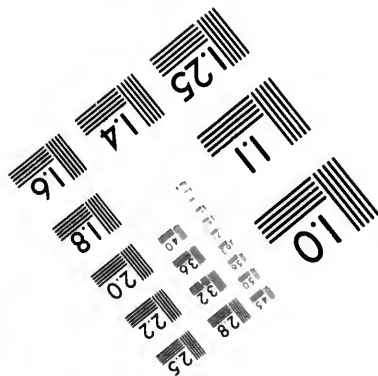
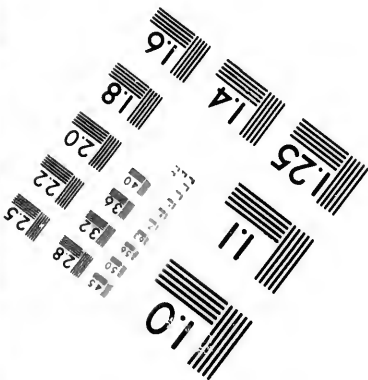
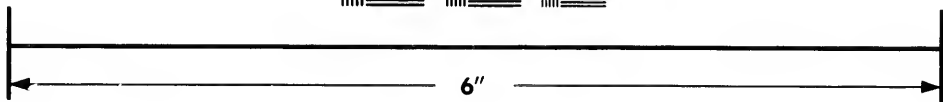
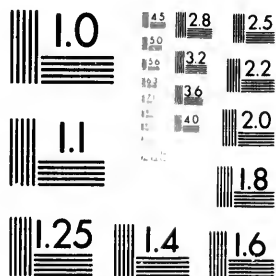


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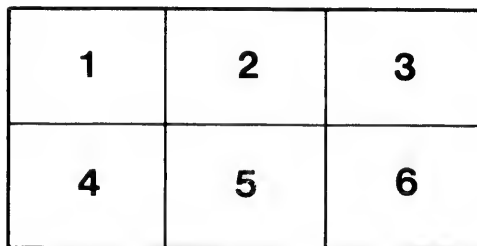
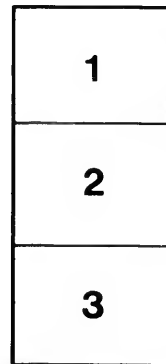
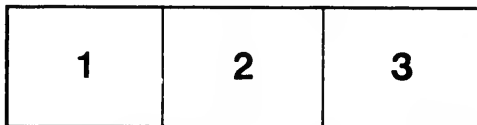
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NEW BRUNSWICK SCHOOL SERIES.

SCHOOL GEOGRAPHY

ESPECIALLY PREPARED FOR USE IN THE

Schools of New Brunswick.

BY

J. B. CALKIN, M.A.

Prescribed by the Board of Education for New Brunswick.

London:

T. NELSON AND SONS, PATERNOSTER ROW.
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IN preparing this book, it has been a special aim to select such matter as will be intelligible and interesting, and to present it in a simple and familiar style. It is hoped that the facts communicated will be found instructive, and will also serve the important purpose of awakening a spirit of inquiry—a desire to know more of the World in which we live. Care has been exercised to keep the book within as small compass as appeared consistent with a fair degree of completeness, and with avoiding the baldness and dulness of bare outline.

JOHN BURGESS CALKIN.

NORMAL SCHOOL, TRURO, N.S.

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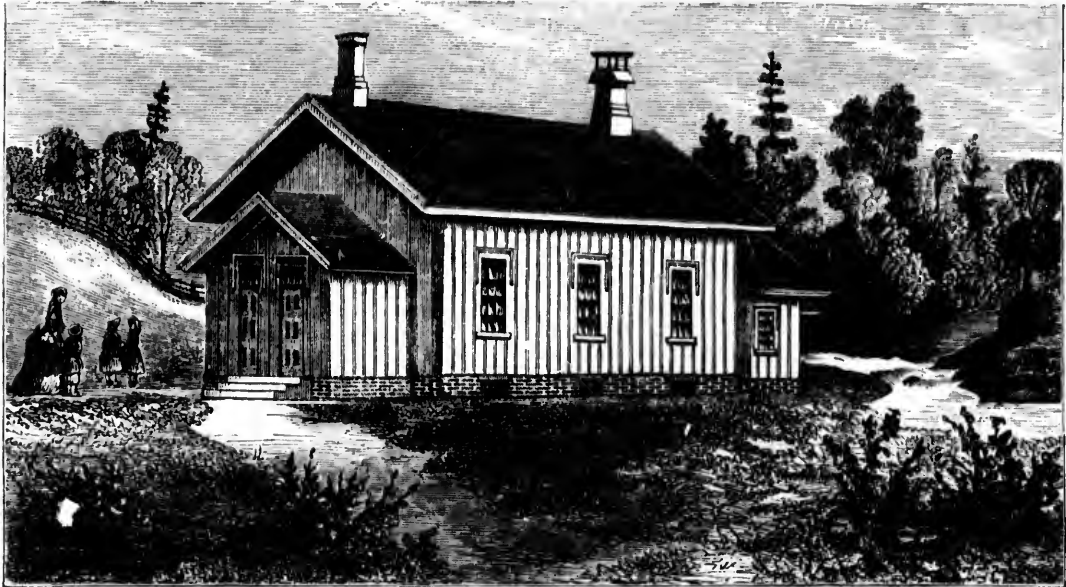
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SCHOOL GEOGRAPHY.

PART I.—INTRODUCTORY.



CHAPTER I.

THE SCHOOL DISTRICT OR SECTION.

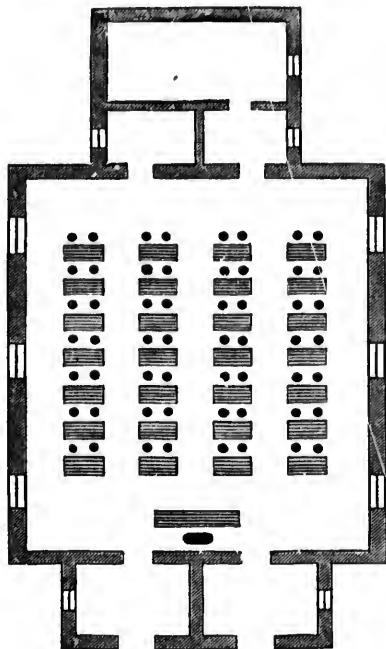
The District or Section.—1. This is a picture of a school-house in the country. The boys and girls are assembling for school. Around their homes, scattered here and there through the neighbourhood, are hills, valleys, level fields, and woodlands. It is summer, and the country is very beautiful. The farmers are busy with their hay-making in the meadows. Near by are patches of grain and potatoes; and on the sunny slopes are orchards which, in the autumn, will be laden with apples and pears. Away up on the hill-sides are the pastures where the cows and sheep are quietly feeding. In the valleys, the brooks which

have come down from the springs among the hills are winding their way, and hastening to the sea. Here, on holidays, the boys love to fish or to sail their tiny boats, and the girls love to stroll along the green banks and gather wild-flowers.

2. Some of the children who read this book live in a place quite different from that which has been described. Their homes are perhaps by the sea-side. The land is rocky and poor; there are no grain-fields nor orchards. Far and wide stretches the boundless ocean of salt water; whilst here and there ships may be seen, tossed up and down on the billows, their white sails filled with the wind. Along the shore are rocky cliffs, against which the waves are ever beating; and

down by the water's edge is the beach, where children love to wander when the tide is out, and gather curious shells and smooth stones. Some of the men here are fishermen, and go out on the sea in boats and vessels to catch cod, halibut, and other kinds of fish; and some are ship-builders, who get timber from the forests, and build ships to sail far away over the sea.

3. In other parts of our Province, again, the children have quite another kind of home. They live in a town or city. There are no fields, nor hills, nor brooks, nor forests; but only houses and shops, with narrow streets between them. Many of the people are merchants, whose business is to buy and sell; others are manufacturers, who make furniture, clothes, and many kinds of things; others are printers, who print books and newspapers.



6. PLAN OF SCHOOL-HOUSE.

4. Again: it may be, your homes are near the coal mines, and the men are miners. All black with dust, they peck away at the coal seams, and take out the coal until they form large under-ground chambers, into which the light of the sun never enters. Or, perhaps, you live where the men are lumbermen, who in winter go far into the forests, cut down large trees, and draw them to the banks of a river. Then, when spring comes, they float the logs to the mills, and saw them into lumber.

5. Perhaps now, after all, I have failed to tell you what

kind of place you live in; and it is no great matter if I have, for you can find out for yourselves. After you have carefully observed all the features of your home and the places near it, you can write what you have learned, and you will then have a little geography of your neighbourhood. You may not be able to draw a picture of your school-house, but you can make a plan of it; which, though not so pretty, is sometimes quite as useful.

6. Here is a plan of a school-house, showing the floor, and how everything is situated. The plan is not nearly so large as the floor of the building, but everything must be in proportion. After you have drawn a plan of your school-house, make one of the play-ground, drawing lines to represent the fence, the school-house, and any other objects around. You can then draw a plan of the neighbourhood in which you live, marking the roads, the buildings, the brooks, the fields, and any other things which you have observed. Such a plan of a portion of country is called a Map.

The County.—7. Your School District is joined on different sides to other districts, and these again to others, each having its own school-house and its own happy homes. If you were to travel from district to district, you would by-and-by go over the whole County in which you live. Perhaps your county is up in the north; or it may be on the east, by the Gulf of St. Lawrence; or on the south, by the Bay of Fundy; or on the west; or in the interior, along the River St. John. Find it on the map; observe where it is situated, and what counties lie on different sides; now point out all the counties in the Province.

The Province.—8. The country or Province in which you live is called New Brunswick. In some parts of New Brunswick there are well cultivated farms; in other parts there are extensive forests, where the lumberman chops down the tall trees. In travelling through the Province, you would see many fine rivers. The St. John is the largest river in New Brunswick. On the east and south sides of New Brunswick we have the sea-coast. Bordering on New Brunswick are other countries. Thus, on the south, we have Nova Scotia, partly separated by the Bay of Fundy; on the north, we have Quebec; and on the east, across Northumberland Strait, Prince Edward Island. New Brunswick and Nova Scotia are often called the Sister Provinces. Maine, on the west, is not a Province of Canada.

The Dominion.—9. New Brunswick, Nova Scotia, and Prince Edward Island, are situated near a large body of water called the Atlantic Ocean. These Provinces are much alike in respect to soil, climate, and products of the field. Nova Scotia is about two-thirds as large as New Brunswick, and Prince Edward Island

is only about one-thirteenth as large. Crossing the Restigouche River, we enter the *Province of Quebec*, which is nearly eight times larger than New Brunswick, stretching away westerly far into the interior. Its forests are more extensive than those of New Brunswick; and its great river, the *St. Lawrence*, is much larger than the *St. John*. Nearly three-fourths of its inhabitants are descendants of Frenchmen, and speak the French language. On the west of Quebec is the *Province of Ontario*, which is nearly as large as Quebec, and is a much finer country. On its southern border are several large lakes; one of these, called *Lake Superior*, is larger than the whole of New Brunswick. Ontario is a very fertile country, yielding abundance of grain. Still further west, a long way from the sea, is the *Province of Manitoba*. West of this again, beyond the high Rocky Mountains, is *British Columbia*, noted for its gold mines. On the west of this Province is a great ocean called the *Pacific*. On the north of the Provinces, extending to the frozen Arctic Ocean, is an immense country called *The North-West Territory*. A great part of this country is very cold, and is valuable chiefly for the soft warm fur obtained from its wild animals.

These seven Provinces and the North-West Territory form the *Dominion of Canada*.

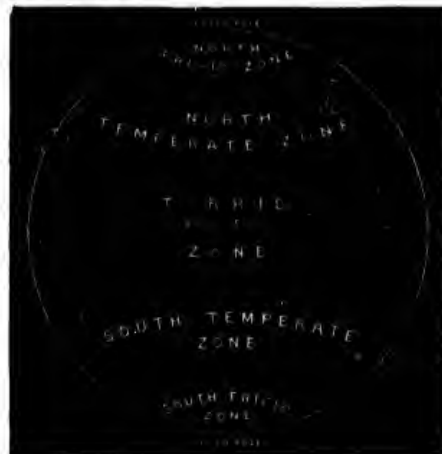
North America.—10. South of the Dominion is a large country, warmer than ours, called the *United States*; and farther south is a still warmer country, called *Mexico*. These countries, like the Dominion, extend from the Atlantic Ocean on the east to the Pacific Ocean on the west. The waters on the east and west now draw closer together, so that the country on the south of Mexico, called *Central America*, is very narrow. All this great land, from the far north of the Dominion to this narrow country, is called *North America*.

South America.—11. Beyond the narrowest part, called the *Isthmus of Panama*, the land spreads out again into another great country like North America. This is South America. The northern half of South America is very hot, and is noted for its vast forests, so dense with trees, shrubs, and vines, that one would need to cut a path to get through them. As we go south the country becomes cooler, and in the far south it is very cold.

The World.—12. Once, long ago, people thought that by travelling a long distance in any one direction they would come to the end of the world. This was a

mistaken notion, for the Earth is round like a ball; and if you travel far enough in a straight course, you will at last come to the place from which you started, just as a fly might do in crawling round an apple.

13. Men often sail round the world. To do this they must go either east or west. In going north, they would find it becoming colder and colder, until at last their way would be wholly blocked up by ice. The far north, which nobody has yet been able to reach, is called the *North Pole*. If they went south, they would by-and-by come to a part of the Earth where the Sun is nearly overhead every day, as in the north of South America. This is the hottest portion of the Earth, and is called the *Torrid Zone*. The Torrid Zone is a broad belt, and is divided by a line called the Equator, which encircles the Earth, so that half the Torrid Zone is on the north and half on the south of the Equator.



13. ZONES.

14. South of the Torrid Zone the countries become cooler, like our own, and are said to be in the *Temperate Zone*, because they are neither extremely hot nor cold. The seasons in the Temperate Zone on the south of the Equator are just the reverse of those of the Temperate Zone on the north. Thus, in the southern part of South America it is winter during our summer. Still further south the cold becomes more and more severe, until the way is blocked up by ice as in the north. The far south is called the *South Pole*.

15. As the Earth is round, it is usual to represent the whole of it by two circular maps, just as a boy covers a ball with two circular pieces of leather. These two maps are called *Hemispheres*, the *Western* and the *Eastern Hemispheres*. We shall make an imaginary tour round the Earth. You may trace the course on the Map of the World.

CHAPTER II.

A VOYAGE ROUND THE WORLD.

Crossing the Atlantic.—16. We shall take a steamship at Halifax, and set out on our long voyage. We cannot go west, because the land of North America lies in our way; we therefore sail east, across the Atlantic Ocean. In a few hours we lose sight of land, and there is nothing to be seen but the sea, with here and there a distant sail. We see no path, nor any sign to direct us; but the captain, with his compass and chart, can take us directly across the pathless ocean as if he followed a beaten track. He needs to know his duty well, and to manage carefully; for sometimes we are surrounded by a dense fog, so that we can scarcely see from one end of the ship to the other. In such a fog we might run against another ship, or against rocks, and be dashed in pieces.

17. You know that the Sun rises in the east, and sets in the west. If you stand with your right hand to the east, the west will be at your left hand; the north will be before you, and the south behind you. Half way between the north and east is *north-east*; half way between east and south is *south-east*; half way between south and west is *south-west*; and half way between west and north is *north-west*. If you were travelling in a strange place on a cloudy day, or in the night, you could not tell in what direction you were going. The compass is a curious instrument, containing a thin piece of magnetic steel, called a needle, turning on a pivot. No matter how the compass is moved, one end of the needle turns quickly towards the north, and remains pointing in that direction. Sailors always take a compass and a chart with them. A chart is a map of the sea and the coasts, showing the harbours and the dangerous places.

18. Above is a picture of a number of ships at sea, as seen through a telescope. The whole of the nearest ship is seen, less of the next, and less of the next, till the one furthest away is nearly hid from view. Nothing can be seen of it but a part of its masts. The rest of it is hid, because the surface of the sea is not level, but curved like the surface of a ball.

19. Sometimes, away in the distance, we see a huge glittering object, like a mountain of glass. It is a great mass of ice, called an *iceberg*, which has floated down from the frozen regions of the north. Many ships are dashed in pieces by running against icebergs in the fog.

20. The sea around the North Pole, called the *Arctic Ocean*, is all frozen over in the winter; and during the short summer the ice breaks up into cakes or *ice-floes*, which are brought

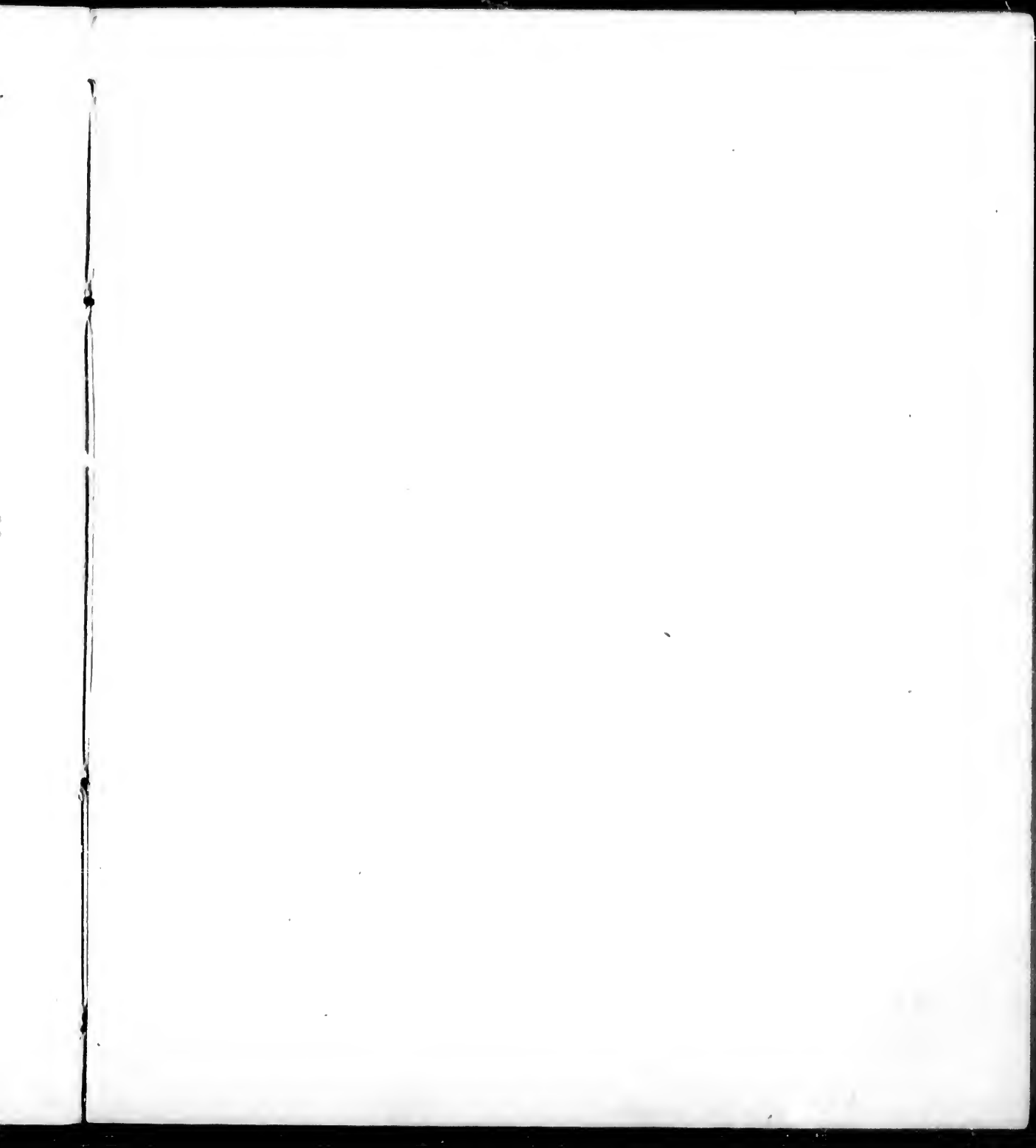


18. GRADUAL DISAPPEARANCE OF SHIPS AT SEA.

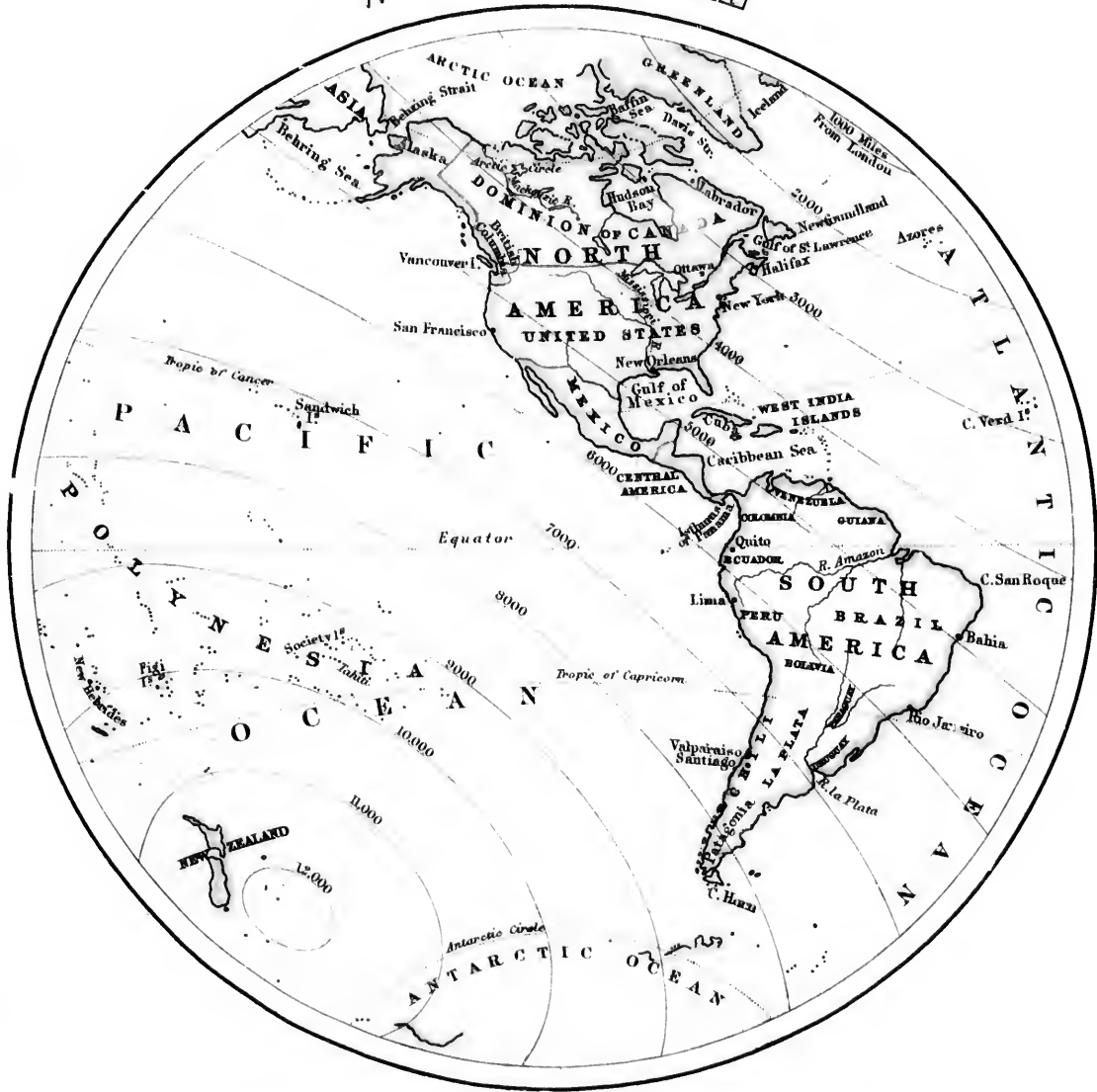
down by currents into the warm waters of the Atlantic, where they melt. Bold navigators have made great efforts to reach the North Pole. They sail past Greenland and Iceland as far as they can into the Arctic Ocean; and when the ship can go no further, they harness dogs to a sled, and drive over the ice. In this way Captain Hall of the *Polaris* reached very near the North Pole.

21. It may seem very odd to be drawn by dogs over the sea; but some of Captain Hall's party crossed these northern waters in a more singular way. The ship becoming leaky, nineteen persons—men, women, and children—were placed on the ice. A storm came on in the night, the ship was driven off, and the ice broke up. These poor people, thus left on an ice-cake in the midst of the ocean, were tossed about for over six months, until their frail raft was so broken in pieces by storms that only a small portion of it remained. Luckily some provisions had been placed on the ice with them; they also killed seals and polar bears for food, and they burned their oil to keep themselves from freezing. Gradually they drifted towards the south, until at last they were picked up near the coast of Labrador by seal-hunters from Newfoundland.

Europe.—22. We have now come to land; first *Ireland*, and then Great Britain, consisting of *England*, *Scotland*, and *Wales*. Here is the home of our Queen, and the land from which our forefathers came. England is a beautiful country. It has rich green meadows, enclosed with pretty thorn hedges; and all through the country are fine parks with shady trees, smooth walks, green lawns, and sparkling fountains. England has many large cities, celebrated for manufactures and trade. Our merchants come here to buy



W. HEMISPHERE



(The figures 1000, 2000, 3000, &c., show the distances from London all over the globe. In the separate Maps of the Continents the same distances are repeated.)

E. HEMISPHERE



(The figures 1000, 2000, 3000, &c., show the distances from London all over the globe. In the separate Maps of the Continents the same distances are repeated.)

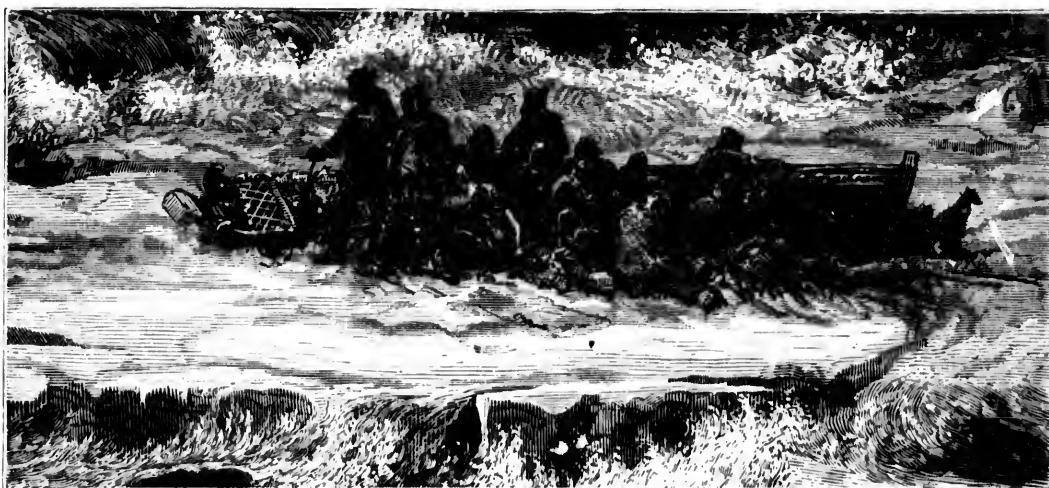


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21. DRIFTING TO SEA ON FLOATING ICE.

their cottons, woollens, crockery, cutlery, and many other things. At *Liverpool*, *London*, and *Glasgow*, we see ships from *Halifax* and *St. John*.

We notice a strange circumstance here. It is noon, when, by our watches, it is about eight o'clock in the morning.

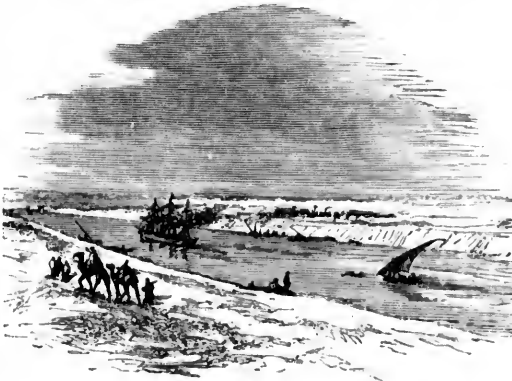
23. Great Britain and Ireland are islands. On the east and south is the continent of *Europe*, containing many countries. We must sail southerly, passing France, Spain, and Portugal, to get round the land. Passing through this narrow channel called the *Strait of Gibraltar*, we enter a sea called the *Mediterranean*, which lies south of Europe. On our left we pass *Italy* and *Greece*, which were in ancient times the most powerful countries in the world.

Africa.—24. On the south of the Mediterranean is another large body of land, called *Africa*, which stretches far away beyond the Equator into the temperate regions of the south. Along the north are the *Barbary States*. Beyond is the *Great Desert*, where it never rains. Vast tracts of country produce only dry grass and stunted shrubs, on which the hardy camel of the traveller subsists. In some places, for hundreds of miles, there is not a drop of water, not a tree, nor flower, nor blade of grass,—nothing but burning sand and barren rock on the earth, and a blazing sun in the heavens. Beyond the Desert is the *Land of the Negro*.

25. In the north-east of Africa is Egypt, one of the oldest and strangest countries in the world. Here, ages ago, the Israelites served their hard task-masters, until God sent

Moses to free them from bondage. It very seldom rains in Egypt, yet the land produces great crops of grain. It is made fruitful by its wonderful river, the *Nile*, which overflows its banks every year, and covers the whole country with water.

We observe that as we go east our watches seem to be going more and more astray. By our time it is six o'clock in the morning, when it is noon in Egypt.



