposes, elected for six years by its own legislature, one-third being renewed biennially, with representatives (elected for only two years) varying in number with the population, one being returned for every 93,000 inhabitants. The present number of Senators is sixty-six, and of Representatives two hundred and thirty-seven. The Congress meets annually, at Washington, on the first Monday in December. Its members are paid travelling expenses going and returning, with a stipend for the session. The President is elected for four years, and takes the following oath:—"I do solemnly swear (or affirm) that I will faithfully execute the office of President of the United States, and will, to the best of my ability, preserve, protect, and defend the constitution of the United States."

22. The first permanent Anglo-American settlement, *Jamestown*, on James's River, flowing into Chesapeake Bay, was founded in 1607, and called after James I. Here the first colonial assembly was convened in June, 1619, consisting of the governor, his council, and two representatives from each of the eleven boroughs which had then been established. The town itself has perished. The first newspaper in the States and in North America was published in 1704, and the second in 1720. At the Declaration of Independence the number of newspapers was 35; and in 1850, it amounted to 2526.

Opossum.

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MEXICO.

1. MEXICO, formerly called *New Spain*, extends in a gradually contracting manner from the frontier of the United States on the north, previously defined, to the narrow tract of Central America on the south, between the Pacific Ocean on the west, and the great Mexican Gulf on the east. After being stripped by its powerful northern neighbour of some of its finest provinces—Texas, New Mexico, and California—it still contains an area of not less than 750,000 square miles; and is by nature one of the most beautiful and productive regions of the globe, but politically weak and socially impoverished, by misgovernment and civil dissensions, with great popular ignorance and indolence. On its western coast is *the Gulf of California*, the largest inlet on that side of the entire continent.

2. The interior of the country is for the most part a plateau, ranging from 6000 to near 8000 feet in height, on which are some spacious lakes and many volcanic cones rising far above the snow line. *Popocatepetl*, the highest volcano, overlooking the capital, attains the elevation of 17,720 feet, and is, after Mount St. Elias, the loftiest point of North America. Earthquakes and volcanic eruptions occasionally occur with great violence, and have produced remarkable local changes. In a single night, on the 29th of September, 1759, the *Jorullo mountain* was thrown up, 1300 feet in height; and the surface in the neighbourhood was permanently elevated through an area of many square miles. Seven years before, the inhabitants of *Passo del Norte*, where the Cordilleras enter the United States, saw the *Rio del Norte*, the only large river in Mexico, suddenly become dry for 150 miles, and it remained so for three weeks.

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3. Owing to the varying altitude of the country, three distinct zones of *climate* are encountered in passing across it from coast to coast, between Vera Cruz, on the Gulf of Acapulco, and the Pacific. The maritime lowlands are hot regions, *tierras calientes*, where the summer heat is excessive, the vegetation tropical, and malaria and the yellow fever periodic. Ascending the plateau to the height of 2500 feet, the traveller gains temperate regions, *tierras templades*, where the ordinary cereals of Europe flourish, and fevers are unknown. At an elevation of 5000 feet, cold regions are entered, *tierras frias*, but the air is still genial, and corn is raised even at a far greater height, the line of perpetual snow being at 14,800 feet.

4. There is great *vegetable variety* and floral beauty in the country. A passion for flowers distinguished the natives at the time of the Spanish conquest; and it is still characteristic of their descendants, exhibited in household life as well as on festive occasions. The well-known dahlia and several of the fuchsias are indigenous; as is also a beautiful convolvulus, the root of which furnishes the medicine called jalap, a name derived from the town Xalapa or Jalapa. Cacti are abundant, especially the species upon which the cochineal insect feeds. Vanilla plants furnish the aromatic of commerce. Entire forests occur of an admired tree, the *cheirostemon*, so called from its flowers, which are supposed to resemble the five fingers of the human hand. Majestic cypresses and oaks abound in the temperate region.

5. Mexico has long been famous for its *metallic treasures*, consisting of gold, silver, copper, lead, tin, and iron. It is especially rich in silver, the supply of which seems inexhaustible, and is easily obtained. Previous to the arrival of the Spaniards, the natives were well acquainted with the mineral wealth of their country, and had made considerable advances in the art of obtaining the metals in a pure state, as well as in applying them to useful and decorative purposes; but their iron mines do not appear to have been worked before 1825. Their arms, axes, chisels, and other implements, were made of copper, mixed with tin, to give them the requisite hardness. Gold and silver vessels were manufactured in all the large towns. During nearly three centuries, the Spaniards diligently worked the old mines, and opened new ones, extracting immense wealth from them;

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and there are now upwards of 3000, chiefly silver. The central chain of mountains, *Sierra Madre*, is believed to be the richest in the world in the useful ores; these, however, have been comparatively neglected in favour of gold and silver. But revolutions and social disorganisation interfere to check mining and all other branches of industry; and whenever commerce is in consequence suspended, the whole population becomes inconvenienced for want of iron.

6. This fine country was conquered by Cortes in 1521; and remained a possession of Spain till 1810, when the first struggle for independence commenced. It became an empire for a short time, and in 1824, a federal republic, similar to that of the United States, and is now called the *Mexican Confederation*.

STATES.	Area, sq. m.	Population.	Chief Towns.
Federal District .	89	200,000	Mexico (City of).
Xalisco	48,590	774,500	Guadalaxara.
Zacatecas	30,507	356,000	Zacatecas, *Aguas Calientes*.*
Puebla	18,440	660,000	Puebla, Cholula.
Vera Cruz . . .	27,595	265,000	Vera Cruz, Jalapa.
Tamaulipas . . .	30,334	100,000	Nuevo Santander, Ciudad Victoria, Tampico.
Mexico (State of) .	35,450	1,500,000	Tezcuco, Toluco, Acapulco.
Yucatan	52,947	681,000	Merida, Campeachy.
Tabasco	15,609	64,000	Villa Hermosa, S. Juan Baptista.
Guanaxuato . . .	12,618	713,600	Guanaxuato, Celaya.
Durango	54,500	162,200	Victoria de Durango.
Chihuahua . . .	100,250	147,600	Chihuahua.
Coahuila	56,570	75,300	Coahuila, Saltillo.
Nuevo Leon . . .	21,000	133,300	Monterey.
Chiapas	18,750	144,000	San Christoval.
Guerrero . . .	32,002	270,000	Tixtla.
Mechoacan . . .	22,993	498,000	Morelia (or Valladolid).
Oaxaca	31,822	525,100	Oaxaca, Mitla.
Queretaro . . .	7,500	184,000	Queretaro.
San Luis Potosi .	29,486	368,000	Potosi.
Sonora†	123,466	139,000	Ures, Arispe, Sonora.
Sinaloa†	35,721	160,000	Culiacan, Villa del Fuerte.
Tlascala (territory of)	1,984	80,000	Tlascala.
Colima (territory of)	3,019	61,000	Colima.
Lower California (territory of) . . .	60,662	12,000	La Paz.

* Lately raised to the dignity of a State.
† Ceded to the United States by the Treaty of 1853.

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In the names of places, the letters *x* and *j* are interchangeable. Thus Mexico is sometimes written *Mejico; Xalapa, Jalapa;* and Guadalaxara, *Guadalajara*. The sound is a strong guttural. In names with *ua* the pronunciation corresponds to our *wa*, as Chih*ua*hua, Chih*wa*hwa; Gu*a*temala, G*wa*temala. The name of Mexico originated with the Spaniards, who derived it from *Mexitli*, the god of war of the natives.

7. The city of *Mexico*, the capital, lat. 19° 25′ N., long. 99° W., is very grandly situated in a spacious oval-shaped valley, enclosed by a wall of porphyritic mountains, among which *Popocatepetl* rises on the southern side, crowned with perpetual snow. The valley is a basin on the plateau, the lowest part of which, occupied by the city, is still 7483 feet above the sea. There is immense wealth in the numerous ecclesiastical edifices, consisting of statues, vases, candelabras, balustrades, and ornaments, all composed of the precious metals. The great square, *plaza mayor*, an area of twelve acres paved with marble, the cathedral on one side, and the government palace on another, has a noble appearance. The city has claims to be regarded as the finest in the New World, and is supposed to contain upwards of 170,000 inhabitants. A cypress in the neighbourhood, called the cypress of Montezuma, was a fine tree when that unhappy native monarch fell in defending his capital from the Spaniards. It has a trunk 41 feet in girth, and must be at least four centuries old.

8. *Guadalaxara*, in the State of Xalisco, a considerable and well-built city, with an active trade in leather and pottery, ranks next to the capital in population, 70,000. *Puebla*, called *Puebla de los Angelos*, "the town of angels," seems to deserve the title of "Paradise of Priestcraft;" though its population does not exceed 72,000, it has 69 churches, 9 monasteries, 13 nunneries, and 63 ecclesiastical colleges. It lies on the great road between Mexico and Vera Cruz, and enjoys a delightful climate, being 7,200 feet above the sea. Within a few miles of Puebla, and in the same state, is *Cholula*, the capital of the ancient Mexican superstition, where Cortez, the Spanish conqueror, found upwards of 100 temples. *Guanaxuato*, which lies in the midst of mountains, and is 6,800 feet above the sea, has 50,000 inhabitants, and is the capital of the richest silver mining district. The principal vein, discovered in 1558, is a ravine, which yielded

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during the Spanish dominion one-fourth of the silver produce of Mexico, and one-sixth of the produce of all America. *Vera Cruz*, situated in the department of its name, and the chief port on the Gulf of Mexico, is one of the most unhealthy places in the world, owing to the yellow fever. It was founded by Cortez, who landed at the spot, and gave it the name of *Villa Rica de la Vera Cruz*, "rich city of the true cross." Population less than 10,000. The capital of the department of Vera Cruz is *Jalapa*, which stands on a hill, and is healthy; population upwards of 18,000. *Tampico*, 215 miles north-north-west of Vera Cruz, with about the same amount of population, is a good and healthy port, with considerable trade. *Acapulco*, on the coast of the Pacific, has a magnificent harbour, but has lost the commerce it enjoyed in the days of the old Spaniards, when galleons, laden with gold and silver, used to sail annually to the Philippines, and bring back the choice products of eastern Asia. The town is unhealthy, and the population only about 5,000. *Merida*, the capital of the peninsula of YUCATAN, with a population of 40,000, is distinguished by a very noble cathedral. This peninsula is remarkable as one of the very few which project in a northerly direction. It has fine woods, with grand and very interesting ruins of cities almost buried beneath masses of vegetation, the monuments of a prehistoric people. From *Campeachy*, a port on the west coast, the dye-wood is exported which bears its name, although more generally termed logwood. Population, 18,000. *Tlascala* and *Colima* are almost exclusively inhabited by Indians, and have a government of their own.

9. The entire *Population* of Mexico was estimated in 1858 at 7,859,564, of a very miscellaneous kind. It consists of *Creoles*, or whites of Spanish descent, the dominant class; *Indians*, or indigenous Mexicans, more numerous and partially independent; a few thousand *Negroes*, formerly slaves; *Mestizoes*, the descendants of whites and Indians; *Mulattoes*, the descendants of whites and negroes; and *Zamboes*, the descendants of negroes and Indians.

10. The *Religion* is so strictly Roman Catholic that no other is tolerated; and the rites and ceremonies are performed with all the pomp of the papal states. Most of the coloured people belong nominally to the same profession; but the Indians interweave with it the rites of their

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heathen ancestors. Monks and nuns are in great profusion, yet *Education* is in so low a condition that not one person in ten can read or write.

11. Silver, gold, copper, cochineal, indigo, jalap, vanilla, and hides, are the principal exports. Manufactures can scarcely be said to exist; agriculture has decayed through neglect of the artificial irrigation required by the country, and maintained in former times; and subsistence by robbery is common. Rude crosses and heaps of stones along wretched roads frequently meet the eye, marking the spots where travellers have been murdered by brigands.

CENTRAL AMERICA.

GUATEMALA—HONDURAS—BALIZE—SAN SALVADOR—NICARAGUA—COSTA RICA.

1. The narrow tract of country commonly called *Central America* extends from the borders of Mexico and Yucatan to the Isthmus of Panama, between the Caribbean Sea, an arm of the Atlantic, and the Pacific Ocean. It has a length of about 1,000 miles, with a breadth varying from 80 to 300; and comprehends an area of 208,551 square miles. The population, estimated at 2,500,000, consists of whites of Spanish descent, native Indians, mixed races, and a few British. Conquered by the Spaniards under Alvarado, in 1523, the country remained for the most part in the possession of Spain, till declaration of independence was made in 1821; and, after a brief incorporation with Mexico, the United States of Central America were formed. But the union was dissolved in 1823; and five distinct republics, with a British settlement, now share the territory between them, as follows:

	Area, sq. m.	Population.	Chief Towns.
GUATEMALA .	75,098	1,100 000	New Guatemala, Old Guatemala.
HONDURAS .	66,314	380,000	Comayagua, Omoa, Truxillo.
BRITISH HONDURAS . .	16,000	20.000	Balize.
SAN SALVADOR	9,500	600,000	Cojutepeque, San Salvador, Sonsonate.
NICARAGUA .	44,000	400,000	Leon, Nicaragua, Granada.
COSTA RICA .	25,000	215,000	San José, Cartago.
	235,922	2,715,000	

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The region being generally elevated within the tropics, has a delightful climate; but it is frequently disturbed by earthquakes and volcanic outbursts.

2. GUATEMALA, the largest and most northerly State, stretches from sea to sea, and has a capital of the same name, with the prefix of *Nueva*, "New." This is an inland city, elevated 5,000 feet above the sea-level; with 60,000 inhabitants, who dwell in low houses, which have very thick walls, as a precaution against earthquakes. *Old Guatemala*, about twelve miles distant, was dreadfully devastated by an earthquake in 1773, on which account the Spanish government ordered the site to be abandoned. The remains of the churches are magnificent, and the population, consisting chiefly of Christianised Indians, is still considerable. Two remarkable mountains rise in the neighbourhood, the *Volcano de Agua*, or water volcano, and the *Volcano de Fuego*, or fire volcano, both nearly 14,000 feet in height. The country produces about two million pounds of cochineal annually; and has a remarkably splendid bird, rare elsewhere, the Quesal, deemed sacred by the Indians. The plumage is an exquisite green, spotted on the wings with brilliant red and black, while the long feathers of the tail are of a green powdered with gold. *Guatemala*, like *Yucatan*, contains the ruins of many ancient cities, probably of the Aztec period, or earlier.

3. HONDURAS, a district on the Caribbean Sea, is celebrated for its forests of mahogany and other valuable woods. It has an inland capital, *Comayagua*, with 18,000 inhabitants, and *Omoa* for its chief port, where the last Spanish flag waved till the 12th of September, 1832. *Truxillo* is another port of Honduras. The province of BALIZE, commonly called BRITISH HONDURAS, is a portion of the same territory, extending 200 miles along the coast, with no well-defined inland limits, and is a British colony, under the charge of a superintendent appointed by the Crown. It has been held since the close of the last century; and is valuable for its supply of Honduras mahogany and logwood. *Balize*, the capital, which is built almost wholly of wood, is a seaport of great trade; its principal houses are raised about ten feet from the ground, on pillars of mahogany. Its population varies from 6,000 to 8,000. Balize is the

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Spanish form of Wallis, the name of a notorious buccaneer who once infested the locality. The woodmen go out in gangs into the forests in the dry season, from February to the close of May, when the trees are felled, and drawn to the rivers. In June the rains commence, and the streams are swollen. The timber is then set afloat, and drifted down by the currents, while strong booms at the mouths of the rivers prevent its passage out to sea. The freighted vessels are ready to sail by August 1. Innumerable coral rocks fringe the shores, which are covered with cocoa-nut trees; and turtles abound all along the coasts. *Ruatan* and *The Bay Islands*, in the Gulf of Honduras, which had been held by the British for some years, were ceded to the Republic of Honduras, in June, 1860.

4. SAN SALVADOR, on the coast of the Pacific, the smallest State, having only a territory of about 9,500 square miles, has the greatest proportionate population, viz. 600,000. The city of that name was the central seat of government while the confederation existed. Prior to 1854, when the greater portion of the town was destroyed by an earthquake, it contained 20,000 inhabitants. *Cojutapeque* is the capital of the present little republic, which has three ports: *Acajutla*, *Libertad*, and *La Union*. This district is remarkable as producing the famous Balsam of Peru.

5. NICARAGUA, the most thickly-wooded division of Central America, stretches from shore to shore; and commands the navigation of a spacious fresh-water lake, nearly 400 miles in circuit, with depth sufficient for the largest vessels. As the lake communicates with the Atlantic by the river San Juan, and is only separated from the Pacific by a narrow isthmus of sixteen miles, it has been thought possible to connect the two oceans at this point by a ship-canal. But there are grave difficulties in the way. Yet it was agreed by treaty between Great Britain and the United States, in 1850, that in the event of a ship-canal being ever constructed, neither power should have any exclusive control over it, or erect fortifications, or interfere with the passage of vessels in time of war. *Leon*, the capital, has suffered greatly during the political troubles, but still has a population of 30,000.

6. COSTA RICA, the most southerly State, extends likewise to the two oceans, and consists of two principal districts: the Oriental on the side of the Atlantic, and

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the Occidental on that of the Pacific, separated by a range of mountains. The country scarcely answers to the meaning of its name, "rich coast," though possessing two convenient ports, coal in large quantities, and woods yielding gutta-percha, mahogany, and cedar. Coffee is extensively cultivated, and is the staple export. There are no negroes in this state. *San José*, the small capital, is about midway between the oceans, in a mountain region subject to stormy volcanic action. *Cartago*, the former capital, is now a ruined city. It was so devastated by an earthquake in 1841, that out of 3,000 houses and 8 churches, only 100 of the former and one of the latter were left standing. The first European settlement in the New World was founded on the south-east coast by Columbus in 1502.

SOUTH AMERICA.

New Granada—Venezuela—Equador.

1. New Granada, one of the old Spanish vice-royalties, subsequently a federal republic, embraces a north-western section of South America. Upon the triumph of the patriots after throwing off the yoke of Spain, it formed a union with Venezuela in 1819; and a single republican state was constituted under the name of Colombia, to which Quito or Equador was admitted in 1821, and *Panama* in 1823. This arrangement subsisted till 1831, when the three districts became politically distinct.

2. The territory of New Granada has Venezuela on the east; Equador on the south; the Pacific Ocean, with the bay of Panama, on the west; and the Caribbean Sea, with the Gulf of Darien, on the north. It contains about 380,000 square miles, and above 2,000,000 inhabitants, and consists mainly of two contrasted regions of nearly equal extent, one of grand highlands on the maritime side, the other of low inland plains; the former includes the most northerly part of the *Andes*, which stretch in a broad belt from north to south, in three parallel chains, and wall-in great longitudinal valleys. The central chain is the loftiest, rising in the truncated cone of *Tolima*, 18,336 feet, the highest point of America north of the equator. Between this chain and the one more interior, is the long valley of the *Magdalena*,

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the principal river of New Granada, and main current of commerce, flowing to the Caribbean Sea in great force and volume. Nine-tenths of the population dwell either on its banks, or on those of the Cauca, its chief affluent, which flows between the central and more northern chain.