27. THE SUEZ CANAL.

Asia.—26. Our course to the eastward is again obstructed by land. Here, before us, is the great continent of *Asia*, the largest of all the land divisions of the Earth. On the east coast of the Mediterranean is



28. ARAB TENTS.

Palestine, which is quite a small country, but noted as the land which God gave the Israelites, and as the place where our Saviour lived when on Earth. Indeed,

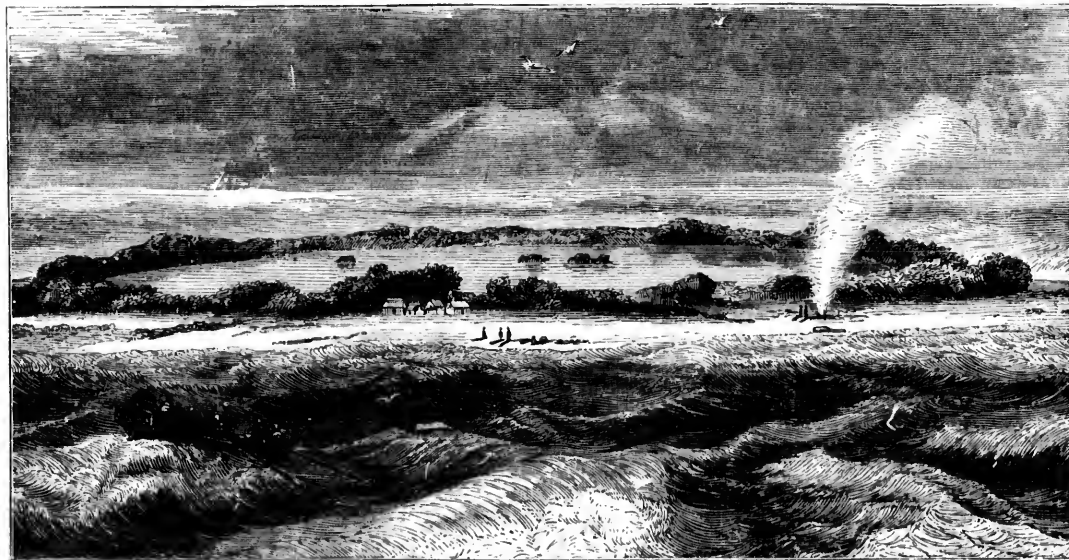
most of the events spoken of in the Bible occurred in this country.

27. We shall be able to continue our voyage by turning to the south. Across this narrow neck of land called the *Isthmus of Suez*, which joins Africa and Asia, a canal has been cut, through which we can sail to the *Red Sea*. On our left we pass Arabia, a land abounding in deserts, and celebrated for its fine horses. In the south of Asia we also find *British India*, *Siam*, and some other countries, which, with the islands off the coast, are called the *East Indies*. These are hot countries, yielding cotton, silk, rice, and all kinds of spice. *China*, the land from which we obtain our tea, is on the east of Asia; and off the east coast are the *Japan Islands*.

28. Asia is said to contain two-thirds of the people in the world, and nearly all its inhabitants are heathens. The central countries are inhabited by shepherds, who live in tents, and are always roving about in search of pasturage.

The Indian Ocean.—29. That part of the sea which lies south of Asia and east of Africa is called the Indian Ocean. It is sometimes visited by violent hurricanes called *cyclones*, which move in circles. South of the Indian Ocean, around the South Pole, is the *Antarctic Ocean*, which is full of ice like the Arctic Ocean.

Australia.—20. We are now about half way round the world. Before we proceed, we shall turn to the south to visit Australia, which is the largest island in the world. It



32. A CORAL ISLAND.

belongs to Great Britain, and many people from the British Isles have come here to live. The country abounds in excellent pasture, and it has the richest gold mines yet discovered. The island lies south of the Equator, so that the hottest season is near Christmas, and the coolest winds blow from the south. It is night here when we have day in our country.

The Pacific Ocean.—31. We have now to cross the Pacific Ocean, which is the largest of all the oceans. Indeed, it covers one-third of the Earth's surface. It is noted for its many groups of islands. Most of these islands lie in the hot belt called the Torrid Zone; but they are fanned by sea breezes, which make the climate quite agreeable.

The inhabitants of the Pacific Islands live mostly on fruits, which grow without the toil of cultivation. Many of them are savages; others have been converted to Christianity by missionaries. You see a group called the *New Hebrides*, where we shall meet missionaries from our own country. The inhabitants of the *Feejee Islands*, who formerly killed and ate human beings, and those of the Sandwich Islands, have also been instructed by missionaries.

32. Many islands of the Pacific were formed by the coral polyp. These little animals are very numerous in the ocean near the Equator, and they extract lime from the sea water, forming it into a substance called coral. You have often seen rings and other ornaments made of coral. This kind of coral is quite rare, and is obtained by diving deep into the sea. The islands are formed of a coarser kind. The insects build up immense masses of it in branches like the limbs of a tree, and in many strange shapes, until a rock is formed, the top of which is on a level with the sea. The waves then beat against it, throwing up sea-weed and other substances. Soon mosses begin to grow on the rock; then some soil is formed; which after hundreds of years becomes deep and rich, nourishing more beautiful and useful plants.

Some of the coral islands are in the form of a broken ring, the great ocean outside dashing against the shores; and inside the ring of land is a peaceful lake or lagoon. Sometimes there is land in the middle, then a ring of smooth water, then a broken ring of land. Vessels can sail in through the opening in the ring, to seek shelter from storms.

Sailing round America.—33. We have now come to land again. It is *British Columbia*, a province of the Dominion of Canada noted for its gold mines. We could return home by land across the Dominion, but as we wish to go in the ship, we sail southerly thousands of miles along the west coast of North America and South America, until we reach *Cape Horn*. Then we sail northerly along the east coast of America, crossing the Equator again, and passing on our left the *West India Islands*, from which we obtain our sugar. Finally, we arrive at home, having completed our long voyage round the world.

CHAPTER III.

WHAT WE HAVE LEARNED.

About the Land and Water.—34. We have learned that the Earth is round like a ball, and that its surface is partly land and partly water. There is only about half as much land as water. The land is principally in five great bodies—*North America*, *South America*, *Europe*, *Africa*, and *Asia*. Besides these, there are many islands, of which *Australia* is much the largest. The water is also in five great bodies or oceans—the *Atlantic*, the *Pacific*, the *Indian*, the *Arctic*, and the *Antarctic*. These oceans are all connected with one another.

Day and Night.—35. We have seen that all parts of the Earth have not day or night at the same time. Thus, when it is noon with us, it is midnight half way round the Earth, as in the *East India Islands*; it is six o'clock in the evening one-fourth the way round towards the east, as in *Egypt*; and it is six o'clock in the morning one-fourth the way round towards the west, as in the *Sandwich Islands*.

This is because the Earth is always turning round, making one revolution every twenty-four hours. As the Earth is a ball, the Sun can shine on only half of it at once. The middle of the half on which the Sun shines has noon, the western edge of the light portion has morning, and the eastern edge has evening.

Heat and Cold.—36. The countries on the Earth differ much in respect to heat and cold. The hottest countries are in a belt called the *Torrid Zone*, around the middle of the Earth. This is because the Sun is nearly overhead every day in the year. The coldest countries are far north and south, near the poles, because the Sun is here always low, near the horizon, and its rays fall slanting, as in our winter. Midway between the hottest and coldest parts of the Earth are countries like *New Brunswick*, *Nova Scotia*, and *Prince Edward Island*, which have neither extreme heat nor cold, and are said to have a temperate climate.

Summer and Winter.—37. At one time of the year the Sun comes up high at noon, giving us long, hot days; at another time the Sun keeps far away in the south, and the days are short and cold.

The temperate countries on the south of the Equator have their summer when we have our winter, and they have winter during our summer. This happens because the northern part of the Earth is turned towards the Sun during one half the year, and the southern part during the other half.

PART II.

CHAPTER I.

NORTH AMERICA.

History.—38. Four hundred years ago our forefathers were living far away to the eastward, beyond the Atlantic Ocean, in a part of the world called Europe. They did not know that there was such a country as America, the land in which we live. Indeed, most people at that time did not know that the Earth was round. The most distant country which they knew anything about was *India*, in the south of Asia.

39. As the merchants found it very profitable to trade in the spices and other valuable products of India, they were



39. COLUMBUS.

anxious to find the shortest and best way to that country. A sailor named Columbus, who lived in the north of Italy, believing that the Earth was round, thought he could reach India more readily by sailing westerly, than by sailing southerly and easterly around Africa. Columbus was poor, and needed money to carry out his plans. When he stated his opinions and asked for assistance, people shook their heads and thought he was crazy. Finally, having gained the favour and help of Isabella, Queen of Spain, Columbus set out over the unknown Western Ocean on his voyage of discovery. It was a sad day

to the sailors when they left Spain, as they never expected to see their homes again.

40. After a long, weary voyage, Columbus arrived at a group of islands. Believing that he was on the border of India, he called the inhabitants *Indians*. This name was afterwards given to all the natives of America; and when the islands were found to be very far from India, they were called the *West Indies*.

41. There was great excitement in Europe over this wonderful discovery of land beyond the Atlantic Ocean. Many ships were sent over the sea, by different nations, to make further discoveries. It was soon found that, besides the islands discovered by Columbus, the *New World* consisted of two great bodies of land, one lying to the north and the other to the south. One of the leading men in exploring the coasts was named *Americus Vespucius*. In honour of him, the New World was called *America*.

Position.—42. North America is nearly surrounded by the sea—the *Arctic Ocean* on the north, the *Atlantic* on the east, the *Gulf of Mexico* on the south, and the *Pacific Ocean* on the west.

North America is connected with South America by a narrow neck of land, called the *Isthmus of Panama*. *Behring Strait*, on the north-west, separates America from Asia.

Surface.—43. On the east side of North America there is a low coast-region next the Atlantic, and then further inland are the *Appalachian Mountains*. Beyond these highlands is a broad low plain, extending from the Arctic Ocean to the Gulf of Mexico. Still further west, beyond the plain, are highlands again, much longer, broader, and higher than those near the Atlantic. Lofty mountains, called in the north the *Rocky Mountains*, and in Mexico the *Sierra Madre*, extend along the eastern side of these highlands; and other high ranges, called the *Cascade Mountains* and the *Sierra Nevada*, lie in the west. Between the Rocky Mountains and the western ranges are high table-lands, divided into basin-like valleys by short mountains running crosswise.

44. The *Appalachian Mountains* are made up of different ranges—as the *White Mountains*, the *Green Mountains*, the *Catskill*, the *Adirondack*, the *Alleghany*, the *Blue Ridge*, and the *Cumberland Mountains*. They are generally of moderate height, and are covered with forests to their summits. Between the different ranges are beautiful fertile valleys. In some places the ranges are broken by gaps, through which the rivers find their way to the plains.

Mount Washington, in the *White Mountains*, over a mile

NORTH AMERICA



(Divided into Squares of 1000 Miles.)

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high, is one of the loftiest and most noted peaks of the eastern highlands.

45. The Rocky Mountains are wild and broken. On the lower slopes are dense forests; further up are shrubs, coarse grass, and mountain-flowers; still higher are barren, rugged rocks; and the highest peaks are covered with snow all the year.

46. The table-land between the Sierra Nevada and Rocky Mountains has very little rain. There are no forests here, and few plants of any kind, except near the streams which come down from the mountains. The *cactus*—a curious plant which we often see cultivated in the house, and which needs little moisture—is one of the most common native plants towards the south.

There are many salt lakes on this table-land, much saltier than the ocean—so salt that fish cannot live in them. The few streams that come down from the mountains flow into these lakes.

47. Here and there in the Sierra Nevada are deep, narrow gorges, or clefts, called *cañons*, along which the rivers flow. The stream in some places covers the whole breadth at the bottom of the cañon—high walls of rock rising perpendicularly from the water's edge. In some places the rivers rush down terrible precipices.

The western slopes and valleys of the Sierra Nevada are noted for their *giant trees*. The great pines and cypresses of California are 300 or 400 feet high, and 25 feet through.

48. Near the Pacific Ocean are low mountains, called the *Coast Range*. Between these and the Sierra Nevada lies the beautiful fertile valley of the *Sacramento* and *San Joaquin* rivers.

49. In Mexico and Central America there are many volcanoes. *Popocatepetl*, a volcanic peak in Mexico, nearly 3½ miles high, is the highest mountain in North America.

50. The Great Plain between the eastern and western highlands is highest near the middle, from which it slopes towards the north and south. In the central parts of the plain there are rich *prairies* or meadows of great extent, which in their natural state are covered with tall grass, and when cultivated yield large crops of grain.

Rivers.—51. The great rivers of North America are the *Yukon*, *Mackenzie*, *St. Lawrence*, *Mississippi*, and *Columbia*. The *St. Lawrence* and *Mississippi* are grand highways by which vessels sail hundreds of miles into the interior, exchanging the products of different countries.

52. The *Mackenzie* flows through nearly the whole length of the northern slope of the central plain. It flows into several basin-shaped hollows along its course, and forms large lakes, as *Great Slave Lake* and *Great Bear Lake*.

The other large rivers flowing northerly are the *Churchill*, *Saskatchewan*, *Assiniboine*, *Red River*, and *Nelson*. The rivers on this slope are frozen during a large part of the year.

53. The *St. Lawrence*, flowing easterly to the Gulf of *St. Lawrence*, drains five of the greatest lakes in the world far back in the interior, many small rivers flow into large deep basins. In this way the lakes are formed. The first in the chain is called *Lake Superior*, which is larger than the Province of New Brunswick, and is the largest lake in the world. The others are *Huron*, *Michigan*, *Erie*, and *Ontario*.

54. The *Niagara River*, between *Lakes Erie* and *Ontario*, is celebrated for its *Falls*. The river, half a mile wide, rushes headlong over the rocks, and falls perpendicularly 165 feet.

55. In the upper part of the *St. Lawrence*, near *Lake Ontario*, are many beautiful islands, called the *Thousand Isles*. Further down are the *Rapids*, where the water flows very swiftly. Boats going down stream dash through the rapids with great velocity. They cannot sail up against so strong a current, but go round by the canals. On an island in the river, about 600 miles from the sea, is a large city called *Montreal*. Near this place, the *Ottawa*, a large river from the north, joins the *St. Lawrence*. Further down is the mouth of the *St. Maurice*, another large tributary. Then we come to *Quebec*, a fortified city, built partly on the shore and partly on a high bluff overlooking the river. A few miles below *Quebec* are the *Falls of Montmorency*, where a small river rushes over high rocks and falls into the *St. Lawrence*. Before we reach the sea, we pass the mouth of another large tributary, called the *Saguenay*.

56. The other important rivers of North America, flowing easterly, are the *St. John*, *Connecticut*, *Hudson*, *Delaware*, *Susquehanna*, and *Potomac*.

57. The *Mississippi* flows through nearly the whole length of the southern slope of the central plain, and is one of the largest rivers in the world. In the upper part of its course, before it becomes large, it passes through forests, sometimes hurrying amid rapids, and sometimes dashing over falls. Then it comes to the prairie lands, with their tall grass and broad grain-fields. As it goes south it passes through warmer countries, which yield Indian corn, tobacco, cotton, and, in the far south, sugar-cane.

58. Many large rivers flow into the *Mississippi*. From the eastward come the waters of the *Ohio*, gathered along the slopes of the *Alleghanies*; and from the *Rocky Mountains*, on the west, come the *Missouri*, the *Arkansas*, and the *Red River*. The head of the *Missouri* is 4,000 miles from the Gulf, so that the little stream that starts from the mountain side would be nearly six weeks in reaching the sea, at a hundred miles a day.

59. Near the mouth of the *Mississippi* is a large city, called *New Orleans*; and up the river and its tributaries there are other cities, as *St. Louis*, *Cincinnati*, and *Pittsburg*. Steamboats are constantly coming and going between these cities, bringing the products of one country, and carrying away those of another.

60. The *Rio Grande* is a large river west of the *Mississippi*. The *Columbia*, *Fraser*, *Colorado*, and the other rivers flowing into the Pacific, are so broken by rapids and falls that they are not navigable very far.

Climate and Products.—61. In travelling from the Isthmus of Panama to the Arctic Ocean, one should



54. THE NIAGARA ABOVE THE FALLS.

find every variety of climate and vegetation. The hot countries of the south, which have no winter, yield coffee, sugar-cane, cotton, rice, pine-apples, and many fine fruits; a little further north, where the heat is less intense, the climate is suited to Indian corn, grapes, peaches, sweet potatoes, and tobacco; then we come to the countries which have warm summers and cold winters, producing wheat and other kinds of grain, potatoes, apples, and pears. In the far north it is too cold for forests or cultivated fields. The ground freezes very deep during the winter, and only a few inches of the surface thaw during the short summer. Coarse grass, moss, and stunted shrubs are the principal plants.

The countries near the Pacific Ocean have milder winters than those near the Atlantic.

Minerals.—62. Coal and iron are found in New Brunswick, and are abundant in Nova Scotia and Pennsylvania; gold is most plentiful in California, Colorado, and British Columbia; the richest silver mines are in Mexico. New Brunswick furnishes superior antimony.

Animals.—63. The large wild animals of North America are the bison or buffalo, the moose, deer,

musk-ox, grizzly bear, white bear, brown bear, and wolf.



64. HUNTING THE BUFFALO.

64. Buffaloes were formerly very numerous on the prairies of the great lowland plains, where they were much hunted by Indians both for their flesh and hide. As the country

became settled, these animals retreated to the more elevated plains of the far west.

Large droves of wild horses roam over the highland plains of Mexico.

65. The grizzly bear is a large, fierce animal, inhabiting the Rocky Mountains. The white bear is found in the frozen regions of the north.

66. The northern seas abound in useful animals, as the seal, walrus, and whale. Seals are captured in large numbers off the coast of Labrador, chiefly for their oil; and off the coast of Alaska, for their valuable fur. The walrus sometimes comes up on the land, where it is attacked by the hunter. The Esquimaux use its oil both for food and fuel.

Inhabitants.—67. North America contains over 70,000,000 of inhabitants. The greater number of these are white people, whose forefathers lived in Europe.

Indians are numerous in the western highlands, on the northern part of the central plain, and in Mexico. A singular people, called *Esquimaux*, live on the coasts and islands of the Arctic Ocean. In the Southern States there are many *Negroes*, whose ancestors were brought from Africa as slaves.

Divisions.—68. The principal great divisions of North America are the *Dominion of Canada*, the *United States*, and *Mexico*.

The narrow country between Mexico and South America is called *Central America*. To the east of Central America are the *West Indies*. The islands *Greenland* and *Iceland* are sometimes called *Danish America*.

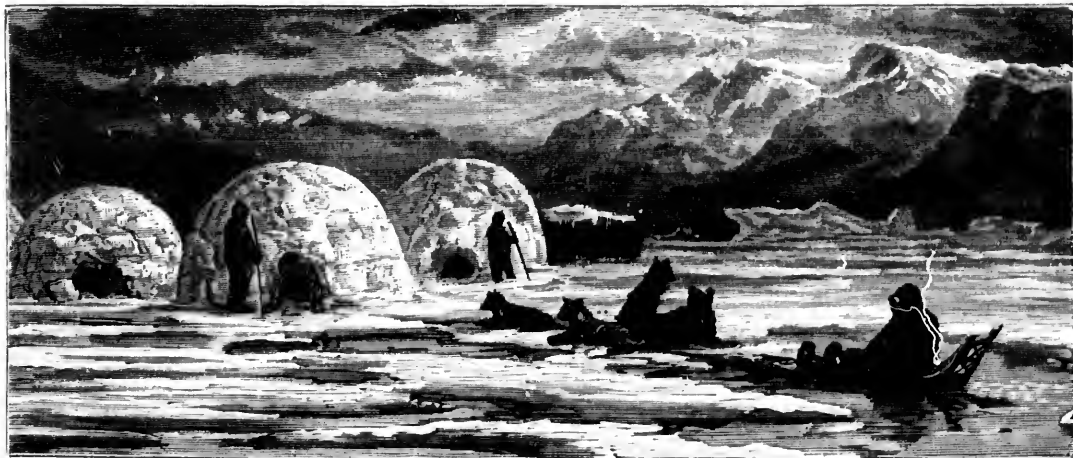
Towns.—69. New York, the largest city in America,



65. WHITE BEAR AND SEAL.

contains more people than the Provinces of New Brunswick, Nova Scotia, and Prince Edward Island.

Government.—70. In America the laws are made by representatives chosen by the people. The United States is the most powerful country in America.



67. ESQUIMAUX SNOW-HUTS.



81. MONTREAL, AND VICTORIA BRIDGE ACROSS THE ST. LAWRENCE.

THE DOMINION OF CANADA.

History.—71. The Dominion of Canada was formed in the year 1867, by the union of the four British Provinces, *New Brunswick, Nova Scotia, Quebec, and Ontario*. It has since been greatly enlarged by the addition of other provinces and territory, so that it now includes all the British possessions in North America except Newfoundland.

Position.—72. The Dominion lies between the Arctic Ocean on the north, and the United States on the south; and between the Atlantic Ocean on the east, and the Pacific on the west. It includes all the northern part of America, except *Alaska* in the north-west, and the islands *Greenland* and *Iceland* on the north-east.

Coast.—73. The principal *Coast Waters* are *Hudson Bay* and *Strait*, the *Gulf of St. Lawrence*, and the *Bay of Fundy*, on the east; and the *Strait of Juan de Fuca*, *Gulf of Georgia*, and *Queen Charlotte Sound*, on the west.

74. The Islands are the *Arctic* groups, on the north: *New-*
(575)

foundland, Anticosti, Magdalen, Prince Edward, and Cape Breton, on the east; and *Vancouver* and *Queen Charlotte*, on the west.

Area.—75. The Dominion includes about three-eighths of North America.

Surface.—76. On the eastern side of the Dominion are low table-lands varied with low mountains; the centre includes the northern slope of the central plain of North America; and the western side includes the northern portion of the *Rocky* and *Cascade Mountains*.

Mount Brown and *Mount Hooker*, in the *Rocky Mountains*, are the highest peaks.

Rivers and Lakes.—77. The two great rivers of the Dominion are the *Mackenzie* and the *St. Lawrence*.

There are several large rivers flowing northerly through the central plain, forming many large lakes along their course. These rivers and lakes abound in fish, but are of little service to trade.

The *River St. Lawrence*, and the great Lakes *Ontario, Erie, Huron, and Superior*, form a road by which vessels can



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sal hundreds of miles into the interior,—almost half way across the country.

Inhabitants.—78. The population of the Dominion is 4,325,000.

Divisions.—79. The Dominion of Canada is made up of the Provinces *New Brunswick, Nova Scotia, Quebec, Ontario, Manitoba, British Columbia, and Prince Edward Island*; the Districts of *Assiniboia, Saskatchewan, Alberta, Athabasca, and Kewatin*, and *North-West and North-East Territories*.

Towns.—80. **Ottawa** (27,412), on the Ottawa River, in the Province of Ontario, is the capital. The finest building in the city is *Parliament House*.

81. **Montreal** is the largest city, and **Quebec** is the oldest city, in the Dominion. The other principal cities are *Toronto, St. John, Halifax, Kingston, Hamilton, and London*.

Nearly all the important towns are connected by railways.

Government.—82. The Parliament, which meets at **Ottawa**, is composed of the *Governor-General*, the *Senate*, and the *House of Commons*.

The *Governor-General* is appointed by the Sovereign of Great Britain. The members of the *Senate* and *House of Commons* come from the various Provinces.

Each Province has a *Lieutenant-Governor* and a Legislature, to manage its local affairs.



83. THE FORESTS IN WINTER.

NEW BRUNSWICK.

History.—83. Two hundred years ago New Brunswick was one vast forest, like the forests which still cover a large part of its surface. Its only inhabitants were Indians, who lived in wigwams, and subsisted by hunting and fishing. In the year 1604, a Frenchman named De Monts, accompanied by a number of his countrymen, seeking a suitable place to form a colony, sailed up the River St. John. In the following year the party settled on the opposite side of the Bay of Fundy, at the place now called Annapolis.

84. Many years after, the French formed various settlements on the east coast and in other parts of New Brunswick. A noted man named La Tour, having received a grant of a large part of the country from the King of France, built a fort

near the mouth of the River St. John. La Tour's wife was a remarkable woman. On one occasion, when the fort was attacked in the absence of her husband, she took command of the soldiers, and bravely, though unsuccessfully, resisted the enemy.

85. In those early times the territory now forming New Brunswick and Nova Scotia was considered as one country, which was called *Acadie* by the French, and *Nova Scotia* by the English. Its ownership was often a subject of dispute and war between the two nations.

In the year 1713, when the French and the English were signing a treaty of peace, France gave up all claim to Nova Scotia; but she still continued to assert her right to New Brunswick, until fifty years later,

when another treaty was signed, confirming the whole country to Great Britain. New Brunswick was considered as a part of Nova Scotia, forming a county called *Sunbury*, until the year 1784, when it became a separate Province.

86. In the year 1825 the eastern part of New Brunswick was laid waste by a great fire. Immense forests, covering nearly one-fourth of the Province, were destroyed. At night a vast sheet of flame, driven by a violent wind, burst suddenly from neighbouring forests upon Newcastle, Douglastown, and other places in the valley of the Miramichi River. The terrified inhabitants, some of whom thought the end of the world had come, fled in every direction to save their lives. Safety was not easily found, for flames were everywhere. Some rushed up to their necks in the river, and beside them were bears and other wild animals, seeking the same protection from the raging fire. Hundreds of people lost their lives, and a very large amount of property was destroyed.

Position.—87. New Brunswick lies between the Restigouche River and Bay Chaleur on the north, and the Bay of Fundy on the south; and between the Gulf of St. Lawrence and Northumberland Strait on the east, and the United States on the west. The Province lies on the eastern side of North America; and beyond it, on the east, lies the Atlantic ocean.

In New Brunswick, Nova Scotia, and Prince Edward Island, the sun rises about four hours earlier than in Vancouver Island, on the west of the Dominion of Canada, and about four hours later than in England, on the east of the Atlantic Ocean. New Brunswick is about half way between the hottest part of the Earth, called the Equator, and the far north, or the North Pole.

Coast.—88. New Brunswick is called a maritime country; by which we mean that it borders on the sea. Its long sea-coast, on the north, east, and south, forming two-thirds of its boundary, and measuring about four hundred miles without following the curve of the shore, gives it great advantages. All along the coast are bays and mouths of rivers, making harbours where vessels can lie in safety to take in and discharge their cargoes. Here, at many places, in the proper season, men are busy loading vessels with lumber, fish, lime, granite, and other products of New Brunswick; ship-carpenters are building new vessels; fishermen are curing their fish, or are out fishing in their vessels a few miles from the shore; and up the rivers are saw-mills, where lumber is made from the logs that are rafted down from the interior.

89. Bay Chaleur extends along the north about ninety miles. Its coast along New Brunswick is low, and has many good harbours; the Quebec coast, on the opposite side of the bay, is high and rocky. The town of *Dathousie* is at the head

of the Bay, and *Bathurst* is about half way down. *A* and *Shippegan* are small islands at the entrance of the Bay. More than two hundred years ago the French had a station at *Miscou* for catching walrus, which at one time were very numerous in these waters, but have long since disappeared. On the west of Shippegan are huge blocks of granite, which have drifted on great ice-cakes from the rocky shores of *Gaspé* in Quebec.

90. *Miramichi Bay* is on the Gulf coast. Ships sail up the bay and river to *Chatham*, *Douglastown*, and *Newcastle*, thirty miles from the sea. *Point Escuminac* is at the entrance of the bay.

Northumberland Strait separates Prince Edward Island from New Brunswick. On this coast are *Kouchibouguac Bay*, *Richibucto Harbour*, *Shediac Harbour*, *Cape Tormentine*, and *Bay Verte*.

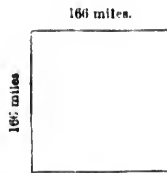
91. The **Bay of Fundy** lies between New Brunswick and Nova Scotia. Its head-waters in New Brunswick are *Chignecto Bay*, *Shepody Bay*, and *Cumberland Basin*. They are noted for the great rise and fall of the tides, the difference between high and low water being sometimes over fifty feet! Along these head-waters the coast is generally low and sandy, and there are in some parts extensive marsh-lands, so low that they require to be protected from the sea by dikes. In the autumn these fertile marshes are thickly dotted with haystacks. Near this coast are *Sackville*, *Dorchester*, and *Hopewell*; and up the *Peticodiac River*, at the *Bend*, is *Moncton*.

92. At the head of *Cumberland Basin*, near *Sackville*, are old battle-grounds of the British and the French. Each built here a strong fortress for protection from the fire of the enemy. On the north of the *Missiquash River*—which now forms the boundary between New Brunswick and Nova Scotia—stood *Fort Beauséjour*, where the French entrenched themselves; on the south of this river was *Fort Lawrence*, the stronghold of the British troops. These forts were little over a mile apart. The French fort was taken by Colonel *Moncton* in 1755, and its name was changed to *Fort Cumberland*. Remains of these old forts, constructed over one hundred years ago, are still in existence.

93. West of *Cape Enragé* the coast on the Bay of Fundy is rugged, and is bordered by a high wall of dark-coloured rock called *trap*. The harbours are generally small, and can be entered by vessels only at high water. The bay is often covered with fog, which extends a considerable distance inland, so dense as to hide the face of the sun.

94. On the coast are *Quaco Head*, *Cape Spencer*, and *Mispeck*. Further west is *St. John Harbour*—large, safe, and open all the year. It is also noted for its shad and salmon fisheries. The *River St. John* flows into this harbour, by which large quantities of lumber and other products are brought down to *St. John city*.

95. The coast west of *St. John* continues rugged, but there are many good harbours. Here are *Point Lepreau*, *Mace's Bay*, *Passamaquoddy Bay*, and *St. Andrew's Bay*. The island of *Grand Manan*, off this coast, is about 20 miles long and 8 miles broad. *Campobello* is 8 miles long; and *Deer Island* is about the same size. The town of *St. Andrews* is at the mouth of the *St. Croix River*; and *St. Stephen* is a few miles up the river.



Area.—96. If all the land of New Brunswick were formed into a square, each side would measure 160 miles. Estimated as the farmers measure their land, the Province contains $17\frac{1}{2}$ million acres. The length of the Province, north and

south, is about 200 miles; the breadth, east and west, is 160 miles.

Surface.—97. By looking on the map of New Brunswick, we observe from the course of the rivers that the eastern part of the country slopes towards the north-east, and that the western part slopes towards the south-east. The streams flow down these slopes as the rain on the two sides of a roof. The highest ridge, dividing two such slopes, is called a water-shed.

98. The *Highlands* of New Brunswick are in the north-west of the Province. A mountain range extends from the north-west of Carleton County, in a north-easterly direction, passing through Victoria, Northumberland, and Restigouche Counties. *Mars Hill*, *Moose Mountain*, *Bald Mountain*, and *Squaw's Cap* are high peaks—some of them nearly half a mile high.

Mountains of less height extend along the south—in Charlotte, King's, St. John, and Albert Counties.

Rivers and Lakes.—99. The principal rivers flowing easterly are the *Restigouche*, *Nepisiguit*, *Tracadie*, *Tabusintac*, *Miramichi*, *Kouchibouguac*, *Richibucto*, *Buctouche*, and *Cocagne*. Those flowing to the Bay of Fundy are the *Peticodiac*, *St. John*—(branches on the right—*Aroostook*, *Oromocto*, and *Nerepis*; branches on the left—*Madawaska*, *Tobique*, *Nashwaak*, *Jemseg*, *Washademoak*, *Belleisle*, and *Kennebecasis*)—the *Musquash*, *Lepreau*, *Magaguadavic*, and *St. Croix*.

100. The *Restigouche*—an Indian name, meaning according to some the *broad river*, according to others the *five-fingered river*—is 200 miles long. The *Nepisiguit*, 80 miles long, is noted for its falls. It is not navigable, but large quantities of timber are floated down its rapid current.

The *Miramichi* is a long river, navigable for large vessels to the junction of its two principal branches.

101. The *St. John* is the largest river in New Brunswick, and is much admired for its beautiful scenery. It is navigable for large steamers to Fredericton, 85 miles from the sea; for small steamers to Woodstock, 150 miles; and in the rainy season to Grand Falls, 225 miles. At *Grand Falls* the water has a perpendicular fall of 74 feet.

Many of the tributaries of the *St. John* are large rivers. The *Oromocto* (the deep river) is navigable for small vessels 20 miles. The *Madawaska* is navigable for small steamers to *Lake Temiscouata*. The *Tobique* is a large river, flowing through a forest country. The *Jemseg* forms the outlet of *Grand Lake* and *Salmon River*, by which small steamers can sail up 40 miles from the *St. John*. The *Washademoak* is

for twenty miles nearly a mile wide. The *Kennebecasis*, 80 miles long, forms a beautiful lake or bay for twenty-five miles of its course. This broad part of the river is a favourite water for rowing matches. The *St. John* and its tributaries present many busy scenes, with their numerous saw-mills and rafts of logs and lumber. The *St. Croix* rises in a group of lakes, and forms a portion of the boundary between the United States and New Brunswick.

Climate and Products.—102. The winters in New Brunswick are long and cold; but the snow keeps the ground warm, and aids the lumbermen. The summers are hot, with frequent rains, and crops grow rapidly. The farmer finds excellent soil in New Brunswick. He cultivates wheat, and other kinds of grain; potatoes, turnips, and other vegetables; and apples.

The forests, which are very extensive, contain pine, spruce, larch or hackmatack, cedar, birch, beech, oak, maple, elm, ash, butternut, and other kinds of trees.

The mineral products include iron, coal, antimony lime, and granite.

Animals.—103. The larger wild animals are the moose, caribou, deer, wolf, and bear.

The moose, which lives on vegetable food like the ox, is the largest wild animal in New Brunswick. His horns, called antlers, are not hollow like those of the ox, but are solid and



103. THE MOOSE.

branching. They fall off every year, and new ones grow in their place. Moose are much hunted for their hides and flesh. The caribou is somewhat like the moose, but smaller. The wolf and bear are flesh-eaters, and destroy the farmer's sheep.

There are many smaller wild animals in New Brunswick,

which yield valuable fur, as the fox, beaver, otter, mink, musk-rat, marten, raccoon, and lynx.

Inhabitants.—104. The inhabitants of New Brunswick were numbered by Government officers in 1881; and the total number, including men, women, and children, was 321,000.

Most of the inhabitants are white people, whose ancestors came across the Atlantic from Great Britain and Ireland. A portion, called *Acadians*, are descendants of the early French settlers.

There are about one thousand Indians in New Brunswick; they belong to two different tribes—*Micmacs* and *Milicetes*.

The people of New Brunswick believe in the Christian religion. About two-thirds belong to the various Protestant Churches, and one-third are Roman Catholics.

Divisions.—105. New Brunswick is divided into fifteen *Counties*. In each county the courts are held, and other public business is transacted, in some central town or village called the *Shire Town*.

The following are the counties and shire towns:—

Counties.	Shire Towns.
RESTIGOUCHE.....	Dalhousie.
GLOUCESTER.....	Bathurst.
NORTHUMBERLAND.....	Newcastle.
KENT.....	Richibucto.
WESTMORELAND.....	Dorchester.
ALBERT.....	Hillsborough.
ST. JOHN.....	St. John.
CHARLOTTE.....	St. Andrews.
KING'S.....	Hampton.
QUEEN'S.....	Gagetown.
SUNBURY.....	Oromocto.
YORK.....	Fredericton.
CARLETON.....	Woodstock.
VICTORIA.....	Grand Falls.
MADAWASKA.....	Edmunston.

Towns.—106. Towns and cities are usually situated near a harbour, a river, or a railroad. From the seaport towns of New Brunswick fish, lumber, lime, ships, and other products of the country, are exported in exchange for those things which New Brunswick does not produce.

107. **Fredericton**, on the River St. John, 85 miles from its mouth, is called the capital of New Brunswick, because in it the Governor resides and the laws are made. It has about 6,128 inhabitants. The city has a beautiful situation on a level plain. Behind the city is a low range of hills; and in front flows the River St. John, which is here about half a mile broad. The most important buildings are—Government House, where the Governor resides; Parliament House, in which the Assembly meets; the University; the Normal School; the Episcopal Cathedral; and the Exhibition Building.

108. **St. John** is five times as large as Fredericton, having 26,128 inhabitants. It is connected with Nova Scotia and the

United States by railroad; and its fine harbour at the mouth of the St. John River affords great facilities for trade. *Carleton*, on the opposite side of the harbour, forms part of St. John City. *Portland*, though closely adjoining, is a separate town.

109. **Sackville** is noted for its seminaries. *Moncton*, *St. Stephen*, *St. Andrews*, *Miltoown*, *Woodstock*, *Newcastle*, *Chatham*, and *Shediac* are important towns.

Railways.—110. In addition to good common roads through all the settled parts of the country, and many navigable rivers, New Brunswick has several railways, which make travelling easy and pleasant, and aid in conveying goods.

Government.—111. The Lieutenant-Governor is the head-officer in the Government of New Brunswick. Some of the laws are made by the *Local Legislature*, which meets at Fredericton; other laws are made by the *Dominion Parliament* at Ottawa.

Some countries are so badly governed that there is no one to punish robbers, murderers, and other evil-doers. In such countries there can be no improvement. Industry and economy only render a man a richer prey for the plunderers. In some countries the king, or other chief ruler, compels the people to pay large taxes that he may have means to gratify his selfish desires. In New Brunswick we have good laws, which cause evil-doers to be punished; and the taxes we pay are expended in making roads and bridges, in educating the children, and in various other ways for the improvement of the country and the happiness of the people. We have great cause to be thankful to God for a good and well-governed country.

NOVA SCOTIA.

History.—112. When discovered by Europeans, Nova Scotia, like New Brunswick, was wholly a dense forest, inhabited by Indians and wild animals.

The first settlement by white people was formed by the French at Annapolis, in the year 1605. The French gave this place the name of *Port Royal*, and they called the whole country *Acadie*. Soon the English came and claimed the country, as Cabot, a countryman of theirs, had discovered it a hundred years before the French came to Annapolis. They gave it the name *Nova Scotia*, which is the Latin for *New Scotland*.

113. For more than a hundred years Nova Scotia was a scene of contention between the French and the English. It was now held by the one, and now by the other; and the colonists of each were in turn robbed, and sometimes killed. This frequent change of ownership, and the violent hostility between the two nations, was a serious injury to the country, interfering with its rapid settlement and prosperity.

114. In the year 1710, *Port Royal* was finally taken from the French; and three years after, Nova Scotia was given up to the English. The *Acadians*, as the French inhabitants were called, were told that they might remain in the country if they would obey the laws. Afterwards, as the *Acadians* were not regarded as very good British subjects, the English

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colonists did not think it was safe to allow them to remain any longer. Accordingly, the Governor sent soldiers, who seized all the Acadians they could find, and sent them out of the country.

Position.—115. The Province of Nova Scotia, now made up of the *Peninsula of Nova Scotia* and the *Island of Cape Breton*, is on the east side of North America, extending into the Atlantic Ocean.

116. Nova Scotia is nearly surrounded by water, hence it is called a *Peninsula*. The narrow neck of land between Cumberland Basin and Bay Verte is called an *isthmus*. A canal is to be cut across the isthmus so that vessels may sail from one water to the other.

Coast.—117. We observe from the map that Nova Scotia is long and narrow; that it is nearly surrounded by water; and that the sea in many places runs into the land, forming bays and harbours. The country has thus great advantages for trade, as goods can be carried by sea much cheaper than by land.

118. The *Bay of Fundy*, on the north-west, has generally high and rocky shores. Near the mouth of the Bay are *Brier Island*, *Long Island*, and *Digby Neck*, separated from the mainland by *St. Mary's Bay*. *Digby Gut* is a gap in the seawall, through which the water enters and forms *Annapolis Basin*. Further up, the bay is divided by a tongue of land ending in *Cape Chiegnecto*. On the north are *Chiegnecto Bay*, *Cumberland Basin*, and *Shepody Bay*; on the south, *Minas Channel*, *Minas Basin*, and *Cobequid Bay*. At the entrance of Minas Basin is a high, rocky bluff, called *Cape Blomidon*.

119. *Northumberland Strait* lies on the north, between Nova Scotia and Prince Edward Island. *St. George's Bay*, the *Strait of Canso*, and *Chedabucto Bay*, separate Cape Breton from Nova Scotia. *Cape St. George* is at the entrance of *St. George's Bay*, and *Cape Canso* at the entrance of *Chedabucto Bay*. Many fishing and trading vessels pass through the *Strait of Canso*.

120. The *Bras d'Or* waters form irregular bays in the interior of Cape Breton. They enter on the north-east by two narrow channels, called *Great Bras d'Or*, enclosing *Boulardarie Island*. A canal, half a mile long, connects *Bras d'Or Lake* and *St. Peter's Bay*. *Cape North* is a high rocky cape on the north of Cape Breton. The coast here is dangerous, and seamen are warned by light-houses on *St. Paul's Island*. *Sable Island*, noted for its wild ponies is a low, sandy island, 100 miles south of Cape Breton.

121. The Atlantic coast has many fine harbours. On the east of Cape Breton is *Sydney Harbour*, where large quantities of coal are shipped; and on the south is *Louisburg Harbour*, where the French once had a strong town. Further west is *Isle Madame*, separated from the mainland by *Lennox Passage*.

On the south of Nova Scotia are *Halifax Harbour* and *Bedford Basin*, *Margaret's Bay*, and *Mahone Bay*. *Cape Sambro* is near the entrance of Halifax Harbour. *Crown Point* is a high cape between Margaret and Mahone Bays. *Cape Sable* is the most southerly land of Nova Scotia.



121. SHAD FISHING.

The coast waters abound in herring, mackerel, cod, shad, and other fish.

Area.—122. Nova Scotia is about two-thirds the size of New Brunswick. It contains the same number of acres as a country in the form of a square, each side measuring 136 miles.

Cape Breton contains about one-sixth of the whole area.

Surface.—123. The highest parts of a country from which streams flow are called *water-sheds*. A central *water-shed* divides Nova Scotia into a *northerly* and a *southerly slope*.

The *South Mountain* forms the western portion of the central *water-shed*.

The *North Mountain*, composed of dark-coloured rock, forms a wall along the margin of the Bay of Fundy.

The *Cobequid Mountains*, in the north, contain superior iron ore.

The mountains in the north of Cape Breton are the highest in the Province.

A beautiful sheltered valley lies between the North and South Mountains. *Annapolis*, the oldest town in Nova Scotia, is on *Annapolis Basin*, at the west end of this valley; *Canard* and *Grand Pré*, also noted for early French settlements, are at the east end, near Minas Basin. The expulsion of the Acadians from these places forms the subject of Longfellow's beautiful poem "Evangeline."

Rivers and Lakes.—124. The rivers of Nova Scotia are quite small. The largest are the *Shubenacadie*, *East River* of Pictou, *St. Mary's*, *La Have*, *Liverpool*, *Annapolis*, and *Cornwallis*.

The largest lakes are *Rossignol*, *Grand Lake*, *Ship Harbour Lake*, and *Ainslie*.

Climate and Products.—125. Nova Scotia has long cold winters, and short warm summers. The autumn is a very pleasant season.

The most important products of the soil are various kinds of grain and vegetables. Extensive marshes, intervales, and uplands, yield hay for the cattle, horses, and sheep, during the long winters.

The valley between the North and South Mountains is celebrated for its fine apples.

126. Large forests of pine, spruce, birch, maple, and other trees, yield valuable timber. The largest wild animals in the forests are the moose, caribou, and bear. In the winter the Indians bind broad snow-shoes on their feet and hunt the moose through the deep snow.

127. The most important mineral products are *coal*, *iron*, and *gold*.

The most valuable coal mines are in Cape Breton, Pictou, and Cumberland Counties. The colliers dig very deep into the earth for coal. As the sun-light cannot enter the mines, the colliers work by lamp-light. The mines sometimes contain an explosive gas which is set on fire by the lamps. Coal is formed from the wood of immense forests which covered the earth thousands of years ago.

Inhabitants.—128. In 1881 the Government appointed men to visit every family in the Province and find the number of persons it included. This is called "taking the *census*." The number of people in Nova Scotia at that time was 440,000.

Divisions.—The Province is divided into eighteen *Counties*,—fourteen in Nova Scotia, and four in Cape Breton. The town in each county in which the courts are held is called the *county town*.

The counties and county towns can be learned from the map.

Towns.—129. Halifax, the capital of Nova Scotia, contains about 36,000 inhabitants. It has a superior harbour, and ships may be seen here from many foreign countries. The finest buildings are, the *Province Building*, in which the members of the Legislature meet; and the *Dominion Building*, containing the Post Office and other public offices.

130. Next to Halifax, the largest towns in Nova Scotia are, *Dartmouth*, *Yarmouth*, *Truro*, *Pictou*, *New Glasgow Lunenburg*, *Liverpool*, *Shelburne*, and *Sydney*.

All the county towns are important places of trade. From the many harbours on the coast the products of Nova Scotia,

consisting of coal, fish, potatoes, apples, wood, lumber, and other things, are sent to other countries.

QUEBEC.

History.—131. This Province formerly belonged to the French. Over one hundred years ago, in 1759, the English sent war-ships and soldiers, who took all the strong places and compelled the French to give up the country.

A brave commander, named General Wolfe, sailed up the St. Lawrence in 1759 to take Quebec. This was a very strong town, and was well guarded. Wolfe led his men by night up the steep banks to the heights on which the city is built. On the following day a great battle was fought, in which the French were defeated. General Wolfe, and General Montcalm, the French commander, were both slain.

Position.—132. The Province of Quebec is on the north and north-east of New Brunswick, lying on both sides of the St. Lawrence. The inhabitants for the most part live near the river, the back country being covered with forests.

Area.—133. Quebec is more than four times the size of New Brunswick and Nova Scotia taken together.

Rivers.—134. This Province is noted for its large rivers.

The St. Lawrence is navigable for large ships to Montreal. A little below Quebec it is ten miles wide, and it becomes much broader before it reaches the Gulf. The other rivers are tributaries of the St. Lawrence.

The *Ottawa* is a long river, receives many tributaries, and forms, in its course, several lakes, rapids, and falls.

The *St. Maurice* flows from lakes hundreds of miles back in the forests. It enters the St. Lawrence by three mouths. A town situated here is called *Three Rivers*.

The *Saguenay* forms a large lake called *St. John*. This is a deep river, and is noted for the high rocky cliffs along its banks.

The *Richelien* flows from *Lake Champlain*.

Climate and Products.—135. The winters in Quebec are long and cold. The rivers are frozen over for five months in the year. The country is generally not well suited to agriculture.

The forests are of vast extent, and lumber is one of the most important exports. The lumber is brought down to Montreal and Quebec in rafts, formed of many logs bound together.

136. The fisheries of the coast and the St. Lawrence are a source of great wealth. The *Magdalen Islands* and *Bonavista* are important fishing stations.

Population.—137. A large proportion of the inhabitants of Quebec are French, and speak the French language. The whole population is 1,358,000.

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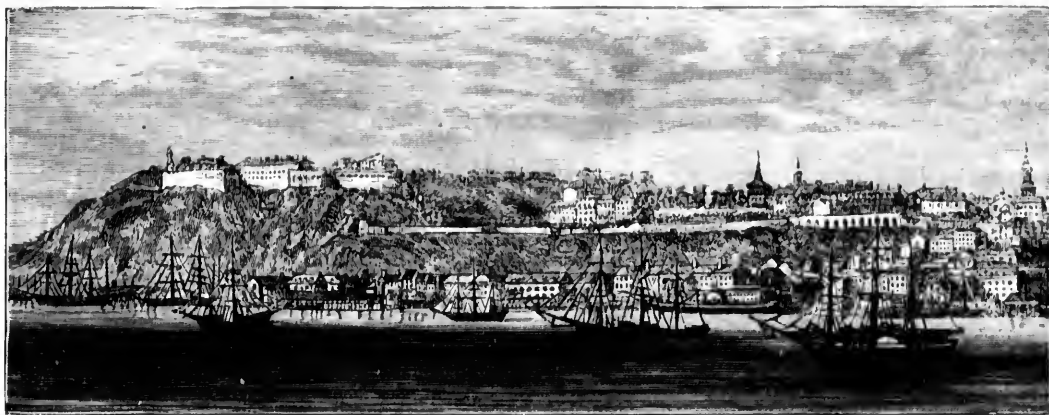
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Towns.—138. **Quebec** (62,000), the capital, situated on a point of land between the River St. Lawrence and its tributary the St. Charles, is said to be the most strongly fortified city in America. Part of the city is on the low ground near the river, where ship-building and a large portion of the trade are carried on. The Upper Town, containing the chief residences and public buildings, is situated on the rocky cliffs over three hundred feet above the level of the river. Quebec is noted for the beautiful scenery in its neighbourhood. The St. Lawrence is here about two miles in width, and is navigable for large ocean ships. The lumber trade is a source of much wealth to the city.

Lévis (7,600) is situated on the St. Lawrence, opposite Quebec.

139. **Montreal** (140,000), on an island in the St. Lawrence, is near the site of an old Indian village called *Hochelaga*. It is the largest city in the Dominion, and is the most important in trade and manufactures. It is also noted for its beautiful stone buildings. Near the city is the great Victoria Bridge, by which the rail-cars cross the St. Lawrence. This bridge, made of pieces of iron strongly riveted together, and resting on stone piers one hundred feet above the water, forms an immense tube nearly two miles long, through which the cars pass in crossing the river.

140. **Three Rivers**, situated at the threefold mouth of the St. Maurice, **St. Hyacinthe**, and **Sherbrooke**, are important cities. **Hull** is on the Ottawa River, opposite the city of Ottawa. **Rimouski** has an extensive lumber trade, and is a port of call for English steamers.



138. QUEBEC—(UPPER).

ONTARIO.

History.—141. Ontario was formerly called *Upper Canada*, and also *Canada West*. It received its present name in 1867.

Position.—142. Ontario is situated between the great lakes, on the west and south, and the Ottawa River, on the north-east. It is bounded on the north by James Bay and the Albany River, and extends westerly to the Lake of the Woods. The Province is hundreds of miles from the sea; but a water-road between different places, and to the ocean, is furnished by the lakes, the River St. Lawrence, and numerous canals.

Area and Importance.—143. The Province of Ontario is about seven times larger than New Brunswick. It is the most populous and wealthy Province in the Dominion, and it has vast and varied resources in its soil, its forests, and its mines.

Physical Features.—144. Ontario is for the most part a level country. The great inland waters, known as the Great Lakes, surpass anything of their kind in the world.

145. **Lake Superior** is the largest body of fresh water in the world. Its waters flow into Lake Huron by a short river called the *St. Mary*. The rapids in this river are overcome by a canal which passes through the territory of New York State. *Prince Arthur's Landing* is an important port.

146. **Lake Huron** is noted for its fisheries. Its western arm is called *Georgian Bay*, on the south of which is *Nottawasaga Bay*. In the northern part of the lake are several islands, of which *Grand Manitoulin* is the largest. The waters of Lake Huron flow southerly through *River St. Clair*, *Lake St. Clair*, and *Detroit River*, to Lake Erie. The town of *Sarnia* stands at the head of *St. Clair River*. *Windsor* is on the *Detroit River*, opposite the city of *Detroit*, in the United States.

147. **Lake Erie** is noted for its violent storms. Its waters flow onward to Lake Ontario through Niagara River, dashing over the great *Niagara Falls* on their way. The *Welland Canal* forms a grand highway by which ships pass from one lake to the other.

148. **Lake Ontario** is the smallest of the five great lakes. The western end of the lake is called *Burlington Bay*. *Quinté Bay*, on the north, forms the peninsula of *Prince Edward County*. This lake is noted as a highway of trade for the Province of Ontario, and along its shores are many prosperous cities and towns: *Hamilton, Toronto, Kingston, Port Hope, Cobourg, and Belleville*.

149. The **River St. Lawrence**, in its upper course, forms the *Lake of the Thousand Isles*, famed for its numerous beautiful islands. Between this lake and Montreal the navigation of the river is in several places obstructed by rapids. The obstructions are overcome by canals, through which steamers pass in ascending the river; but in going down stream the steamers, skilfully guided, pass through the rapids in safety.

Climate and Products.—150. Ontario has a temperate and healthful climate. The winter is cold, but less severe than in the other Provinces of the Dominion. In the peninsula formed by the great lakes the climate is milder than in other parts of the Province.

Ontario is one of the finest agricultural countries in the world, producing wheat and other grain in abundance. Large quantities of flour and grain are exported to the eastern Provinces, and to Great Britain. Apples are raised in nearly all parts of the country; and grapes and peaches are successfully cultivated, especially in the warmer counties near the lakes.

Ontario has extensive **forests**, which yield immense quantities of timber, lumber, and potash, for foreign markets.

Minerals.—151. The most important mineral products are silver, copper, iron, lime, petroleum, and salt.

The **copper** and **silver** mines on the shores of Lakes Huron and Superior are of great value. **Petroleum** is abundant at Oil Springs, Petrolia, and Bothwell in Lanark County, and in other places south of Lake Huron. It is obtained by boring deep into the earth with augers. When purified, it forms the oil which we use in our lamps. **Salt** is obtained from salt springs at Goderich, Seaforth, and other places on the east of Lake Huron.

Inhabitants.—152. The population of Ontario in 1881 was 1,913,000. Excellent provision is made for the education of the people in the free common schools, the high schools, and the colleges of the Province.

Towns.—153. **Toronto** is the capital and the largest city in the Province. Among its fine public buildings are the *University, Osgoode Hall, the Custom-House, and the Normal School*.

Ottawa, the capital of the Dominion, is on the Ottawa River, near the Chaudière Falls, about 100 miles from Montreal. Its lumber trade is a source of great wealth.

Kingston, near the Lake of the Thousand Isles, is an old fortified town, and has many fine stone buildings.

Hamilton, on Burlington Bay, the second city in size, has a large trade with the west.

London, on the Thames, is surrounded by a rich farming country, and has a large trade in grain.

St. Catharines, on the Welland Canal, is noted for its mineral springs, which attract many invalids during the summer months.

Brantford, Guelph, Chatham, Dundas, Galt, Woodstock, Ingersoll, Stratford, Collingwood, Goderich, Sarnia, Windsor, Cobourg, Port Hope, Belleville, Peterborough, Lindsay, Perth, and Brockville are important towns.

MANITOBA.

154. Manitoba, sometimes called the *Prairie Province*, was formerly known as *Red River Settlement*. It received its present name and became a Province of the Dominion in 1870.

This Province lies north of that portion of the United States called Minnesota, and it is about midway between the Atlantic and the Pacific Ocean.

Manitoba is 500 miles in length from east to west, and 280 miles in breadth from north to south. It is about four and a half times as large as New Brunswick.

Physical Features.—155. Manitoba is for the most part a level or undulating prairie country, sloping towards the north. In the north are the large lakes *Winnipeg, Winnipegosis, and Manitoba*. These lakes abound in fish of various kinds, and are also the resort of wild fowl.

156. **Red River**, rising in Minnesota, crosses the country from south to north, and flows into Lake Winnipeg. The **Assiniboine**, flowing from the west, joins Red River at the city of Winnipeg.

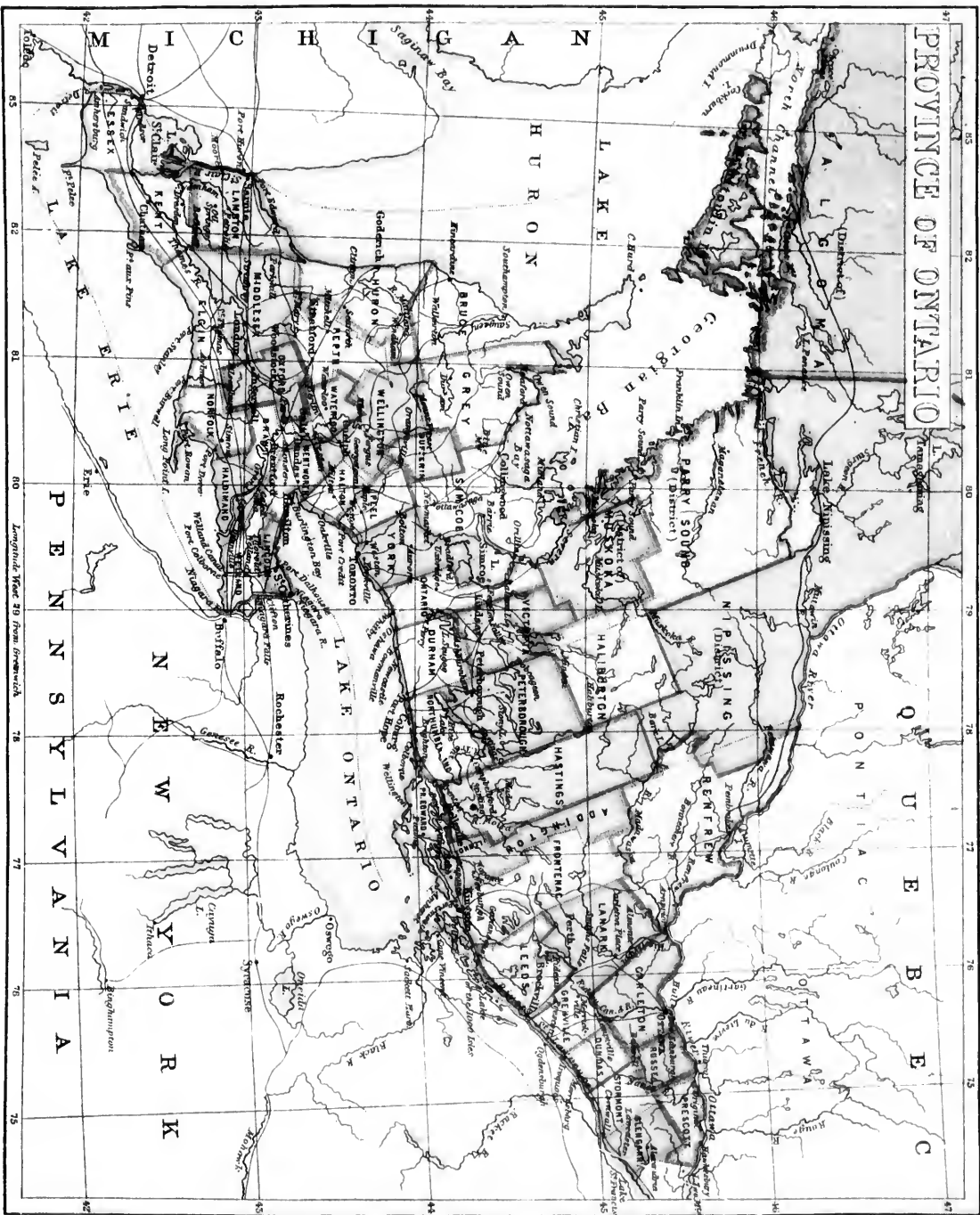
157. The winter is much colder and less changeable than in Nova Scotia; but the air is so dry that the cold does not seem severe. Spring comes on rapidly, sometimes causing destructive freshets.

158. The **soil** is very deep and fertile, yielding large crops of grain, vegetables, and flax.

The **woodlands** are chiefly along the banks of the rivers.

159. The **inhabitants** in 1870 were principally Indians and half-breeds; but since that date many settlers have come in from the other Provinces and from Europe. The population in 1881 was 66,000.

PROVINCE OF ONTARIO



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Towns.—160. **Winnipeg** (8,000), the capital, situated at the junction of Red River and the Assiniboine, is a rapidly growing city.

The other most important places are *Emerson, Portage la Prairie, Selkirk, and Brandon.*

BRITISH COLUMBIA.

161. British Columbia is the most westerly Province of the Dominion, including Vancouver Island and all the mainland of British America west of the Rocky Mountains. It was admitted as a Province of the Dominion in the year 1871.

British Columbia is nearly twelve and a half times as large as the Province of New Brunswick.

Physical Features.—162. British Columbia is a rugged highland country. The **Rocky Mountains** lie along the eastern border, and the **Coast Mountains** are in the west, near the Pacific Ocean. Between these mountain ranges are high table-lands.

Some of the highest peaks of the Rocky Mountains, as *Mount Hooker* and *Mount Brown*, are about three miles above the level of the sea.

163. The rivers, throughout a large part of their course, flow rapidly over rocky beds, at the bottom of narrow gorges. In many places rocky cliffs rise on each side, almost perpendicularly, for hundreds of feet.

The principal rivers are the *Simpson, Finlay, Fraser, Thompson, and Columbia.* The fisheries of the rivers and coast-waters are very important.

164. **Vancouver Island**, separated from the mainland by *Queen Charlotte Sound, the Gulf of Georgia,* and the *Strait of Juan de Fuca,* is about half as large as the Province of New Brunswick.