3. The inland plains, traversed by some of the head streams of the Orinoco and Amazon, are in part clothed with forests, but are still more extensively almost treeless, changing from fine pastures in the rainy season to scorched deserts in the dry. Large herds of horses, mules, and horned cattle are reared on the plains; the forests yield dye-woods and cinchona, the well-known medicinal bark; and the Andean region is wealthy in precious stones, especially emeralds, iron, copper, tin, lead, sulphur, and coal. Cocoa, coffee, sugar, tobacco, indigo, and rice, are to some extent raised; but the people are generally disposed to indolence and vice. They number 2,363,000; and consist of nearly equal proportions of Spanish descent and native Indians, with a few negroes. The latter were far more numerous before the war of independence; but in distinguishing themselves as soldiers in the struggle, they were largely cut off.

4. The Republic of New Granada was formerly composed of only five provinces; namely:

Provinces.	Population in 1858.	Chief Towns.
CUNDINAMARCA	564,955	Santa Fé de Bogota, Honda.
CAUCA . . .	276,249	Popayan, Pasto, Cartago.
MAGDALENA .	253,521	Cartagena, Ocana, Mompox.
BOYACA . . .	424,210	Tunja, Socorro, Pamplona.
ISTHMUS . . .	144,108	Panama, Porto-Bello, Chagres.

But quite recently (June 22, 1858), in adopting the title of *the New Granadian Confederation*, it has added three other provinces, viz: *Bolivar*, population 182,157; *Santander*, population 378,376; *Antioquia*, population 244,242.

Santa Fé de Bogota, the capital, containing 45,000 inhabitants, is seated on a table-land of the Andes, 8,650 feet above the sea, and has a climate of perpetual spring. Owing to earthquakes, the houses are low and the walls thick. The neighbourhood is remarkable. A magnificent waterfall in the rainy season is formed by the descent of the river *Bogota* from the table-land into the valley of

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the Magdalena, a leap of 574 feet. In the same locality are the natural bridges of *Icononzo*, two masses of rock lying across a narrow gloomy ravine of immense depth, one above the other, the upper being 300, and the lower 250 feet above a torrent. There is also the treasure lake of *Guatarita*, into which the natives are said to have thrown their gold, that it might not fall into the hands of the Spaniards, when they conquered the country. *Antioquia*, formerly the chief commercial city of this province, is now with its vicinity raised to the rank of a representative state in the confederation.

5. *Popayan*, near the source of the river CAUCA, which gives its name to the district, and *Pasto*, towards the frontier of Equador, are like the capital, at a high elevation, and enjoy a delightful climate. *Cartago*, on the Viega, an affluent of the Cauca, is a handsome town, with a population of 3,500. *Cartagena*, on a small island close to the north coast, has a commodious harbour, and was formerly a great commercial port, but has gone to decay through the insalubrity of the place. *Tunja* and *Socorro*, in the valley of the MAGDALENA, have manufactures of coarse cottons, woollens, and straw hats.

6. *Panama*, on the Pacific, gives its name to the western half of the *Isthmus* which connects the main masses of the continent. It is a small fortified town, with a beautiful cathedral, and some good buildings in the old Spanish style. New life has been given to Panama since the completion of the railway to Aspinwall in Navy Bay, on the opposite Atlantic coast, a distance of nearly fifty miles. The eastern half of the isthmus is usually called the *Isthmus of Darien*, from the gulf of that name, which forms the seaboard on the side of the Atlantic. *Porto Bello*, situated on it, was so named by Columbus from the excellence of the harbour. It is a dilapidated place, notoriously unhealthy, surrounded with marshes and mangrove jungles, fitly entitled *La Sepultura de los Europenos*.

This *Isthmus* has great natural interest as the link uniting two mighty masses of land. Tremendous showers descend upon it in the rainy season; streams are numerous; forests largely clothe the surface; and native Indians hold jealous possession of many interior parts of the narrow domain. The first settlement of Europeans in South

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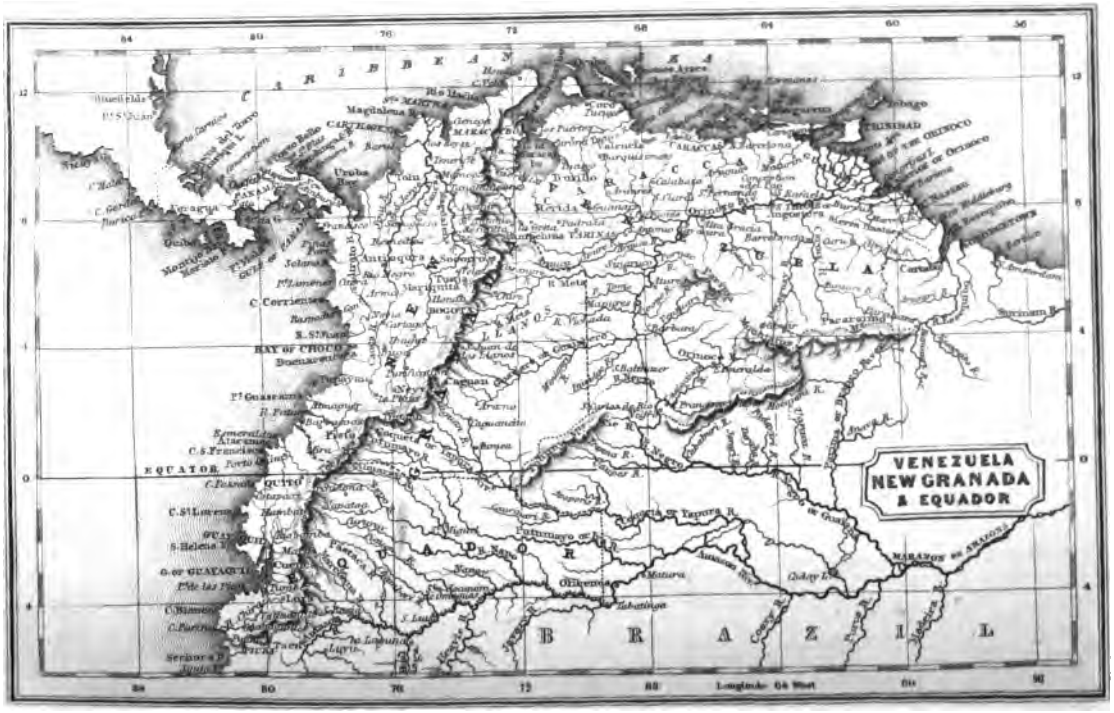

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America was on the Darien coast, at the mouth of the *Atrato*, founded in 1509. It was called *Santa Maria del Antigua*, and had for its arms a golden castle between a jaguar and a puma. The second settlement, in 1514, was at Agla, a few miles inland, whence Balboa crossed the isthmus to the Pacific, and the earliest expeditions to Peru were despatched. Both settlements were abandoned; but close to the last, on what received the name of Caledonian Harbour, in 1698, Paterson, the man who planned and founded the Bank of England, planted his Scotch colony which failed so miserably. This lamentable enterprise has been lately revived in public recollection by the lamented Eliot Warburton, in his work called "Darien," who was on his way to explore the region personally, when lost in the fire which destroyed the Amazon steam-ship.

7. VENEZUELA extends along the coast of the Caribbean Sea from New Granada on the west to British Guiana on the east, having the Brazilian empire for its inland boundary on the south. It has an area of 426,712 square miles, is traversed by ranges of mountains in the maritime region, but consists of *plains* or *llanos* through more than three-fourths of its extent. Nearly the whole country belongs to the *basin of the Orinoco*, which follows a very divergent course through it, and is connected with the system of the Amazon by the natural canal of the Casiquiare. The name of Venezuela, or little Venice, originated with the early Spanish visitors, who observed on the flat shores of Lake Maracaybo some native villages built on piles.

8. Cattle by millions are bred in the llanos, and constitute the chief wealth of the State. A considerable number of horses and oxen are sent to the West Indies; and dried meat, hides, and leather, are also largely exported. When the llanos are inundated by the periodical overflow of the Orinoco, which for several months together converts the flat country into a lake of 600 miles in length by 100 in width, the cattle find refuge on gently rising mounds, while the Indians establish themselves among the tops of the fan-leaved palms, constructing hammocks for themselves out of the fibrous leaves, and subsisting on the fruit. Coffee, tobacco, cotton, and cocoa are the chief objects of culture; but the number of useful plants cultivated is said to exceed

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180, while the forests contain 240 species of valuable woods, 36 plants yielding gums and resins, and 45 producing medicinal drugs. The cow-tree is the most remarkable vegetable product. It grows on the parched sides of rocks in the mountain region; has a dry and leathery foliage; and seems scarcely to penetrate the ground with its roots. For several months together the leaves are not moistened by a shower; the branches seem withered and dead; yet when the trunk is pierced, it yields a nourishing and agreeable milk. At sunrise this vegetable fountain flows most freely, and is regularly visited by the natives.

9. The Venezuelans are Whites (of Spanish descent), Indians, and Negroes, but principally of mixed origin, forming an aggregate population of 1,564,433. It was amidst the vast plains of Venezuela, watered by the Orinoco, that report located the fabulous *El Dorado*, long the grand object of our early adventurers, and which occasioned the fitting out of so many expeditions in search of them, and among others that of Sir Walter Raleigh, in 1595.

Caraccas, the capital of Venezuela, containing 50,000 inhabitants, occupies an inland site, but carries on a large foreign trade by means of the ports *La Guayra* and *Puerto Cabello*, the former reputed to be the worst, and the latter the best, on the Caribbean Sea. The great square, the largest of eight, is nearly 3,000 feet above the sea; and in the neighbourhood the remarkable saddle mountain, *Silla de Caraccas*, so called from the depression between its two peaks, rises to 8,600 feet. The city has suffered much from earthquakes and political convulsions. In 1812, nine-tenths of the buildings became a heap of ruins in a few seconds, and 12,000 persons perished. *Valencia*, the next largest town, situated among fertile valleys, has a population of about 20,000 inhabitants. *Maracaybo*, with a population of nearly 20,000 inhabitants, is a fine seaport town, west of the strait which connects its lake with the Gulf of Venezuela. In its neighbourhood is an inexhaustible mine of asphalt, the vapours of which ignite spontaneously, and serve as a lighthouse, called "the Lantern of Maracaybo." *Cumana*, another seaport, with 10,000 inhabitants, lies on the coast, 180° east of the capital. *Barcelona*, forty miles to the south-west, has 15,000 inhabitants,

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but is extremely unhealthy. *Varinas* is known in Europe from the tobacco grown in its neighbourhood. At *Angostura*, now called *Ciudad Bolivar*, the principal place in the valley of the Orinoco, though with only 8,000 inhabitants, the first congress of the republic was held, February 15, 1819.

10. ECUADOR, so called from being on the equator, stretches along the shore of the Pacific Ocean, between New Granada on the north, and Peru on the south, extending inland to the Brazilian territory. It has an area of 325,000 square miles, and a population (according to a recent estimate) of 987,000, of Spanish origin, with native Indians. The volcanic *Galapagos Isles*, 600 miles out in the ocean, belong to the republic, and are used as a place of banishment for criminals. They are named, from the large land tortoises with which they abound, *Islas de los Galapagos*, "islands of land-turtles."

11. The region is one of the grandest on the face of the globe, being intersected by the Andes from north to south, which form two parallel chains, with boldly projecting summits. The western or maritime chain, at an inconsiderable distance from the coast, has *Pichincha*, rising 15,924 feet; *Illinissa*, 17,380; and the dome-shaped *Chimborazo*, 21,424. The eastern or inland chain has the most beautiful of all volcanoes, *Cotopaxi*, 18,875 feet, of which the flames sometimes rise 3,000 feet above the crater, and the roaring, it is said, may be heard 600 miles off; *Antisana*, 19,137; and *Cayambe*, 19,535, remarkable for its position directly under the line of the equinoctial. Between these ridges are very high desert plains, known by the name of *paramos*, verdureless tracts swept by piercingly cold winds from the snowy-clad peaks of the mountains. But the greater portion of the country lies on the continental side of the Andes, and consists of forests and savannahs watered by tributaries of the Amazon. This mighty river itself forms part of the boundary from Peru.

12. The republic of Ecuador is divided into three departments:

	Chief Towns.
QUITO OR ECUADOR	Quito, Ibarra, Otavalo, Nueva Riobamba, Esmeraldas.
GUAYAQUIL . . .	Guayaquil, Tumbez.
ASSUAY	Cuença Loxa, Canar, Giron.

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Quito, the capital, containing 76,000 inhabitants, occupies one of the Andean table-lands at the height of 9,500 feet above the sea. Churches and convents are the principal buildings. The climate is delightful, owing to the altitude of the site. Its equatorial position and perpetual verdure have acquired for the city the name of the "evergreen Quito;" but the inhabitants are dreadfully tormented by reptiles, which it is scarcely possible to keep out of the beds; and no candles are burnt but in lanterns, as otherwise they would be extinguished by insects flying into them. Eleven snow mountains are visible from the great square.

13. *Ibarra* and *Otavalo* are highland towns, with some cotton and woollen manufactures. *Nueva Riobamba* is the modern representative of the ill-fated Riobamba, at a short distance, which perished by a tremendous and perfectly unique catastrophe in 1797. It was literally blown up by the mine-like explosion of an earthquake, when houses and inhabitants were hurled across the river Lican. *Guayaquil*, the principal port in the gulf of that name, monopolises almost all the maritime trade. *Tumbez*, a small port, is of interest as the spot where the Spanish conqueror, Pizarro, landed on the coast.

14. *Cuença* and *Loxa* are inland towns on the Andes in the south. Near Loxa, extending into Peru, are the woods which furnish the best Peruvian bark of medicine, so highly valued as a febrifuge. Fever barks are yielded by several species of *cinchonaceæ*, which form extensive forests on the slopes of the Andes, at an elevation ranging from 2,000 to 8,000 feet. The young trees are remarkable for being tall and slim, sometimes from fifty to sixty feet high, yet not more than six inches in diameter. The name is derived from the Countess de *Cinchon*, vice-queen of Peru, who brought the first specimens of the medicine to Madrid in 1640. It was called at first the "Countess's Powder," from that circumstance; and "Jesuits' Powder" from its use being recommended by that order.

15. Remains exist at a great height of a military road executed by the old Incas of Peru, who were in possession of the country at the time of the Spanish conquest. It extended upwards of 1,000 miles on the main mass of the Andes, from Quito to Cuzco, but was not more than twenty feet broad. "It was conducted over pathless sierras buried

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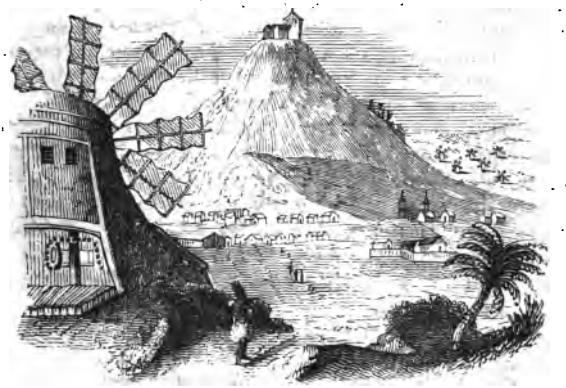
in snow; galleries were cut for leagues through the rock; rivers were crossed by means of bridges that swung suspended in the air; precipices were scaled by stairways hewn out of the native bed; ravines of hideous depth were filled up with solid masonry; in short, all the difficulties that beset a wild and mountainous region, and which might appal the most courageous engineer of modern times, were successfully encountered and overcome." The road had stone pillars at intervals, apparently answering the purpose of milestones. It passed over the Paramo del Assuay at a height very little inferior to that of Mont Blanc.

PERU—BOLIVIA—CHILI.



Silver Mine of Potosi.

1. The territory of PERU, immediately south of Equador, corresponds to it generally in natural features, consisting of a narrow lowland tract on the coast of the Pacific, the high wall of the Andes inland, and vast interior plains. It has an area of above 500,000 square miles, and contains a population of 2,500,000. The country is proverbially rich in metallic produce, especially silver, which occurs in all forms and combinations from the pure metal to the argentiferous lead-ore. The Andes have been called the Treasury of Peru, from the vast quantities of the precious metal obtained from the highlands, both to replenish the public exchequer, and reward

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the enterprise of private individuals. The table land of *Pasco*, at the mean elevation of 11,000 feet, is the richest district, a very dreary region, where the air is chill through the greater part of the year, and the ground at sunrise is white with hoar-frost even in the middle of summer.

2. The discovery of the subterranean wealth of Pasco was made accidentally. It is related that, in the early part of the sixteenth century, an Indian shepherd tended his flock on a small pampa, near the Lake of Llauricocha, one of the sources of the mighty Amazon river. Having one day wandered further from his hut than usual, and being fatigued, he made a sheltered declivity his resting-place for the night, kindled a fire to protect himself from the cold, and lay down to sleep. On awaking in the morning, he was astonished to find the stone beneath the ashes of his fire melted and turned to silver. The shepherd communicated this intelligence to his master, a Spaniard, who immediately repaired to the spot, found indications of a rich vein of silver-ore, and made preparations for working it. New veins were discovered by fresh adventurers, whose settlements and explorings originated the town and mines of Pasco.

3. Peru declared itself independent of Spain in 1821; and became actually so when Bolivar defeated the royalist army at the village of Jumin, August 24, 1824. The republican form of government then adopted has repeatedly given place to terrorism and a dictatorship.

Depart^{s} of Peru.	Population.	Chief Towns.
Lima . . .	180,923	Lima, Callao.
Junin . . .	245,722	Huanuco, Pasco, Junin.
Libertad .	202,662	Truxillo or Libertad, Caxamarca.
Cuzco . .	346,211	Cuzco, Abancay.
Ayacucho .	129,921	Huamanga, Ayacucho.
Huancavelica	76,198	Huancavelica.
Puno . . .	245,681	Puno, Chucuito.
Arequipa .	121,585	Arequipa, Arica.
Amazonas .	39,074	Chachapoyas.
Ancas . .	155,779	Huaras.
Moquegna .	61,440	Tacna.
Callao . .	8,352	Callao.
Plura . .	74,372	Plura.

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Lima, the capital, six miles from the coast, contains upwards of 70,000 inhabitants, with a great number of churches, convents, and squares. It is the oldest city of European origin in South America, and was founded by Pizarro in 1534. His tomb is in the cathedral. Portraits of the Spanish viceroys, from Pizarro down to the revolution, 44 in number, are in the museum, taken there from the old government palace. Many slight shocks of earthquakes are experienced every year; and about two severe visitations in the course of a century. *Callao*, the port of the capital, connected with it by a railway, is strongly fortified. The old town, at a little distance, was submerged during an earthquake in 1746; and some of its ruins may be seen when the sea is clear. *Truxillo* and *Arica* are the other principal ports.

4. *Cuzco*, the largest of the inland towns, with 40,000 inhabitants, stands at an elevation of 11,300 feet. It was the capital under the Incas, and has remains of a vast citadel of their age, built of immense blocks of stone. *Arequipa*, in the neighbourhood of a grand volcano, and very subject to earthquakes, has a population of 30,000. *Caxamarca* is of melancholy interest as the place where the last Inca was barbarously murdered, by command of Pizarro, in his palace, some remains of which exist. *Huancavelica* has rich quicksilver mines in the vicinity. *Pasco*, the centre of the great silver mining district, has sometimes a population of 18,000, but it fluctuates with the condition of the works, and the political vicissitudes of the country. A great number of openings or mouths, most of which are in the town, lead direct to the mines. Two principal veins are supposed to intersect each other under the market-place. The first steam-engine in South America, sent out from England, was established here for the purpose of drainage, in 1816, under the superintendence of Mr. Trevithick, the well-known Cornish engineer. *Puno*, on the north-west shore of lake Titicaca, is the highest town of Peru, 12,870 feet. Some cottages are situated as high as 15,720 feet.

One of the most valuable possessions of Peru are the *Chinchas Isles*, yielding the guano of commerce, which have produced to the state about twelve millions sterling, in the last twenty years.

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BOLIVIA.

1. Bolivia, chiefly an inland country, with a limited extent of coast between Peru and Chili, contains 473,298 square miles, and a population (in 1855) of 2,326,000, of whom more than one-third are Indians. Full one-fourth of the area in the south-west is occupied by an enormous plateau, formed by the main mass of the Andes (also called the *Cordilleras*), enclosed by two longitudinal ridges which tower above it. The general elevation is from 12,000 to 13,000 feet. The latter height is very nearly attained by lake Titicaca, which belongs in part to Peru, and is the largest alpine expanse on the globe. No trees grow at such an altitude; but there is coarse grass in abundance. North and east of the plateau the country consists of great lowlands, clothed with primeval forests, watered by the affluents of the Amazon and La Plata, chiefly the former; it also includes part of the Gran Chaco, sandy desert. Most of the rivers produce gold dust.

2. Bolivia was formerly called Upper Peru, but changed its name in August, 1825, on becoming a republic, in honour of General Bolivar, who secured its independence by the defeat of the Spaniards, at the battle of Ayacucho, on the 9th of December, 1824. Many parts of the country are very imperfectly known, and are in the hands of wild Indian tribes. *Chuquisaca*, the capital (formerly called La Plata), on the south-eastern slope of the plateau, has only about 20,000 inhabitants: its cathedral is large and handsome. *La Paz* and *Cochabamba*, on the plateau itself, are much more considerable; the former having 43,000, and the latter 41,000. *Potosi*, a deserted place, owing to the exhaustion of its silver mines, is said to have contained a population exceeding 100,000, when they were prolific. It stands at the great height of 13,330 feet, on a slope of the *Cerro de Potosi*, which is pierced with mines in every direction. This single mountain is supposed to have yielded silver which paid duty to the value of £120,000,000, besides large quantities smuggled. Numerous churches and public buildings, a palace, a theatre, a vast mint, and court-houses, attest the former importance of the city, which at present scarcely numbers 20,000 inhabitants. The other principal towns of Bolivia are *Santa Cruz de la Sierra*, at the foot of an offset of the Eastern Cordillera, population 9,000. *Tarija*,

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beautifully situated in a valley, population 12,000; *Oruro*, *Beni*, and *Cobija*, or *Port-la-Mer*, the only legal sea-port of the Republic.

CHILI.

1. Chili, a long narrow territory, embraces the coast of the Pacific, from Bolivia to the archipelago of Chiloë; and is bounded inland by the stupendous chain of the Andes, or Cordilleras, which, in a single ridge, divide it from the La Plata states. The area within these limits is estimated at 170,000 square miles; and the population at 1,558,319. But the republic claims the whole coast to the *Strait of Magellan*, where a Chilian convict settlement has been for some years established. Volcanic outbursts and earthquakes are here of frequent occurrence, but the climate is temperate and healthy. A small insular dependency, upwards of 300 miles from the mainland, *Juan Fernandez*, is of great interest to English readers. It was the abode of the shipwrecked mariner, Alexander Selkirk, for four years, whose adventures are supposed to have suggested the Robinson Crusoe of Defoe. Lobsters are so abundant on this island, that they are caught by being turned over with a stick when they come on shore to feed on offal spread for them.

2. The country in the south is a forest region from which timber is exported; the central provinces are agricultural, and have been styled the granary of South America; but the entire north is a desolate sandy desert, without vegetation, fuel, or water, intersected by bare, rugged, and forbidding-looking mountains. Five years have been known to elapse without a single shower. But concealed beneath the surface, and in many instances cropping out, there is vast mineral wealth, consisting of veins of the purest silver ore, besides copper, lead, iron, bismuth, cobalt, antimony, arsenic, and quicksilver. Copper-mining is here conducted under the superintendence of hardy Cornishmen. The discovery of silver is comparatively recent, dating from the year 1832. The richest localities are in the hands of the Copiapo British Mining Company.

3. Chili, previous to the Spanish conquest, belonged to the Incas of Peru. In 1535, Pizarro sent Almagro to invade it, and in 1541 Valdivia subdued the whole territory.

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Its independence was declared on the 18th of September, 1810, and finally secured by the battle of Maypu, April 5, 1818. The republic adopted the condor as the national symbol, which figured upon its first coinage.

It is divided into thirteen Provinces, namely:

Provinces.	Area in sq. m.	Population in 1858.	Chief Towns.
Santiago . . .	12,000	293,113	Santiago.
Valparaiso . .		124,600	Valparaiso.
Aconcagua . .	14,000	121,654	Quillosa.
Colchagua . .	15,000	206,919	San Fernando.
Maule	12,000	168,807	Cauquenes, Chanco.
Valdivia . . .	40,000	31,988	Valdivia.
Conception . .	18,000	122,281	Conception.
Chiloe. . . .	11,000	65,743	San Carlos.
Coquimbo. . .	48 000	119,991	Coquimbo, Copiapo, Caldera.
Atacama . . .	37,500	55,567	Atacama alta.
Talca		84,461	Talca.
Nuble		110,219	Chillan.
Arauco . . .		48,995	Arauco, Naciemento.

4. *Santiago*, the capital, delightfully situated on a plain studded with acacia woods, at the base of the Andes, contains upwards of 80,000 inhabitants, and is one of the most healthy and agreeable towns in South America. *Valparaiso*, its port, ninety miles distant, has 72,000 inhabitants, many of whom are English and French, with an active and increasing commerce, chiefly with Great Britain. The other towns of consequence are chiefly sea-ports: *Valdivia* and *Conception*, with *Talcuahano*, on the south coast, *Coquimbo* and *Caldera* on the north. The latter, quite a modern creation, is a rapidly rising place, a station of the Pacific Steam Navigation Company, and the terminus of a railway extending to Copiapo and the rich silver mines of the interior. In 1850 there were only a few fishermen's cabins on the beach; now there are commodious dwellings, wharves, hotels, shops, a guard-house, custom-house, and a railway station which would do credit to any provincial town. The engineers arrived in April, 1850; the first sleepers were laid towards the close of the year; and the line was opened for traffic in December, 1851. It extends 50 miles to Copiapo, and thence 28 miles to the mines of Chanarcillo.

5. The towns of Chili have been terribly ravaged by

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earthquakes. Copiapo was nearly destroyed in 1819; Valparaiso in 1822; Conception in 1835; and Valdivia in 1837.

6. The *Chilian Andes* consist of a series of towering volcanic cones, of which no fewer than fourteen are said to be still active. The highest mountain in the system, and the loftiest volcano on the globe, is *Aconcagua*, 23,910 feet high.* The chain is crossed by four principal passes at the height of more than 10,000 feet. A road with post-houses extends from Santiago by the Pass of Portillo to Buenos Ayres, a distance of nearly 1,400 miles.

7. *Araucania*, a small native state, south of Chili, and nominally subject to it, has successfully maintained its independence against its European aggressors, and is virtually independent. Area, 28,000 square miles; population unknown. *Osorno*, with a mixed population, is the chief settlement.

STATES OF LA PLATA.

Area, 900,000 square miles.

BUENOS AYRES — URUGUAY — ARGENTINE CONFEDERATION — PARAGUAY.

1. The territory of BUENOS AYRES lies on the south bank of the *Rio de la Plata*, and embraces a considerable extent of country inland, amounting to above 75,000 square miles, chiefly on a dead level. Originally a Spanish viceroyalty, it became a member of the Argentine confederation (or confederated Republic) at the era of independence, but separated in 1853, and now forms a distinct State. In recent times it has generally been under military government. The population was estimated in 1856 at 350,000, of which a very large proportion are Europeans, and not less than 10,000 are British.

2. The whole of this region is one of pampas or plains, covered with a great depth of alluvial soil, and clad with a luxuriant growth of the lofty pampas grass, thistles ten feet high, and other herbaceous vegetation, through part of the year, but rendered an arid wilderness by the hot summer. Millions of cattle, horses, and sheep are reared here; and

* One measurement makes the height only 22,296 feet, another (that adopted by Mr. Hughes) makes it 23,944 feet.

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hides, horns, and bones are exported in enormous quantities. The inhabitants of the pampas, called Guachos, are of Spanish descent, and occupy small homesteads; they are admirable horsemen, and are principally employed in capturing the wild cattle, which they perform with the lasso, a leather thong with a running noose. *Buenos Ayres*, the capital, is on the Rio de la Plata, about 150 miles from its mouth, and contains a population of 122,000. It is a very regularly built city, with a cathedral, some few churches, and a university; but, though a place of great trade, has a most inconvenient harbour, owing to extensive shoals near the shore. The name, signifying "good air," was given to it by the Spanish founders from the supposed salubrity of the site.

3. URUGUAY, or the *Banda Oriental*, occupies the north bank of the Plata, and extends to Brazil, between the Atlantic and the river Uruguay. It contains about 120,000 square miles, and a population of 250,000, chiefly engaged in rearing cattle, and preparing animal produce for export. After shaking off the yoke of Spain, it was conquered by the Brazilians in 1823, but recovered its independence in 1828, and became a republic. *Monte Video*, the capital, on the estuary of the Rio de la Plata, is a small but very thriving town, with (according to a recent estimate) 35,000 inhabitants, and the best harbour on the river. It received its name from a mountain overlooking it, on which stands a lighthouse. The inhabitants suffer from the extreme heat of summer, and the scarcity of water; but suffered much more during the nine years the town was besieged by the tyrant Rosas, although it was the whole time under the protection of France and England. Slavery has for some years been abolished in the Banda Oriental. A number of Waldensian Christians emigrated to it from the mountain valleys of Piedmont in 1858, employment failing them at home, and are now settled in the interior.

4. The ARGENTINE CONFEDERATION, formed in 1819, consists of thirteen States, united more in name than in reality, distributing between them the immense and thinly occupied region between La Plata and the Andes, comprising an area of about 745,000 square miles. Though about six times the size of Great Britain, the population is probably not more than a million. The country contains fine pasture grounds, with vast tracts permanently sterile, as *el Gran Chaco* or the

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Great Desert, extending into Bolivia, covers about 200,000 square miles, and the *Salinas* or Salt Plains, at the foot of the Andes, consisting of sands covered with a saline efflorescence. With the exception of the first-named State, the rest are called after their chief towns.

States.	Area in sq. miles.	Population.	States.	Area in sq. miles.	Population.
Entre Rios.	29,589	80,000	Catamarca.	35,343	50,000
Santa Fe .	24,780	40,000	La Rioja .	30,723	34,500
Corrientes.	44,898	85,000	San Luis .	23,856	32,000
Cordova .	58,275	130,000	Mendoza .	30,324	60,000
Sanjago.	38,325	60,000	San Juan .	18,543	62,000
Tucuman .	23,100	88,500	Jujuy . .	33,117	33,200
Salta. . .	58,590	66,600			

The name *Entre Rios*, "between the rivers," refers to the site of the district between the Uruguay and Parana. *Mendoza*, a town on the road between Buenos Ayres and the Chilian Andes, situated at an elevation of 4,891 feet above the sea, has 18,000 inhabitants; and *Salta*, with a mule market, chiefly trading with Bolivia, has 12,000.

Among the other towns of the *Confederation* worthy of note, are: *Cordova*, the seat of a monarchy formerly of some celebrity, with a population of 15,000; *Tucuman*, the capital of a fertile province, designated "the Garden of the Argentine," population 8,000; *Corrientes*, population 8,000, the chief town of a district containing vast herds of cattle, sheep, and horses.

5. Paraguay, an inland territory, consists of the country between the head-streams of the Plata, the Parana, and Paraguay rivers. It comprises upwards of 87,000 square miles, and contains a population commonly estimated at 600,000, but recently stated to be 800,000. Fine forests clothe the surface, containing the Indian-rubber tree, and the lapacho-tree, remarkable for the hardness of its wood. A species of holly, called the "Yerba Mate," is also abundant, the leaves of which furnish the beverage called Paraguay tea, extensively used in La Plata, Bolivia, Peru, and Chili. *Assumption* (or Ascension), the capital, is a small unimportant city of Spanish origin, population 15,000. The country, formerly part of the vice-royalty of Buenos Ayres, and afterwards subject to the dictatorship of the infamous Francia, who forbade all intercourse with foreigners, is now under a republican government, and is fast recovering its prosperity. Paraguay is the only South American State which has no sea-coast.

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BRAZIL.

Brazilian Plant House.

1. The great empire of Brazil, the most extensive portion of South America, comprehends its central and eastern districts, and borders all the other states, with the exception of Chili and Buenos Ayres. It has an extent of 2,600 miles from north to south, 2,400 miles from east to west, and a coast line of 3,700 miles, comprehending an area of 3,134,000 square miles, which is nearly thirty-five times the size of Great Britain.

2. This vast country consists of a highland and a lowland region, which occupy nearly equal proportions of the surface. The highlands in the east and south are ridges of moderate elevation, the loftiest rising to 7,500 feet immediately behind Rio Janeiro, the capital. They include some rich woodland tracts, with treeless salt steppes, and extensive pasture grounds, on which great herds of cattle are sustained. The lowlands in the west and north are densely wooded plains, intersected by the majestic flood of the *Amazon* (the largest river in the world), with its great affluents, the Madeira, Tapajos, Xingu, Rio Negro, and their tributaries. This region is almost entirely in a state of nature, and in the exclusive but very partial possession of small communities of native Indians. The occupied and cultivated districts through the empire are chiefly maritime,

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farms becoming fewer and occurring at greater distances as we recede from the coast.

3. The *vegetation* is varied and magnificent. Mahogany, logwood, rosewood, piassaba, and caoutchouc trees abound in the forests; as also Brazil-wood, of a beautiful red colour, and Brazil-nuts, the fruit of another tree, which supplies the natives with an article of food, and yields a lamp-oil. Coffee, sugar, cotton, tobacco, cocoa, manioc or cassava, and rice, are extensively cultivated.

4. The *Zoology* of Brazil is remarkable. The jaguar and puma inhabit the woods and jungles, with a profusion of monkeys of different species, whose screams and howls at night are terrific to the stranger. The birds are of splendid plumage and in great variety, and have been elegantly figured by Mr. Swainson; the most beautiful belong to the parrot tribe; the most interesting are the humming-birds, numerous and diversified; the largest is the emu, or American ostrich, met with to the south. Insect life is almost everywhere intensely developed, including besides the class of tormentors, the brilliantly coloured butterflies, and fire-flies whose phosphorescent lustre sheds a magical effect in the woods at night.

5. The *Mineral* resources of the country, which are very considerable, include gold, diamonds, topazes, and other precious stones. Gold is obtained from mines in the mountains, but chiefly from the alluvial deposits of the rivers, whence also the diamonds are procured. The auriferous sands are principally in the upper branches of the San Francisco river, in the province of Minas Geraes; and the richest diamond district is in the same locality. Iron is also very abundant, almost the entire masses of some mountains consisting of this ore.

6. Brazil was discovered by Cabral, a Portuguese, on the 3rd of May, 1500, who, while proceeding to India, was drifted westward by the equatorial current, and reached the coast not far from St. Salvador. He called it *Tierra de Santa Cruz*, or the Land of the Holy Cross. The present name is derived from the Brazil-wood with which it abounds. It remained a dependency of Portugal to the year 1822, when it became an independent empire, or more strictly speaking, a constitutional monarchy, under a prince

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of the house of Braganza. The first assembly of deputies of the Brazilian provinces, after the declaration of independence, was held on the presumed anniversary of the discovery of the coast, the 3rd of May, 1823.

7. The empire of Brazil is divided into *twenty provinces*, eleven of which are larger than Great Britain, and some equal the area of most European kingdoms.

Maritime Provinces.	Area in sq. m.	Population.	Principal Towns.
Rio Janeiro	18,060	1,200,000	Rio Janeiro.
Bahia	127,911	1,100,000	Bahia, or San Salvador; Caçoeira.
Pernambuco	61,068	950,000	Pernambuco.
Maranhao	141,939	360,000	Maranhao, Caxias.
Para	1,144,647	207,400	Para, Cometa.
Piauhy	96,537	150,400	Oeiràs, Paranaiba.
Ceara	36,435	385,300	Ceara, Aracati, Sobral.
Rio Grande do Norte	16,842	190,000	Natal.
Parahiba	23,898	209,300	Parahiba.
Sergipe	5,418	183,600	Sergipe.
Alagoas	11,131	204,200	Alagoas, Porto Calvo.
Espirito Santo	13,503	51,300	Vittoria.
San Paulo	169,050	500,000	San Paulo, Sorocaba.
Santa Catharina	14,574	105,000	Santa Catharina, Desterro.
Rio Grande do Sul	85,239	201,300	Porto Allegre, San Pedro.
Inland Provinces.			
Matto Grosso	603,036	85,000	Villa Bella, Cuyaba.
Goyaz	285,474	180,000	Villa Boa, Natividade.
Minas Geraes	239,673	1,300,000	Villa Rica, or Ouro Preto.
Amazonas	100,000	42,600	Barra.
Parana	***	72,400	Parana, or Santa Fé.

In the nomenclature, *Rio Janeiro* means January river; *Rio Grande do Norte*, great river of the north; *Rio Grande do Sul*, great river of the south; *Espirito Santo*, Holy Spirit; *Matto Grosso*, great forest; *Minas Geraes*, general mines; *Bahia*, bay; *San Salvador*, Holy Saviour; *Villa*, town; *Bella*, beautiful; *Rica*, rich.

8. *Rio Janeiro*, the capital, commonly called *Rio*, in lat. 22° 53′ S., long. 43° W., is the largest city of South America, containing with the suburbs upwards of 350,000 inhabitants. It stands on the shore of a splendid land-locked bay of the south-east coast, sufficiently capacious to accommodate the collected navies of the world. The city, which is called by the natives the City of Palaces, was founded in 1567; it has

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many fine buildings in the European style, a grand aqueduct and fountains supplying it with water, and is the seat of a vast commerce. *Bahia*, or *San Salvador*, next to the capital in size, and with superior edifices, is finely situated on the Bay of All Saints; commands an extensive foreign trade; and has a population of 180,000. It was the residence of the Portuguese viceroys down to the year 1763, when the seat of government was removed to Rio. *Pernambuco*, the third city of the empire in importance, has 60,000 inhabitants, and is also called *Ciudad da Recife*, the city of the reef, from a ridge of rocks a short distance from the shore. *San Paulo*, with 40,000 inhabitants; *Maranhao*, with 30,000; and *Para*, *Villa Bella*, and *Caçoeira*, each with above 20,000, are the next considerable places.

9. The total population of Brazil is estimated at 7,700,000. More than one half are negro slaves; and in spite of treaties, great numbers of negroes are annually imported; they are, however, said to be more kindly treated than in other countries. Besides this class, and the whites of Portuguese descent, there are aborigines, *Indianos bravos*, roving tribes, and *Indianos mansos*, a domesticated race. The government is an hereditary monarchy, limited by a senate and a chamber of deputies. Brazil ought to be one of the most flourishing countries of the globe, being eminently favoured by nature. It is not disturbed by earthquakes and volcanic explosions, like the adjoining regions, nor visited by the hurricanes which sweep destructively in latitudes immediately to the north and south; it possesses splendid rivers and forests, and though mostly within the tropics, the climate over a great extent of the surface is delightful, owing to the elevation; but the facility with which ordinary sustenance may be obtained operates to check enterprise, and foster indolence.

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GUIANA.

Surinam.