165. The **climate** of Vancouver Island and of the country on the west of the Cascade Mountains is mild and humid. The table-lands of the interior have but little rain, and the cold is very severe in winter. The **agricultural products** are similar to those of the other Provinces, but farming does not receive much attention.

The mountain slopes are covered with dense forests. On the west of the Cascade Mountains the trees grow to an immense size, and yield valuable timber. The table-lands are nearly destitute of trees, but yield grass and herbs, which afford good pasturage.

166. British Columbia was once famous for its gold mines. Vancouver Island has valuable coal mines.

167. The **fisheries** are very valuable. In the rivers are salmon and sturgeon of immense size; and the coast-waters teem with herring, cod, and halibut.

168. About two-thirds of the people in British Columbia are Indians and Chinese. Population in 1881, 49,459.

169. **Victoria** (5,925), the capital of the Province, is situated on the south-east of Vancouver Island. It has a fine harbour.

Malmo is near the coal mines. **New Westminster**, on the Fraser River, is the largest place on the mainland.

PRINCE EDWARD ISLAND.

History.—170. Prince Edward Island was called *St. John* until the year 1800, when it received its present name in honour of Prince Edward, Queen Victoria's father.

Position.—171. Prince Edward Island is situated on the south of the Gulf of St. Lawrence, and is separated from Nova Scotia and New Brunswick by Northumberland Strait.

The Island is distant from New Brunswick 9 miles; from Nova Scotia, 15 miles; and from Cape Breton, 30 miles.

172. The principal **Coast Waters** are *Richmond Bay, Cardigan Bay, Hillsboro' Bay, Bedeque Harbour, and Eymont Bay.*

173. The **area** of Prince Edward Island is about one thirtieth that of the Province of New Brunswick.

174. The **surface** is low and undulating, except near the middle, where it is more hilly. The **climate** is temperate. The summers are not so hot, nor are the winters so cold, as in Nova Scotia. The **soil** is very fertile, and large quantities of oats and potatoes are shipped to other countries. Horses and dairy produce are also important exports.

175. There are more **inhabitants** in proportion to the size of the country than in any other Province of the Dominion. The population in 1881 was 108,981.

176. The Island is divided into three **Counties**—*Prince, Queen's, and King's.*

177. **Charlottetown** (11,485), the capital and largest town, has a fine harbour.

Summerside, on Bedeque Harbour, is the chief town in the west of the Island. **Georgetown** is the most important town in the east.

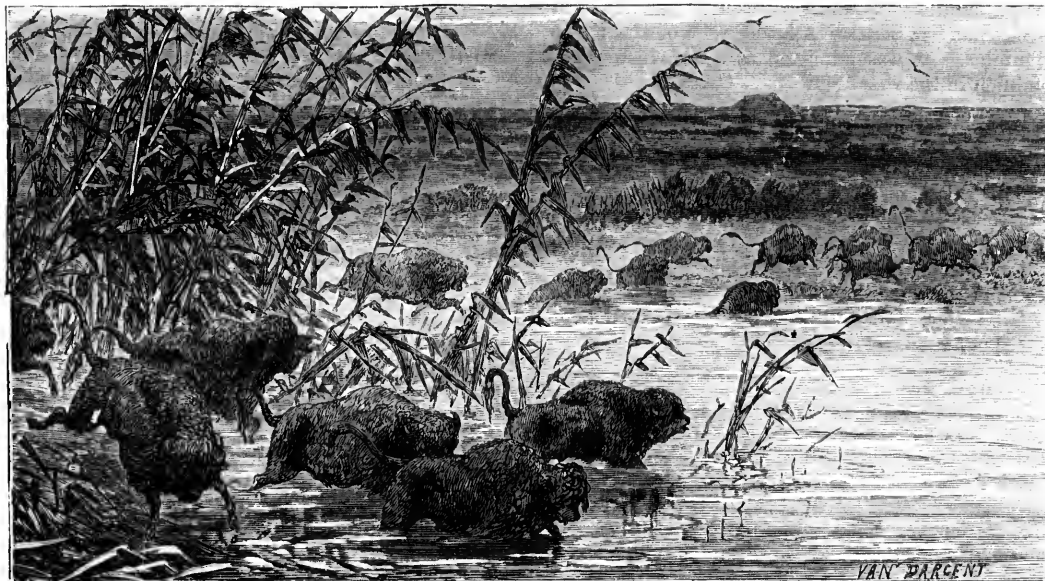
DISTRICTS AND TERRITORIES.

178. On the west and north-west of Manitoba, in the basins of the *North and South Saskatchewan,* the

Athabasca, and *Peace Rivers*, is a vast prairie country, which has been divided into four *Districts*, each three or four times larger than the Province of New Brunswick. **Saskatchewan** and **Assiniboia** adjoin Manitoba; **Alberta** lies in the west of these, and extends to the Rocky Mountains; and **Athabasca** lies on the north of Alberta, in the valleys of the Athabasca and Peace Rivers.

179. These Districts comprise extensive grassy

plains, varied with lakes, marshy tracts, and beautiful park-like groves of poplar and other trees along the banks of the rivers. The soil is deep and rich, well suited to the growth of wheat. The climate is much like that of Ontario, only the winters are more severe and the summer nights are cooler. These rich prairie lands, once the feeding grounds of roving herds of buffalo, now opened up for settlement by the Pacific Railway, are rapidly becoming productive farms.



179. HERD OF BUFFALOES ON THE PRAIRIE.

180. Many people from the older Provinces and other countries have settled in these Districts; but as yet Indians and half-breeds form the majority of the population. The population in 1881 was estimated at 56,446.

181. The most important places are **Regina**, the capital of Assiniboia, **Qu'Appelle**, **Medicine Hat**, **Battleford**, **Prince Albert**, **Edmonton**, **Fort M'Leod**, and **Dunvegan**.

182. The **District of Keewatin**, on the north of Manitoba, has some fertile lands; but it is for the most part a marshy, rocky region, abounding in lakes and rivers. **Fort York** is a trading-post on Hudson Bay. It is visited by vessels during a few weeks at midsummer.

183. **The North-West Territory** extends from Saskatch-

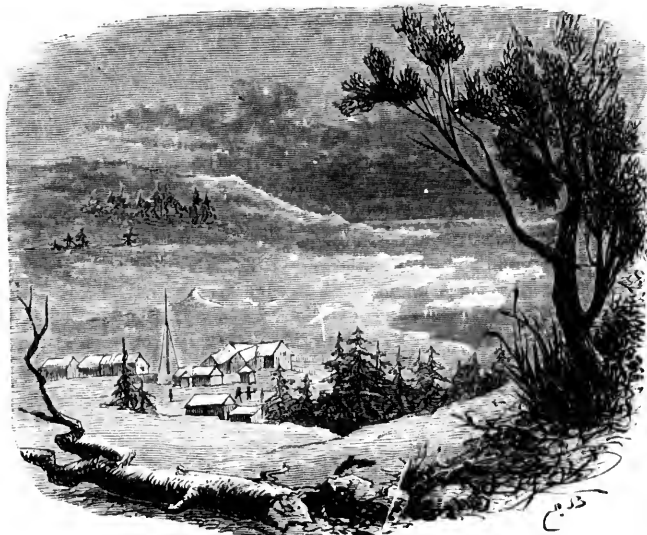
ewan, Athabasca, and British Columbia, on the south, to the Arctic Ocean, on the north. It is a region of lakes and rivers. Vast forests of pine and spruce are found along the Mackenzie River. These forests are the home of moose, foxes, martens, and other wild animals.

In the far north it is too cold for trees, and the only vegetation is shrubs, coarse grass, and moss. The winters here are long and severely cold. At this season it is night nearly all the time. The sun rises, skims along very low in the south, and soon goes down. About Christmas the day lasts only a few minutes. Indeed, there is one day on which the sun does not rise at all. Then in the summer the days are as long as the nights are in the winter; and at midsummer there is a day on which the sun does not set, but goes all around the horizon, and is seen even at midnight.

184. The inhabitants of these northern regions are Indians and Esquimaux, who live by hunting and fishing. The Es-

quimaux live along the northern shores. Their dress is made of the skins of wild animals—the hairy side outward—and

border by the narrow Strait of Belle Isle. It is about twice the size of Nova Scotia.



182. A HUDSON BAY FORT.

sometimes all in one piece from the cap to the shoes. They have no vegetable food, but eat flesh, fish, and oil. They sometimes make their houses of drift-wood, and sometimes of snow.

185. North-East Territory is a large cold region, of which little is known, situated on the east of Hudson Bay.

NEWFOUNDLAND.

History.—186. This is the only Province of British North America which does not belong to the Dominion of Canada.

Soon after the discovery of America, the people of Europe found out that the Island of Newfoundland was very valuable on account of its fisheries. The British and the French both wished to own it, but finally the French ceded it to Great Britain, at the same time that they gave up Nova Scotia.

Position and Size.—187. Newfoundland lies about sixty miles north-east of Cape Breton, and is separated from Labra-

Climate and Products.—188. Newfoundland is cold and bleak. The air over sea and coast-land is often filled with dense fog. The cold and fog are unfavourable to the ripening of grain. The soil and climate in the south-west are well suited to agriculture. The interior is not well known. It contains some good soil, and also large lakes, swamps, and barrens.

The Banks.—189. The bottom of the sea, like the land surface, is uneven with hills and valleys. This is discovered by dropping a lead with a line tied to it, called a *sounding-line*. At the bottom of the sea off the south-east of Newfoundland there are high hills called the *Banks of Newfoundland*.

The Fisheries.—190. The coast waters off Newfoundland are the most noted fishing grounds in the world. The waters near the *Banks* are specially celebrated for cod-fish. The north coast, towards Labrador, abounds in seals, which are valuable for their skins and oil.

The fisheries are the chief dependence of the people of Newfoundland. Fishermen from the United States also, and even from France, come here, so that in the summer season hundreds of fishing vessels may be seen off the coast.

Icebergs.—191. Immense masses of ice, called *icebergs*,



190. COD-FISHING, NEWFOUNDLAND.

almost like mountains, are often seen floating in the sea near Newfoundland. These icebergs are formed far away to the north, on the coasts of Greenland, and are brought down by currents in the ocean. Ships are sometimes driven against them by the wind, and dashed in pieces.

Inhabitants.—192. The inhabitants live near the sea, and the greater part of them are near the south-east coast. In some places—near the harbours—there are small towns and villages; in other parts, the houses are scattered far apart.

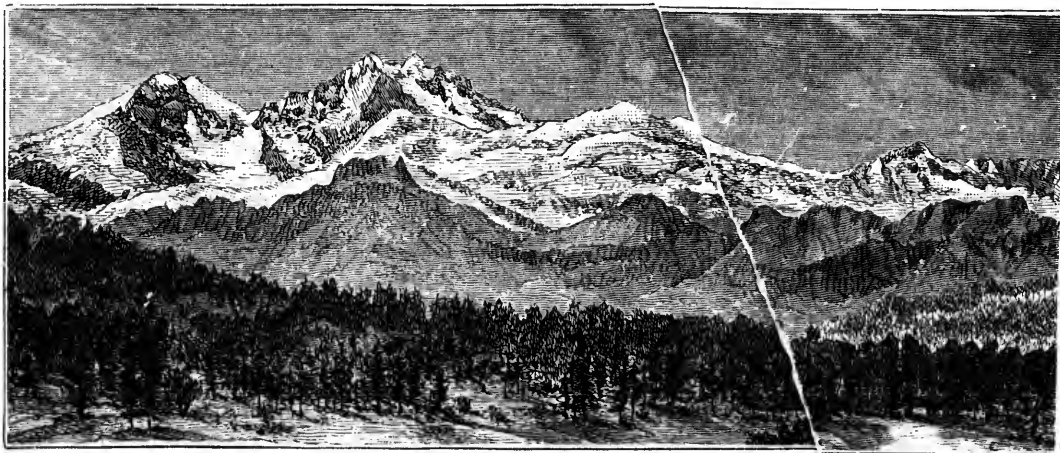
The population is about 182,000.

Towns.—193. **St. Johns** (23,000), the capital, has a fine harbour, and sends out many men and vessels to the fisheries.

Harbour Grace and **Carbonear** are next in importance.

THE UNITED STATES.

History.—194. Shortly after the French came to Annapolis, English colonists began to settle at various places along the Atlantic, south-west of Nova Scotia and New Brunswick. About one hundred years ago, these colonies became dissatisfied with the manner in which they were ruled by Great Britain. They therefore, after a long war, formed themselves into an independent nation called the *United States*.



194. ROCKY MOUNTAINS—DENSE FORESTS AND SNOW-CAPPED PEAKS

The Eastern Highlands.—197. As we go west, we come abruptly to a rocky ridge, forming the border of a table-land. Still further, across the table-land, we come to those mountain ranges which in the outline of North America are called the *Appalachian Mountains*. The ranges take different names, and extend from the mouth of the St. Lawrence in Canada, to the lowlands along the Gulf of Mexico. The mountain ridges are

A great many people from almost all parts of the world have since come to live in this country. They have gone further and further west, cutting down forests, ploughing up prairie lands, making farms, building houses, cities, and railroads, crossing rivers and mountains, until they have gone quite across the continent to the Pacific Ocean.

Position and Size.—195. The United States occupy the middle portion of North America, between the Dominion of Canada on the north and Mexico on the south, and extending from the Atlantic Ocean to the Pacific.

In size, the country is about equal to the Dominion of Canada.

The Coast Country.—196. In crossing the United States from east to west, we first find a narrow low-land country, bordering on the Atlantic. In the north this coast region is somewhat rough, and is not very fertile, but it has excellent harbours. South of Chesapeake Bay there are few good harbours, and the country is level and sandy. It is in some places covered with large forests of pitch pine, which yield tar and turpentine; and in other places there are large swampy districts.

covered with forests, and are rich in iron and coal. The valleys are very fertile.

The Central Plain.—198. From the Eastern Highlands we pass to the *Central Plain*, the southern slope of which is wholly in the United States. Here we find the great *Mississippi*, with its tributaries coming in from the Eastern and Western Highlands. In all this vast region we see no mountains—only level or un-

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dulating plains and rolling prairies. The northern half of the plain produces abundance of grain; the southern half yields tobacco, cotton, and sugar-cane.

The Western Highlands.—199. After crossing the Mississippi, we rise gradually along the prairies to the foot of the *Rocky Mountains*. Along the lower slopes are dense forests, then shrubs and mountain flowers, then moss-covered rocks and snow-capped peaks. Beyond these mountains are the dry, barren highland plains. Still further west is another mountain wall, the wild *Sierra Nevada* and *Cascade Mountains*, with their deep cañons and rapid streams.

Little farming is done in these highland regions; but people come to these rough countries to get gold from the rich mines of California and Colorado, and silver from the mines of New Mexico, Arizona, and Nevada.

The Western Coast Country.—200. Beyond the Sierra Nevada is the beautiful valley of the *Sacramento* in California, one of the most fertile countries in the world, producing the finest wheat, apples, grapes, and other fruits.

In the forests are trees of immense size—three hundred feet high and twenty-five feet in diameter.

Between the fertile valleys and the Pacific are the low *Coast Mountains*.

Rivers and Lakes.—201. The *Mississippi* and its tributaries, flowing through many States differing in climate, provide a water-road by which these States can exchange their different products, and trade with foreign countries.

The **Great Lakes**, on the north, open up a way for trade between the grain-producing States of the west and the manufacturing States on the Atlantic. The lake steamers laden with grain at *Milwaukee* or at *Chicago*, on *Lake Michigan*, come round through *Lake Huron* to *Buffalo* on *Lake Erie*; or, passing through the *Welland Canal* in Canada, they come to *Oswego* on *Lake Ontario*.

The **River Hudson** is a beautiful river, flowing into New York harbour. On one side, near its mouth, are rocky cliffs, called the *Palisades*; further up are high banks on each side, called the *Highlands*. Large steamers go up to *Albany*, nearly 150 miles from New York. A canal has been made through the mountain valleys from *Albany* to *Buffalo*, and the grain that has come over the lakes is brought in small boats drawn by horses along the canal, and is then taken down the Hudson to New York.

Many other important rivers flow into the Atlantic, as the *Connecticut*, the *Delaware*, and the *Potomac*, which are navigable through the low coast region; and further up they flow rapidly, furnishing water-power for machinery.

On the Pacific slope, the *Columbia* and *Colorado* flow rapidly through the deep gorges.

Climate and Products.—202. In travelling through the United States from north to south, we first find the climate and products very like what we have in our own country; as we go southwards we pass through warmer States, which, in addition to wheat, Indian corn, and other kinds of grain, yield tobacco, grapes, and peaches; then we come to the Southern States, which produce cotton, rice, sugar-cane, sweet potatoes, and oranges.

Inhabitants.—203. The number of inhabitants at the last census was 50,182,000.

In some of the Southern States negroes form more than half the population.

The Indians retreated westerly as the country became settled by white people. *Indian Territory* has been set apart specially for them, but they are numerous in other portions of the west. Some tribes, still wild and savage, often attack emigrants travelling in the far west.

Divisions.—204. The United States are made up of forty-nine divisions. Thirty-nine of these are called *States*, of which all but five are east of the *Rocky Mountains*.

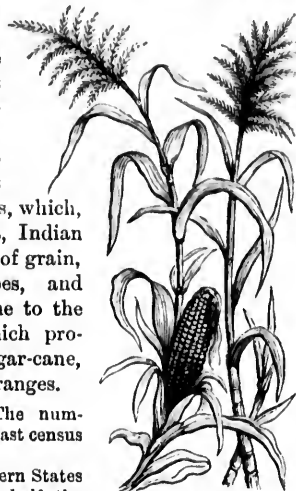
Seven divisions, called *Territories*, are situated in the Western Highlands. The *District of Columbia* is a small territory on the *Potomac*. *Alaska*, far away in the north-west of North America, is a cold, barren country, inhabited chiefly by Indians and Esquimaux. It was purchased a few years ago from Russia. Neither *Alaska* nor the *Indian Territory* is organized.

The States are usually grouped as follows:—Six *New England States*, six *Middle States*, five *South-Eastern States*, seven *Southern States*, twelve *Central States*, and three *Pacific States*.

New England States.—205. These are, *Maine*, *New Hampshire*, *Vermont*, *Massachusetts*, *Rhode Island*, and *Connecticut*.

206. *Maine* has fine harbours. Many of the people are lumbermen, ship-builders, or fishermen. *Portland* is the largest city.

207. *New Hampshire* and *Vermont* are mountainous countries, and are well adapted to the raising of cattle and sheep. *Manchester*, in *New Hampshire*, is noted for cotton and woollen manufactures.



INDIAN CORN.

208. Massachusetts, Rhode Island, and Connecticut, taken together, are about half as large as New Brunswick; but they have more than seven times as many inhabitants. They are noted for their fine public schools, and for their manufactures. The most important cities are *Boston, Lowell, Worcester, Springfield, New Bedford, and Salem*, in Massachusetts; *Providence and Newport* in Rhode Island; *Hartford and New Haven*, in Connecticut.

Middle States.—209. These are, *New York, Pennsylvania, New Jersey, Delaware, Maryland, and West Virginia*.

210. New York ranks first among the States in population, commerce, and wealth; Pennsylvania is first in iron and coal mining. Both States are among the first in manufactures and agriculture. The chief cities are *New York, Brooklyn, Buffalo, Oswego, Albany, Rochester, Troy, and Syracuse*, in New York; *Philadelphia, Pittsburg, and Alleghany City*, in Pennsylvania. *Newark, Jersey City, and Trenton*, are in New Jersey. *Wilmington* is in Delaware, and *Baltimore* in Maryland.

South-Eastern States.—211. These are, *Virginia, North and South Carolina, Georgia, and Florida*.

Southern States.—212. This group lies on the west of the South-Eastern States, including *Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, and Texas*.



212. COTTON PLANTATION.

These two groups have few harbours, manufactures, or large cities. The most important products are tobacco, cotton, sugarcane, rice, and Indian corn. The chief cities are *Richmond,*

Norfolk, Wilmington, Charleston, Savannah, Atlanta, Mobile, Montgomery, Vicksburg, New Orleans, Memphis, and Nashville.

Central States.—213. This group lies wholly in the interior, between the Middle States and the Rocky Mountains.

The most important exports are wheat, Indian corn, beef, and pork. The principal cities are *Louisville, Cincinnati, Cleveland, Indianapolis, Chicago, Detroit, Milwaukee, and St. Louis*.

Pacific States.—214. These are, *California, Oregon, and Nevada*.

California is noted as a great mining, agricultural, and grazing country. *San Francisco* is the largest city on the western side of America.

Cities.—215. Washington, in the district of Columbia, is the capital. There are ten very large cities in the United States, all beside ocean, river, or lake, and well situated for trade. We shall take them in order, beginning with the one nearest our own Province.

216. Boston (362,000) is noted for the intelligence of its people and its excellent public schools. The shoes, cottons, and many other things manufactured in the smaller towns, are brought here to be sold.

217. New York (1,206,000) is visited by ships from all parts of the world, bringing the products of other countries. Thousands of emigrants also come here, every year, from the crowded countries of Europe. Immense quantities of grain, flour, and other things, are exported from New York, which is the largest and richest city in America.

218. Brooklyn (566,000) is separated from New York by a narrow channel of water. Many people who do business in New York live here.

219. Philadelphia (847,000) is not very far from the coal and iron mines. Cotton, wool, and other things used in manufacturing, are also easily obtained. Hence this is the greatest manufacturing city in the United States.

220. Baltimore (332,000) is noted for its manufactures and trade. Large quantities of tobacco are exported from this city.

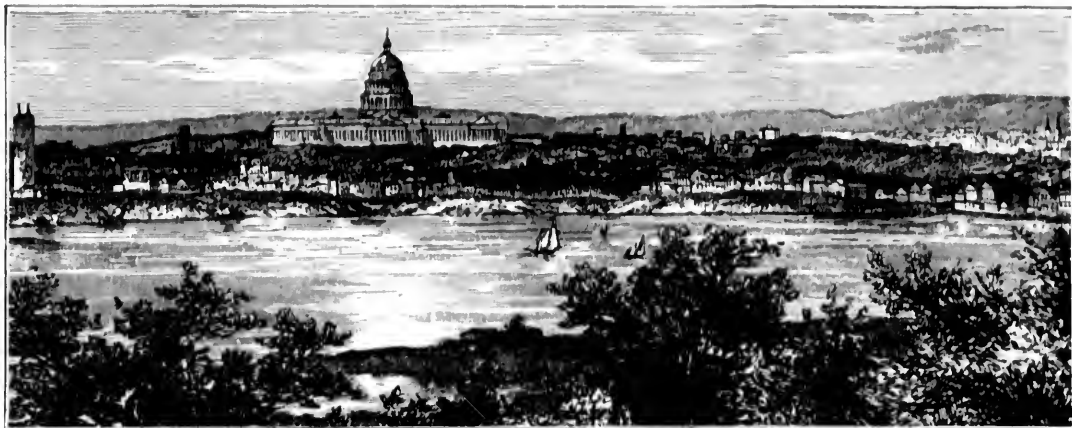
221. New Orleans (216,000), on the Mississippi, 100 miles from its mouth, is the greatest cotton market in the world. A terrible disease, called *Yellow Fever*, prevails here in the hot season.

222. St. Louis (350,000), on the Mississippi, Cincinnati (255,000), on the Ohio, and Chicago (503,000), on Lake Michigan, export grain and other agricultural products. *San Francisco* (234,000) is the great port of the Pacific coast.

Government.—223. The laws are made by the *President and Congress*.

The President is elected by the people for the term of four years, and lives at Washington. The members of Congress are elected by the various States, and meet in a fine building in Washington called the *Capitol*.

A country in which the head officer is elected for a limited time, as in the United States, is called a *Republic*.



215. THE CITY OF WASHINGTON.

MEXICO.

History.—224. When the Spaniards came to America they found the Indians of Mexico quite different from those further north. They had large cities, richly-ornamented temples, finely-wrought manufactures, and great wealth in gold and silver.

225. The Indian King Montezuma sent very rich presents to Cortez, the Spanish general, to induce him not to visit his capital. But this only made the avaricious Spaniard the more eager to obtain the whole country. Cortez seized Montezuma, and, holding him as a prisoner, compelled him to advise his people to submit to the Spaniards. The enraged Indians let fly their arrows at the Spaniards, and unintentionally killed Montezuma as he stood addressing them.

Position and Size.—226. Mexico lies on the south of the United States, and extends southerly to the narrow and hottest portion of North America. It is about one-fourth the size of the Dominion of Canada.

The Lowlands.—227. Crossing the country from east to west, we find first a plain, low, hot, and unhealthy, near the Gulf of Mexico, but rising as we go inland, and becoming cooler and more healthy. The cultivated lands yield cotton, sugar-cane, coffee, indigo, and tropical fruits. The forests contain palm-trees, mahogany, and dye-woods. Many plants which we cultivate in gardens and conservatories, such as dahlias, geraniums, and fuchsias, grow wild.

The Highlands.—228. On the west of the plain we come to mountains, high, steep, and difficult to climb. They are a continuation of the Rocky Mountains. From the summit we look down on a wonderful table-

land half as high as the mountains. It is walled in, for far away on the Pacific side are other high mountains. Here and there over the plain rise cone-shaped mountains with openings at the top, like chimneys, sending out smoke, and sometimes flame, ashes, and melted stones.

229. The climate on the table-land is delightful, and the products are the grains and fruits of temperate countries. Towards the north are immense grassy plains, the pasture lands of many buffaloes, wild oxen, and horses.

Minerals.—230. The mountains of Mexico are rich in minerals, and mining is a leading occupation. Silver is the most important mineral.

Towns.—231. The large cities are all on the cool highlands.

Mexico City (230,000), the capital, is near a beautiful lake in an oval valley, with high mountains all around. **Vera Cruz** is the principal port on the east; **Acapulco**, on the west. Both are small places.

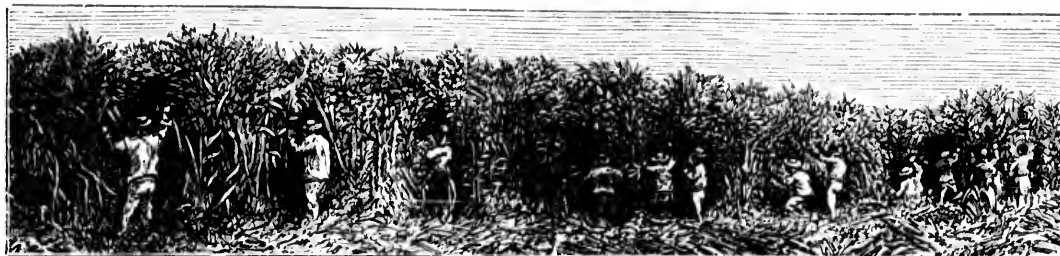
Inhabitants.—232. The inhabitants are Spaniards, Indians, and mixed races. They are generally indolent. The population is about 9,500,000.

Government.—233. The Government is republican, like that of the United States; but it is very weak, and is unable to maintain order. Mexico has often been disturbed by civil war.

CENTRAL AMERICA.

Position.—234. The narrow portion of America, between the broad continents of North and South America, is called *Central America*.

General Features.—235. Central America resembles Mexico in its coast plains and interior highlands, and also in climate and products. Mahogany and logwood are exported.



245. AMONG THE SUGAR-CANES.

236. Volcanoes are numerous. The country is often visited by destructive earthquakes, during which the ground trembles and rocks, or is whirled violently around, and opens in wide chasms. Houses are thrown down, whole cities are destroyed, and thousands of people are killed.

Inhabitants.—237. The people are not industrious, and consequently they have very little to send to foreign markets. Population, 2,543,000.

Divisions.—238. The country is divided into five Republics—*Guatemala, Honduras, San Salvador, Nicaragua,* and *Costa Rica*, and a small State on the east coast, called *British Honduras*, belonging to Great Britain.

Towns.—239. Guatemala is the largest city. San Salvador was destroyed by an earthquake in 1854, and again in 1873.

THE WEST INDIES.

Position.—240. The West Indies are clusters of islands on the east of the Gulf of Mexico, between North and South America. It was here that Columbus landed after his first voyage across the Atlantic.

241. The islands are near the Equator, where the Sun's rays fall perpendicularly. Snow and frost are unknown, except on the mountains; and summer lasts all the year. The larger islands have high mountains, and it is quite refreshing to the inhabitants, when almost exhausted by the intense heat, to retreat to the cooler highlands.

Area.—242. All the islands taken together contain about twice as much land as New Brunswick and Nova Scotia.

Products.—243. The West Indies are very fertile, and in some of the islands nearly all the land is cultivated. The most important product is sugar. The islands also yield tobacco, coffee, oranges, pine-apples, bananas, and other fruits.

244. The farms are called plantations. The owner of a plantation lives in a large, low house, with wide verandahs and polished uncarpeted floors. There are many small cabins around for the labourers, who are mostly coloured people.

245. At a distance, the sugar-cane looks like Indian corn. When it has grown tall, and is full of sweet juice, it is cut and taken to the sugar-mill. Here the juice is pressed out

and made into sugar, somewhat as we make sugar from the sap of the maple tree.

246. One of the most valuable and beautiful trees of the West Indies is the cocoa-nut palm. It grows straight and tall without branches or leaves; only at the top a tuft of long broad leaves hangs over, often so as to conceal the fruit. The cocoa-nuts which we buy grow on these trees.

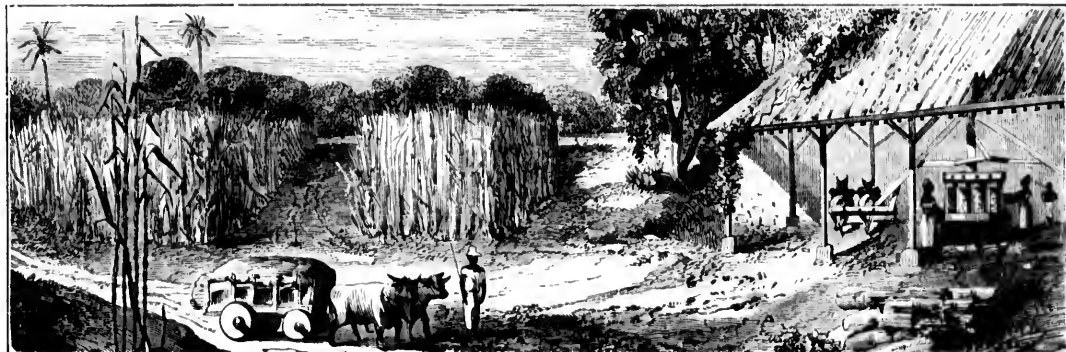


246. TOP OF COCOA-NUT PALM.

Inhabitants.—247. A very large proportion of the inhabitants are Negroes and Mulattoes. The population is about equal to that of the Dominion of Canada.