1. GUIANA extends along the coast from Brazil to Venezuela, and embraces an inland area of about 200,000 square miles, clothed with great luxuriance of vegetation; the possession of this great region being divided between Great Britain, Holland, and France, according to the proportions shown in the following table. The name is derived from an Indian tribe, the Guayanoes, and properly applies to the whole country between the Amazon and Orinoco rivers.

	Area in sq. m.	Population.	Chief Towns.
British Guiana.	76,000.	139,090.	Georgetown (*Demerara*), New Amsterdam (*Berbice*).
Dutch „	38,500.	70,090.	Paramaribo (or *Surinam*).
French „	21,500.	30,000.	Cayenne, Sinamari.

Indians of various tribes are not included in the population given. Negroes form the great majority of the people.

2. BRITISH GUIANA, western, formerly Dutch, but ceded to Great Britain in 1803, lies between the mouth of the Orinoco and the river Corentyn. It is under a lieutenant-governor; divided into the three districts of *Berbice, Demerara,* and *Essequibo,* after the names of the three principal rivers. The interior of the country, which is extremely fertile, was but little known till explored by Sir R. Schomburgk in 1835, under the auspices of the Royal Geogra-

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phical Society, who discovered the *Victoria Regia*, that giant of the lily tribe, in the waters. *Georgetown*, the capital, on the river Demerara, contains about 25,000 inhabitants; and has considerable trade, exporting sugar, coffee, cotton, and cocoa. *New Amsterdam*, founded in 1796, when the country was held by the Dutch, is a small but thriving town on the river Berbice; population 5000.

3. DUTCH GUIANA, central, lies between the Corentyn river and the Marowyne (pronounced Marony); and has many Jews among its population. *Paramaribo*, the capital of SURINAM, is a neat Dutch-looking town of 20,000 inhabitants, with Fort *Zeelandia* at the mouth of the river Surinam, which, after a course of 300 miles, enters the sea here.

4. FRENCH GUIANA, eastern, stretches from the *Marowyne* to the Brazilian border. *Cayenne*, the capital, is an insignificant place on a small river-island, notorious for insalubrity, and for a species of capsicum, which bears the name of Cayenne pepper; population 15,000. Political delinquents, during the French revolutions, were sent here, and to *Sinamari*, in the neighbourhood, at the mouth of the river of its name, where they perished in the unwholesome swamps. The whole coast of Guiana is low and unhealthy, subject to the ravages of yellow fever during the rainy seasons.

At the southern extremity of South America is PATAGONIA, an extensive and inhospitable region, of above 350,000 square miles, bordered on its western coast by the Andes, which here rise from 3,000 to 8,000 feet. It was first discovered by *Magellan*, in 1519, after whom the Straits, which separate the mainland from the Archipelago of *Tierra del Fuego*, were named. The inhabitants, stalwart Indians, once regarded as giants, lead a wandering life, chiefly on horseback, are cannibals in war, and have been said, when pressed by hunger, as they sometimes are in winter, to kill and eat their old women in preference to their dogs. *Cape Horn*, a steep rock about 600 feet high, and the most extreme southerly point of America, is on Hermit Island, the chief town of the Fuegian Archipelago: it was first doubled by Schouten, who named it after his birthplace,

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Hoorn, in North Holland. The natives subsist chiefly on mushrooms and fish.

The *Falkland Islands*, 300 miles east of Patagonia, belong to Britain, and consist of two large, and about 200 small islands, destitute of trees, and mostly covered with peat. The tussac grass grows to the height of six feet, and large herds of wild cattle and horses abound. There are fine harbours on the coast, of which *Port Stanley*, in *Berkeley Sound*, is one of the best, and much frequented as a port of call for provisions and the refitment of ships. Population very small.

The Cocoa Nut Palm.

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CALIFORNIA.

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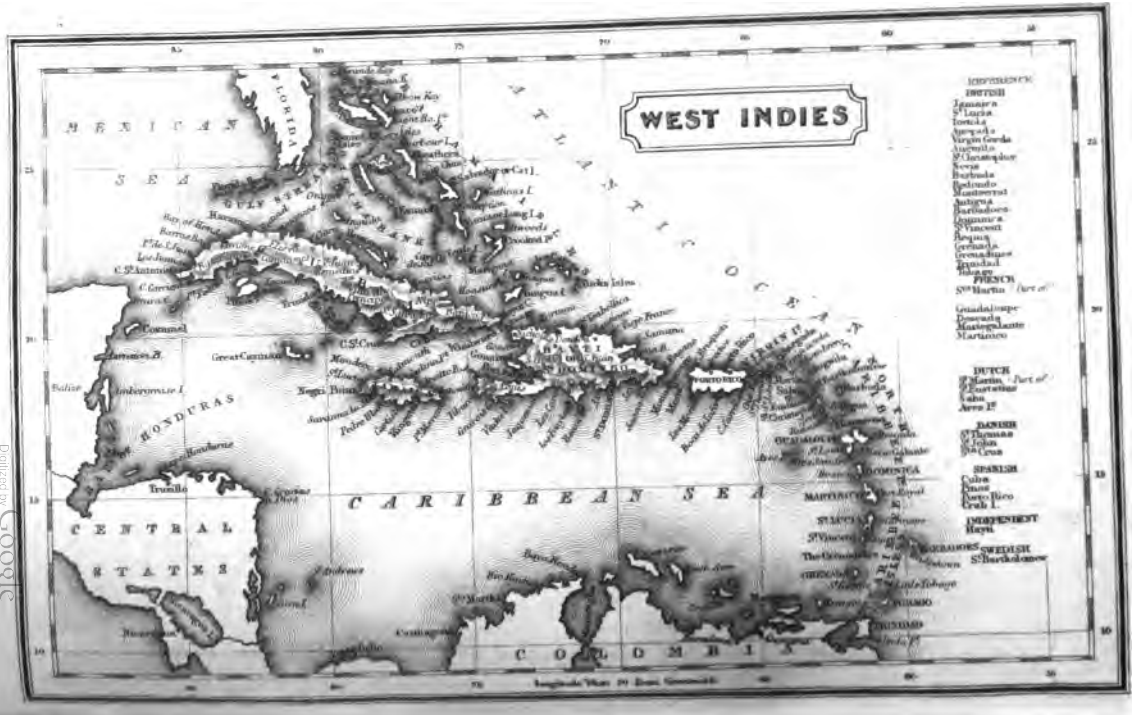
WEST INDIES
MEXICAN SEA
FLORIDA
GULF STREAM
ATLANTIC OCEAN
CARIBBEAN SEA
CENTRAL STATES
HONDURAS
COLOMBIA
Great Cayman
Negri Bay
Trujillo
Cumaná
Coro
Tortuga
Tobago
Trinidad
Guadalupe
Dominica
Martinica
Barbados
Grenada
Grenadines
Trinidad
Tobago
Guadalupe
Desirada
Mariegalante
Martinico
Cuba
Puerto Rico
Crab I.
Haya
Sweden
St. Bartholomew
Jamaica
St. Lucia
Tortola
Anegada
Virgin Gorda
Anguilla
St. Christopher
Nevis
Barbuda
Redondo
Montserrat
Antigua
Barbadoes
Dominica
St. Vincent
Bequia
Grenada
Grenadines
Trinidad
Tobago
French
St. Martin
Guadalupe
Desirada
Mariegalante
Martinico
Dutch
St. Martin
St. Eustatius
Saba
Aves Is.
Danish
St. Thomas
St. John
St. Cruz
Spanish
Cuba
Pinos
Puerto Rico
Crab I.
Independent
Hayti
Sweden
St. Bartholomew

WEST INDIES.

1. The West Indian archipelago consists of a long curving chain of islands, stretching from near the southern shores of the United States to the coast of South America, and dividing the Atlantic Ocean from the basins of the Caribbean Sea to the Gulf of Mexico, occupying an area of about 95,000 square miles. The name originated with Columbus, who reached the islands by a voyage to the west, and mistook them for a part of India. They are called by the French "les Isles Antilles," because of their position opposite the American Continent.

2. There are four large and about fifty small islands, with an immense number of islets, rocks, reefs, and sand-banks. Besides varying greatly in dimensions, they differ in character; some being very slightly raised above the waves, while others are mountainous. The majority are of volcanic origin, but many are coralline formations, and some exhibit alternating layers of volcanic and coralline rock. They are in general very beautiful and fertile, but subject occasionally to fearful earthquakes and hurricanes, with the fatal yellow fever in the rainy season.

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3. Three principal groups are distinguished, namely, the *Greater Antilles*, the *Lesser Antilles*, and the *Bahamas*, for the most part in the possession of European powers.

I. The Greater Antilles.

	Area sq. m.	Population.	Chief Towns.	Government.
Cuba	47,278.	1,000,000.	Havannah.	Spanish.
Porto Rico.	3,860.	500,000.	San Juan.	Spanish.
Hayti (*Eastern and Western States.*)	29,000.	1,000,000.	San Domingo, Port-au-Prince.	Independent.
Jamaica	5,460.	380,000.	Spanish-town, Kingston.	British.

4. Cuba, which belongs to Spain, is the largest and most westerly island of the entire archipelago, extending 700 miles from east to west, with an average breadth of 60 miles; *Havannah*, the capital, on the north coast, is the largest city, containing upwards of 130,000 inhabitants. It is strongly fortified; has a spacious and excellent harbour; and is the seat of extensive commerce in tobacco, cigars, sugar, coffee, wax, and mahogany. The grave of Columbus is shown in the cathedral. Slavery and the slave trade are here in full operation, the number of slaves being about 700,000. *Matanzas*, another port, with a population of nearly 30,000, is connected with Havannah by a railway. *Puerto Principe* and *Santiago* are inland towns of nearly the same size. Porto Rico, the other Spanish island, well watered and fertile, is the smallest and most easterly of the group; its chief town, *San Juan*, is on the north coast.

5. Hayti, originally called Hispaniola, or Little Spain, is intermediate to the two preceding islands, and extends 300 miles from east to west, and 140 miles from north to south. It was formerly divided between France and Spain, but became independent in the early part of the present century, and now consists of two republics. The whole island was at first possessed by the Spaniards, but at length the French wrested from them the *western division*, which they retained until the year 1791, when a fierce insurrection of the negroes, caused by the despotism of the governor-general, produced serious disturbances, which were much increased when the National Convention of France decreed the emancipation of the blacks. A war of extermination succeeded,

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in which the most dreadful atrocities were committed on both sides, the blood-hound being put into constant requisition by the French. Hostilities at length ceased, and this division of St. Domingo became the REPUBLIC OF HAYTI, in sole possession of the negroes. *Hispaniola*, or the *eastern division* of Hayti, which still belonged to Spain, declared its independence on the 1st December, 1821, and has since become an independent state, under the name of the DOMINICAN REPUBLIC. The country in general is highly fertile, everywhere well watered, and producing almost every variety of vegetable nature. *San Domingo*, a fortified seaport on the south coast, with a population of 15,000, is the oldest existing European foundation beyond the Atlantic, dating from the year 1504. It is regularly laid out in the old Spanish style, and has a Gothic cathedral, numerous churches and convents, some colleges, hospitals, and public buildings, an arsenal, lighthouse, and barracks. Near a high and beautiful headland at the eastern extremity, now called *Cape Samana*, which Columbus rounded in January, 1493, the first blood was shed by white men in the New World in an affray with the natives.

6. *Port au Prince*, now called *Port Republican*, with a population of 30,000, is the capital and principal sea-port of the Haytian Republic. In the early part of the revolutionary contest, the beautiful city of *Cape François*, now *Cape Haytien*, on the north side of the island, was set on fire by the blacks, and totally destroyed. A new city again arose from its ruins, which, in 1842, was overwhelmed by an earthquake, and upwards of 3,000 of the inhabitants perished by the catastrophe.

7. JAMAICA, south-east of Cuba, 160 miles in extent from east to west, and about 60 in breadth, is the most important British possession in the Archipelago. It was discovered May 3, 1494, and wrested from Spain in 1655. *Spanishtown*, the capital, on the inland plain of St. Catherine, is only of consequence as the seat of government and the public offices. *Kingston*, the largest town, and chief port, has 30,000 inhabitants. Within six miles of it the ground is so elevated that all the garden vegetables of Europe can be grown there. The government is administered by a governor and council appointed by the crown, and a house

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of assembly elected by the freeholders. The popular branch of the legislature is largely composed of coloured persons. The island is a bishop's see, which includes the Bahamas and Honduras. The fragrant Pimento tree, which produces Jamaica pepper or allspice, grows wild in the northern parts of the island in considerable groves; the ceiba, or wild silk-cotton tree, is another remarkable growth of the island.

8. The *Maroons* form too remarkable a feature in the history of Jamaica to be passed over wholly unnoticed. They were originally negro slaves, who, with a native spirit of independence, when the Spaniards evacuated the island, retired into the woods, and carried on a marauding warfare with the succeeding English planters. After many struggles, they have been entirely driven from the island. Their history has been ably told by Mr. Dallas.

II. The Lesser Antilles, or Caribbean Islands.*

1. Virgin Islands . .	*British*—Anegada, Tortola, Virgin Gorda.
	Danish—St. Thomas, St. John, Santa Cruz.
	Spanish—Culabra, Vieque.
2. Leeward Islands . .	*British*—Antigua, Anguilla, St. Christopher, Barbuda, Montserrat, Nevis, Dominica.
	French—Guadaloupe, Desirade, Marie-galante, Les Saintes, North St. Martin.
	Dutch—South St. Martin, Saba, St. Eustatia.
	Swedish—St. Bartholomew.
3. Windward Islands . .	*British*—Barbadoes, Trinidad, St. Lucia, Tobago, St. Vincent, Grenada & the Grenadines.
4. Venezuelan Coast Chain.	*French*—Martinique.
	Dutch—Curaçoa, Buenayre, Oruba, Los Roques, Margarita.

9. These islands are so much alike in their general characteristics, as not to require much separate description. The more important are Antigua, Barbadoes, Trinidad, Martinique, Guadaloupe, and St. Lucia. *St. John's*, in An-

* The Caribbee Islands are so called after the aborigines, the Charibs, a wild and warlike race of savages, now nearly extinct.

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TIGUA, may be considered the capital of the British Virgin and Leeward islands, being the central seat of government, which is administered by a governor, council, and house of assembly. Population 15,000. There is a total want of fresh water in Antigua, and the inhabitants depend entirely on rain water, extensively collected in cisterns. *Bridgetown*, in BARBADOES, the capital of the British Windward islands, with a population of 22,000, is one of the finest cities in the West Indies. It has good wharfs and quays, handsome streets, a noble church, a college and various other educational establishments, and is the residence of the Bishop. Its exports are chiefly sugar, ginger, rum, aloes, and arrow-root. All the important islands in each group have lieutenant-governors, and separate legislatures, except Trinidad and St. Lucia, which are crown colonies, and subject to the orders of the Queen of Great Britain in Council.

10. TRINIDAD, discovered by Columbus in 1498, has been English since 1797, when it was taken from the Spaniards by Abercrombie. It is nearly seventy miles from east to west, and about fifty from north to south, and is the most fertile, beautiful, and important of the windward group. It adjoins the island of *Tobago*, and is south of the sphere in which hurricanes prevail. It produces sugar, coffee, tobacco, cocoa, ginger, cotton, and cedar-wood, with a variety of fine fruits. In this island the most remarkable phenomenon is a lake of asphalt, nearly three miles in extent, of a circular form, and about eighty feet above the level of the sea. In the centre it boils up, but along the shore is as hard as coal: it is extensively used for paying ship's bottoms. Population 80,000. *Port of Spain*, the capital, with 18,000 inhabitants, is one of the finest towns in the West Indies, has a good public library and other establishments, and an excellent harbour.

11. MARTINIQUE, French, is a valuable island; the country is mountainous, and the tropical fruits here, as in Barbadoes, are abundant; population, 137,000. *Fort Royal* is the military capital; but the trade of the island, and generally of French America, centres in *St. Pierre*, the commercial town. Martinique sustained severe injury by an earthquake in 1839.

12. GUADALOUPE, also French, has a volcano and sulphur

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pits; indigo, coffee, ginger, sugar, and cotton are its chief commodities. It is divided into two parts by a narrow channel, over which there is a ferry; population, 132,000. *Basseterre*, the capital, is defended by a citadel. *Point-à-Pitre*, one of the most elegant and flourishing cities in the West Indies, eighteen miles north of Basseterre, was overwhelmed, in 1843, by a tremendous earthquake, which, out of 18,000 inhabitants, ushered nearly 6,000 into eternity; and scarcely had the earthquake ceased its ravages, when a fire broke out in several places at once, and scarcely a single house escaped the flames.

13. St. Lucia, which, with the exception of Guadaloupe and Trinidad, is the largest of the Little Antilles, is particularly noted for its wild and romantic scenery, and its great fertility. All the delicious fruits of the West Indies, as well as many valuable exotics, grow here in perfection. The forest trees are of endless variety, and the rivers abound in fish. The French were the first foreign possessors of the island; but after repeated struggles for its possession, it fell under the arms of England in 1803, since which it has continued a British colony. The insalubrity of the climate has been greatly exaggerated; but the island is frequently subject to those terrific visitors of the tropics, earthquakes and hurricanes. The population, 25,000, is composed of whites (mostly of French descent), people of colour, and the native blacks. *Castries*, with 4,000 inhabitants, is the chief town.

14. Grenada, which has belonged to England since 1783, has an area of 125 square miles, and a population of about 30,000. The soil is very fertile, but the climate unhealthy. *St. George*, with 4,000 inhabitants, is the chief town: its harbour is one of the best in the West Indies. Between Grenada and St. Vincent is a group of British islands called the *Grenadines*, of which the principal are *Bequia*, *Carriaçou*, and *Union*, of a rocky character, but producing cotton and sugar.

15. Of the Virgin Islands, St. Thomas (Danish) is the largest. Three lines of steam communication meet here, one from Havannah and the Mexican Gulf; another from Nicaragua and Jamaica; and a third from Demerara, by the Windward and Leeward Islands. It is also a principal station

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of the West India Mail Company from Southampton. *St. John* is the best watered of the Virgin Islands, and has the most capacious harbour; but the land is poor. These and *Santa Cruz* are the three belonging to Denmark.

III. The Bahama Islands.

New Providence, Great Bahama, Great Abaco, the Caicos, Andros, Eleuthera, Crooked Island, St. Salvador, the Exumas, Long Island, &c.

8. The long chain of *the Bahamas* extends upwards of 700 miles to the north of Cuba and Hayti, and closely approaches the United States. It consists of more than 500 islets, for the most part low, barren, and rocky, all British, of which not twenty have any settled inhabitants. The entire population of these islands is about 14,000. *Nassau*, the capital, is situated on the island of New Providence, once the stronghold of the Buccaneers, and where the first English settlement was planted in 1629. The chief articles cultivated are cotton and arrowroot, pine-apples and barks. *St. Salvador*, or Cat island, originally called *Guanahani*, is commonly considered the first land of the New World seen by Columbus, October 12, 1492. Its claims to this distinction have been urged by Washington Irving, and sanctioned by Humboldt; but another of the groups, *Watling Island*, has recently been thought better entitled to the honour.

9. *Turks Islands*, south-east of the Bahamas, and nearer Hayti, were a few years ago separated from the Bahama government, and constituted a distinct British colony.

10. The West India islands have an aggregate *population* somewhat exceeding 3,500,000, of whom the whites belonging to various European nations form but a small proportion, not more than one-sixth. In 1834 the British government abolished slavery in their West Indian possessions, and indemnified the planters by a grant of twenty millions sterling. The great majority of the present population are negroes, free in Hayti and the British possessions, but slaves in the Spanish colonies. The aboriginal Indians have perished, with the exception of a remnant said to survive in Trinidad,

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where there are also a few Mohammedan negroes, the only community of the kind in connection with the great western continent. The *climate* is generally moist and warm, and very unhealthy in the lower grounds, especially in August and September, which are the hottest months. Fevers, earthquakes, and hurricanes, are the inflictions of this region. The most healthy season is from December to April. The *produce* of the West Indies is commercially important, and comprises sugar (with rum and molasses), coffee, arrow-root, tamarinds, cotton, ginger, tobacco, and mahogany; as well as the most delicious fruits, especially pine-apples, bananas, oranges, grapes, and cocoa-nuts. Wild animals are almost extinct; but birds, insects, reptiles, and fish abound. Domestic animals, especially horses, asses, and mules, require to be imported; and only a few islands produce cattle, sheep, and goats. But monkeys and pigs find abundant food in the woods, and are numerous.

The BERMUDAS are a group of seven or eight low islands, with several hundred rocks, far out in the Atlantic, about 800 miles east of South Carolina. Area 20 square miles, with a population of 10,000. They enjoy an uninterrupted spring, and are covered with perpetual verdure; but are of little value, except as a naval station; for which purpose large sums have been expended by the British Government in forming and fortifying a dock-yard. They have a House of Assembly of thirty-six members, chosen by the nine parishes into which the islands are divided. *St. George*, the capital, is a small fortified town, with about 2000 inhabitants. The people are chiefly employed in the carrying trade between North America and the West Indies, and the whale fishery. The islands abound with poultry, and produce oranges, grapes, and the usual tropical fruits.

Cotton Shrub. Coffee.

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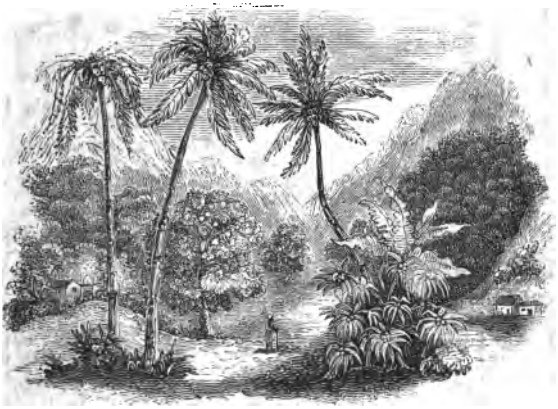
OCEANIA.



Hawaii.

THE large islands and extensive archipelagoes in the Pacific, between the south-eastern shores of Asia and the western coast of America, form a fifth division of the globe, to which the collective name of *Oceania* is now, by common consent, applied, and not inaptly characterizes these ocean-bound districts. Oceania is separated from Asia by the Gulf of Martaban, the Strait of Malacca, the Chinese Sea, and the sea to the south and east of Japan; and from America by the wide expanse of ocean, which is free of islands, between the western shores of that continent and the most easterly parts of Polynesia. This island-world extends about 6,200 miles from north to south, and nearly 11,000 miles from west to east. The land-area is supposed to be about 4,500,000 square miles, and the population not less than thirty millions. This vast realm is distributed into five portions, *Malaysia, Micronesia, Melanasia, Australasia,* and *Polynesia,* as shewn in the following table.

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Principal Island Groups.		Chief Islands and Towns.
MALAYSIA (or Eastern Archipelago).		
Sumatra	The Sunda Isles.	Acheen, Padang, Bencoolen, Palembang, Banca.
Java		Batavia, Sourabaya, Djocjokarta, Samarang.
Madura, Bali, Sumbawa, Lombok, Flores, Sandalwood, Timor.		Bankalan, Samao, Badong, Sumbawa, Amtooang, &c.
Borneo, Labuan		Borneo, Sambass, Pontianak, Banjermassin, Sarawak, Labuan.
Celebes		Vlardingen, Kema, Macassar, Fort Amsterdam.
Moluccas (or Spice Islands)		Amboyna, Ternate, Gilolo, Ceram, Rouro.
The Bandas, or Nutmeg Islands		Great Banda, Banda Neira, &c.
Philippines		Luzon, Mindanao, Mindoro, Palawan, Manilla, Panay, Samar.
Sooloo Archipelago		Soung, Cagayan Sooloo, San José.
MICRONESIA (the smaller Pacific Islands).		
Pelew Islands		Angour.
Ladrone or Marianne Islands		S. Ignacio de Agana, Tinuan, Guahan.
Caroline and Mulgrave Archipelagoes		Radack, Ralick, Gilbert, and Marshall Isles.
MELANASIA.—New Guinea		Interior unexplored.
Papuan Archipelago		Admiralty Isles, New Britain, New Ireland, Louisiade Archipelago, Solomon Isles, New Hebrides, New Caledonia.
Feejee Islands		Ambau, Ovolau, Viti-levu, Rewa.
AUSTRALASIA.		
Australia (formerly *New Holland*).		Sydney, Parramatta (or Port Jackson),
New South Wales		Liverpool, Windsor, Goulburn, Maitland, Newcastle, Bathurst.
Western Australia (or Swan River Settlement)		Perth, Freemantle, Albany.
South Australia		Adelaide, Port Adelaide, Glenelg.
Victoria (formerly Port Phillip Settlement)		Melbourne, Portland, Geelong, Ballarat, Belfast, Sandhurst.
Queensland (or Moreton Bay District)		Brisbane, Ipswich, Cleveland.
Tasmania, or Van Diemen's Land		Hobart Town, Launceston, George Town.
Norfolk Island		
POLYNESIA (or Lesser Australia).		
New Zealand		Auckland, Wellington, New Plymouth,
Chatham Group and Auckland Isles.		Nelson, Canterbury, Otago, Hawke Bay, Chatham, Pitt, &c.
Friendly and Navigators' Isles		Tongataboo, Savau, Upolu.
Society, Harvey, Cook's, and Austral Isles		Tahiti, Raratonga, Oheteroa.
Marquesas		Nukahiva.
Sandwich Islands		Owyhee (or Hawaii), Honolulu.
Pitcairn Island		

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Javanese Boat.

I. MALAYSIA.

1. Chain of the Sunda Isles; Sumatra, Java, Madura, &c.
2. Borneo; Labuan. 3. Celebes. 4. Moluccas.
5. Banda Isles. 6. Philippines. 7. Sooloo Archipelago.

1. The members of this group are largely inhabited by the yellow Malay race, and hence the name; but it is also often called the *Eastern* or *Asiatic Archipelago*. It closely approaches the mainland of Asia at the peninsula of Malacca, curves round towards Formosa, bounding the Chinese Sea, acquires great expansion under the equator, and stretches easterly to the vicinity of the Australian shores. The "lake of twelve thousand islands" is a term in local use to denote the unknown number of these insulated lands, and the space of sea they stud; and the "gardens of the sun" is another phrase of eastern speech used with reference to them.

2. Forty degrees of longitude close to the equator, and thirty of latitude, define the extent of this picturesque blending of land and water. This is a linear distance of 2700 miles from east to west, by 2100 miles from north to south; the area included within these limits being not less than 5,500,000 square miles.

3. *Borneo*, next to the continent-like Australia, is the largest island in the world. *Sumatra* extends more than 1,000 miles in length, by an average of about 100 in width. *Java* has dimensions nearly equal to those of our own England; *Celebes*, *Luzon*, and *Mindanao* correspond in space to

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the largest of the West Indian group. *Ceram*, *Flores*, and more than a dozen others, are little less inferior. *Amboyna*, followed by a numerous train, represents the area of Jersey; others dwindle down to fairy-like patches, which the billows often submerge.

4. Broad and deep oceanic channels divide some of the islands, but generally the intervening passages are narrow, tortuous, and intricate, full of submarine rocks, reefs, and shoals, rendering careful navigation necessary, though far less perilous than is usual in close seas, owing to the steadiness of the winds, and the regularity of the currents. A section of the region is indeed swept by the typhoons of the Chinese sea. The shores are green, umbrageous, and flowery, down to the edge of the wave; but there are other less pleasant phases of nature—mangrove swamps and pestilential marshes, with lines of powerful volcanic action, and the remains of noble woods calcined and blackened by the outbreak of subterranean fires.

5. The *Animal kingdom* is rich and varied, including, according to the locality, the elephant, two-horned rhinoceros, tiger, tapir, honey-feeding bear, buffalo, babyroussa, alligator, boa-constrictor, sloth, the orang-outan, and the chimpanzee. The latter makes the nearest approach to man, and builds a house for himself in the trees, resembling the nest of the rook in everything but size. In the recesses of the woods, green, velvety, and harmless snakes hang pendant from the boughs, while others of darker hue, dangerous and deadly, lie coiled up beneath them, or, disturbed by the human intruder, assume a menacing aspect, but if not attacked, generally glide out of sight. Huge alligators haunt the mangrove creeks and swamps, but are rarely troublesome, having abundance of fish to feed upon.

6. Fragile and richly-tinted *shells* lie empty or tenanted upon the sandy beaches, while others arrest attention by their enormous magnitude, being often three feet in diameter, and several inches in thickness. Shells of the gigantic Philippine oyster are actually used as bénitiers or holy-water fonts in the Roman Catholic churches of that group of islands. But of all the inhabitants of these waters, the most peculiar is the herbivorous dugong, or daughter of the sea, the fabled mermaid of the east—one

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of the links between the creatures of the field and flood —whose flesh was formerly reserved for the tables of sultans and rajahs, as too delicious to be used by ordinary mortals, though now devoured by the natives without scruple.

7. Beauty and utility are not often blended in the economy of nature; but both have been sown broadcast, and with prodigal hand, over the face of this great maze of islands. The most gorgeously arrayed of birds and flowering plants appear in connection with trees furnishing useful timber, ornamental woods, caoutchouc and gutta percha, vegetable-tallow and wax, and resin for varnish, camphor and other gums. Fruit-bearing and amylaceous plants include the durion, jack, mango, banana, yam, sago-palm, guava, pine-apple, peculiar kinds of orange, citron and lemon, with the pride of the east, as the mangosteen is called. This is also the region of the spices, which comprehend various species of cinnamon and cassia, and nutmeg, with the aromatic myrtle, the buds of which are known as cloves.

8. The *floral vegetation* has very peculiar forms and properties, as well as brilliant decorations. Red and yellow are the prevailing colours, though others are common. The Four Lights of Java, not unlike a single gilliflower in appearance, show a superb red, with four curved leaves, dark-green inside, pale-green without, and variegated with stripes of different tints. Pitcher-plants, a race of climbers, have generally crimson flowers, precisely resembling pitchers, some of which would contain upwards of a pint of water, being also furnished with a lid. The Monkey-cup is similar, being a hollow flower with a lid at the top, which remains open until the cup is filled by the rain or dew when it closes till a fresh supply is needed. The Tree of Morning opens its blossoms at sunrise, and closes them in the evening; the pale Lady of the Night blows only after sunset; and the Tree of Melancholy never blooms but at midnight.

9. The *mineral wealth* is immense, though very imperfectly developed. Sumatra, called the Happy Isle by the Hindoos, also the Land of Gold, contains, besides the precious metal, iron, sulphur, arsenic, saltpetre; and Banca is renowned for its abundant tin-mines, which supply the markets of India and China. Borneo yields diamonds and other precious stones, with coal, a much more important

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product, and antimony. The Philippines possess copper, lead, cinnabar, and other metals; and pearls of fine quality are obtained from the shallow waters near the shores.

10. Malaysia is densely peopled with numerous aboriginal tribes, besides Malays. The Chinese form a considerable body; and there are also Dutch, Spanish, Portuguese, and British settlers. Among the Europeans the Dutch command the greatest extent of territory, and next to them the Spanish. The total population is very vaguely estimated at 16,000,000, of whom 3,000,000 are assigned to Sumatra, 4,600,000 to Java, 3,000,000 to Borneo, 3,000,000 to Celebes, and 1,700,000 to the Philippines.

11. SUMATRA, a long narrow island, separated from the continent of Asia by the strait of Malacca, contains an area of 120,000 square miles, and is traversed through its entire extent by a chain of mountains, with summits rising to 15,000 feet. It is held by many independent tribes, the *Acheenese* in the north, a Mohammedan people under the sultan, and the *Battas* in the centre, under various chiefs, who display some civilisation in alliance with very barbarous usages. The Dutch have settlements at *Padang*, *Bencoolen*, and *Palembang*. They likewise hold, near the southern extremity, the small island of *Banca*, rich in tin-mines, discovered in the early part of the last century, which appear to be inexhaustible. The remarkable parasite named *Rafflesia Arnoldi* after Sir Stamford Raffles, its discoverer, is Sumatran. It produces a flower more than a yard in diameter, with brick-red petals the size of cows' horns, but has no stem or leaves, and only minute fibres for roots, which are imbedded in a species of vine. Formidable wild beasts and serpents abound throughout Sumatra. Northward, in the Bay of Bengal, are the *Nicobar*, and the volcanic *Andaman isles*. Southward is the *Keeling cluster*, remarkable for being low corallines covered with cocoa-nut trees, surrounded by an immensely deep ocean.

12. JAVA, eastward of Sumatra, and resembling it in form, but scarcely half its size, is separated from it by the narrow strait of Sunda. It is likewise traversed throughout by mountains, not forming a chain, but having distinct bases, and rising majestically in cones to a great height. They are volcanoes, some of which are extinct, while others

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throw out clouds of sulphurous vapours, and are at intervals in fierce activity. A Singapore visitor to one of them after an eruption described a remarkable contrast on ascending it. He first passed plantations of tea and rice; then a belt of coffee shrubberies; next, a primeval forest, with its tall trees, gay climbers, carpeting of moss, and enormous ferns; further on, the traces of verdure became more and more scanty, till there alone appeared the dry, calcined remains of noble woods—thousands of trees lying prostrate, others still standing amid heaps of cinders.

13. The native Javanese are under a Susuran or Emperor, and a Sultan. The capital of the former, *Sourabaya*, near the centre of the island, contains upwards of 100,000 inhabitants, but is a group of numerous villages, rather than a regular town. That of the latter, *Djocjokarta*, is similar, on the south coast. The people profess Mohammedanism, and their standard of beauty is a very yellow complexion, with black teeth.

14. The Dutch are politically dominant in Java; but only occupy portions of the north coast, where the shores are low, swampy, and insalubrious. *Batavia*, their capital, and that of all Dutch India, a city and seaport of great trade, contains 150,000 inhabitants; and the country for twenty miles round is very populous. The town, owing to its situation amid extensive mud-flats and rank decomposing vegetation, is so notoriously unhealthy as to be considered a great sepulchre. The governor, garrison, and merchants reside at higher levels inland; and no European thinks of passing a night in the place. *Samarang* is a fortified seaport on the northern coast, the residence of a Dutch governor, well built, but unhealthy. Population 20,000, mostly Chinese.

15. Java is remarkable for its edible birds'-nests and poisonous plants, though neither are peculiar to it. The nests are composed of a glutinous substance, supposed to be masticated food, and are chiefly obtained from limestone caverns on the south coast. Among the poison plants, the Upas tree, which had once a fabulous notoriety, neither vitiates the air nor injures the vegetation, but flourishes in the woods, though life is speedily destroyed if its juices gain access to the animal system. The poisonous sap flows freely from the bark when tapped, and is equal in potency, when absorbed

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by the blood, to any animal poison yet known. The tree has a fine appearance, rising from sixty to more than two hundred feet high, with a white stem, supported at its base by those excrescences resembling buttresses, which are common to the trees of tropical jungles.

16. *Madura*, *Bali*, *Lombok*, *Sumbawa*, *Flores*, *Timor*, and *Sandal-wood Island*, separated by very narrow channels, continue the chain of the SUNDA ISLES, in a direction nearly due east, to a great distance. They are partly independent, partly Dutch and Portuguese, producing cocoa-nut oil, coffee, rice, sappan-wood, birds' nests, and wild cinnamon. *Bankalan*, the capital of Madura, is a large and populous seaport. *Badong* is the chief commercial town on the island of Bali. *Sumbawa* has on its north coast the *Tomboro volcano*, the eruption of which, in 1815, is one of the most tremendous physical convulsions on record. The sky was darkened by the ashes all over Java, the sounds of explosion were heard at the distance of 1000 miles, in Sumatra; and on the island itself, out of 12,000 inhabitants, only 26 survived.

17. BORNEO, to the north of Java, nearly divided by the equator into two equal portions, has the immense area of 286,000 square miles, equal to the united extent of France and England. Aboriginal Dyaks form many independent communities in the interior, and mingle with Malays and Chinese in the maritime districts. The Dutch have factories at *Sambass*, *Pontianak*, on the west coast, and at *Banjermassin*, on the south. The British occupy *Sarawak*, on the western side; and the small island of *Labuan*, close in shore, is a colony of the crown, ceded by the sultan of Borneo in 1847, under the influence of Sir James Brooke, who had succeeded in making himself Rajah of Sarawak. Coal of good quality, subsequently discovered here, is now worked by a company; and will be in increased demand, as steam navigation becomes extended in the Chinese waters. In 1856, upwards of 5500 tons were sold. The other exports are camphor, pepper, sago, spices, pearls, beeswax, gutta percha, birds' nests, and the tripang or sea-slug. A specimen block of Labuan coal, weighing 280 lbs., is in the Museum of Practical Geology, London. The population recently numbered 1079 males and 183 females, of whom 21 males and 1 female were Europeans.

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18. CELEBES, to the eastward of Borneo, from which it is separated by the strait of Macassar, is the third Malaysian island in extent, and contains about 73,000 square miles, with a population of 3,000,000. It has a very singular conformation, consisting of four long, narrow, curving peninsulas, somewhat resembling a knot of ribbons. The Dutch have settlements at *Vlardingen*, on the south coast, on the site of the old well-known town of *Macassar*, and at *Fort Amsterdam*, towards the north extremity. On this island is found in great abundance the Badeau tree, from which the Macassar oil is extracted; there is also a teak forest.

19. The MOLUCCAS, or Spice islands, between Celebes and New Guinea, form a considerable cluster, of which *Gilolo*, *Ceram*, and *Rouro* are the largest; but *Ternate* and *Amboyna* are the most important, as the chief centres of the cultivation of the clove-plant, an indigenous aromatic. These are all claimed and controlled by the Dutch, who have their head-quarters at the town of *Amboyna*, in the little isle of that name. The spice-plant is a small evergreen of the myrtaceous order, of which cloves are the flower-buds. An average crop is reckoned at from 250,000 to 300,000 lbs. The plant is now cultivated in other tropical districts.

20. The BANDAS, or *Nutmeg Islands*, immediately southward, are all small; the largest having only a circuit of less than twenty miles. The cultivation of nutmegs is somewhat widely spread; but nowhere are they produced as in this group. *Banda* itself seems like one continuous grove. But the change here is often sudden from the exuberant to the terrible; and the visitor may find himself amid brilliant verdure, with the elements of destruction beneath his feet. If Banda has its nutmeg groves, woods of cocoa and other fruit-trees, with a sheltered and superb roadstead, it has the *Gunong Api*, or the fire mountain, in the haven, which has many a time blasted the industry of the Dutch, and threatened to destroy them totally. The volcano forms an islet of itself. It rises with a gentle slope to the height of 2000 feet, and is clothed to a considerable height with stately vegetation. But partially hidden by this living mantle of the mountain lie the monuments of its destructive energy—courses of lava, once fiery hot, with dead and blackened trunks of trees in every direction.