Greater Antilles.—248. Four of the islands are much larger than the rest,—in fact, much larger than all the others taken together. These are *Cuba* and *Porto Rico*, belonging to Spain; *Jamaica* belonging to Great Britain; and *Hayti*, which is independent.

249. Cuba is larger than all the other West India Islands taken together, and it is said to yield one-third of the sugar produced in the world. *Havana* (230,000), on this island, is



245. SUGAR PLANTATION.

the largest city in the West Indies. It is celebrated for its fine cigars. Its cathedral contains the remains of Columbus.

250. **Jamaica** is about one-half the size of New Brunswick. *Kingston* is its largest city and capital.

251. **Hayti** is the second in size of the West Indies. It is divided into two independent states. Nearly all the inhabitants are negroes. *Port au Prince* and *St. Domingo* are the capitals.

The Small Islands.—252. On the north of the Greater Antilles is a group of small islands, called the *Bahamas*, belonging to Great Britain; and on the south-east are three groups, called the *Virgin Isles*, the *Leeward Isles*, and the *Windward Isles*. Nearly all of them belong to Great Britain, France, Denmark, and Holland.

253. The **Bermudas** consist of a cluster of very small islands far away to the north-east of the Bahamas, belonging to Great Britain. They have a delightful climate. The chief products are arrow-root and garden vegetables.

DANISH AMERICA.

254. The two islands, *Greenland* and *Iceland*, far away on the north-east of America, on the borders of

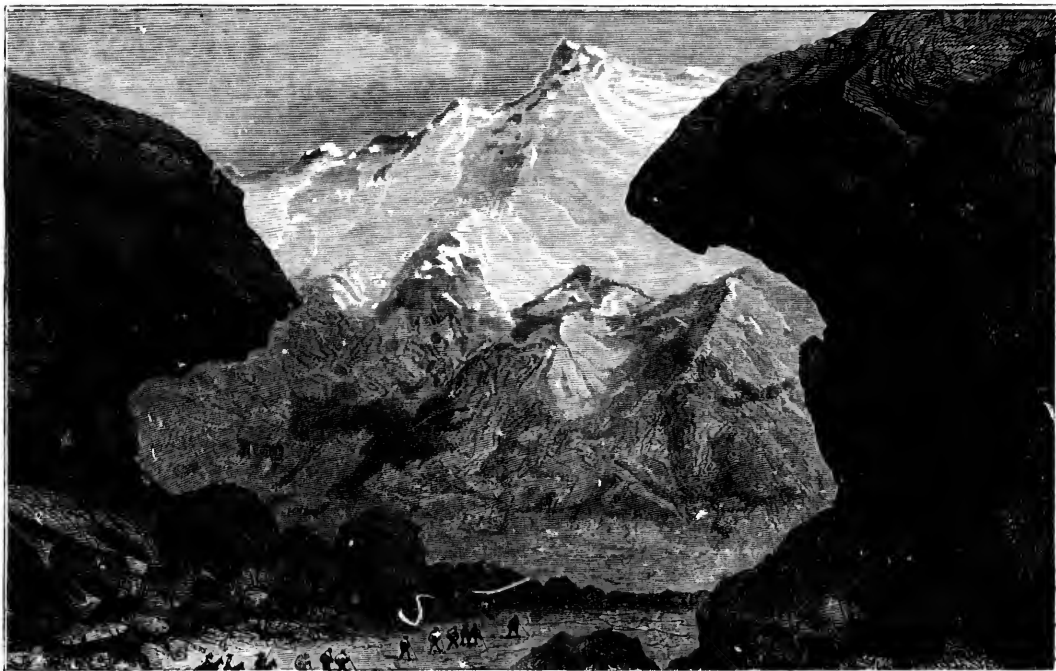
the frozen Arctic Ocean, belong to a country in Europe called Denmark.

Greenland.—255. One might suppose from the name that this was a beautiful island, verdant with rank vegetation. It is, however, one of the coldest inhabited countries in the world, and a large part of it is constantly covered with ice and snow. The inhabitants are mostly Esquimaux, and live near the south-west coast. They depend chiefly on fishing and seal-hunting. *Upernavik* is the most northerly settlement. It is often visited by Arctic navigators.

Iceland.—256. This island is not so cold as Greenland. It has some very remarkable features. There seem to be vast fires constantly burning deep in the earth. In some places there are hot springs, called *geysers*, which occasionally send boiling water high in the air, like a fountain. The fires break out in many places, causing volcanoes. *Mount Hecla* is one of the most celebrated volcanoes in the world. Potatoes and other vegetables are cultivated in the south, and there is plenty of grass, so that cattle and sheep are raised. Large flocks of sea-birds visit Iceland, among which is the eider-duck, valuable for its soft down.



255. GREENLANDERS FISHING.



267. SCENE IN THE ANDES.

CHAPTER II. SOUTH AMERICA.

History.—257. When South America was discovered, it was inhabited by Indians, some of whom were highly civilized. They had large cities, with fine buildings ornamented with gold and silver. These people were soon conquered, and robbed of their wealth by the Spaniards and Portuguese.

258. Portugal colonized Brazil; Spain, nearly all the remainder of South America. The colonies gained their independence about fifty years ago.

Position.—259. South America is surrounded by the sea, except at the Isthmus of Panama, where it joins North America.

The Caribbean Sea and Gulf of Mexico are on the north; the Atlantic Ocean lies on the east; and the Pacific Ocean on the west.

260. The northern portion of South America, including about three-fourths of the whole, is in the hottest part of the Earth, called the *Torrid Zone*.

Coast.—261. The coast of South America is very regular; that is, there are no deep bays running into the land.

The principal *Coast Waters* are, the *Gulf of Darien*, *Gulf of Venezuela*, *Mouth of the Amazon*, *Mouth of the La Plata*, *Strait of Magellan*, *Gulf of Guayaquil*, and *Bay of Panama*.

The *Capes* are *Gallinas*, *St. Roque*, *Horn*, and *Blanco*.

262. The principal *Islands* near the coast are *Trinidad*, *Marajo*, *Falklands*, *Terra del Fuego*, *Chiloe*, *Juan Fernandez*, and *Galapagos*.

263. *Terra del Fuego* is a cluster of rocky islands, separated from the mainland by the *Strait of Magellan*. They are inhabited by a few degraded savages.

264. *Juan Fernandez* is noted as the island on which Alexander Selkirk spent four years. The story of "*Robinson Crusoe*" was founded on his adventures.

Area.—265. South America is about four-fifths the size of North America.

Surface.—266. A long high range of mountains, called the *Andes*, extends along the west side of South America, near the Pacific Ocean, somewhat like the mountains on the west side of North America. In-

SOUTH AMERICA



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deed, the Andes may be considered as a continuation of the Rocky Mountains; but the Andes do not spread out so wide, and they are nearer the coast.

267. In the south, the Andes form a single ridge; but in the middle and north there are two or three ridges with broad elevated valleys, or table-lands, half as high as the mountains, between the different ridges. On these table-lands are cultivated fields and large cities; and in the mountains around them are rich mines of silver and other metals. But the countries between the mountain ridges are almost shut out from the rest of the world. The sides of the Andes are too steep for rail-roads, or even for carriage-roads. There are just winding paths, which only the sure-footed mules, donkeys, and llamas can travel with safety.

268. The traveller in ascending the Andes, finds along the lower slopes dense forests of palms, and other trees of warm countries; as he advances, he no longer meets with trees of this sort, but such as we have in our forests; further up are shrubs and gay-coloured mountain-flowers; then he comes to the dark, barren rocks, and here and there, extending far above him, are the high peaks covered with snow all the year.

269. Crossing the Andes is, in some places, very difficult and dangerous. There are deep gorges with steep banks, and at the bottom are rushing, foaming streams. Over some of these are curious bridges. Two ropes, made of twisted bark, are stretched across and tied to trees. Swung on the ropes is a kind of basket in which the traveller sits and pulls himself over.

270. No mountains in the world have so many volcanoes as the Andes. *Cotopaxi* is one of the most noted. Its flames are seen rising high above the lofty summit, and its roaring is heard far out on the Pacific Ocean. The Andes and the neighbouring countries are visited by terrible earthquakes, which sometimes destroy whole cities, and bury thousands of people in the ruins.

271. On the east of the Andes is a vast lowland country. It includes three great divisions,—the *Plains of the Orinoco*, the *Plains of the Amazon*, and the *Plains on the south-east of the La Plata*. On the north of the Plains of the Amazon are the *Mountains of Guiana*; and on the south, the *Mountains of Brazil*.

272. The Plains of the Orinoco are called *Llanos*. Except along the margin of the river, there are no trees on the llanos. At one time of year, when it rains every day, they are covered with tall grass, mingled with flowers of every hue. At this season immense herds of wild cattle and horses roam over these plains. At another time of year there is no rain for several months; the hot sun parches the ground, and every plant dies. The dry grass is then set on fire, to clear the ground for the next year. In the dry season the cattle and horses are great to pasture-lands near the mountains.

273. The Plains of the Amazon are called *Selvas*. They are covered with the most wonderful forests in the world. There are palms, ferns, mahogany, rosewood, dye-woods, and other trees, very large and tall, with the space between filled with shrubbery. Then, clinging to the trees, twining around



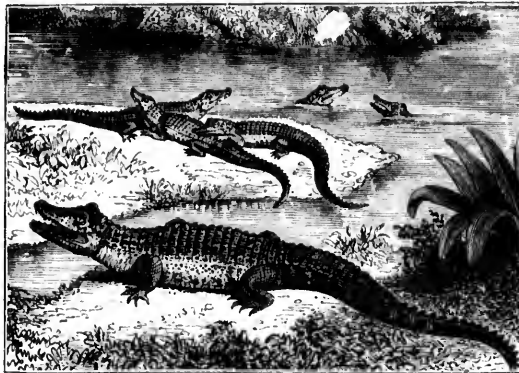
273. FOREST OF THE AMAZON.

them, and hanging down from their branches, are many kinds of vines covered with beautiful blossoms. The roots of some of these vines do not reach the ground, but wave in the air.

from which they derive all their nourishment. They are thus called *air plants*. In these dense forests are *jaguars*, *tapirs*, *monkeys*, *serpents*, *parrots*, and many other animals.

274. The Plains of the La Plata are called *Pampas*. Like the llanos, they have no trees. In the wet season they produce a coarse grass, mixed with rank clover and tall thistles, higher than a man's head. Hundreds of thousands of cattle and horses feed on these plains.

Rivers.—275. South America has three great rivers, the *Orinoco*, the *Amazon*, and the *La Plata*.



277. ALLIGATORS.

276. The *Orinoco* rises in the Andes, and flows northerly through the llanos.

277. The *Amazon* is the largest and longest river in the world. It is nearly 4,000 miles long. It rises in the Andes, and flows easterly through the selvas, entering the Atlantic Ocean by two great mouths, separated by *Marajo Island*. Many large rivers flow into the Amazon. Along the river-banks are wide marshes covered with tall reeds, amongst which turtles, alligators, and many kinds of serpents have their home. Floating on the river here and there is the wonderful water-lily called *Victoria Regia*. Its huge leaves are ten feet long and six feet broad, in the midst of which is the large beautiful blossom, white and pink, with a golden centre.

278. The *La Plata* is a very large river formed by the union of the *Parana* and the *Uruguay*.

Lakes.—279. There are no large lakes in South America. *Titicaca*, on the borders of Peru and Bolivia, is remarkable for its elevated situation. Along its shores, and on an island in it, are ruins of ancient temples and other remains of Indian civilization.

Climate.—280. The climate, except on the high mountains and in the south, is hot. There is no cold season like our winter;—it continues hot throughout the year. At one time

of year, called the *dry season*, there is no rain for months; then the *wet season* comes on, during which it rains in torrents every day. The dew is very heavy in the dry season, almost like a shower of rain.

281. In ascending the mountains of the hot countries, one finds every variety of climate within a few miles,—intense heat at the foot of the mountains, constant spring on the middle slopes, and perpetual winter on the summits. In some countries west of the Andes it never rains.

Plants.—282. No part of the world has such rank vegetation as the warm, moist countries of South America. The forests are so dense with trees, shrubs, and tangled vines, that one needs to cut a path in making his way through them.

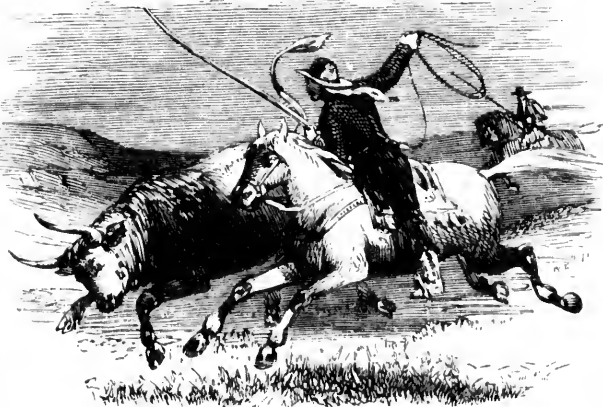
283. Among the trees of the forests are the cocoa-nut, sago, and many other kinds of palm trees; mahogany, rosewood, various kinds of dye-wood, and medicinal plants; the caoutchouc, from the sap of which india-rubber is made; and the cacao, from the fruit of which chocolate is made.

284. In the cultivated lands of the warm countries are raised coffee, sugar-cane, cotton, tobacco, indigo, pine-apples, and many fine fruits and spices. Wheat and other grain are raised in the mountain valleys.

Minerals.—285. There are rich silver mines in the mountains of Peru and Bolivia; copper is plentiful in Chili; iron, gold, and diamonds are obtained in Brazil.

Animals.—286. The *tapir* is the largest wild animal of South America. The *jaguar* is a ferocious animal like the tiger.

The *llama* and *alpaca* of the Andes yield a kind of wool. The llama is used as a beast of burden.



288. LASSOING CATTLE.

287. The marshes abound in *alligators* and huge *serpents*. In the forests are *parrots*, many kinds of beautiful birds, and troops of chattering *monkeys*. Far up on the Andes, among the rocks, lives the *condor*, the largest flying bird in the world.

288. There were no cattle and horses in South America when it was discovered. They were brought here by the Spaniards and Portuguese, and turned out on the plains to take care of themselves. Catching the cattle is an exciting sport in which the people greatly delight. Men mounted on swift horses pursue the herds; and when they come sufficiently near an ox they toss a rope, called a *lasso*, over his neck.

Inhabitants.—289. There are supposed to be about 29,000,000 of inhabitants in South America. Nearly all are Roman Catholics.

The white people are chiefly *Portuguese* in Brazil, and *Spaniards* in the other countries. They are not generally very industrious.

There are many negroes, whose forefathers were brought from Africa as slaves.

Many of the Indians are savages, living on fish and wild fruits.

Divisions.—290. South America includes the following *thirteen* countries:—

Name.	Capital.
COLUMBIA.....	Bogota.
ECUADOR.....	Quito.
VENEZUELA.....	Caraccas.
BRITISH GUIANA.....	Georgetown.
DUTCH GUIANA.....	Paramaribo.
FRENCH GUIANA.....	Cayenne.
BRAZIL.....	Rio Janeiro.
PERU.....	Lima.
BOLIVIA.....	Chuquisaca.
CHILI.....	Santiago.
ARGENTINE REPUBLIC.....	Buenos Ayres.
PARAGUAY.....	Asuncion.
URUGUAY.....	Monte Video.

Towns.—291. Rio Janeiro (275,000) is the largest city in South America.

Government.—292. Brazil is a *limited monarchy*. All the other countries are republics, except Guiana, which is divided amongst the *English*, *Dutch*, and *French*.

COLUMBIA.

293. Columbia includes the narrow Isthmus of Panama, and extends southerly to the Equator.

In the western part of the country are mountains and high table-lands; in the south-east are the low grassy plains of the Orinoco.

The chief exports are cattle, hides, tropical fruits, coffee, dye-wood, indigo, emeralds, and gold.

A railroad extends across the Isthmus from Aspinwall to Panama.

294. **Bogota**, the capital and largest city, is on a high plateau in the middle of the country. **Cartagena** is the chief port.

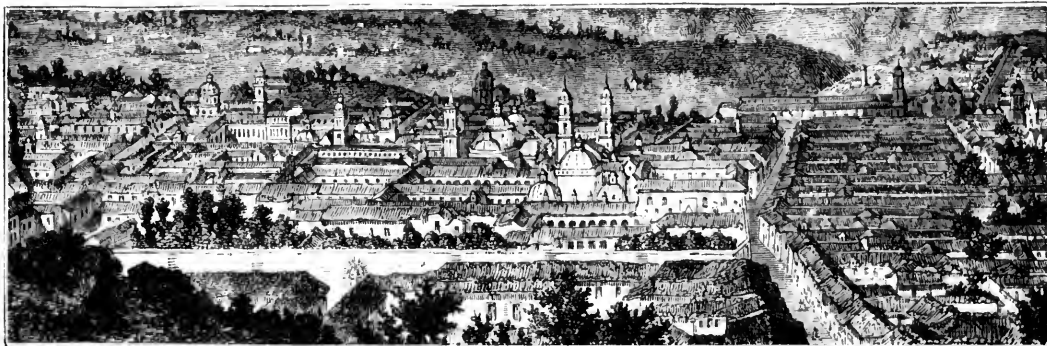
ECUADOR.

295. The west side of Ecuador is crossed by two ridges of the Andes. Most of the inhabitants reside on the table-land between these ridges. The country east of the Andes forms part of the forest plains of the Amazon.

Ecuador contains *Chimborazo*, *Cotopaxi*, and other lofty volcanoes.

296. **Quito** is a large city situated near the Equator, on table-land nearly two miles above the sea-level. Day and night are always of equal length at Quito, each being twelve hours long. **Guayaquil** is the chief port.

Cocoa, india-rubber, and Peruvian bark are exported.



296. QUITO.

VENEZUELA.

297. Venezuela is crossed by mountain ridges and highlands in the north-west and south-east. Between these highlands are the llanos, covering a large part of the country.



298. THE COW-TREE.

a public fast-day, many of the people were assembled in the churches, and 12,000 were killed by the falling buildings.

GUIANA.

300. This is the only part of South America that is now owned by European nations. *British Guiana* lies on the west, *Dutch Guiana* in the middle, and *French Guiana* in the east.

301. The coast is low and level, the interior elevated and mountainous. The climate is very hot, humid, and unhealthy. The soil is fertile, producing sugar-cane, coffee, pepper, cloves, Cayenne pepper, and tropical fruits.

302. A large proportion of the inhabitants are negroes. Georgetown and Paramaribo are the principal cities.

BRAZIL.

303. Brazil is the largest and most important division of South America. It is larger than the Dominion of

Canada, and has on its northern, western, and southern borders all the other countries of South America, except Chili.

304. Brazil includes nearly all the forest plains of the Amazon, called *selvas*. In the south-east are table-lands and mountains.

305. Brazil has a warm, moist climate, and a very fertile soil. The products are, coffee, sugar, cotton, rice, manioc, tobacco, Indian corn, vanilla, and all kinds of tropical fruits.

306. It is said that this country produces half the coffee which is used in the world. The coffee plant is a large shrub which bears a red berry, containing two hard substances resembling the two halves of a bean.

Vanilla is a vine which produces a kind of bean from which a delicious perfume is extracted.

307. The greater part of Brazil is covered with dense forests. The trees are very different from those in our forests. Some of them have beautiful blossoms. The palm grows tall and straight, and without branches. At the top is a tuft of long broad leaves. It has no bark like our trees, and the hardest part of the wood is on the outside. Mahogany, rosewood, and other valuable products of the forest, are brought down the Amazon and exported to foreign countries.

308. The highland country in the south-east of Brazil has long been celebrated for its rich diamond mines.

309. The white inhabitants form about one-third the population. They are generally indolent, and consider labour disgraceful.

310. Rio Janeiro has a fine harbour. Its streets are lined with beautiful palms. Coffee and diamonds are the chief exports. Goods are carried chiefly by negro porters. The *coffee-carriers* go in companies, each carrying on his head a sack of coffee weighing 150 lbs.

Bahia is a large commercial city. Para, near the mouth of the Amazon, is well situated for exporting the products of the forest.

PERU.

311. When discovered by the Spaniards, Peru, Bolivia, and Chili formed one large Indian Empire, the most civilized and powerful country in South America.

312. The Indians of Peru worshipped the Sun; and they had a curious legend that the *Inca*, or emperor, was the offspring of their god. The country was conquered, and the emperor treacherously put to death, by a Spaniard named Pizarro. Peru still contains ruins of Indian cities, temples, and aqueducts. Cuzco contains the ruins of a temple of the Sun.

313. The table-lands, between the mountain ridges and the river valleys, are the principal inhabited parts of Peru. The country west of the Andes has very little rain. On the east of the Andes are vast forests.



310. RIO JANEIRO.

314. The products are, sugar, tobacco, cotton, and fruit. The minerals are silver, gold, and nitrate of soda.

Trade is carried on across the mountains by means of mules. The llama was the largest beast of burden possessed by the Indians when the country was discovered.

315. Lima is seven miles from the sea, and is connected with Callao on the coast by a railway. This railway extends easterly across the Andes.

319. *Aconcagua*, in Chili, was formerly considered the highest mountain peak in America.

320. The climate is temperate and the soil fertile. The products are grain, hemp, and potatoes.

The potato grows wild in Chili, and it was from this country that it was first obtained for cultivation.

321. Copper is plentiful, and large quantities are exported.

322. Santiago is a large city, situated in a fertile plain at the foot of the Andes. Valparaiso is the principal port.

BOLIVIA.

316. The mountains are higher in Bolivia, and the table-land is broader, than in other countries of South America.

Sorata, nearly five miles high, is the highest peak in America.

West of the Andes the country is wild and barren. Mule paths are the only roads across the mountains. The silver mines of Bolivia were once the most productive in the world.

317. The cities are on the high table-lands. Sucre or Chuquisaca is nearly two miles above the sea-level. La Paz is the largest city. Potosi was once famous for its silver mines.

CHILI.

318. Chili, a long narrow country west of the Andes, is one of the most prosperous in South America.

THE ARGENTINE REPUBLIC.

323. A large part of this country consists of the *pampas*, which in the wet season are covered with coarse grass and tall thistles.

324. The inhabitants give little attention to the cultivation of the soil. Their wealth consists chiefly in the immense herds of cattle and horses which run wild over the plains.

On the pampas live a people called *Gauchos*, a mixed race of Whites and Indians. They are very fond of riding on horseback, and of lassoing the wild cattle.

325. Buenos Ayres, the largest city, is situated on the La Plata, 150 miles from the sea. Parana, Mendoza, Corrientes, and San Juan are important cities.

Patagonia, the most southerly part of the mainland of South America, belongs to the Argentine Republic. It is a barren, rocky country, inhabited by uncivilized Indians.

PARAGUAY.

326. Paraguay is the only country of South America which has no sea-coast. It has the river *Paraguay* on the west, and the *Parana* on the east.

327. Paraguay has a warm, healthy climate, and a fertile soil. The products are Indian corn, tobacco, rice, cotton, and sugar-cane. A wild shrub, called *maté*, or *Paraguay tea*, grows abundantly. The leaves are used in many parts of South America as we use China tea.

328. **Asuncion**, on the Paraguay, is the chief town.

URUGUAY.

329. Uruguay is a small State, south of Brazil. It is a hilly country affording rich pastures.

Cattle, horses, and sheep are numerous, and form the chief wealth of the country.

330. **Monte Video**, the chief town, is near the mouth of the La Plata.

CHAPTER III.

EUROPE.

History.—332. In early times Europe was inhabited by barbarous tribes who had no settled place of abode. Greece, a small country in the south-east, nearly surrounded by the sea, was the first to become civilized. Then Rome, in Italy, became the leading power, and gave laws to the world. After the Roman Empire had fallen into decay, there followed a period called the *Dark Ages*, during which hordes of barbarians from the north overran the whole continent. In more modern times the present nations of Europe were formed, England, France, Germany, and Spain at first taking the lead; and then Great Britain, France, Germany, Austria, and Russia.



342. MONT BLANC, THE HIGHEST MOUNTAIN IN EUROPE.

EUROPE



(Divided into Squares of 1000 Miles.)

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333. About four hundred years ago, Spain, Portugal, England, and France began to send ships abroad over unknown seas, on voyages of discovery. Brave and hardy seamen crossed the Atlantic to America, and sailed round the south of Africa to India. Still later, the Dutch discovered Australia.

Position.—334. Europe is principally in the North Temperate Zone. It has the Arctic Ocean on the north, Asia on the east, the Black Sea and the Mediterranean on the south, and the Atlantic Ocean on the west.

The Ural Mountains, Ural River, Caspian Sea, and Caucasus Mountains form the boundary between Europe and Asia.

Coast.—335. Europe has many seas and bays, extending far into the land, by which a large portion of the continent has the advantages of shipping.

The principal Coast Waters are—the *White Sea*, the *North Sea*, the *Skager Rack*, the *Cattegat*, the *Baltic Sea*, the *Gulf of Bothnia*, *Gulf of Finland*, *Gulf of Riga*, *English Channel*, *Bay of Biscay*, *Strait of Gibraltar*, *Gulf of Lions*, *Gulf of Genoa*, *Strait of Otranto*, *Adriatic Sea*, *Archipelago*, *Dardanelles*, *Sea of Marmora*, *Bosphorus*, *Black Sea*, *Sea of Azov*, and *Caspian Sea*.

336. The principal Capes are—*Nordkyn*, *Cape North*, the *Naze*, *Skaw*, *Cape Wrath*, *Cape Clear*, *Land's End*, *La Hogue*, *Finisterre*, *Roca*, *St. Vincent*, *Tarifa Point*, *Passaro*, *Spartivento*, *Leuca*, and *Matapan*.

337. The principal Islands are:—

In the Arctic Ocean, *Lofoden*, *Spitzbergen*, and *Nova Zembla*.

In the Atlantic, the *Faroe*, the *British Isles*, and the *Azores*.

In the Mediterranean, the *Balearic Isles*, *Sicily*, *Sardinia*, *Elba*, *Corsica*, *Malta*, the *Ionian Isles*, *Candia*, *Cyprus*, and many small islands east of Greece.

Area.—338. Europe contains about one-fourteenth of the land surface of the Earth.

Surface.—339. Europe consists of a lowland plain in the north-east, and a highland region in the west and south. The **Lowlands** extend from the North Sea to the Ural Mountains, including about two-thirds of the whole area. The **Highlands** include Norway, Spain, Portugal, the south of France, Italy, Switzerland, the south of Germany, Austria, Turkey, and Greece.

340. The principal Mountains are—the *Scandinavian Mountains*, in Norway; the *Ural*, in Russia; the *Caucasus*, between the Caspian and Black Seas; the *Pyrennees*, between France and Spain; the *Alps*, in France, Italy, and Switzerland; the *Apennines*, in Italy; the *Carpathian*, in Austria; and the *Balkan*, in Turkey.

341. The Scandinavian Mountains form an irregular wall along the Atlantic coast of Norway. They are much broken by deep ravines.

342. The Alps are the grandest mountains of Europe. Many of the high peaks are covered with snow throughout



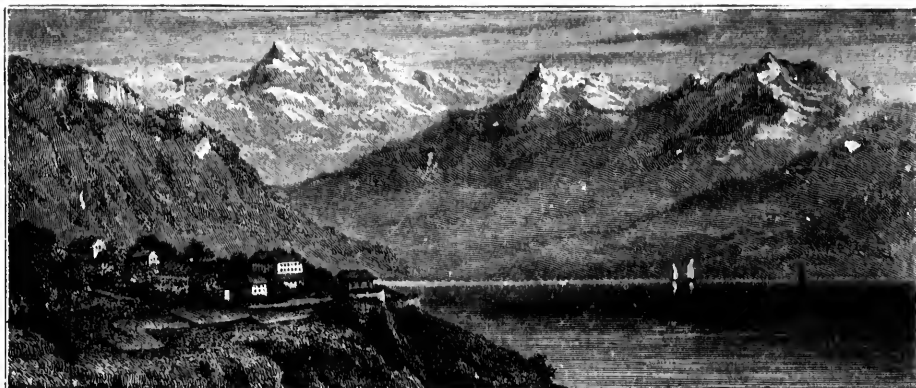
342. ICE-RIVER—GLACIER OF THE RHONE.

the year. *Mont Blanc*, about three miles above the sea-level, is the highest of these peaks. In the valleys are vast masses of ice called *glaciers*. The great pressure from above causes the glaciers to move slowly down, until they reach the warmer levels, where they melt and give rise to rivers.

343. On the lower slopes of the Alps are large pine-forests. The most noted of these lies on the north, and is called the *Black Forest*.

Narrow roads wind along the steep sides of the Alps leading to pretty villages nestled high up among the hills, with lofty snow-capped peaks rising far above them. In some of the high valleys are beautiful lakes, fed by glaciers, with orchards and vineyards sloping down to their shores.

344. Many travellers visit the Alps every year, to enjoy the beautiful scenery, to hunt the wild deer in the forests and the chamois among the cliffs and crags, to examine the wonderful *ice-rivers* or glaciers; and the bolder ones, to climb the icy steeps to the highest peaks.



343. ALPINE LAKE.

This mountain-climbing is very dangerous. Sometimes the traveller loses his footing on the ice, or an immense mass of snow slips from above and dashes him over a fearful precipice. There are deep *crevasses*, or openings in the ice, covered over with loose snow. Travellers require to take guides who know the way. They go in file, one behind another, tied together with ropes; and thus, if one slips, the others will hold him up. Sometimes they are overtaken by drifting, blinding snow-storms, and they lose their way and are frozen to death.