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21. The PHILIPPINES, the most northerly portion of Malaysia, include about 1000 islands or islets, comprising an area of 120,000 square miles; but the area of *Luzon*, the most extensive, is nearly equal to that of all the rest, being estimated at 57,500 square miles. They are very fertile, yielding timber, fruit, and rice; but are for the most part volcanic, and subject to earthquakes. The group was discovered by Magellan, in 1521, who perished here while conducting the first circumnavigation of the globe. The islands, named after Philip II. of Spain, received the first colony of Spaniards in 1570, and have since formed a dependency of that country. *Manilla*, the capital, and residence of the captain-general, on the west coast of Luzon, contains upwards of 140,000 inhabitants, of whom a great number are Chinese, with not more than about 4000 of Spanish descent. It has two royal cigar manufactories of great extent, in which women are chiefly employed, the production of cigars being, as in Spain, a government monopoly. Printing has been carried on here since 1610, and some fine books have been produced. Its harbour is one of the finest in the world, and the commerce very considerable, especially in sugar, hemp, rope, and cigars. *Mindanao*, the second largest of the Philippines, is in possession of the natives, who are notorious pirates.

22. The SOOLOO ARCHIPELAGO extends between the Philippines and Borneo, and consists of a great number of small islands, of which about sixty are inhabited. They are under a sultan, residing at *Soung*, in Sooloo. The people are Mahommedans, very rude, and addicted to piracy.

II. MICRONESIA.

1. Pelew Islands. 2. Ladrone Islands. 3. Caroline Islands.

1. This name is given to the long range of little groups of coral rock and sand, to the north of the equator and east of the Philippines, including the Pelew and Ladrone Islands. They extend 2700 miles east and west, between the meridians of 135° and 175° E., but are comparatively narrow.

2. The PELEW group, at the western extremity, contains about twenty-eight islands of small dimensions under native government. They were discovered by Villalobos in 1543; and first became generally known to the British public owing to the kindness of the natives to Captain Wilson

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and the rest of the shipwrecked crew of the "Antelope" in 1783. Prince Le Boo, a son of the king, accompanied Captain Wilson to England, where he died of the small pox, December 27, 1784, and was buried by the East India Company in Rotherhithe churchyard.

3. The LADRONE ISLANDS, about twenty in number, are of volcanic origin, and very fertile. They are Spanish possessions, included in the government of the Philippines, and were once densely inhabited; but the natives fled to escape an oppressive foreign rule, and scarcely a remnant of the original population remains. The lama, introduced from Peru, thrives on the highlands. *S. Ignacio de Agana*, the Spanish capital, is a small town of 3,000 inhabitants, on *Guahan*, the principal island, about eighty miles in circuit. At *Tinian*, another of this group, Anson landed his sick during his voyage round the world in 1742. There the anchor of his ship, the "Centurion," which had been lost, was hooked up by a whaler on raising her own anchor, very little corroded by the submergence of nearly a century. The *Ladrones* were discovered by Magellan in 1521, who gave them the name, signifying "thieves," from the thievish propensities of the people. They were afterwards called the *Marianne Islands*, after Mary Ann of Austria, wife of Philip IV. of Spain, who directed their settlement.

4. The CAROLINE ISLANDS consist of from forty to fifty groups, mostly low coralline formations, forming a great belt from west to east immediately north of the equator. They were discovered in 1686 by a Spanish navigator, and are named after Charles II. of Spain. A Spanish missionary once attempted to establish himself on them, but he and all his companions, soldiers, and others, were murdered. The *Radack*, *Ralick*, *Gilbert*, and *Marshall Isles* are eastern appendages of little importance.

III. MELANASIA.

1. New Guinea or Papua. 2. Papuan Archipelago. 3. Feejee Islands.

1. This division, north and north-east of Australia, takes its name from being inhabited by a dark-skinned race, with woolly or frizzled hair, who are commonly called Oceanic Negroes. They have decidedly negro features, with a universally deep chocolate complexion. But the hair is the

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prime characteristic. Hence the term *Papuan* applied to them, a Malay word meaning "crisp-haired." *Tanna Papua*, "land of the crisp-haired," is a Malay denomination for New Guinea and the islands occupied by the race. The hair is not spread equally over the head, as is usual with the African negroes, but grows in separate tufts, each assuming a spiral form. The descriptive phrase, "mop-headed Papuans," is life-like.

2. NEW GUINEA, or *Papua*, separated from Australia by Torres Strait, ranks after Borneo in size among the islands of the globe. It has the great extent of 1200 miles east and west, and contains an area of 275,000 square miles. The interior, supposed to be mountainous, has not been explored by any traveller, nor have the shores, which are in many parts lined by high mountains, been occupied by any civilised nation. But it is known to yield gold, many important tropical productions, especially yams and cocoanuts, besides hogs in great abundance. It is also the home of the gorgeous birds of paradise, which periodically leave their breeding-grounds for the spice and nutmeg islands in the flowering season, where it is said they are so overpowered by the odour of the aromatic plants as to be readily captured.

3. The PAPUAN ARCHIPELAGO, to the east and south-east, includes the *Admiralty Isles*, *New Britain*, *New Ireland*, the *Louisiade* and *Solomon groups*, *New Hebrides*, and *New Caledonia*. They extend over an immense space; but, with a few exceptions, are very little known, and occupied by the worst of savages. Some are very fertile, and produce the wild nutmeg, the cocoa palm, figs, oranges, and the sugar cane. *Erromanga*, one of the New Hebrides, was the scene of the death of the celebrated missionary, Williams. A few French are settled in New Caledonia, and France claims it as part of the empire.

4. The FEEJEE GROUP comprises 225 isles and islets, coral and volcanic, remarkable for their beauty and fertility, and equally so for the barbarism of the people. But a great social reformation has of late been wrought among them; and some of their darkest characteristics, cannibalism, infanticide, and polygamy, are now nearly abolished. The sovereignty of these islands, of which the population is estimated at 133,000, has recently been accepted by Britain.

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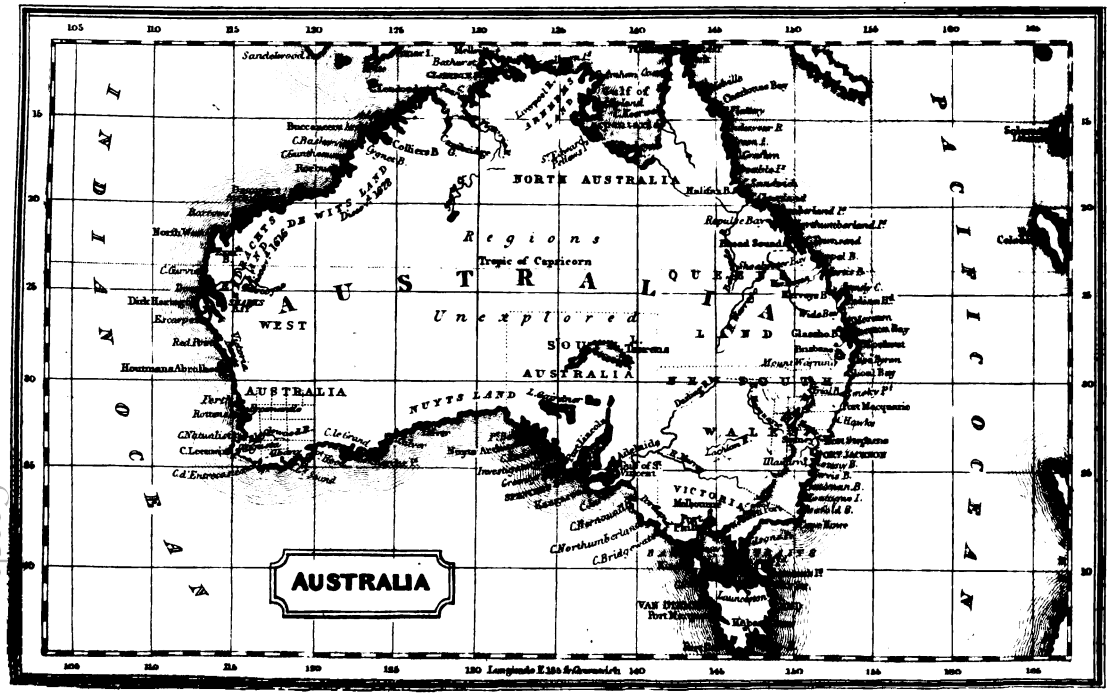
AUSTRALIA
Regions
Tropic of Capricorn
Unexplored
NORTH AUSTRALIA
WEST AUSTRALIA
SOUTH AUSTRALIA
QUEENSLAND
NEW SOUTH WALES
VICTORIA
INDIAN OCEAN
PACIFIC OCEAN
Sandalwood I.
Timor
Arafura Sea
Gulf of Carpentaria
Gulf of St Vincent
Spencer's Gulf
Port Phillip
Sydney
Melbourne
Adelaide
Perth
Swan R.
Hobart Town
Launceston
Van Diemen's Land
Lake Torrens
Lake Eyre
Lake Macquarie
Port Macquarie
Moreton Bay
Brisbane R.
Gulf of Carpentaria
Cape York
Torres Str.
Endeavour R.
Cape Leeuwin
Cape Otway
Cape Howe
Cape Northumberland
Cape Bridgewater
Cape Naturaliste
Cape Arid
Cape Pasley
Cape Wessel
Cape Londonderry
Cape Van Diemen
Cape Inscription
Cape Farquhar
Cape Hardy
Cape Hawke
Cape Byron
Cape Moreton
Cape Sandy
Cape Capricorn
Cape Clear
Cape Grafton
Cape Upstart
Cape Melville
Cape Flattery
Cape Direction
Cape Gloucester
Cape Bougainville
Cape Hotham
Cape Croker
Cape Dromedary
Cape Howe
Cape Wilson
Cape Grim
Cape Pillar
Cape Frederick Henry
Cape Portland
Cape Barren I.
Cape Sorell
Cape Schanck
Cape Everard
Cape Otway
Cape Northumberland
Cape Bridgewater
Cape Nelson
Cape Jaffa
Cape Spencer
Cape Borda
Cape Jervis
Cape Willoughby
Cape Catastrophe
Cape Finniss
Cape Arid
Cape Pasley
Cape Leeuwin
Cape Naturaliste
Cape Vlamingh
Cape Cuvier
Cape Murat
Cape Lambert
Cape Preston
Cape Latouche Treville
Cape Villaret
Cape Bruguieres
Cape Wessel
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IV. AUSTRALASIA.

Ornithorhyncus Paradoxus.

1. Australia. 2. Tasmania or Van Diemen's Land.

1. AUSTRALIA, considered as an island, is the largest in the world; viewed as a continent, it is the smallest. The two terms may be applied in conjunction to the territory; and the term "island-continent" will appropriately express the relation it bears to other masses of land. The proportions of the great tracts are roughly indicated by the following figures:—Asia 17, America 15, Africa 12, Europe 4, and Australia 3.

2. Australia lies between the parallels of 10° 45′ and 38° 45′ S., and the meridians of 112° 20′ and 153° 30′ E. The tropic of Capricorn divides it into two nearly equal parts. Between Cape York, the north extremity, and Wilson's Promontory, on the south, there are 28° of latitude, answering to upwards of 1,900 miles. Following the parallel of 25° from Shark's Bay on the west, to Hervey Bay on the east, 41° of longitude are passed over, equal to 2500 miles. The circuit may be taken in round numbers at 8000 miles, and the area is calculated at nearly 3,000,000 square miles.

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3. Situated in the southern hemisphere, and comparatively near our direct antipodes, the days, nights, and seasons of the year are opposite in their occurrence to our own. When the shades of midnight envelop the Thames, the morning sun, high in heaven, is lighting the shores of Port Jackson; and when ships are setting their chronometers at midday by the ball at Greenwich, the inhabitants of Sydney are retiring to their nightly rest. Our longest day coincides with their shortest, and the reverse. Their harvests are being reaped when the fields of northern Europe are clothed with snow, and its rivers choked with ice. The Christmas festival is their Midsummer. Oak branches and acorns take the place with them of our holly and mistletoe; and while we celebrate the occasion with blazing fires to keep out the cold, they are perspiring from heat in the densest shade. The spring months of Australia, referring to its settled districts, are September, October, and November; the summer, December, January, and February; the autumn, March, April, and May; and the winter, June, July, and August.

4. Other phenomena are in direct opposition to our experience, and strikingly arrest the attention of the newly-arrived emigrant. The sun, which has a southerly position in the heavens to us, and reflects our shadows to the north when in the meridian, is northerly to our Australian countrymen, their shadows falling to the south at noon. The north wind is hot, the south wind cold, and the east wind healthy and exhilarating. The leaves of the predominating trees, instead of being extended horizontally, are vertical. The native flowers are commonly without odour, the bees without sting, and the birds without melody. The owl hoots by day, the cuckoo coos by night. There are black swans, white eagles, blue crabs, cherries growing with their stones outside, and trees which shed their bark instead of their leaves.

5. The known portions of the surface are insignificant when compared with the unknown. It seems to be a generally level region, excepting the highland ranges near the coast. The most important of these are known as the *Blue Mountains* to the west of Sydney, the *Liverpool Range* further north, and the *Australian Alps* further south. But they are nowhere of Alpine elevation. The highest points

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are Mount Kosciusko, on the southern frontier of New South Wales, which raises its sienitic cone 6,510 feet, and Mount Karriboyong, which has an altitude of 6563 feet.

6. No active volcano has been observed, and the terrible phenomena of earthquakes are here unknown. But evidence of extinct volcanic action appears in various parts of the country in true crateriform hills and veritable lavas. Distinctly marked craters and hills of lava are found in Victoria, near the celebrated gold-diggings of Ballarat and Mount Alexander. It is remarkable also, that through the whole extent of the eastern coast from Torres to Bass's straits, pebbles of pumice are strewed, a volcanic product found on the flats immediately behind the beaches, a few feet above high water-mark.

7. The country is essentially defective in irrigation. There are a few important *rivers*, and a number of minor streams, but they bear no proportion to the vast range of territory, or to the great drainage systems of other regions, either as to the length of their course, volume of water, or capacity for navigation. There are also lagoons along the coast, and interior lakes; but the entire water supply is subject to a prime natural drawback, that of being at times redundant, alternating with long intervals of deficiency or absolute failure. Heavy rains produce floods of remarkably sudden occurrence, occasionally destructive. But during the long hot summer, the larger rivers shrink in volume, the lesser lose their continuity, and become a series of detached pools; and the mere streams entirely dry up. The largest river, *the Murray*, descends from the New South Wales and Victoria districts to Encounter Bay in South Australia, and is navigable only for light draught steamers, upwards of 2000 miles from the sea.

8. There is no part of the globe where the forms of *animal and vegetable life* are so distinct from those of other countries. Beauty, though eminently belonging to many objects, is not here a prominent or prevalent feature among the general products of living nature; nor is utility to man an attribute extensively developed. This does not arise from any defect in the soil and climate, for all the important food-plants of Europe, with many belonging to other regions, are cultivated with the greatest success, while all the animals best adapted for human sustenance, and the purposes of social

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life, have been introduced with a similar result. Further experiments upon this point are now in progress, and recently the alpaca has been imported from South America, and partridges and the ova of salmon from our own country.

9. Great uniformity characterises the *indigenous vegetation*. The same trees, or nearly so, are perpetually recurring, chiefly of two families, Gum-trees and Acacias. Owing to scanty foliage, and the peculiar arrangement of the leaves, which present their edges to the light, they afford little protection from the summer sun. The woods have therefore no sombre shadows—no glades of profound gloom—but are comparatively light and airy scenes. Flowering plants of extraordinary beauty are found, many growing to an arborescent size; and extensive pastures are prominent in the landscape. But the latter have not the verdant and dense character of the English sward; and hence a much larger area is required to sustain an equal number of live-stock than would be sufficient in England. Maize, wheat, flax, tobacco, and the vine, are successfully cultivated.

10. The *Animal kingdom*, like the botanical, exhibits great peculiarities. Of mammalia, there is a remarkable paucity of species, and those which do occur are not commonly abundant, for many miles of the interior may be traversed without meeting with a single quadruped. None of the monkey tribe, or of the thick-skinned animals, or of the ruminants, belong as natives to the zoology of the country. *Kangaroos* are almost the only important quadrupeds; and of beasts of prey, the *dingo*, or wild dog, is the principal example. The most peculiar animal, the *ornithorhyncus paradoxus*, is a creature so anomalous, that when the first specimens arrived in Europe, naturalists suspected them to have been fabricated. It has the bill and webbed feet of the duck united to the body of a mole, and bears the common name of the water-mole. The most remarkable bird is the *apteryx*, which is without perceptible wings, and builds its nest in deep holes. Australia is the metropolis of the marsupial order, for with few exceptions these land-animals belong to it. But the indigenous zoology of the country bears no proportion to that which has been naturalised by the introduction of our domestic animals. *Sheep farming* has long been the principal pursuit of the majority of settlers, and so continues, notwithstanding the

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attractions of the gold fields; hence the large exports of wool and sheep-tallow.

11. The *mineral produce* of the country includes coal, iron, tin, lead, copper in vast abundance in South Australia, and gold in New South Wales and Victoria. Science opened the way to the discovery of the golden store, which flock-masters had unperceived under their very feet. Specimens of gold were found by Strzelecki and Clarke in 1839 and 1841; and shortly afterwards, on independent grounds, the gold fields were predicted by Sir Roderick Murchison, who inferred their existence from the mineral composition of the highlands of the eastern coast. The first actual demonstration of a workable gold-field was made by Mr. E. H. Hargraves, Feb. 12, 1851, in the neighbourhood of Bathurst, New South Wales. On the following Aug. 25th, public announcement was made of its discovery at Anderson's Creek, Victoria. The yield has been most extraordinary. In the interval between May, 1851, and the close of 1859, it amounted to 25,000,000 ozs., equal in value to £101,371,828, the largest proportion being from the Victoria fields.

12. The northern part of the country, embracing nearly half the territory, being within the torrid zone, has a tropical *climate*. The extra-tropical or colonised districts are also subject to a high temperature, varying according to latitude, the elevation of the surface, and proximity to the sea. In summer, great heat is experienced, which becomes distressing when scorching wind—the *sirocco* of Australia—blows from the interior, which it does for twenty-four to thirty hours, three or four times a year; but a very genial temperature prevails through eight months of the year. The chief disadvantage is deficiency of water, caused by the long droughts, when scarcely a drop of rain falls for twelve months or more. These have been thought to be periodical, as they generally occur after intervals of ten or twelve years; and are followed by superabundant rains, which diminish year after year, until the era of total suspension comes round again. Experience of these droughts is chiefly confined to New South Wales. In point of salubrity the climate is extremely favourable.

13. Thinly scattered over the surface are various tribes, commonly called Austral negroes, from their greater resemblance to the African negroes than to any other division of

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the human family, though far inferior in every respect to them. They have the flat nose, large nostrils, and thick protruding lip of the true negro, but their hair is commonly long and coarse instead of being woolly. They differ to some extent among themselves in different places, as to complexion, habits, and language; but appear to have had a common origin. No records, monuments, or traditions, throw the faintest light upon their migrations and history. The Aborigines are very insignificant in number compared with the area they occupy.

14. Australia was first sighted by the Dutch in 1605, who reached the north coast from Batavia, and gave it the name of *New Holland*. Its shores were afterwards visited at various points by mariners of different nations; yet little attention was paid to the great southern country till the time of Captain Cook, who sailed along the whole eastern coast from Cape Howe to Cape York. In consequence of his report respecting Botany Bay, the British government determined to found there a penal settlement; and from the date of its establishment, the colonisation of the country by the British has proceeded.