345. High up on one of the mountains of Switzerland, nearly two miles above the sea-level, is a house called the *Monastery of St. Bernard*, founded nine hundred years ago. It is occupied by the *monks* of St. Bernard, who have long been noted for their kindness in saving travellers lost on the



345. MONASTERY OF ST. BERNARD.

mountains. These monks have wonderfully sagacious dogs, which hunt out those who have fallen exhausted amid the snows.

346. Between France and Italy are high carriage-roads over the Alps. A wonderful railway-tunnel has also been made through a high peak called *Mont Cenis*. This tunnel, or passage-way, is about seven and a half miles long, twenty-six feet wide, and twenty feet high.

347. *Mount Vesuvius* in Italy, and *Mount Etna* in the island of Sicily, are remarkable volcanoes.

Rivers.—348. The rivers of Europe are not so long and large as those of the other great divisions of the Earth. If we stretch a line on the map from the Strait of Gibraltar to the Ural Mountains, we shall divide the rivers into two groups. Flowing toward the north and west are the *Dwina*, *Vistula*, *Oder*, *Elbe*, *Rhine*, *Seine*, *Loire*, and *Tagus*; flowing toward the east and south are the *Volga*, *Don*, *Dnieper*, *Danube*, and *Rhone*.

349. The *Volga*, over 2,000 miles long, and the *Danube*, about two-thirds as long, are the largest rivers of Europe.

350. The *Rhine*, flowing from the Alps, is one of the most beautiful rivers in the world. Along its shores are pretty villages, large cities, charming valleys, and vine-clad hills. In some places it flows past high, rocky cliffs, crowned with grim stone castles, which were built long ago for defence in times of war.

Lakes.—351. There are many small lakes in the north of Europe. *Ladoga*, 130 miles long, is the largest. The lakes in the Alpine valleys are celebrated for their beauty. *Geneva* and *Constance* are the largest.

Climate.—352. Europe has a milder climate than any other part of the world at the same distance from

the Equator. The western side, being near the warm waters of the ocean, has a milder climate than the interior. The winters in the north are intensely cold.

Products.—353. The southern countries produce olives, figs, oranges, grapes, tobacco, and the mulberry, which yields food for the silk-worm. The central countries produce the various kinds of grain and vegetables. The northern countries yield barley, oats, and pasturage. Near the Arctic Ocean nothing will grow but lichens, mosses, and stunted shrubs.

Minerals.—354. Europe does not contain rich mines of gold and silver. Iron is plentiful in Britain, France, Sweden, and Russia; coal in Britain and Belgium; copper in Britain, Norway, and Russia; lead in Britain and Spain; tin in Britain; marble in Italy and Greece; and salt in Russia and Britain.



355. CHAMOIS.

Animals.—355. The wild animals are not numerous or large. In the north are the rein-deer and various fur-bearing animals; in the central countries are bears, wolves, wild boars, and various kinds of deer. The *chamois* is a beautiful animal inhabiting the Alps. Large eagles are also found among the Alps.

Inhabitants.—356. The population of Europe is about 320,000,000. The countries which are most thickly peopled are Belgium and England.

Most of the inhabitants of Europe believe in the Christian

religion. In the southern countries they are mostly Roman Catholics; in Britain, Holland, Denmark, Norway, Sweden, and North Germany, the majority are Protestants; in Russia, Turkey, and Greece, they belong to what is called the Greek Church. In Turkey there are also many Mohammedans, who believe in Mohammed, a false prophet who lived more than twelve hundred years ago.

Divisions.—357. Europe includes twenty countries or political divisions, which are given in the following table:—

Name.	Population.	Capital.
GREAT BRITAIN	35,000,000	London.
NORWAY AND SWEDEN....	6,500,000	Stockholm.
DENMARK	2,000,000	Copenhagen.
RUSSIA	85,000,000	St. Petersburg.
GERMAN EMPIRE.....	45,000,000	Berlin.
AUSTRIA	37,800,000	Vienna.
HOLLAND	4,270,000	Amsterdam.
BELGIUM.....	5,500,000	Brussels.
FRANCE.....	37,600,000	Paris.
SWITZERLAND.....	2,800,000	Berne.
SPAIN.....	16,400,000	Madrid.
PORTUGAL.....	4,500,000	Lisbon.
ITALY.....	28,400,000	Rome.
TURKEY.....	5,000,000	Constantinople.
GREECE.....	2,000,000	Athens.
ROUMANIA.....	5,376,000	Bucharest.
SERVIA.....	1,700,000	Belgrade.
MONTENEGRO.....	236,000	Cettigne.
BULGARIA.....	2,000,000	Sophia.
EAST ROUMELIA.....	815,000	Philippopolis.

The most powerful countries of Europe are Great Britain, Germany, France, Russia, Austria, and Italy. These are sometimes called the *Six Great Powers of Europe*.

Government.—358. Most of the countries of Europe are called limited monarchies, because the laws are made by the sovereigns assisted by parliaments elected by the people.

The Czar of Russia and the Sultan of Turkey rule their dominions without the assistance of a parliament.

Switzerland and France are republics.

THE BRITISH ISLES.

359. The British Isles consist of two large islands, *Great Britain* and *Ireland*, and many neighbouring small islands.

History.—360. When Britain was first visited by the Ro-

mans, more than nineteen hundred years ago, the country was covered with forests, and inhabited by barbarous tribes, who lived by hunting and fishing, clothed themselves with skins of wild animals, and stained their bodies with the juice of herbs.

Position.—361. The British Isles are in the northern part of the North Temperate Zone. The Atlantic Ocean lies on the north and west; the North Sea, the Strait of Dover, and the English Channel, are on the east and south, separating Britain from the mainland of Europe.

362. The Strait of Dover, at the narrowest part, is twenty-one miles wide. It has been proposed to make a tunnel here, so that rail-cars may pass under the sea from one side to the other.

Climate.—363. The prevailing winds come from the south-west, over the warm waters of the Atlantic, bringing heat and moisture. Hence the climate is milder and more humid than in most countries as far north.

Area.—364. Great Britain is about three times as large as New Brunswick. It is the largest European island. Ireland is about twice as large as the peninsula of Nova Scotia.

365. Great Britain includes three countries,—*England*, in the south; *Wales*, in the west; and *Scotland* in the north.

ENGLAND AND WALES.

History.—366. The name *Britain* is derived from the Britons, the early inhabitants of the country.

Twelve or thirteen hundred years ago, several German tribes came from Denmark and took possession of the southern part of the island. The Britons were driven from

their homes: some of them crossed to the north of France, others took refuge on the mountains of Wales, where their descendants still live.

The name *England* is derived from *Angles*, one of the German tribes which settled in the country.

Coast.—367. The principal Coast Waters are—*Mouth of the Humber*, the *Wash*, and the *Mouth of the Thames*, on the east; the *Spithead*, *Solent*, *Plymouth Sound*, *Falmouth Harbour*, and *Mount's Bay*, on the south; *Bristol Channel*, *Cardigan Bay*, *Mcnai Strait*, *Mouth of the Mersey*, *Morecambe Bay*, and *Solway Firth*, on the west.

Near the mouth of the Thames are dangerous shoals called the *Goodwin Sands*, on which many ships are wrecked every year.

368. The principal Capes are—*Flamborough Head*, *Spurn Head*, *North Foreland*, the *Needles*, *Portland Point*, *Start Point*, *Lizard Point*, *Land's End*, and *St. David's Head*.

369. The principal Islands on the coast are—the *Isle of Wight*, *Scilly Isles*, and *Channel Isles*, on the south; and the *Isle of Man* and *Anglesey*, on the west.

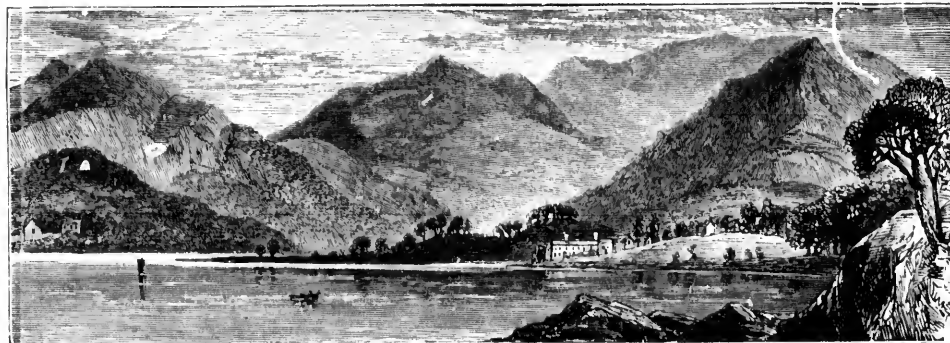
370. The Isle of Wight, varied with high hills and rich valleys, is noted for its beauty. The Queen has here a favourite residence, called *Osborne House*.

371. The Channel Isles, *Jersey*, *Guernsey*, *Alderney*, and *Sark*, are near the coast of France. These islands yield apples, pears, peaches, and other fruits, in great abundance.

372. The Isle of Man, in the middle of the Irish Sea, contains valuable lead mines. The inhabitants are called *Manx*.

373. Anglesey is separated from the mainland by Menai Strait. The strait is crossed by two wonderful bridges—a Suspension Bridge for ordinary travel, and the *Britannia Tubular Bridge* for rail-cars.

The Tubular Bridge consists of an immense tube of iron, over half a mile in length, resting on stone towers one hundred feet above the water. Anglesey is noted for its stone



377. WINDERMERE.

ENGLAND & WALES



(Divided into Squares of 100 Miles.)

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tables and other curious remains of a superstitious people called Druids. The copper mines of the island have yielded immense wealth.

Area.—374. England and Wales together are rather more than twice as large as New Brunswick.

Surface.—375. The eastern side of England, including the greater part, is low and level or undulating; the western side is mountainous. A large part of the country slopes towards the east.

The Mountains are—the *Cheriot Hills*, the *Pennine Range*, and the *Cumberland Mountains*, in the north; the *Cambrian*

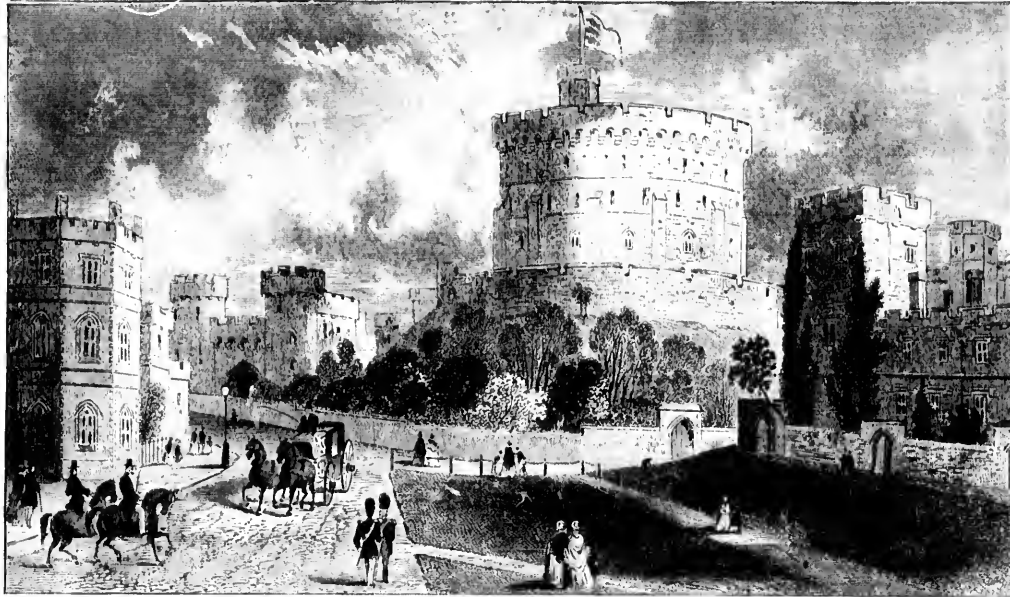
Mountains, covering a large part of Wales; and the *Devonian Mountains*, in the south-west.

Snowdon, in the north-west of Wales, 3,590 feet high, is the highest peak.

Rivers.—376. The principal rivers are—the *Tyne*, *Tees*, *Humber* (*Ouse*, *Trent*), *Great Ouse*, and *Thames*, on the east; and the *Severn* and *Mersey*, on the west.

The *Thames* and *Severn*, the two largest rivers, are about 220 miles in length.

Lakes.—377. The principal lakes are in the glens of the *Cumberland Mountains*. The most important are—*Winder-*



384. PART OF WINDSOR CASTLE.

mere, *Derwentwater*, and *Ulleswater*. They are celebrated for their beauty, and are a favourite resort of tourists.

Products.—378. England owes much of her greatness to her immense mineral wealth. The most important minerals are, *coal*, *iron*, *copper*, *tin*, *lead*, and *salt*. They are found chiefly in the north and west.

379. The soil is carefully cultivated, and yields large crops of grain and vegetables. The south-western counties are celebrated for fine orchards; the south-east, for the culture of hops, which are used in the manufacture of beer.

380. A large part of the country is devoted to pasturage. Cattle, horses, and sheep, are very numerous, and great attention is given to the improvement of breeds.

381. England exceeds every country in the world in the variety and value of its manufactures. These include cottons, woollens, silks, and all kinds of metallic goods. The manufacturing towns are generally in the coal districts.

382. The extensive manufactures give rise to trade, so that England is the greatest commercial country in the world. Cotton, silk, and other raw materials, are brought from foreign countries; and manufactured goods are exported.

General Features.—383. A large part of England is owned by wealthy noblemen, who rent their lands to tenants, or hire a large number of labourers to work them. The landlord lives in a splendid castle or palace, and the labourers in humble cottages.

384. The rich green fields are generally separated by hedges of shrubs, which add greatly to the beauty of the country. Large tracts are devoted to parks and forests, containing stately elms, oaks, and other trees, planted many hundred years ago. These beautiful woodlands are inhabited by deer, rabbits, foxes, and other wild animals. The chase, or hunting on horseback, is a favourite sport. Windsor Forest, near the Queen's Castle at Windsor, is fifty-six miles in circuit.

Inhabitants.—385. The population of England and Wales in 1881 was about 26,000,000.

Some of the inhabitants possess great wealth; others are miserably poor, one in every twenty-three being a pauper. The wealthy and middle classes are generally well educated, but the poor are very ignorant.

The most noted institutions of learning are the Universities of Oxford and Cambridge.

Towns.—386. England has many large and important cities. The following are the largest:—

London (3,800,000), *Liverpool*, *Manchester*, *Birmingham*, *Leeds*, *Sheffield*, *Bristol*, *Newcastle*, *Bradford*, *Stoke*, *Hull*, and *Portsmouth*.

387. London, the capital of the British Empire, is situated on both sides of the River Thames, forty miles from the sea. It is the largest and wealthiest city in the world. The river



387. ST. PAUL'S CATHEDRAL.

is crowded with ships from all parts of the globe, and the streets are so thronged with men and vehicles that railroads have been constructed under the streets to enable people to move from place to place with ease. There are several bridges over the river, and also a tunnel or passage-way under it. London has many splendid buildings. *St. Paul's Cathedral* is a magnificent church. *Westminster Abbey* is the place where the Sovereigns are crowned, and where the illustrious dead are buried.

388. *Liverpool*, near the mouth of the Mersey, is the second city in population and commerce. Its docks, where ships

load and unload, extend five or six miles along the river. *Bristol* and *Hull* rank next as commercial cities.

389. *Portsmouth* is the head-quarters of the British Navy. Its dock-yards cover one hundred and twenty acres, and its harbour is crowded with war-ships. *Plymouth* and *Devonport* are also important naval stations.

390. *Manchester* is a great manufacturing city, forming the centre of the cotton manufactures. Its factories are immense brick buildings, over two hundred in number, from five to eight stories in height. *Leeds* is the great centre of the woollen manufactures.

391. *Birmingham*, near the centre of England, is the most noted city in the world for the manufacture of all kinds of metal goods. The surrounding country is covered with furnaces, forges, and foundries. *Sheffield* is noted for its cutlery; *Worcester*, for its porcelain; and *Kidderminster*, for its carpets.

392. *Stoke-upon-Trent* is in the centre of a district called *The Potteries*, celebrated for the manufacture of all kinds of earthenware. The district is covered with cone-shaped kilns, or baking ovens, with tall chimneys. It was here that *Josiah Wedgwood* did so much to improve the manufacture of earthenware.

SCOTLAND.

History.—393. Scotland was once a separate kingdom, and had kings of its own. In those times it was often at war with England, and the inhabitants of the Border districts lived in the greatest insecurity.

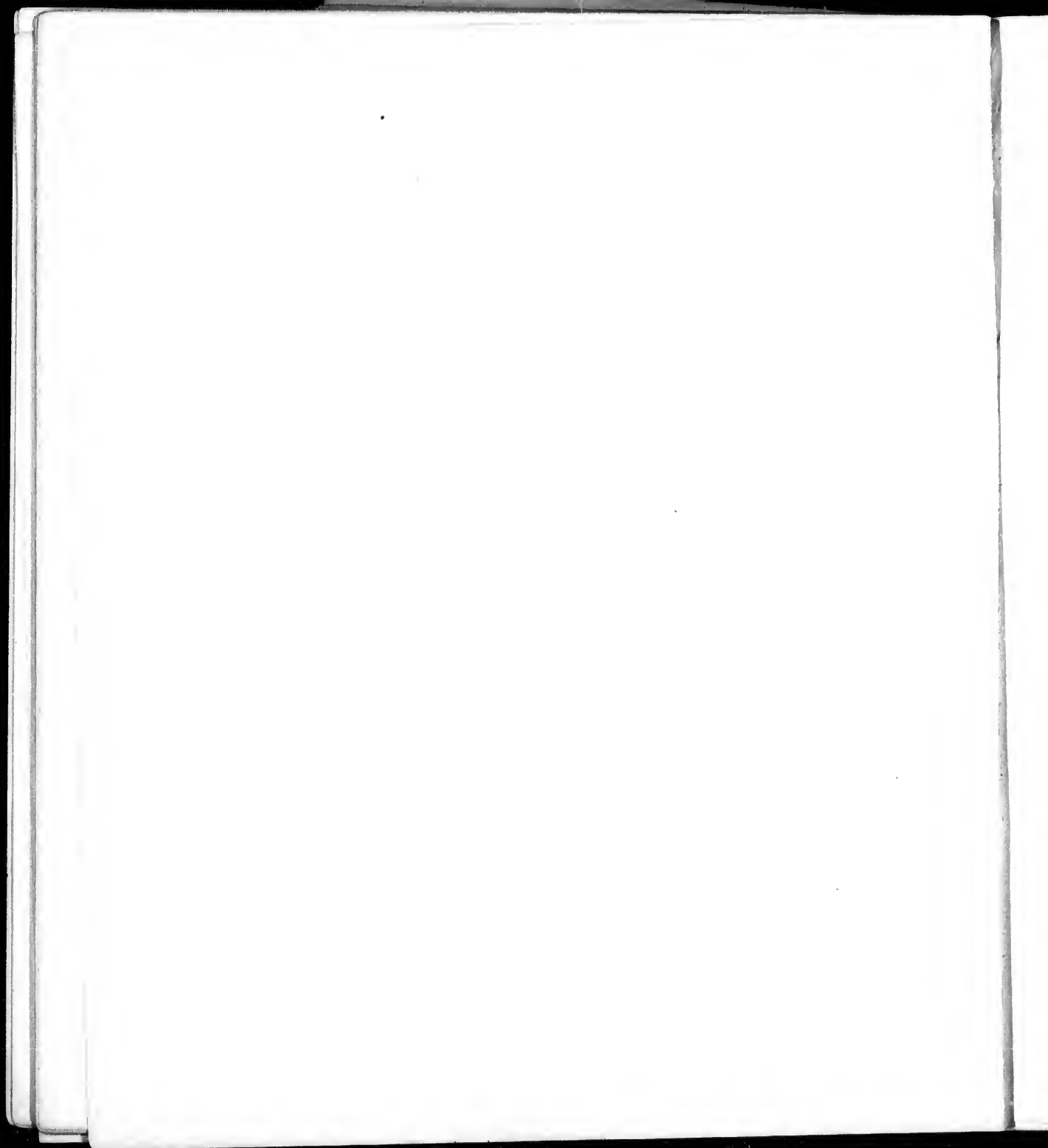
In 1603 *James VI.* of Scotland, being the nearest heir to the English throne, became King of England; and about one hundred years later the two countries were united as one kingdom.

Coast.—394. The coast of Scotland is very irregular, and in many places it is rocky and elevated.

The chief Coast Waters are—*Pentland Firth*, on the north; *Dornoch Firth*, *Moray Firth*, *Firth of Tay*, and *Firth of Forth*, on the east; *Solway Firth*, on the south; *Firth of Clyde*, and *Loch Linnhe*, on the west.

The Firths of Forth and Clyde are of great importance to commerce. They are connected by a canal. *Moray Firth* and *Loch Linnhe* are connected by the *Caledonian Canal*.

395. Small islands are numerous. They are included chiefly in three groups:—the *Orkneys* and *Shetlands*, on the north; and the *Hebrides*, on the west.



396. The Orkneys produce oats and vegetables. The Shetland Isles are noted for their wild ponies. Both groups are destitute of trees.

397. The Hebrides include about five hundred small islands. *Lewis* is the largest. *Skye* is noted for its beautiful mountain scenery. *Staffa* is noted for Fingal's Cave, a large cavern opening from the sea, studded along its sides with huge pillars of rock. *Eigg* is noted for a cave in which all the inhabitants of the island were smoked to death by a hostile clan.

Area.—398. Scotland is about as large as New Brunswick.

Surface.—399. Scotland is a mountainous country, especially in the north. The northern portions are called the *Highlands*; the southern, the *Lowlands*.

400. The Highlands are rugged and wild. They are broken in many places by fearful precipices and deep glens. When concealed by blinding snows or thick fogs which often envelop the Highlands, these precipices are very dangerous to the mountain traveller. *Glenmore*, or "the Great Glen," extending from Moray Firth to Loch Linnhe, divides the Highlands into two sections.

401. The Grampians, on the south of Glenmore, are the highest mountains in the British Islands. They are so rocky and steep that they form an almost impassable wall, except along the narrow passes where the streams break through. *Ben Nevis*, 4406 feet high, is the highest point.

402. The Highlands have often been a refuge in times of war and persecution. *Glencoe*, a valley in the Northern Highlands, is noted for the disgraceful massacre of its inhabitants, the *MacDonalds*, by a party of English soldiers, about two hundred years ago.

Rivers.—403. The streams are generally short and rapid. The *Tay* and the *Clyde* (the latter noted for ship-building along its banks) are the most important rivers.

Lakes.—404. Small lakes, called *lochs*, are numerous. They are generally in mountain glens, and are bordered by high cliffs.

Loch Lomond, 20 miles long, is the largest lake in Great Britain. *Loch Leven* is noted for its castle on an island, in which a Scottish Queen was once imprisoned.

Products.—405. The soil in the Lowlands is carefully cultivated, and yields large crops of grain and



404. LAKE SCENE IN THE HIGHLANDS.

vegetables. The Highlands are cold and rainy, and better suited for pasturage. Cattle and sheep are numerous, and many of the inhabitants are shepherds.

Coal and iron are abundant in the central parts of Scotland. The manufactures are similar to those of England.

Inhabitants.—406. The population in 1881 was 3,734,441.

The Scotch are generally intelligent and industrious. The Highlanders are hardy and brave, and speak a language called *Gaelic*. They were formerly divided into *clans*, as the *Campbells*, the *MacDonalds*. Each clan was governed by its own chief.

Towns.—407. The largest cities of Scotland are—

Glasgow (511,500), *Edinburgh*, *Dundee*, *Aberdeen*, *Paisley*, and *Greenock*.

408. Edinburgh, the capital of Scotland, is one of the most beautiful cities in the world. Its chief feature consists of two ridges of hills, separated by a deep narrow valley, and connected by bridges. One ridge is occupied by the *New Town*, which has many broad streets and fine squares. The more elevated ridge has many large old buildings, and is called the *Old Town*. On a bold rock, at one extremity of this hill, is the *Castle*, so noted in Scottish history; at the other extremity is the equally celebrated *Holyrood House*, the palace of the Scottish Sovereigns.

409. Glasgow, on the Clyde, is noted for its manufactures, including cotton goods, engines, all kinds of machinery, and iron ships. It is here that the celebrated Cunard steamers

are built. James Watt, the inventor of the condensing steam-engine, made his first experiments at Glasgow.

410. Paisley is noted for its shawl and thread manufactures; Kilmarnock, for its carpets; Dundee, for its linen; Aberdeen, for its ship-building; Peterhead, for its fine granite. Perth, once the capital of Scotland, is a beautiful city. The stone on which the kings sat during the coronation ceremony was removed many centuries ago to Westminster Abbey. Wick is the head-quarters of the herring fishery.

Dumbarton is noted for its ancient castle; Bannockburn, for a victory gained by King Robert the Bruce over the English.

IRELAND.

History.—411. Ireland once comprised several small independent kingdoms. The quarrels of the kings led to the conquest of the country by the English, about seven hundred years ago. Ireland has often been disturbed by violent political agitation.

Coast.—412. Ireland has many bays and harbours. The most important are:—

Lough Foyle, Belfast Lough, Dublin Bay, Cork Harbour, Bantry Bay, Kenmare Bay, Dingle Bay, Tralee Bay, Mouth of the Shannon, Galway Bay, Clew Bay, and Donegal Bay.

413. On the north coast, 10 miles from Coleraine, is the *Giants' Causeway*, consisting of many thousands of closely-connected pillars of rock, which rise out of the sea, and appear in the distance like a work of art. According to Irish legend, this natural wonder was the work of giants, who were trying to make a road across the sea to Scotland.

Surface.—414. Ireland is generally low and level. At various places near the coast are mountain masses. The most important are the *Donegal Mountains*, in the north; the *Mourne* and the *Wicklow Mountains*, in the east; and *Magillcuddy Reeks*, in the south-west.

Carn Tual (3,400 feet), in the Magillcuddy Reeks, is the highest point.

415. Large bogs extend across the middle of the country. They are covered many feet deep with a black substance called peat, formed from partially decayed mosses. Peat is cut into small blocks, dried in the sun, and used as fuel.

Rivers.—416. The most important rivers are the *Foyle*, the *Lifey*, and the *Shannon*.

The *Shannon*, 250 miles long, is much the largest river. It forms several lakes.

Lakes.—417. Small lakes, called *loughs*, are numerous.

Lough Neagh, 17 miles long, is the largest lake. Its waters contain mineral substances which cause wood placed in them to assume the appearance of stone.

Lough Derg has many small islands. One of these islands is noted as a place of pilgrimage, hundreds resorting here annually for fasting and prayer.

The *Lakes of Killarney*, near Carn Tual, are noted for their beautiful scenery. They are often visited by travellers.

Products.—418. Ireland has a moist climate, which makes it better adapted to grazing than tillage. Its fields are so beautifully green, that it has been called the *Emerald Isle*.

Potatoes, wheat, oats, and flax are cultivated. Much attention is given to the rearing of cattle, sheep, and swine.

419. Manufacturing is carried on mostly in the north. Linen goods are the most important manufactures.

The exports consist of grain, butter, cheese, cattle, bacon, and linen.

Inhabitants.—420. The population of Ireland in 1881 was 5,159,839. In 1841 it was nearly double this number.

Many of the Irish are very poor, live in miserable cabins, and rent their small farms from rich landlords; but they are cheerful and kind-hearted. Large numbers emigrate every year to America. Many of the landlords live in England.

The Irish are generally Roman Catholics, except in the north.

Divisions.—421. Ireland is divided into four *Provinces*: *Ulster*, in the north; *Leinster*, in the east; *Munster*, in the south; and *Connaught*, in the west.

Towns.—422. Dublin, the capital of Ireland, near the mouth of the *Lifey*, is a fine city, containing many magnificent public buildings. Near the city is a large enclosure called *Phoenix Park*, beautifully ornamented with trees, ponds, and winding roads. Many deer and other animals run wild among its thickets.

423. Belfast is the most important town in the north of Ireland, and is noted for its linen manufactures.

Londonderry is celebrated for its resistance to the besieging army of James II. Its inhabitants, though in a starving condition, refused to surrender.

424. Cork, the chief city in the south, has one of the best harbours in the world. The steamers between England and America call at Queenstown, in Cork Harbour, to land and receive the mails.

Limerick, on the Shannon, is noted for the manufacture of lace. Galway is an important sea-port. Ballinasloe has the largest cattle and sheep fair in Ireland.

425. Dundalk, Drogheda, and Wexford are important sea-port towns. At Youghal Sir Walter Raleigh introduced the culture of the potato. Near Trim the Duke of Wellington was born. Not far distant is the Hill of Tara, noted in ancient times for its palace, in which the kings, clergy, and barons met to deliberate on public affairs. The Irish have great love for this spot.

IRELAND



(Divided into Squares of 100 Miles.)

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GREAT BRITAIN AND IRELAND.

Government.—426. England, Wales, Scotland, and Ireland form one kingdom, called the *United Kingdom of Great Britain and Ireland*.

427. The Sovereign, either a king or a queen, is assisted in governing the country by a *Parliament*. The Parliament consists of two bodies of men, called the *House of Lords*, and the *House of Commons*.

428. The Lords hold their office for life; and when a Lord dies, he is succeeded by his eldest son, or nearest male heir. The Commons are elected by the people.

429. Great Britain has a larger fleet than any other country, and her war-ships are found on almost every ocean and sea. The army, though not so large as in some of the countries of Europe, is very large, well-drilled, and powerful.

The British Empire.—430. The British Isles form a very small part of the Earth; but we have seen that they contain a great many people, and very much wealth. They became so crowded with people, that during the past two hundred and fifty years large numbers have emigrated to newly discovered countries, as America and Australia, forming *British Colonies*. The armies and fleets of Britain have also gone abroad and conquered large and populous countries, as in the south of Asia and Africa.

431. The British Isles, together with all the countries in different parts of the world ruled over by Great Britain, form the *British Empire*. This great Empire includes about one-sixth of the land on the Earth, and contains about one-fifth of the Earth's inhabitants.

432. The principal countries of the Empire are:—

The *British Isles*, in Europe; *British India*, in Asia; *Cape Colony* and *Natal*, in Africa; the *Dominion of Canada*, *Newfoundland*, and many of the *West India Islands*, in America; *Australia*, *Tasmania*, *New Zealand*, and the *Feejee Isles*, in the Pacific Ocean.

NORWAY AND SWEDEN.

433. The kingdoms of Norway and Sweden were united under one king about sixty years ago.

Sweden was formerly held in subjection by Denmark. About three hundred and fifty years ago a Swedish prince, named Gustavus Vasa, escaped from prison in Denmark to his own country. He lived some time among the peasants, wore their dress, and worked with them. When a favourable opportunity presented itself, he roused his countrymen, and helped them to gain their independence.

434. Norway is a rugged, mountainous country.

(575)

The mountains are broken by deep narrow valleys with steep sides. Long ago, before Norway and Sweden were united, a Scottish army, sent to aid Sweden against Norway, marched into one of these valleys. The peasants hurled rocks upon them from above, and only two out of nine hundred escaped alive.

435. Sweden comprises the lower mountain slopes and low plains next the Baltic.

Grain and vegetables are cultivated in the lowlands of the south; the mountain slopes and northern portions of the country are devoted to pasture. On the mountains are extensive forests of pines. Many tall straight trees are cut in these forests, floated down the rivers, and taken to other countries, to be used as masts for ships.

436. Sweden is noted for its iron mines. The iron yields steel of the finest quality. Although England has abundance of iron, it imports Swedish iron for its best cutlery. There are also copper and silver mines.

437. Mining has been carried on so long, that large underground chambers have been formed by the miners. A king of Sweden once had these chambers lighted up, and held a banquet in them.

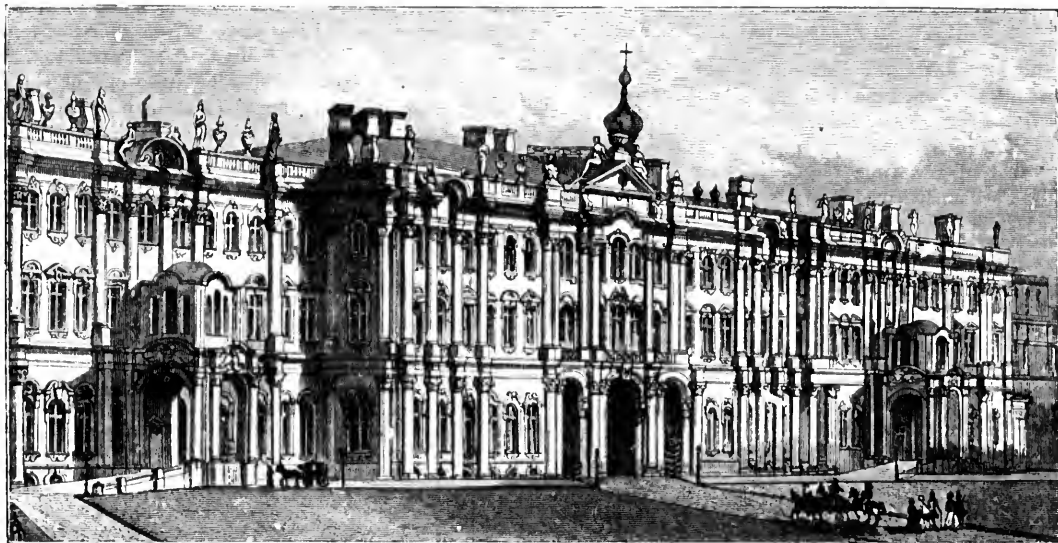
438. In Norway the people often live far apart. In such places the teachers travel about, staying a day or two in one place, then in another.

439. Stockholm is the capital and largest city of Sweden. Christiania is the capital of Norway. Bergen is the chief naval station, and has a large trade in fish.



440. A LAPP IN HIS SLED

440. In the north of Sweden, and extending east to the White Sea in Russia, is a very cold country called Lapland. The Lapps are a curious people. Their food consists largely of the milk and flesh of the reindeer. Some of them have large herds of these animals, and they move from place to place to find pasture for them. They harness the reindeer to a kind of sled, and drive rapidly over the snow.



453. THE CZAR'S WINTER PALACE, ST. PETERSBURG.

DENMARK.

441. Denmark was once inhabited by a warlike people, who sent their pirate-ships over the seas to pillage the neighbouring countries.

History tells us that from this country came Guthrum, who so much annoyed Alfred the Great of England. Canute, King of England, was a Dane; and the Anglo-Saxons, who drove the Britons out of England, came from Denmark. In our own times, a Danish princess has, by marriage with the Prince of Wales, become a member of the royal family of Great Britain, and will probably one day share in the honours of the throne.

442. Denmark is now quite a small, weak State, about half as large as New Brunswick. It consists of the peninsula, called *Jutland*, and several islands, of which *Seeland* and *Funen* are the largest and the most important.

443. Denmark is a low, level country. The climate is temperate and humid. Grain, vegetables, and flax are cultivated; and many horses, cattle, and sheep are raised. Many of the inhabitants are fishermen. Live stock, butter, and cheese are exported.

444. *Copenhagen*, the capital, is on the island of *Seeland*.

445. Denmark owns the *Faroe Islands*, *Iceland*, and *Greenland*.

RUSSIA.

446. Russia has in modern times become one of the leading States of Europe. The Empire includes over half of Europe, and about one-third of Asia.

447. Before the time of Peter the Great, who lived about two hundred years ago, this country was small and unimportant, and the people were rough and uncivilized. Peter himself was ignorant, vicious, and cruel; but he did much to improve his people. He travelled in foreign countries in pursuit of knowledge. In Holland he worked as a millwright, and his fellow-labourers called him *Peter Zimmermann*; that is, *Peter Carpenter*. On his return to Russia he took with him skilled workmen, and taught his people to build ships, and to work at various manufactures. Peter fought many unsuccessful battles with Sweden, but he did not become discouraged. "These people," said he, "will teach us to beat them by-and-by." In the end he took a large part of their territory from them.

448. Russia consists mostly of lowland plains. It has many large rivers. The *Volga* is the largest river in Europe. The rivers are connected by canals, so that, in the summer, boats sail across the country from the Baltic Sea to the Caspian.

449. The northern part of the country is mostly covered with an immense forest of pines and other trees. The winters here are long and cold, and

the summers are so short that grain will not ripen. The rivers and lakes abound with fish and wild fowl; and in the forests are many bears, wolves, and other wild animals, which yield valuable fur. The people hunt, fish, cut wood, make charcoal, tar, pitch, and potash.

450. In the south of Russia are rich lands, yielding grain, flax, and hemp. Large quantities of wheat are raised near the Black Sea. The land is mostly owned by the nobles. The labourers, called serfs, were, until a few years ago, bought and sold, like cattle, with the estates on which they lived.

In the south-east are large treeless plains, called *steppes*, which afford pasture to herds of wild horses.

451. Russia has not many railroads. Trade is carried on by the rivers and canals. The products of the country, and

goods brought from Persia, China, and other countries, are sold at fairs, held annually in certain cities, to which merchants resort.

452. In the winter season men, warmly wrapped in furs, go on long journeys in large sleighs, drawn by swift horses. Sometimes, in passing through forests, they are pursued by hungry wolves, and are compelled to urge their horses to the utmost speed to save their lives.

453. St. Petersburg (700,000), the capital of Russia, is a very large, splendid city. It has many beautiful churches, with tall spires and gilded domes. The *Cathedral of St. Isaac* is said to have cost \$70,000,000. The Czar's *Winter Palace* is the largest palace in Europe, affording room for six thousand people. It is said that there are only two months in the year during which snow does not fall in St. Petersburg.

454. Moscow is a large city in the centre of Russia. Napoleon I. of France led a large army into Russia, intending to make his winter-quarters at Moscow, and in the spring to conquer the country. After much fatigue, at the beginning of winter he arrived at the city, only to find it wrapped in flames; for the Russians had set it on fire, to deprive him of a winter home. Napoleon was obliged to retreat, but before he got back to France the most of his army had perished of cold and hunger.

Riga, Nijni-Novgorod, and Odessa are important towns. Astrachan has a large trade with Western Asia.

THE GERMAN EMPIRE.

455. The German Empire lies between the Alps on the south, and the North Sea and the Baltic on the north.

456. The Empire includes the four kingdoms, *Prussia*, *Saxony*, *Bavaria*, and *Wurtemberg*, and many small States. These countries were united in 1871, under the King of Prussia, who is styled the *Emperor of Germany*.

457. The south of Germany is elevated and mountainous, including the lower slopes of the Alps.

Here are large dark forests, which yield material for the ship-builders, the charcoal-burners, and the wood-carvers. In this part of the country are also large pastures, where cattle and sheep feed in great numbers.

458. Through this highland region flow the *Danube* and the *Rhine*, two of the most important rivers of Europe. The Rhine breaks through the mountains along a narrow



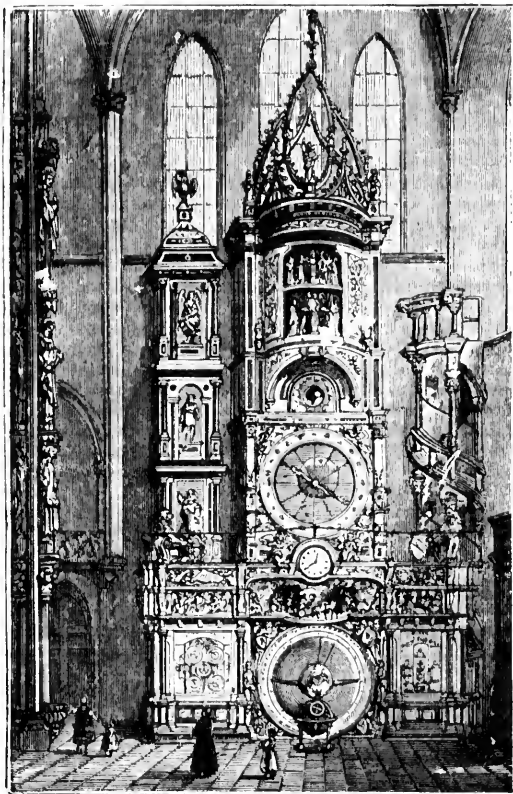
458. SCENE ON THE RHINE.

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464. CLOCK IN STRASBURG CATHEDRAL.

gorge, which widens into a beautiful fertile valley, clothed with vineyards, orchards, and grain fields. Along the banks are many pretty villages and large cities; and here and there on a high cliff is one of those strong stone castles, built hundreds of years ago, and now changed by the lapse of time into picturesque ruins.

459. The country towards the north is low and level, yielding grain, tobacco, and flax.

460. Germany produces wool of the finest quality, and its woollen manufactures are very important. The Germans also excel in the manufacture of lace.

461. Germany is said to yield half the zinc used in the world; it also yields iron and other minerals. In the sands along the shores of the Baltic is found a beautiful yellow substance called amber.

462. Germany has many large wealthy cities, which contain magnificent cathedrals, universities, picture-

galleries, and other works of art. The people are very intelligent, and the law compels them to send their children to school.

463. **Berlin** (1,118,000), the capital, is a large and beautiful city. Its university is one of the most celebrated in the world.

464. **Hamburg**, on the Elbe, is the most commercial city. **Dantzic**, near the mouth of the Vistula, ships large quantities of grain. Its granaries are six or seven stories high. **Bremen** is an important port. **Dresden** is noted for its picture-gallery; **Cologne** for its cathedral. **Strassburg** is a strongly fortified city taken from France in 1871. It has a magnificent cathedral and a wonderful clock.

465. **Lelptic** is noted for its trade in books, and for its great fairs held three times a year. Thousands of merchants attend these fairs, coming from all parts of Europe, and even from Asia.

AUSTRO-HUNGARY.

466. Austria, now properly called the Austro-Hungarian Monarchy, is one of the leading States of Europe. It consists of several countries united under one sovereign.



469. CHAPEL IN A SALT MINE OF AUSTRIA.

467. Austria has but little sea-coast. The western part of the country lies along the eastern slopes of the Alps. East of the Alps is a beautiful country of low hills and fertile valleys, watered by the Danube and its tributaries. Still further east, where the Danube turns to the south, are immense low plains, very fertile, except the swamps near the rivers, and certain tracts covered with deep sand. Beyond the plains, in the far east, are the *Carpathian Mountains*.

468. Austria has a mild climate. Grapes and all kinds of grain grow luxuriantly; flax, tobacco, and silk are also important products.

469. Austria is also rich in minerals. Its salt mines are the richest in the world.

The great salt mines are beyond the *Carpathian Mountains*, near the source of the *Vistula*. In some of the large underground chambers, formed by removing the salt, the miners have made curious pillars and statues of salt. One chamber is formed into a chapel with decorated pillars and arches. It has a pulpit, figures of saints, and of priests kneeling before the altar, all cut out of rock salt. The miners attend service here once every year.

470. **Vienna** (1,021,000), the capital, is one of the largest and finest cities of Europe. It is situated on the Danube, near the highlands.

471. **Trieste** is the chief sea-port. **Buda and Pesth**, on opposite sides of the Danube, are together the capital of Hungary. **Prague** is a large commercial city.

HOLLAND.

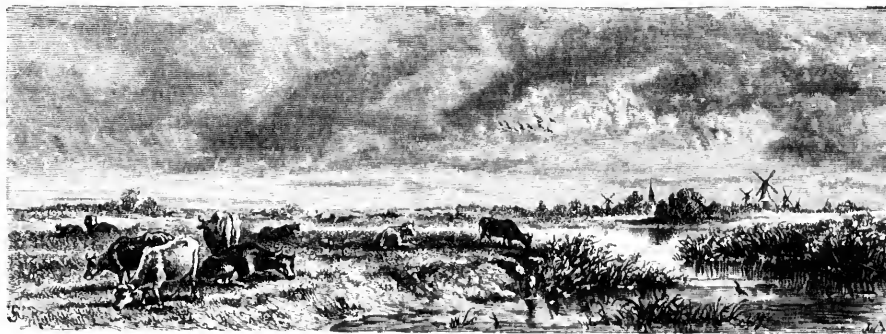
472. Holland is a small country, but it has a most interesting history.

By great bravery and hard fighting, Holland gained its freedom from Spanish tyranny about three hundred years ago. It soon became very prosperous, and sent its ships to all parts of the world, making discoveries, forming colonies, and carrying on trade.

473. Holland is a level, low country, lying along the North Sea, near the mouth of the Rhine. It has no mountains, forests, or rocks.

Cities, villages, and fertile meadows, in some parts of the country, are below the sea-level. The sea is fenced out, and the rivers are kept in their channels, by strong high dikes of earth and stone. Sometimes the dikes break, causing great damage and loss of life. The rivers enter the sea by several mouths.

474. Large ditches or canals, with high banks, run through the country in all directions. In summer the canals are covered with boats, and in winter with sleighs and skaters. Women skate to market, carrying their baskets on their heads.



473. LANDSCAPE IN HOLLAND.

475. The land protected by the dikes requires to be drained, and, as the water cannot flow out, it is taken out by large pumps worked by windmills. These windmills, with their broad sails, give a singular appearance to the country.

476. Holland has a rainy climate, so that it is not a good grain country. The pastures are excellent, and large quantities of butter and cheese are exported. The fisheries are a source of much wealth. The trade with the East Indies is important.

477. The inhabitants of Holland are called Dutch.

They are industrious, cleanly, and intelligent. They have great regard for the wading-birds called storks, and make nests for them on the roofs of their houses. These birds are considered very useful in destroying worms which eat holes in the dikes.

478. **The Hague**, near the mouth of the Rhine, is the seat of the Court. **Amsterdam**, on the Y, is the capital and largest city. **Rotterdam** is also a large city.

479. **Leyden** is noted for bravely refusing to yield to the Spaniards, even when the starving inhabitants were com-

pelled to eat horses and dogs. Finally, the Dutch broke down the dikes, and the Spaniards were driven off by the water.

480. Holland owns Java and other islands in the East Indies.

BELGIUM.

481. Belgium is one of the smallest, but one of the most prosperous kingdoms in Europe.

So many battles were fought in Belgium in former times, that it has been called the *Battle-Field of Europe*; its soil is so carefully cultivated, that it has been called the *Garden of Europe*; and it is so crowded with houses and inhabitants, that a foreign king, in passing through it, said, "*This is only one great city.*"

482. In the north the country is low and level, with many canals, like Holland. It is protected from the sea by hills of sand, which the winds have raised along the coast. The southern part of the country is more elevated and hilly.

483. The farms in Belgium are very small, but they yield large quantities of grain, flax, wool, butter, and cheese.

The highlands of the interior have rich mines of coal, iron, and zinc.

Belgium is noted for its manufactures, especially carpets, lace, and fire-arms.

484. Brussels, the capital, is a handsome city. It manufactures a costly lace. A few miles to the south is *Waterloo*, where a great battle was once fought.

Antwerp is noted for its commerce, its curious old houses, and its beautiful cathedral.

Ghent is noted for its cotton manufactures and its hothouses. Liège, noted for the manufacture of fire-arms and hardware, is called the *Birmingham* of Belgium.

FRANCE.

485. France is one of the Six Great Countries of Europe.

It is noted for the frequent changes in its form of government. At one time it is a monarchy, with a king or an emperor; and at another time a republic, with a president.

486. This country lies to the south of England, from which it is separated by the *English Channel*. The *Bay of Biscay* is on the west; the *Mediterranean Sea* and the *Gulf of Lions* are on the south.

487. France is generally a pretty level country. In the north are large sandy plains.

The *Pyrenes Mountains* separate France from Spain; the *Alps* separate it from Switzerland and Italy.

488. The principal Rivers are the *Seine*, *Loire*, *Garonne*, and *Rhone*.

489. The north of France is somewhat foggy; but as we go south, it becomes clear, warm, and delightful.

490. In the centre and north are large fields of grain, flax, and sugar beet. In the warm south are vineyards, olive and mulberry groves, and fig orchards.

491. Sugar is made from the sugar-beet. The grape-vines grow on stakes, as beans do in our country, only further apart; and wine is made from grapes somewhat as we make cider from apples. The berries from the olive-tree are pressed, and yield an oil called olive oil. The leaves of the mulberry-tree furnish food for the silk-worm, a kind of caterpillar which yields silk.

The chestnut-tree is very common in the forests, and chestnuts are an important article of food with many of the poor.

France exports wine, brandy, oil, fruit, silks, gloves, and many kinds of fancy goods.



493. FOUNTAIN IN PARIS.

492. The French people are gay and fond of amusement. They are also excitable, and like change.

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493. **Paris** (2,260,000), the capital, is next to London the largest city in Europe. It is very gay and splendid, having many fine streets, buildings, squares, gardens, and parks. The Seine flows through the middle of the city, and is crossed by many large bridges. The *Boulevards* are broad paved streets, with broad side walks shaded with trees. Paris is celebrated for its splendid public buildings, its literary and scientific institutions, its manufactures, and its numerous places of amusement. A magnificent palace called the *Tuileries* was destroyed by a mob in 1871.

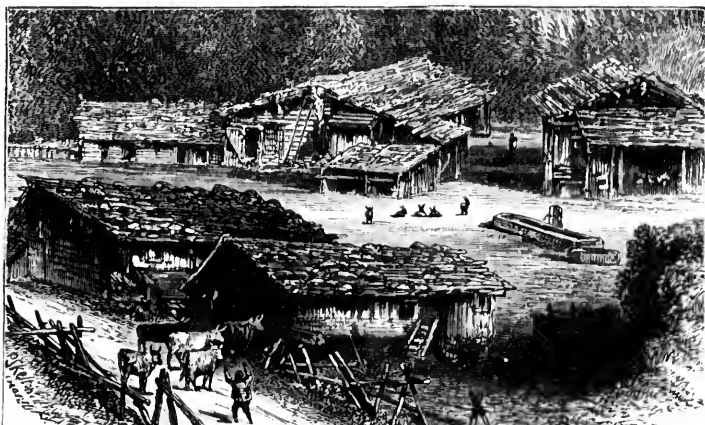
494. **Versailles**, in the neighbourhood of Paris, is noted for its palace and gardens. **Sèvres** is famed for the manufacture of costly porcelain.

495. **Havre**, at the mouth of the Seine, is an important port. **Cherbourg** is a great naval station.

Bordeaux is a large city in the west, from which wine, brandy, and fruit are exported.

Lyon, on the Rhone, is noted for its silk manufactures. **Marseilles**, on the Gulf of Lions, exports silk, fruit, and oil.

496. France owns the island of *Corsica*, in the Mediterranean. It also owns *Algeria*, in Africa; *Guiana*, in South America; and small territories in other parts of the world.



502. AN ALPINE VILLAGE.

SWITZERLAND.

497. Switzerland is a small country surrounded by large and powerful nations. In former times, some of these nations tried to conquer this little country, but the brave Swiss have always maintained their freedom.

498. Switzerland is situated among the Alps. Travellers who are fond of natural scenery love to visit this country more, perhaps, than any other. Here

they find beautiful rich valleys, and clear blue lakes; they can climb the lofty snow-capped mountains, and admire the wonderful glaciers, ever creeping down their sides.

499. Between the high mountains are deep narrow valleys with rapid streams at the bottom. Winding along the sides of the valleys, among the rocks, are roads and footpaths by which travellers pass from the one side of a mountain to the other.

500. In the lower plains and valleys are grain-fields, vineyards, orchards, and rich pastures. As we ascend the mountains, we find forests of oak, chestnut, beech, and pine. Beyond the forests are pasture-lands with scattered shrubs and gay flowers,—blue-bells, hyacinths, lilies, and rhododendrons. Still higher extend the lofty peaks clad with everlasting snow.

501. Only a small part of Switzerland is suited to agriculture. The peasants keep many cows, sheep, and goats, and make large quantities of butter and cheese.

502. The Swiss are intelligent and brave, and love their country.

Pretty villages and small towns are numerous in the mountain valleys. Many of the inhabitants are watch-makers and wood-carvers.

503. **Berne** is the capital of Switzerland. **Geneva**, on Lake Geneva, is the largest city. It is celebrated for its watches.

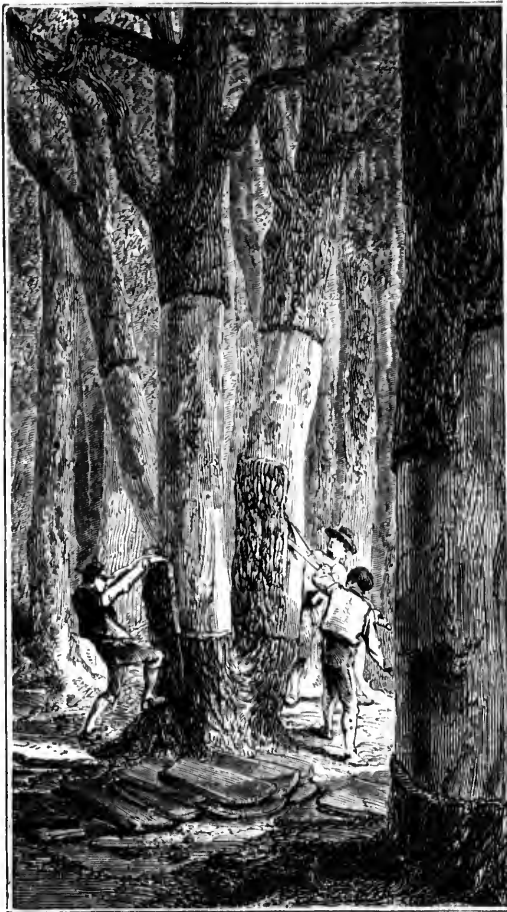
SPAIN.

504. Spain was once a very prosperous country, ruling over vast territories in foreign lands. It has now but little power,

and its people are frequently quarrelling among themselves.

505. A people called *Moors* came from Africa across the narrow Strait of Gibraltar, nearly twelve hundred years ago, and settled in Spain. They built fine palaces and cities, and improved the country very much. The Moors were Mohammedans, and were finally driven out of the country.

Spain led the way in the discovery of America, by supplying Columbus with vessels and men when he sailed westward over the unknown seas.



508. STRIPPING THE CORK-TREE.

506. Spain and Portugal form a large peninsula in the south-west of Europe, having the sea on the east, south, and west. On the north are the *Pyrenees Mountains*, forming a high, broad wall, impassable except by a few deep narrow valleys.

507. A large part of Spain is a rough highland country,—elevated table-lands and lofty mountain ranges.

The table-lands are hot in summer; and they are dry, dusty, and barren, suited only for pasture-lands, except the river valleys, which are very fertile. In winter they are cold, and are swept by high winds.

508. The lowlands of the south have a delightful climate, summer lasting all the year. They produce grapes, olives, oranges, sugar-cane, and the mulberry.

In the forests of the mountain slopes grows a kind of oak which yields the useful substance called cork. The cork is the thick bark of the tree.

509. Horses, mules, and sheep are numerous. The merino sheep of Spain yield wool of the finest quality.

510. Spain has rich mines of lead and iron; it has also silver and several other minerals.

511. The Spaniards are not generally educated or industrious, and they do not improve their country as they might do. Travelling is dangerous along the mountain roads, in consequence of robbers.

512. Madrid, situated on the highlands of the interior, is the capital of Spain. A few miles distant is a noted old palace, called the *Escorial*, built in the form of a gridiron.

Barcelona is the most noted city for manufactures and trade. Granada was built by the Moors. Near the city is an old Moorish palace, called the *Alhambra*.

513. The islands of *Cuba* and *Porto Rico*, in the West Indies, belong to Spain.

PORTUGAL.

514. Portugal is a small country on the Atlantic coast, west of Spain.

In former times Portuguese navigators were among the first in exploring unknown seas and discovering new lands. Like Spain, Portugal has lost most of its colonies, and is now a weak State.

515. A large part of the country consists of highlands; but its plains and mountains are not so elevated nor so dry as those of Spain.

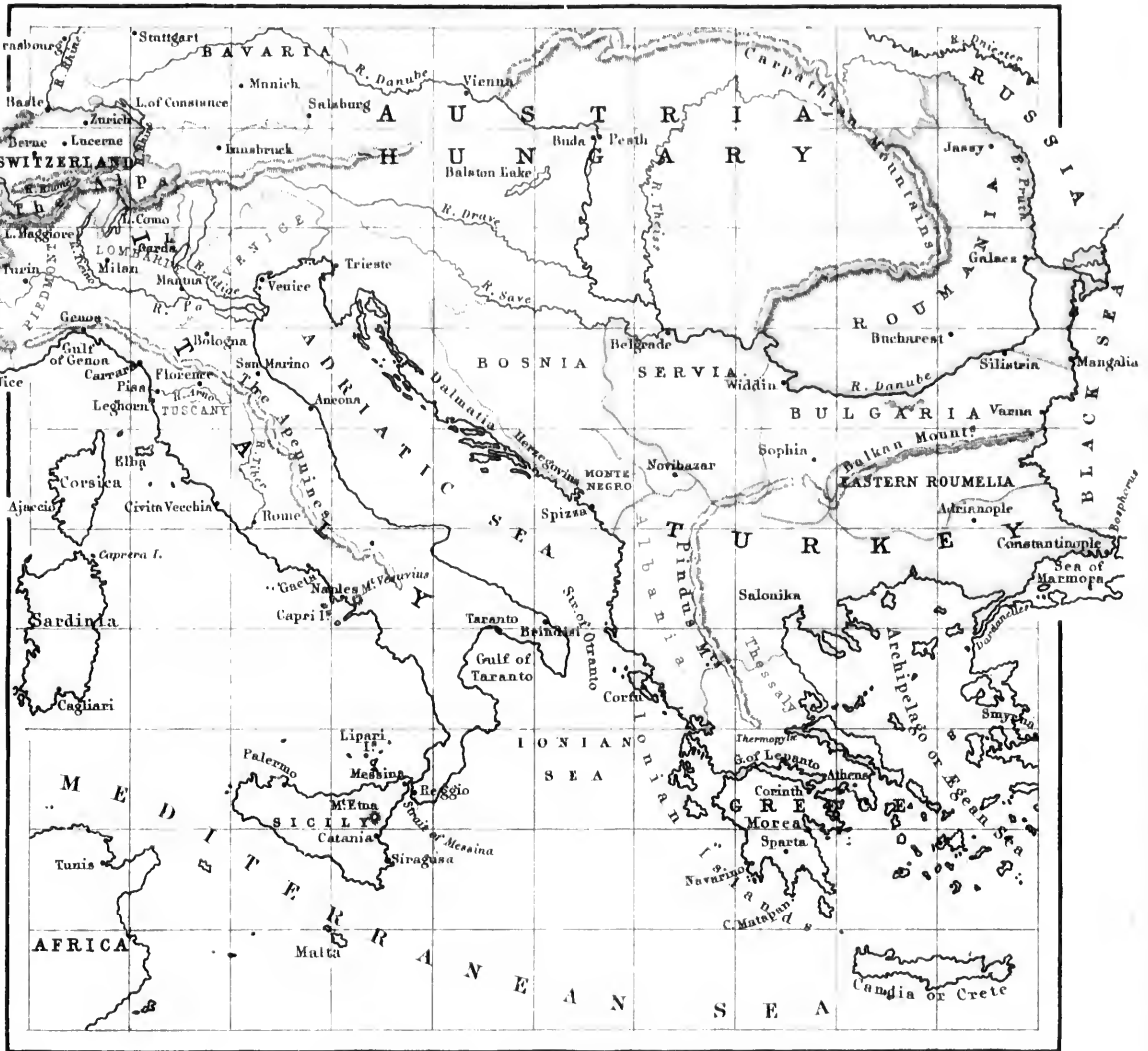
516. The valleys are very fertile. The products are similar to those of Spain. Portugal is noted for a kind of wine called *port*.

Mules, sheep, and goats are numerous.

517. The people are indolent and fond of amusements. The *bull fight* is a favourite, but cruel and dangerous, amusement in Spain and Portugal. The lower classes in Portugal are poor and ignorant. The cities are infested with beggars, and the mountains with robbers.

518. Lisbon, near the mouth of the Tagus, is the capital of Portugal. Over one hundred years ago the city was nearly destroyed by a terrible earthquake, and 50,000 people were buried in the ruins. Oporto exports large quantities of wine.