Australian Lime.

Australian Cranberry.

Australian Chesnut.

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There are five colonies in Australia, namely:

	Founded.	Chief Towns.
NEW SOUTH WALES ..	1788	Sydney, Parramatta (or Port Jackson), Liverpool, Windsor, Goulburn, Campbelltown, Maitland, Newcastle, Bathurst.
WESTERN AUSTRALIA, or *Swan River Settlement*	1829	Perth, Freemantle, Albany.
SOUTH AUSTRALIA ..	1836	Adelaide, Port Adelaide, Gawlertown, Glenelg, Macclesfield, Kooringa.
VICTORIA, (formerly Port Phillip, settled in 1835)	1851	Melbourne, Geelong, Ballarat, Sandhurst, Beechworth, Castlemaine, Portland, Belfast, Williamstown.
QUEENSLAND, or Moreton Bay	1859	Brisbane, Ipswich, Cleveland.

15. NEW SOUTH WALES, our first colony in Australia, embraces a large section of the country on the east coast. It extends from the ocean to the meridian of 141° on the west, and from the parallel of 29° on the north to the Murray river in the south. Previous to 1851 it included the present colony of Victoria, under the name of the district of Port Phillip. Though nature has produced nothing spontaneously for the food of civilised man within its bounds, yet human industry has caused its soil to yield every important grain, vegetable, and fruit, in the utmost profusion; while millions of pounds of wool from the sheep farms are annually sent to the mother country. The Yorkshire clothiers have produced cloth of the finest quality from it; but it is chiefly used for mixed fabrics. The transportation of felons to this colony ceased in 1840; and since that time the convicts undergoing sentence have merged in the mass of society by the expiration of their terms. The total population (to end of 1858) is 342,000, nearly all Anglo-Australians and British emigrants. The former exhibit the features usually observable in a transplanted British race: tall stature, spare form, and pallid face.

16. *Sydney*, the capital, in Cumberland county, stands on the south shore of *Port Jackson*, about seven miles from the entrance, and one of the finest natural harbours in the world. The lighthouse at the South Head is in lat. 33° 51′ S., and long. 151° 18′ E. The streets are generally laid out at right angles, well paved or macadamised, with handsome buildings of cut stone or brick. The government-

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house is of white freestone, in the Elizabethan style. The other public establishments are the legislative council chambers, a college, a cathedral, and numerous churches and chapels, banks, a Hyde Park, and a botanic garden. The city was lighted with gas for the first time January 26, 1842, the fifty-fourth anniversary of the foundation of the colony. Indeed, Sydney has in every respect the appearance of a first-class English town. It contains, including suburbs, a population considerably above 100,000, with an astronomical observatory. *Parramatta* (formerly called *Port Jackson*), the first settled town in Australia, and *Liverpool*, both in the metropolitan county; *Maitland*, a flourishing town, with an extensive manufactory of tobacco; *Newcastle*, in Northumberland, with extensive coal mines; and *Bathurst*, in the county of that name, one of the chief places for gold digging; are all incorporated towns. *Botany Bay*, five miles south of Sydney, was discovered by Captain Cook in 1770, and became in 1787 one of our penal settlements, but was soon after abandoned for Port Jackson. On its coast is a column erected in 1825 to the French navigator, La Peyrouse. Between Sydney and Bathurst there is a fine road across the Blue Mountains, regarded as the great engineering work of the colony.

17. Western Australia, originally called the *Swan River Settlement*, comprehends the country between the meridian of 129° and the Indian Ocean, a vast tract, the greater portion of which is unexplored, and probably incapable of being occupied by civilised man. The settled district is a portion of the south-west corner, chiefly on the Swan River, which was so called by the Dutchman Vlaming, in 1697, from the black swans found floating on the stream. The colony being inconsiderately commenced, encountered a series of disasters in its early stages, which operated to its disadvantage after real difficulties had been surmounted, and it still remains the least promising of the Australian colonies. But it possesses resources for a considerable population, mines, fisheries, pastoral and agricultural lands. In 1850 it was made a penal settlement by the home government, at the request of the colonists, who were in want of labour. *Perth*, the capital, a few miles inland, on the Swan River; *Freemantle*, at its mouth, the principal port of the settle-

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ment; and *Albany*, on King George's Sound, a fine bay, are the principal towns. Population in 1859, 14,837.

18. SOUTH AUSTRALIA lies between the meridians of 132° and 141°, the parallel of 26°, and the Southern Ocean. These limits include an area of 300,000 square miles; but embrace in the north a wide extent of unprofitable country, sandy and stony tracts, with saline mud lakes, and scarcely a single stream deserving the name of river except the lower portion of the Murray. Still there is ample room for tillage and pastoral farming, while the colony is rich in the useful metals, lead, copper, iron, tin, and manganese. Lead was the first ore discovered in 1841; copper was next met with, and is now found in great abundance, and of the finest quality, especially in the Burra Burra mines, 90 miles north of Adelaide, which are the most productive in the world. The ores are the common sulphurets, blue carbonate, red oxide, and green carbonate or malachite, of which splendid specimens have been obtained. *Adelaide*, the capital, a very thriving town, occupies an inland site, six miles from the eastern shore of *Gulf St. Vincent*, with which it communicates by means of *Port Adelaide* and the thriving village of *Glenelg*. It is symmetrically laid out, and surrounded by a public domain for the recreation of the inhabitants, who number about 25,000. *Macclesfield*, which is about 34 miles south-east of Adelaide, and *Kooringa*, near the Burra Burra mines, are two of the most flourishing towns in the mining district, and have churches, schools, inns, and shops. At the entrance of the gulf is *Kangaroo Island*, so called by Captain Flinders from the number of kangaroos he found there. The total population of the colony is upwards of 120,000, of whom about 12,000 are Germans, occupying villages, and among them *Hansdorf*, built after the fashion of their fatherland.

19. VICTORIA, formerly called *Port Phillip* and also *Australia Felix*, includes the south-east corner of Australia, and has an area somewhat exceeding that of Great Britain. Owing to its southerly position, the climate, though changeable, is more temperate than that of the sister colonies, and the amount of permanent surface-water greater, drought being but rarely felt in this comparatively favoured district. Its progress is quite a marvel in the annals of

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civilization. Previous to the year 1835, it was exclusively occupied by wild animals, and rude aborigines not cultivating a sod of land, and scarcely sleeping two nights in succession in the same place. The first settler (Mr. Batman) arrived from Tasmania in the year named, and established himself on the shores of *Port Phillip*, removing in the following year to the site of the present capital. He was very speedily joined by others, upon the fine pastoral capabilities of the country becoming known; and the stream of emigration continued to flow steadily, till, upon the auriferous wealth of the region being discovered in 1851, it became a torrent. The following return shows the progressive advance:—

Years.	Population.	Years.	Population.
1837....	450	1851.....	77,345
1839....	750	1854.....	236,798
1841....	11,738	1857.....	408,998
1846....	32,875	1859.....	525,993

The males are very nearly in the proportion of two to one to females.

20. *Melbourne*, the capital, in the county of Bourke, stands on the river Yarra Yarra, about three miles overland from the point where it enters Hobson's Bay and meets the waters of *Port Phillip*. This distance is now traversed by a railway, with a branch to *St. Kilda*, a sea-bathing place to the inhabitants of the capital. The name of the river means "ever-flowing," and alludes to the permanent character of the stream, being one of the few which are not more or less dried up in the summer. At first, in 1837, Melbourne was a mere collection of huts, disposed without order, and constructed without security; then a long straggling village; next an embryo town with a population (in 1846) of only 10,954: now it is a well-arranged municipality, with a population approaching to 120,000. It has the usual appurtenances of a long-established city, and is not without a select conservative circle, while the general society is necessarily somewhat crude. *Ballarat*, *Mount Alexander*, and *Bendigo*, 80 to 100 miles west and north-west of Melbourne, are the chief localities of the gold diggings. In the vicinity of these places several towns have been laid out

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within the last few years, of which *Castlemaine* is the most considerable. *Geelong*, the chief town of the county of Grant is on the western side of Port Phillip, with commodious hotels, extensive warehouses for wool, and a population of 30,000. It is connected with Melbourne by a railway of 42 miles; and another is in process to *Ballarat*, in the midst of the gold-fields, 58 miles north-west of Geelong. *Beechworth*, *Kyneton*, *Portland*, *Williamstown*, and *Brighton*, are other principal towns of this colony.

21. QUEENSLAND, recently detached (December, 1859) from New South Wales by petition of the inhabitants, and formed into a separate colony with a bishop's see, extends along the north of the parallel of 29°, and embraces the *Moreton Bay* district. Though only in process of settlement, it already has a population of 25,000. The region has extensive tracts of great fertility, and is favoured with a climate which combines ample moisture with a tropical temperature. Cotton is raised here, samples of which have been highly commended by the Manchester manufacturers; but whether it can be grown so as to remunerate the grower, and compete with Transatlantic produce, is a very doubtful point. *Brisbane*, the capital, with 5000 inhabitants, gives its name to the Bishopric, and is on the river of that name, which falls into Moreton Bay. Higher up, amid white limestone hills, is *Ipswich*; and lower down, on the bay itself, is *Cleveland*, a resort of turtle and the dugong.

The Dingo, or Wild Dog of Australia.

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TASMANIA, OR VAN DIEMEN'S LAND.

22. TASMANIA, which forms a fifth Australian colony, outlies the southern coast of Australia, as Ceylon outlies the mainland of India, and is separated from Victoria by Bass's Strait, a channel about 120 miles wide in the narrowest part. The island is about one-sixth less than Ireland, abounds with bays and harbours, of which the principal are *Port Dalrymple, Storm Bay,* and *Port; Davey* has a diversified surface largely under cultivation, is well watered with beautiful streams, and possesses the best features of the English climate. Its native animal and vegetable productions correspond to those of the great northern country. But though chiefly agricultural, sheep-farming and whale-fishing are carried on extensively. The name is derived from Tasman, a Dutchman, who discovered the island in 1642, in preference to that of his patron, Anthony Van Diemen, the governor of Batavia. *Hobart Town,* the capital, a thriving town, with an excellent and capacious harbour, stands on the estuary of the Derwent, with an amphitheatre of fine hills for the back-ground, and contains about 20,000 inhabitants. *Launceston,* 120 miles to the north of the capital, is connected with it by an excellent road. Its site is low and unhealthy, and owing to the difficulty of navigating the river Tamar, it is not well adapted for commerce.

23. Tasmania has been a British colony since the year 1803. It was long a penal settlement; but the practice of having convicts deported to its shores ceased several years ago; population, in 1859, 86,451. The island is under representative government, as well as New South Wales, Victoria, and South Australia.

NORFOLK ISLAND, formerly the penal settlement of New South Wales, and under the government of Van Diemen's Land, has, since the abolition of transportation, been made the home of the descendants of the mutineers of the Bounty, who in 1856 were transferred to it, at their own request, from Pitcairn's Island. The beautiful Norfolk Island Pine (Araucaria excelsa), which grows above 200 feet high, is indigenous here. Area, 13½ square miles; population, 200.

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In each of the five Australian colonies the executive authority is vested in a governor appointed by the Crown; but the Governor of New South Wales ranks as the Governor-General of all the British possessions in Australia. In 1850 an act was passed by the British Parliament which gave to the Australian colonies the power of independent legislation, by means of a representative system; and in 1855 another act was passed, more complete, and founded on their own suggestions, and this forms the basis of their present government; and they have all, with the exception of Western Australia, availed themselves of the privilege. The form they have adopted is in accordance with the British Constitution, namely, an Upper and a Lower House. In all the Australian colonies education has been eagerly cultivated, and colleges and schools established.

The Emeu, native of New Holland.

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V. POLYNESIA.

Artocarpus Incisa, or Bread Fruit.

1. New Zealand. 2. Friendly and Navigator's Islands.
3. Society, Harvey, Austral Islands, and the Marquesas.
4. Sandwich Islands.

1. POLYNESIA is the designation of those islands of Oceania which are inhabited by light-coloured tribes allied to the Malaysian, all speaking dialects of the same tongue. Though these islands are exceedingly numerous, their aggregate area, if we exclude New Zealand, which is by some geographers classed under Australasia, does not exceed 80,000 square miles, within an area of the ocean of not less than 10,000,000 square miles; and their population, according to the latest estimates, but little exceeds 500,000.

2. *High Polynesia* includes the mountainous islands, rising above the height of 6000 feet, as the *Marquesas*,

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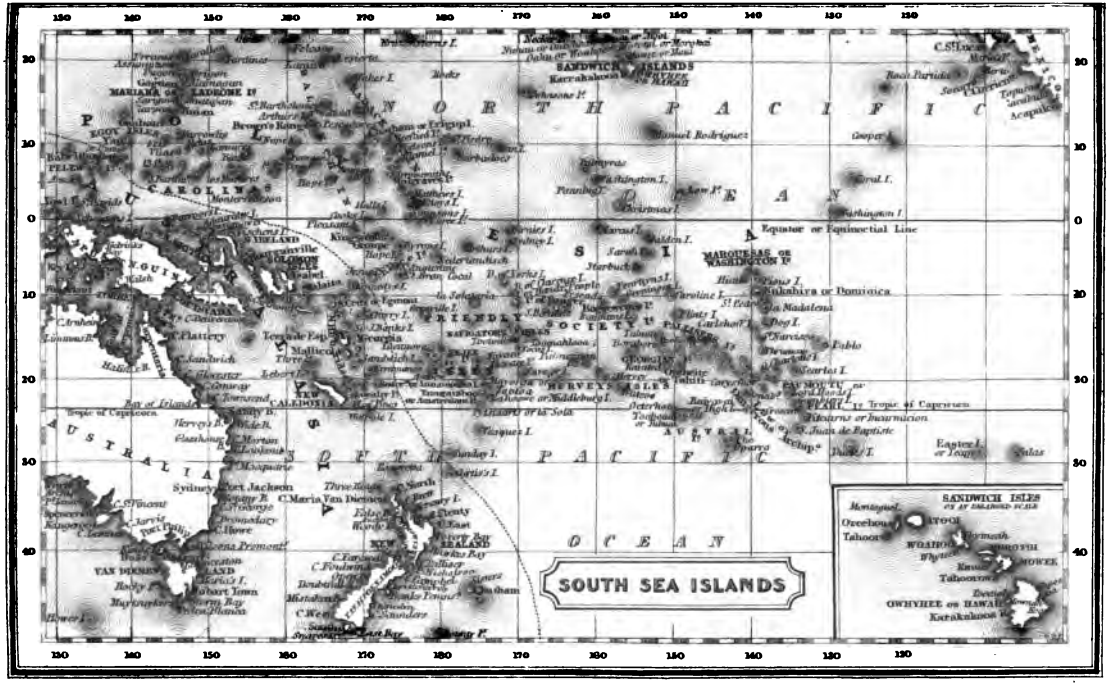
SOUTH SEA ISLANDS
NORTH PACIFIC OCEAN
SOUTH PACIFIC OCEAN
AUSTRALIA
CAROLINAS
MARIANA OR LADRONE IS
SANDWICH ISLANDS
Karrakakoos
Manuel Rodriguez
Equator or Equinoctial Line
MARQUESAS OR WASHINGTON IS
Nukahiva or Dominica
FRIENDLY SOCIETY IS
NEW CALEDONIA
HERVEY ISLES
AUSTRAL IS
Tropic of Capricorn
Tropic of Capricorn
Sydney
Port Jackson
C. Maria Van Diemen
VAN DIEMEN
Hobart Town
Bay of Islands
Tahoor
Tahoorow
OWHYHEE OR HAWAII
Karakakoos
SANDWICH ISLES
Montagu I.
Orechou
Tahoor
WOAHOO
Tahoorow
Owhyhee
Karakakoos

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Society, and *Sandwich Islands*. These are all of volcanic origin, containing in some instances volcanoes at present in action; and are all eminently beautiful and fruitful. *Median Polynesia* includes the islands below the height named, and above 100 feet, composed generally of crystallised carbonate of lime, probably coralline rock, altered and elevated by volcanic agency. They are richly clad with verdure, and seem to enjoy a perpetual spring and autumn, displaying the opening blossom along with the ripened fruit. *Low Polynesia* comprehends the coral islands of recent formation, raised but a few feet above the waves, and liable to be flooded in storms. They are often circular or oval-shaped belts, wooded with cocoa-nut trees, enclosing a central lagoon, connected by a single opening with the ocean.

3. NEW ZEALAND, situated 1100 miles to the east of New South Wales, consists of three islands, stretching in a curve from north to south. They cover an area of 120,000 square miles, and have a population of colonists (in 1859) of above 60,000, and of aborigines about 56,000—the latter fast decreasing, while the former are increasing. The middle island, called *New Munster*, is the largest, and exceeds the area of England and Wales; the northern, called *New Ulster*, is somewhat less; the southern, or *New Leinster*, is very small. They are well supplied with harbours, streams, woods, and fertile lands, and have the advantage of a most genial climate, free from the extremes of heat and cold. There are active volcanic vents, with warm lakes, ponds, and boiling springs, in the northern island; and shocks of earthquakes are frequent in particular districts; but there are no traditions among the natives of any destructive earthquake. Native animal life is deficient to an extraordinary degree, but there is no venomous reptile, and all the introduced live-stock of Europe thrive well.

4. The northern part of the north island was discovered by Tasman, in 1642; but the coast was first circumnavigated by Captain Cook, in 1770, who passed through the narrow strait which bears his name, dividing the north and middle islands, and took formal possession of them on behalf of Great Britain. In 1840 they were constituted a British colony, and in 1852 the British Government conferred on them a

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constitution, since which a considerable number of emigrants of the better class have proceeded to it, and are now under representative government, situated on the northern island, and the seat of government at its southern extremity. There are seven principal settlements or provinces, namely:

Provinces.	Chief Towns.
Auckland (North of North Island) ..	.. Auckland (the capital).
New Plymouth (West of ditto) ..	.. New Plymouth.
Hawke Bay (East of ditto)	.. Napier.
Wellington (Southern extremity of ditto)	... Wellington.
Nelson (North of Middle Island) ..	.. Nelson.
Canterbury (centre of ditto)	.. Christchurch.
Otago (South of ditto)	.. Dunedin.

The New Zealand natives, or Maori, a fine race of Malay-Polynesians, are supposed to number 60,000. They have abandoned the savage usages for which their fathers were notorious, have adopted the habits of civilised life, and maintain amicable relations with the Europeans. Many cultivate farms, and bring their produce to market as regularly as English farmers, especially the taro and sweet potato, which are their chief articles of diet. The *phormium tenax*, or New Zealand flax, which yields a coarse strong fibre, valuable for cordage and canvas (but not for paper), is produced here in great abundance.

Phormium tenax. *a*, flower; *b*, the same opened to show the stamens and pistils; *c*, fruit; *d*, horizontal section of the same; *e*, seed; *f*, the same in section.

5. The Friendly Islands, called the *Tonga group*, after

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the name of the principal island, are upwards of 1000 miles north by east of New Zealand, and contain a small population of 18,000. They were so styled by Cook from the hospitable bearing of the natives, now known to have been treacherous; deceiving him by affability, that they might murder him and seize his vessels. The NAVIGATORS, or *Samoan group*, to the north, with 56,000 inhabitants, were named by Bougainville from observing the natives in possession of superior canoes dexterously managed. They have been converted to Christianity, and are under a native sovereign.

War Canoe of the Society Islands.

6. The SOCIETY ISLANDS, so named by Captain Cook, in honour of the Royal Society, are a lofty volcanic group, centrally situated in the south Pacific, and are so extremely beautiful as to have suggested to the French, their present masters, the appellation of *New Cytherea*. They were once thickly peopled, but have now a population of not more than 20,000. *Tahiti*, or *Otaheite*, the largest island, is about 140 miles in circumference. Here Captain Cook observed the transit of Venus in 1769, in connection with a scientific mission. South-westward are the HARVEY ISLES, with 14,000 inhabitants, one of which, *Raratonga*, was for many years the mission-station of Williams; southward lie the AUSTRAL ISLES, with 1000 inhabitants, where the mutineers who seized the Bounty, in 1788, found a temporary home. North-eastward are the MARQUESAS, mountainous and

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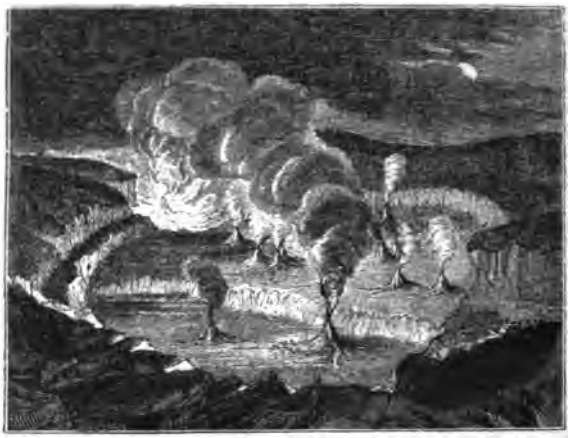
superbly verdant, with a population of 20,000, perhaps the least weaned from barbarity of all the Polynesians. This group was taken possession of by the French in 1842, and is now governed by them.



The Crater of Kirauea in Hawaii.

7. The SANDWICH ISLANDS, so called by Cook, who discovered them in 1778, after Earl Sandwich, First Lord of the Admiralty, are more properly styled the *Hawaiian group*, from *Hawaii* or *Owyhee*, the largest, where the great navigator perished. There are eight inhabited islands, extending about 400 miles in a curved line, containing an area of 6,100 square miles, and a population of 150,000. They lie about 2,000 miles from the shores of Mexico on the east; 5,000 from China on the west; and 2,700 from the Society islands on the south. Hawaii is remarkable for two towering volcanic mountains, the highest of which, Mowna Kaah, nearly 14,000 feet, is the culminating point of Oceania; the other, Mowna Roa, is 13,120 feet; also for the low-lying crater of Kirauea, a deep hollow of 1,100 feet, studded at the bottom with smoking cones, and ponds of liquid lava. *Honolulu*, in the island of *Oahu*,

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is the capital, has churches and schools, two English newspapers, and a good natural harbour, capable of accommodating more than sixty vessels of 500 tons burden. Population about 8000.

8. For many years after the discovery of these islands, the people remained in their original savage condition. But since 1820, the whole face of society has been changed, and the usages of civilised life have superseded the former universal barbarity. There is now a single monarchical government limited by a legislative assembly, with convenient towns, roads, a small fleet, a written language, and regular commerce in victualling ships, and exporting odoriferous sandal-wood, coffee, sugar, oil, &c.

9. The cocoa-nut palm, profusely spread over Polynesia, is an invaluable benefaction to the inhabitants. It needs no culture, pruning, or attention of any kind, while it is the staff of life to the islanders. They repose beneath its shade, eat its fruit, and find a beverage in the acidulated milk of the nut. Their huts are thatched with the leaf-stalks, of which also they make baskets for catching fish, while the leaves furnish bonnets, and the leaflets fans. The larger nuts, thinned and polished, supply goblets; the dry leaf-stalks are used for firing; and the fibrous husk of the nut is twisted into fishing-lines, cords, and matting. The trunk itself is sawn into posts to uphold their dwellings, and paddles for their canoes are made of the middle rib of the leaf.

10. Little less important is the bread-fruit tree, a grand and towering object, as conspicuous in the Polynesian landscape as the elm is in the English. Its fruit, which is yielded in abundance, supplies a nourishing and pleasant food. It was to obtain plants for introduction to the West Indies, that the Bounty was sent to Tahiti in 1787. But, seduced by the prospect of a life of ease, the crew mutined, turned the captain and officers adrift in a boat, and with some native women, finally established themselves in *Pitcairn island*, south-east of *the Dangerous Archipelago*. The Captain and a few others, after numerous hardships, arrived in England, but nothing was heard of the crew for more than twenty years, when obscure reports of their existence were circulated. It was finally ascertained,

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that only one of the mutineers, Adams, survived, who had become a reformed and pious man; but their descendants numbered 66 in the year 1825, when Captain Beechey touched at the island. They increased to 198, formed a very well-disposed colony, and were removed in 1856, with their own consent, to *Norfolk Island*, as a better location.

THE ARCTIC REGIONS.

The Arctic Regions properly include all those districts of Europe, Asia, and America, which lie beyond the Arctic circle, that is 66° 30′ north of the equator. Thus Spitzbergen, Nova Zembla, the coast of Siberia, and the northern parts of North America (including Greenland), are comprised in the term, but it is more especially applied to that part of North America with which the recent researches to ascertain the fate of the last Franklin Expedition have made us so familiar. That expedition was undertaken in prosecution of the discovery of a North-West Passage, an object which has engaged the attention of geographers and navigators for nearly 400 years.

What is at present known of these countries may be briefly described. *Davis Straits* and *Baffin's Bay* lie between *Cumberland* and *Cockburn Islands* on one side, and Greenland on the other; and north of Baffin's Bay, beyond *Murchison Strait*, extends *Smith's Sound*, which, according to Dr. Kane and others, opens into a sea comparatively free from ice, through which, he and some other voyagers think, the north pole might in favourable seasons be reached; this has been explored by the Americans to upwards of 80° North latitude. The land on the west side of Smith's Sound is called *Grinnell Land*, and *Ellesmere Land*, and south of it lies *North Lincoln*, separated by *Jones's Sound* from *North Devon*. The broad opening of *Lancaster Sound* has *Cape Warrender* on its northern, and *Cape Hay* on its southern side; it runs westward, and contracts into *Barrow Straits*, which divide *Cornwallis Island* and *North Devon* from *North Somerset*. The *Wellington Channel* separates North Devon from a number of islands, called collectively *Parry's Islands*, of which *Melville Island* marks the extent

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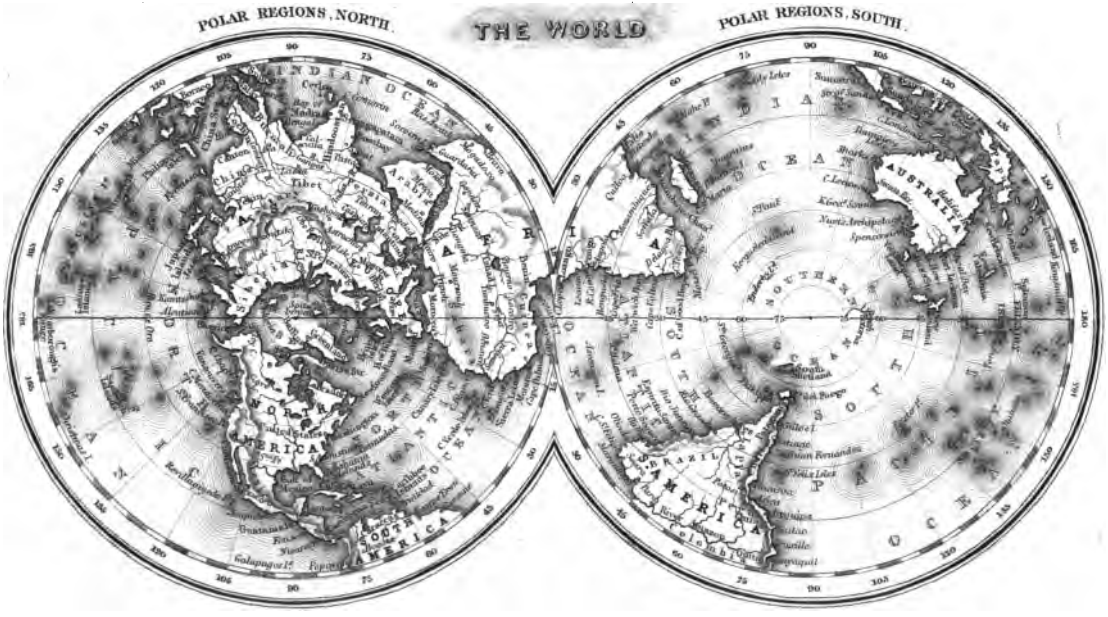

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of Parry's discoveries westward. To the west of Melville Island lies *Prince Patrick's Island;* and a broad channel, called *Banks's Strait*, separates Parry's Islands from a large mass of land on the north of the American Continent, which has been thoroughly explored, with the exception of about 150 miles on the N.E. side of *Victoria Land*. The north-western part is called *Banks' Land*, separated only by the *Prince of Wales Channel* from *Prince Albert Land;* the south-western is *Wollaston Land*, east of which extend in succession *Victoria Land, King William's Land, Boothia Felix*, and *Cockburn Land*, reaching to the western shore of Baffin's Bay.

The mainland of America, opposite to, and westward of these tracts, has been explored by Franklin, Richardson, Back and others, as well as by the Hudson's Bay Company; it contains several noble streams, which flow into the Polar Ocean, especially the *Great Fish River*, the *Coppermine River*, and *Mackenzie's River*, and the coast is thinly inhabited by wandering tribes of Esquimaux. But, like the opposite islands, it is barren, being almost destitute of animals in the winter, with but a very scanty vegetation in the summer; yet, it has been repeatedly traversed, partly for scientific purposes, and more recently in search of the Franklin expedition, and great hardships have been nobly endured by British seamen in prosecuting these researches.

Immediately after the discovery of America the notion became prevalent that a way to the golden regions of the East was to be found by passing from Europe westward in a high northern latitude, and in the reign of Henry VII., (1496, 1497,) John and Sebastian Cabot, Italian mariners in the English service, made a voyage within the Arctic Circle. They sailed along the west coast of Greenland, passed through what afterwards received the name of Davis' Straits, and perhaps even reached Baffin's Bay, but no complete record of their voyage has been preserved, and these places were re-discovered a century afterwards, by Davis and Baffin, skilful navigators of the days of Elizabeth and James I., and therefore named after them. The Portuguese and the French also entered on the same course of discovery, and while the first explored the coast of Labrador, the others visited Canada. An attempt was next made,

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under the command of Sir Hugh Willoughby, to find a passage to the north-east, instead of to the north-west, which caused the discovery of Spitzbergen and Nova Zembla in 1553, and opened a trade by sea between England and Russia; but Sir Hugh with all his crew perished in the ice. Some years after that, Frobisher, Gilbert, and other eminent mariners, set themselves to work to follow out the discoveries of the Cabots, and Davis' Straits were accordingly explored, all the more eagerly as some sparkling pyrites, which were found in abundance at one part of its shores, were at first mistaken for gold. Baffin's Bay, more to the north, was next visited, and soon after, in a southerly direction, a way was discovered, through Hudson's Straits, to a vast inland sea, which, from its discoverer, has received the name of *Hudson's Bay*. The country to the east-south-west was found to abound with bears, beavers, and other animals valuable for their skins, and in the time of Charles II. this was granted, under the auspices of Prince Rupert, to a company, whose representatives still possess it, under the name of the Hudson's Bay territory (henceforth to be called NEW BRITAIN, as mentioned at p. 420). The regions to the north remained unexplored until the early part of the present century, when the voyages of discovery, commenced by Ross and Parry in 1817, and carried on by successive expeditions down to the present time, have made us acquainted with large tracts of country, which extend over 15 degrees of latitude, (from the southern point of Melville Peninsula, in lat. 66°, to Mount Parry, in Grinnell Land, lat. 81°,) and more than 100 degrees of longitude, embracing the whole coast of North America, from Lancaster Sound to Behring's Straits.

The first of these voyages, that under Captain John Ross, in 1818, was a failure, as he only penetrated a few leagues into Lancaster Sound, a vast inlet on the western shore of Baffin's Bay. Captain Parry passing through the Sound in 1819, discovered Barrow's Straits, and reached Melville Island, exploring an extent of country nearly 25 degrees of longitude. In a second voyage Parry visited Hudson's Bay, and in a third he wintered at *Prince Regent's Inlet*, (on the south of Barrow's Strait,) which he had seen and named in his first voyage. Further research down this inlet by Ross led to the discovery of the peninsula of *Boothia*, where is sit-

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uated the north magnetic pole. During this time land and boat expeditions had visited the coast of the polar sea further to the west, and their discoveries were so extensive, as to render all but certain the existence of the long-sought North West passage, though whether it would be available for navigation and commerce was a point still undecided. To connect these discoveries and so clear up all doubts as to a passage from the Atlantic to the Pacific Ocean, northward of America, Sir John Franklin and Captain Crozier sailed in the *Erebus* and *Terror*, in 1845, with a crew, amounting in all to 138 persons; but unhappily the undertaking resulted in the destruction of all the party. When they had been absent about three years, expeditions for their relief were organized both by sea and land, but it was not until 1850 that any traces of them were discovered; after which, further expeditions were successively dispatched, under Captains Collinson, McClure, Kellett, and other able commanders, by Government, Lady Franklin, and others, until 1857, when all search appearing utterly hopeless, the House of Commons, under the impression that every soul must have perished, refused in distinct terms to encourage any more attempts. Upon this, Lady Franklin, that example of womanhood, assisted by her friends, and among them Sir Roderick Murchison, General Sabine, Captain Collinson, and the enthusiastic Captain Allen Young, equipped the steam yacht "Fox" for a final search, under the command of Captain L. McClintock. This effort was successful, and in May, 1859, after passing two winters on the ice, that officer, by finding some records on King William's Island, discovered that the ships had been blocked up there in the ice for 20 months, that Sir John Franklin had died in 1847, and that in the spring of 1848, the crews had abandoned the vessels in the hope of reaching the Hudson's Bay territories by ascending the *Great Fish River*. Some few of them appear to have got to *Montreal Island*, at the mouth of that river, above 250 miles from the spot where the ships were abandoned; but the testimony of the Esquimaux, and the discovery of skeletons, leave us little room to doubt, but that they all eventually perished.

In conclusion it may be observed, that though Sir John Franklin did not succeed in the specific object of his voyage,

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he completed the water boundary of the continent, and put a finishing stroke, unfortunately with his life, to the discovery of the New World. And the expeditions sent in search of him have contributed largely to our geographical knowledge of these still mysterious regions; an important feature being, that Captain (now Sir Robert) McClure has, with the assistance of Captain Kellett, accomplished the transit from one ocean to the other.

THE ANTARCTIC REGIONS.

SOUTHWARD of the continents of Africa and America extends a vast and hitherto but little explored region, which, so far as at present known, consists of a wide open ocean, studded here and there with groups of islands, and abounding with whales and seals. The cold is even more severe there, at equal distances from the pole, than in those Arctic regions which have been so perseveringly explored by Ross, Parry, Franklin, M'Clure, M'Clintock, Collinson, and others; consequently it has hitherto been found impossible to penetrate very far in any direction. Occasionally openings have been met with in the icy barrier which stretches from east to west in latitudes answering to those of the Shetland Islands and St. Petersburg; and Captain Cook, in 1773, reached the 71st degree of south latitude. Since his time, higher latitudes have been visited, as in 1823, when Weddell, a whaling captain, penetrated three degrees farther, and from the great number of birds he saw, concluded that some southern continent must be near; but his occupation did not allow him to go in search of it.

These traces have since been followed up by two scientific expeditions, one sent in 1839 by the United States, and another in the following year by the British Government. The regions visited by the Americans, in the neighbourhood of the Antarctic circle, presented nothing but low, desolate, ice-bound shores, destitute alike of animal and vegetable life. The British explorations, under Sir James Ross, which extended to a latitude but twelve degrees from the south pole, led to the discovery of a region which received the

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name of *South Victoria Land;* and though, if possible, more desolate and inhospitable than the Antarctic continent of the Americans, it presented many points of interest to the scientific voyagers. A lofty range of mountains, which they named after Prince Albert, was seen stretching far away in the direction of the south pole; and isolated peaks received the names of some of our most distinguished explorers, as *Mount Sabine*, *Mount Crozier*, and *Mount Ross.* The most striking feature, however, was an active volcano, the smoke and flames of which ascend 1000 feet above its summit, and were visible even in the day time, to an immense distance. This was found to be 12,367 feet high, (some have assumed it to be more than 15,000 feet,) or loftier than the well-known peak of Teneriffe, and it received the name of *Mount Erebus*, from one of the ships of the expedition. The principal object of the voyage, the discovery of the southern magnetic pole, could not be achieved, although the Erebus reached within 160 nautical miles of the assumed spot, which was believed to lie inland, among the Prince Albert mountains. The commander, Sir James Ross, says, "I had long cherished the ambitious hope to plant the flag of my country on both the magnetic poles of our globe; but the obstacles which presented themselves being of so insurmountable a character, was some degree of consolation, as it left us no grounds for self-reproach."

Of the islands which have been visited, as well as the shores of larger regions hitherto traced, it will be sufficient to remark, that all are alike barren and uninhabited, and apparently must ever remain so. Still many of them are so constantly resorted to by the southern whale and seal ships, and their names are so often met with in books and newspapers, that some indication of their relative positions seems necessary.

The Antarctic Regions include the whole southern portion of both hemispheres. In the western hemisphere we have the *Isle of Georgia*, where Cumberland Bay is a well-known whaling station; and the group of islands called *Sandwich Land*, the most southern of which bears the name of *Thule*, lies 300 miles to the south-east of Georgia. The *New Orkneys*, or *Powell's Islands*, are about 500 miles westward of Sandwich Land; 300 miles further west, is *Clarence Island*,

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the easternmost of the *New South Shetlands*, which extend south-west, and are succeeded by a tract called *Graham's Land*, of which the coast-line is within the Antarctic circle. Two small spots, *Alexander Island*, and *Peter Island*, approach within 400 miles of the position where Cook was repulsed by the ice, nearly a century ago; and no further discovery has since been made in that direction.

In the eastern hemisphere, north of the Antarctic region, the small islands of *St. Paul* and *Amsterdam* lie near the 40th parallel of latitude. Ten degrees further south, *Kerguelen's Land, Marion and Crozet's Island*, and *Prince Edward's Isle*, stretch over a space between the 40th and the 70th degrees of east longitude, and the character of all is much the same, that of extinct volcanoes. So dreary in particular is Kerguelen's Land, that Cook named it the *Island of Desolation*. *Bouet's*, or *Circumcision Island*, lies far to the south-west of Prince Edward's Isle, and forms a connecting link with the western hemisphere. *Enderby Land* and *Adelie Land* are apparently parts of the *Antarctic Continent* of the Americans; they are full 2000 miles apart, and lie just in the line of the Antarctic circle; and 500 miles south-east of Adelie Land, the *Balleny Isles* join the western to the eastern hemisphere. A small island, named *Franklin Island*, commemorates the real discoverer of the north-west passage, and *Mount Terror* and other peaks, some already mentioned, preserve the names of the vessels employed in the Franklin Expedition.

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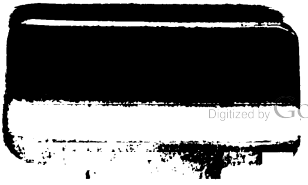

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