ITALY, TURKEY, GREECE &c.



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ITALY.

519. Italy is the country of the ancient Romans, who, in the time of our Saviour, were the most powerful people in the world. The kingdom embraces the boot-shaped peninsula and the islands of Sicily and Sardinia. It is now one of the Six Great Powers of Europe.

520. Travellers visit Switzerland to see the wonders of Nature; they go to Italy to see the beauties of Art,—splendid churches, beautiful pictures, fine marble statues, and grand old ruins.

521. The lofty Alps form a curve around the north of Italy, and the Apennines extend through the country from north to south. On the south of the Alps are several beautiful lakes.

522. Italy has a delightful climate, and a remarkably blue sky and clear atmosphere.

On the west coast is a low marshy district, in which the air is so poisonous that it is dangerous even to pass through it.

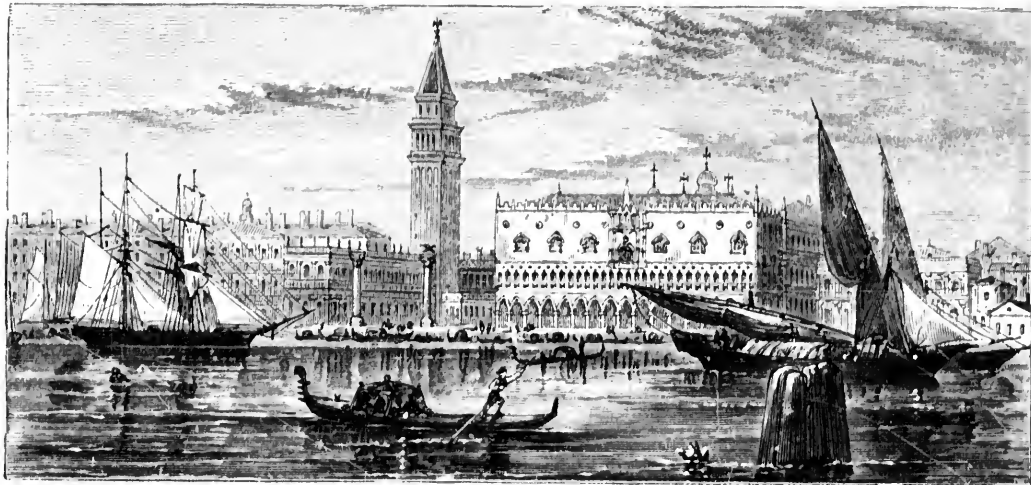
523. The plains, valleys, and lower mountain slopes are well suited to agriculture, yielding grain, the grape, mulberry, olive, and fig. The plains of the River Po, on the south of the Alps, are exceedingly fertile, producing large crops of wheat and rice. Large herds of cows are pastured here; and from their rich milk cheese of the best quality is manufactured.

In the forests of the mountain slopes grow the oak, walnut, and chestnut. Chestnuts are much used as food.

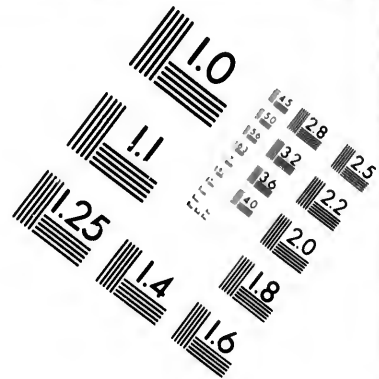
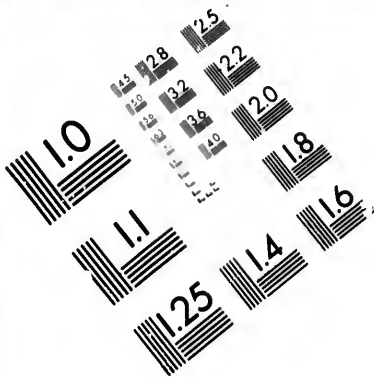


522. SCENE IN ITALY.

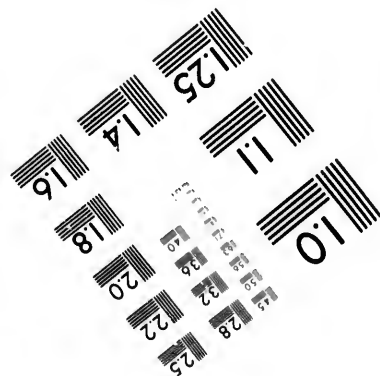
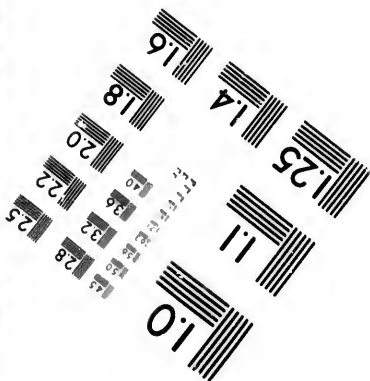
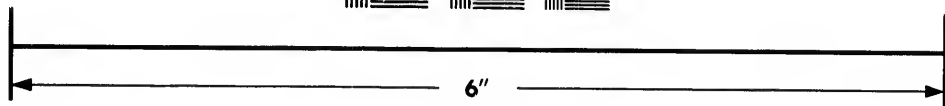
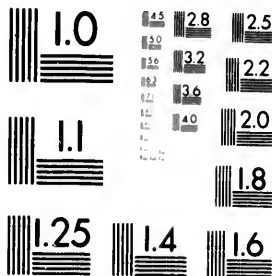
524. Marble of the finest quality is obtained from the Apennines. Many beautiful buildings, statues, and pillars are made from it in Italy, and large quantities of it are sent to other countries.



528. VENICE.



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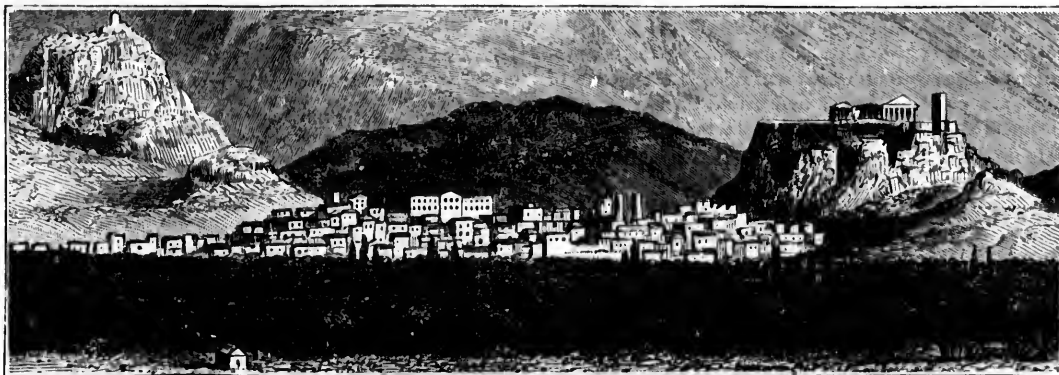
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525. Italy has produced many celebrated musicians, painters, sculptors, and architects.

The people of Southern Italy lack energy; many are poor and ignorant; and there are many beggars and robbers in the country.

526. Rome, the capital of Italy, is a very old city, built hundreds of years before the birth of our Saviour. It was once the richest and most powerful city in the world. It has many beautiful churches. *St. Peter's* is the largest and most splendid church in the world. Its walls and ceiling are covered with paintings by the most skilled artists. The Pope's palace, called the *Vatican*, is an immense building, containing 4,000 rooms. Rome has many ancient ruins,—arches, pillars, aqueducts, and amphitheatres. The most wonderful of these is the *Coliseum*, where the old Romans assembled to witness their cruel amusements,—men fighting with each other, and with savage wild animals.

527. Naples is a large city beside a beautiful bay. Within sight of the city is *Mount Vesuvius*, whose smouldering fires sometimes burst out in terrific flames. Near the mountain are the ruins of the ancient cities *Herculaneum* and *Pompeii*, which have lately been exhumed from the ashes and lava in which they were buried eighteen hundred years ago.



533. ATHENS.

With all the wisdom of the ancient Greeks, they were ignorant of the true God, but believed in many false gods.

531. Greece is a land of mountains, hills, and valleys. The climate and products are like those of Italy. Raw silk, honey, currants and other fruits, are the chief exports.

532. The Greeks are generally farmers, merchants, or sailors. They are said to be very shrewd, and not very honest.

533. Athens, the capital, is a small city. The most important remnant of ancient Athens is the *Acropolis*, or citadel. Within the *Acropolis* are the ruins of an old idol temple, called

528. Venice is built on a cluster of small islands. Channels of water serve as streets; and boats, called *gondolas*, supply the place of carriages. There are many bridges over the channels. One, called the *Bridge of Sighs*, reminds us of the cruel government that once existed in the city. On one side of the bridge is a palace, and on the other a grim prison. Criminals were brought across the bridge to the palace to hear their sentence, and then taken back for execution.

Florence, Genoa, Milan, Leghorn, and Turin are noted cities.

G R E E C E.

529. Greece is a small country, consisting of a peninsula south of Turkey, and a number of small islands on the coast.

530. In ancient times Greece was inhabited by the most learned and powerful people in the world. It produced great poets, historians, orators, artists, philosophers, and warriors. The country has lost all this greatness, and is now interesting chiefly for the remains of ancient buildings and statues, and for places where great events occurred. An English poet has said,—“’Tis Greece, but living Greece no more.”

the *Parthenon*. Not far distant is *Mars Hill*, where the Apostle Paul preached to the Athenians concerning the true God.

534. The principal islands belonging to Greece are the *Ionian Islands*, the *Cyclades*, and *Eubœa*.

T U R K E Y.

535. Turkey is a large country lying south of Austria, between the Black Sea and the Adriatic.

536. Turkey derives its name from the Turks, who, though not the most numerous, are the ruling inhabitants of the country. The Turks were once a fierce, warlike people, living in the middle of Asia. They marched westward, con-

quering every country as they advanced. Turkey is now a weak State. Large territories have in recent times been ceded to Russia, and several provinces in the north have gained their independence.

537. Turkey has a **productive soil**, a mild and healthful climate, and a good position for commerce; but through bad government and lack of enterprise it is much behind the other countries of Europe. Agriculture is in a very rude state, and manufactures are greatly neglected.

The **products** are grain, grapes, olives, tobacco, and cotton. Roses are cultivated in large fields, especially in the valley of the Maritza, from which is made the costly perfume called *attar of rose*. The manufactures are carpets, shawls, and leather goods.

538. The Turks believe in a false prophet named Mohammed. Their dress and manners are very odd. Both men and women wear long flowing dresses, with a belt around the waist. The men wind a long scarf, called a turban, about their heads; and the women wear a thick white veil over their faces when they go out. They have no chairs or sofas in their houses, but sit on the carpet or on cushions. In the large cities, the higher classes are beginning to adopt the customs of other European countries.

539. **Constantinople**, the capital, is one of the largest cities of Europe. It has a beautiful harbour, called the *Golden Horn*. The minarets of the Mohammedan mosques give the city a fine appearance in the distance.

Adrianople, on the Maritza, is the chief manufacturing city. **Salonica** has considerable trade.

The sovereign of Turkey is called the *Sultan*. The **Turkish Empire**, or, as it is called, the *Ottoman Empire*, comprises large territories in Western Asia and several tributary states in Northern Africa.

540. **EASTERN ROUMELIA AND BULGARIA** formerly belonged to Turkey, to which they still pay an annual tribute. They are situated on the south of the Danube, along the Black Sea, and are separated by the Balkan Mountains.

The **products** are grain, tobacco, grapes, and other fruits, which, with wool, skins, and timber, are the chief exports. **Philippopolis** is the capital of Eastern Roumelia; **Sophia**, of Bulgaria.

541. **ROUMANIA** is situated between the Pruth and the Danube. The Carpathian Mountains, on the west, slope easterly and southerly to the treeless plains which comprise a large part of the country. The **products** are wheat, maize, millet, flax, tobacco, and grapes; but the wealth of the country consists chiefly in cattle, horses, sheep, and swine.

Bucharest, the capital, and **Jassy** are large cities. **Galatz** exports grain and wool.

542. **SERVIA** is a small country on the south of the



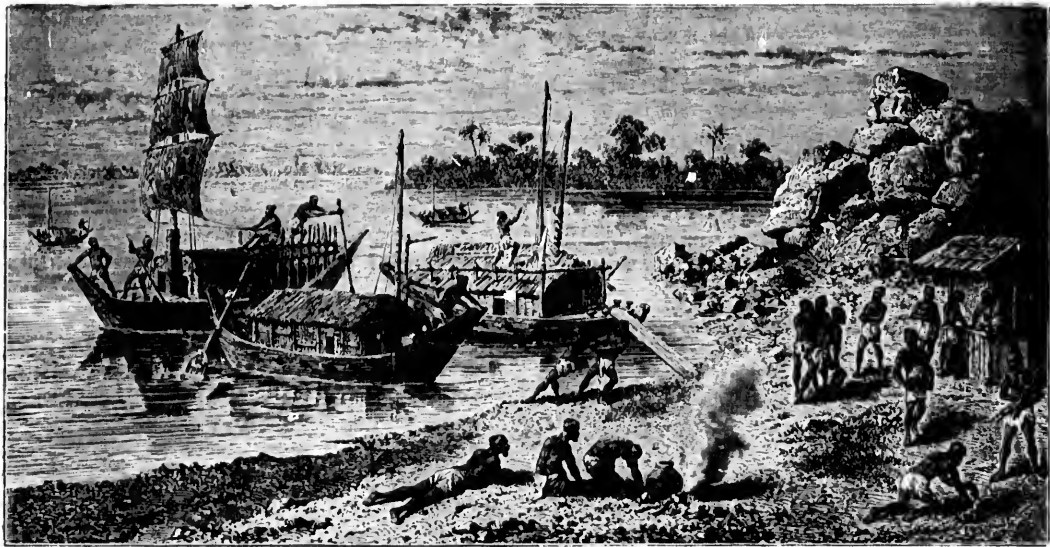
538. TURKS AT MEAT.

Danube. The soil is fertile, yielding grain and fruit. Horses, cattle, and sheep are numerous. The Servians are a brave, enterprising people, noted for love of country.

Belgrade, on the Danube, is the capital. It has a large trade with Austria and Great Britain.

543. **MONTENEGRO** is a small mountainous country on the east of the Adriatic Sea. The people are brave, but rude and uneducated. They live chiefly by agriculture.

Cettigne, a small village, is the capital. **Antivari** is a small town on the Adriatic.



557. SCENE ON THE GANGES.

CHAPTER IV. ASIA.

History.—544. Some of the countries of Asia are very interesting, on account of the great events which have happened in them. It is supposed that the Garden of Eden, in which God placed Adam and Eve, was situated somewhere between the Black Sea and the Caspian. Most of the events which the Bible records occurred in Western Asia, in and around Palestine; and the greater part of it was written there.

Position.—545. Asia lies on the east of Europe and Africa. Away in the north-east, at Behring Strait, it approaches very near North America. It has the Arctic Ocean on the north, the Pacific on the east, and the Indian Ocean on the south.

Coast.—546. The principal **Coast Waters** are,—the *Sea of Okhotsk*, *Sea of Japan*, *Yellow Sea*, *China Sea*, and the *Gulf of Tonquin*, on the east; the *Gulf of Siam*, *Strait of Malacca*, *Bay of Bengal*, *Arabian Sea*, *Gulf of Oman*, *Persian Gulf*, and *Gulf of Aden*, on the south; the *Strait of Bab-el-Mandeb*, *Red Sea*, *Mediterranean Sea*, and *Black Sea*, on the west.

The coast waters on the south run up into the land, forming three great peninsulas.

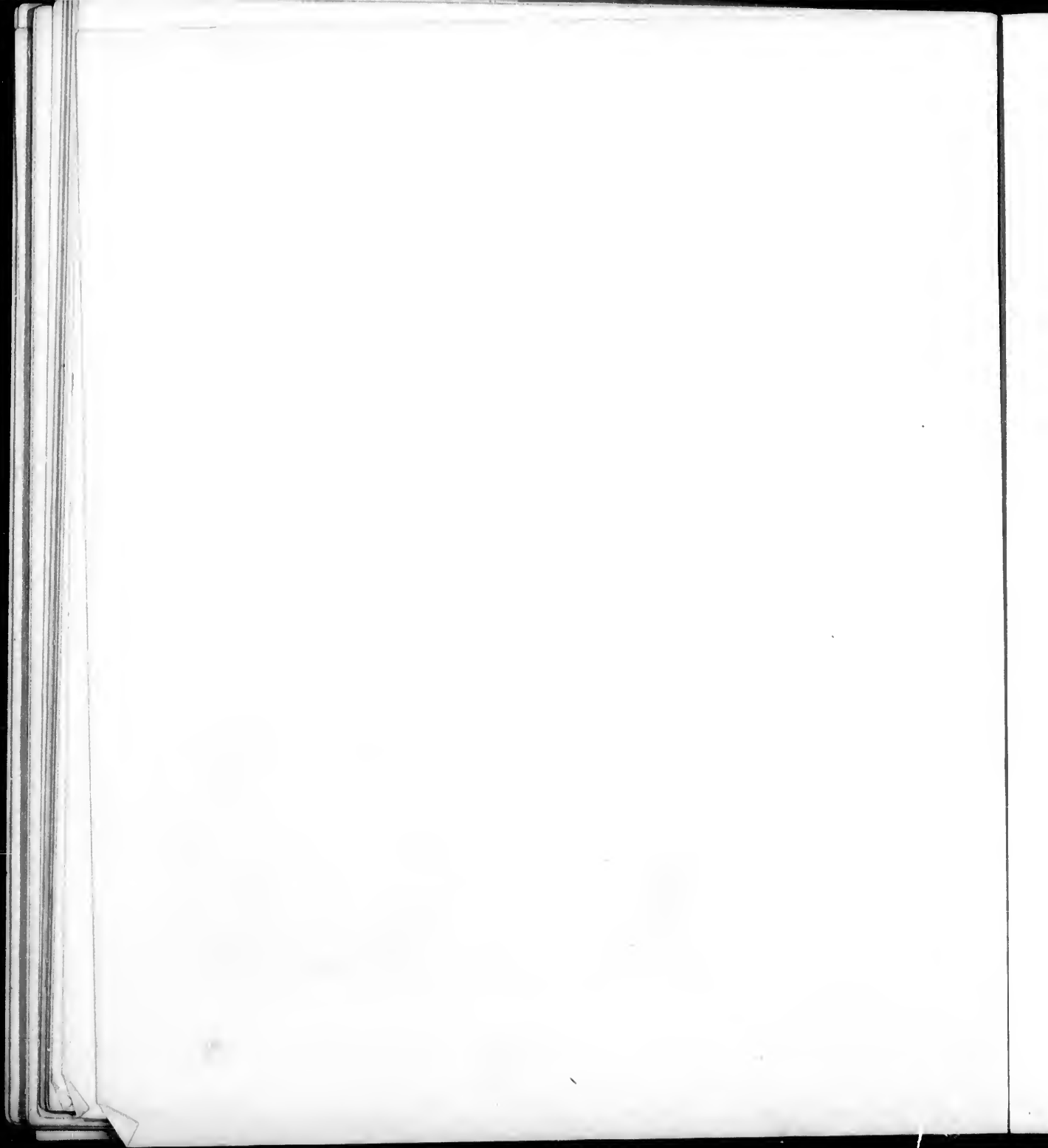
547. The most important **Islands** near Asia are,—the *Japan Islands*, *Formosa*, *Hainan*, and the *Philippine Islands*, on the east; *Borneo*, *Sumatra*, *Java*, and *Ceylon*, on the south; and *Cyprus*, on the west.

Area.—548. Asia is twice as large as North America, and includes one-third of the land in the world.

Surface.—549. Asia has the highest mountains, the lowest valleys, the broadest table-lands, and the most extensive plains in the world. In America the highlands extend north and south, near the coasts; in Asia we find them stretching east and west through the middle of the continent.

The highlands of Central Asia consist of a broad table-land, with the *Himalaya Mountains* on the south, the *Altai Mountains* on the north, and two other parallel mountain walls through the interior.

550. The **Himalayas**, on the north of Hindustan, are the highest mountains in the world. The highest peak, called *Mount Everest*, is five and a half miles above the level of the sea. In ascending these mountains from the south, we should first find dense forests, similar to those on the lower slopes of the Andes. Here are many kinds of palm trees, one of which is called the *fan palm*. It is remarkable for its broad leaves, a single leaf being large enough to cover a dozen men! We should find here many large and ferocious wild beasts, such



as lions, tigers, leopards, and hyenas. Beyond the forests are shrubs and bright-coloured flowers; then wild rough rocks and everlasting snows.

551. These mountains are more difficult to climb than almost any others, they are so steep and so rent by deep gorges, where the foaming streams come rushing down towards the plains. Far up on the mountains, shut in on all sides, we find the beautiful valley of *Cashmere*, so celebrated for its goats, from whose fine hair costly shawls are manufactured.

552. North of the Himalaya Mountains is a highland country called *Thibet*. The lowest valleys here are two miles above the sea-level. This country is so near the Equator that it has warm summers; but on account of its great elevation the winters are extremely cold.

553. Further north, beyond the *Kuenlun Mountains*, is the great table-land, extending hundreds and hundreds of miles. In some parts it is covered with loose sand, and in others with rocks.

554. The most important mountains in the west of Asia are the *Caucasus*, the *Taurus*, the *Elburz*, the *Hindoo Koosh*, and the *Mountains of Lebanon*.

555. On the north of the Altai Mountains is the vast lowland plain of Siberia, sloping towards the Arctic Ocean.

Rivers.—556. The largest rivers of Asia flow to the north and east.

The *Obi*, the *Yenisei*, and the *Lena*, in Siberia, are, like the Mackenzie in North America, frozen over a large part of the year, and consequently of little use to trade.

The *Amoor*, the *Hoang Ho*, and the *Yang-tse-Kiang*, in China, are the most important rivers in Asia. The Yang-tse-Kiang equals the Mississippi in length.

The great rivers in the south of Asia are the *Mekong*, the *Brahmapootra*, the *Ganges*, the *Indus*, the *Tigris*, and the *Euphrates*.

557. The Ganges and Brahmapootra rise far apart on the cold high Himalayas; but after rushing down the steep slopes, they wind along the hot lowlands, approaching nearer until they come together at their mouth. The land here is low and flat, and is overgrown with trees and vines. These jungles abound in tigers and rhinoceroses, and the waters swarm with crocodiles.

558. An ignorant people, called Hindus, who live in Hindustan, look upon the Ganges as a holy river. Mothers who have not the Bible to teach them the way to eternal happiness, sometimes throw their children into its waters, believing that they will thus be borne to a land of bliss.

559. Long ages ago the city of *Ni-nech*, to which the prophet Jonah was sent, stood on the banks of the Tigris; and Babylon, where Daniel lived, was on the Euphrates. These cities were very large, and were surrounded by high and broad walls. They were destroyed many hundred years ago, and after a long time they became covered with sand and grass, so as to appear like mounds of earth. Lately men have been digging into these mounds, and many curious things have been discovered.

Lakes.—560. The fresh-water lakes of Asia are all quite small, except *Baikal* and *Balkash*, in the south of Russian Asia. Salt lakes are numerous. The *Caspian Sea* and the *Sea of Aral* are the largest.

Climate and Products.—561. The southern countries of Asia have a hot climate, and produce cotton, silk, rice, coffee, and many kinds of fruit. The forests contain cinnamon trees, all kinds of spices, and fragrant gum trees, so that the air is filled with rich perfume.

The most fertile countries of Asia are India, China, and the countries south of China.

562. The table-lands of the interior have cold winters and hot summers. The mountains here get all the rain, so that the plains are dry, and unsuited to agriculture. Even the streams which flow from the mountains are soon dried up or lost in the sand. A vast region here is called the *Desert of Gobi*; which is said to mean, "The country without trees and water." Towards the west, in Chinese Tartary, there are fertile valleys; but as we go east into Mongolia, there are no streams of water, cultivated fields, houses, nor cities. Only near the mountains we find water and pasture-lands.

563. The people who live near the desert plains dwell in tents; and their property consists of cattle, horses, camels, and sheep. Their food consists mostly of milk and flesh, and they are always roving about in search of fresh pasture.



568. A CARAVAN.

564. The northern part of Asia, called *Siberia*, is a cold country, like the northern part of America.

Animals.—565. In the forests south of the Himalayas the wild animals are large and numerous, including elephants, lions, tigers, hyenas, and huge serpents. The animals in Siberia are similar to those in the north of America.

Inhabitants.—566. Asia is said to contain 300,000,000 of inhabitants, or three-fifths of all the people in the world. Nearly all are heathens, knowing nothing of the Bible, or the way of salvation which it teaches. In the western part of Asia most of the people are called *Mohammedans*, because they believe in a false prophet named Mohammed: in the east they worship idols.

567. Mohammed lived in Arabia over twelve hundred years ago. He told the people that God had spoken to him through an angel, and had sent him to teach them. He wrote a book called the *Koran*, which he said the angel gave him. When he had gained a few followers, he armed them and went from place to place, compelling all to take him as their prophet and king, and the Koran as their Bible.

568. The people of Asia are much less intelligent than those of Europe and America. In most of the countries they have no schools, books, nor newspaper. and know nothing of other parts of the world. Throughout the greater part of this large continent there are no railroads, nor even common roads or waggons. Merchants travel in large companies, called caravans, conveying their goods on camels and mules. In crossing the deserts they carry water with them. They require also to go armed, and to keep a sharp look-out for robbers.

569. It is dangerous to travel in the countries inhabited by the roving shepherds. These lawless people not only rob and murder strangers, but they are always at war with one another. Sometimes a plundering company of horsemen come suddenly on an unsuspecting tribe, drive off their flocks, and seizing the women and children, sell them for slaves.

Divisions.—570. The principal countries of Asia are,—*Arabia, Turkey in Asia, Russia in Asia, Persia, Turkestan, Afghanistan, Beloochistan, India, Burmah, Siam, Anam, the Chinese Empire, and Japan.*

Towns.—571. Asia contains many large cities. The largest are in China, Japan, and India. *Damascus*, on the east of the Mountains of Lebanon, is said to be the oldest city in the world.

Government.—572. The countries of Asia are generally very badly governed. The laws are not made by representatives chosen by the people, as in our own country. The Emperor, or chief ruler, who is often a selfish, ignorant tyrant, makes such laws as please himself, without considering or knowing what would be best for his subjects.

ARABIA.

573. Arabia is an extensive country on the east of the Red Sea. A large portion of it is a parched desert



573. THE DATE PALM.

land, with here and there a fertile spot called an *oasis*. The most useful tree on the borders of the deserts is the date-palm. Its fruit, called dates, is much used for food. The southern part of Arabia, which is very hot, and has heavy rains at certain seasons, yields the best coffee in the world. Here also are forests of spice and gum trees.

574. The desert in which the Israelites wandered for forty years, and *Mount Sinai*, where God gave the Commandments to Moses, are in the north-west of Arabia.

575. Many of the inhabitants of Arabia are roving shepherds, whose property consists in camels, horses, and other animals. Arabian horses are swift and handsome, and an Arab is said to love his horse as much as his wife and children. The shepherds often quarrel with one another about their pasture-lands and wells of water, as the servants of Abraham and Lot quarrelled long ago.

576. Every year thousands of people in caravans visit

Arabia. These are Mohammedan pilgrims coming from distant countries in Europe, Africa, and Asia, on a visit to Mecca, the birth-place of Mohammed. Every Mohammedan believes that a pilgrimage to this city will secure the forgiveness of all his sins. There is a temple in Mecca containing a black stone, which Mohammedans think very holy, and which is said to be worn quite smooth from being kissed so frequently. Only Mohammedans are allowed to enter the temple. That part of Arabia which borders on the Red Sea, including the cities *Mecca* and *Medina*, belongs to Turkey.

TURKEY.

577. Turkey in Asia forms a part of the large empire ruled by the Sultan, who lives at Constantinople in Europe.

The territory in Asia is made up of several different countries, all of which have an interesting history, extending back to the earliest ages. It contains the ruins of many ancient cities,—some of the first that were ever built.

578. The climate is warm, except on the mountains. In many parts there are extensive sandy deserts, on which rain seldom falls. Grain, tobacco, cotton, grapes, the mulberry, olive, and fig are cultivated; but agriculture is greatly neglected. Robber shepherds wander over the country in search of pasturage and plunder.

579. Asia Minor is that part of Turkey between the Black Sea and the Mediterranean. It is a highland country, with some beautiful valleys in the west. Its largest city is *Smyrna*. A small village near Smyrna occupies the site of ancient *Ephesus*, where in the days of the Apostle Paul the inhabitants made such an uproar about their goddess Diana.

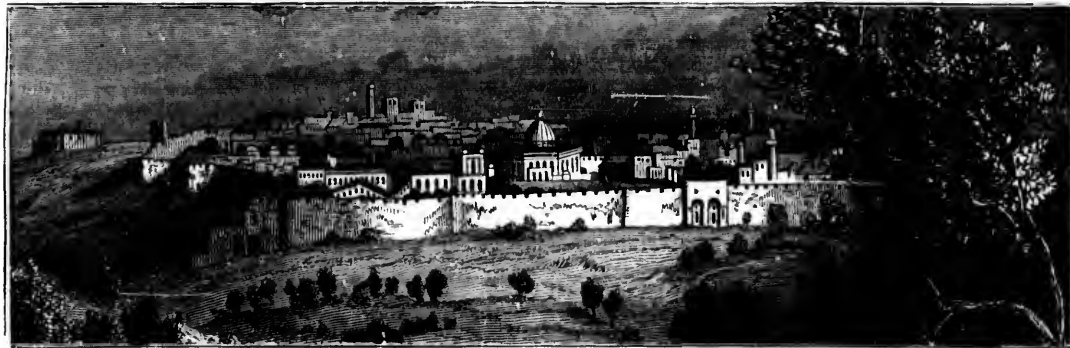
580. Armenia is up in the north, among the mountains. One of the high peaks is called *Ararat*, and is supposed to be the mountain on which Noah's ark rested. A curious city here, called *Erzeroum*, has houses built of mud. The flat roofs overgrown with grass appear in the distance like a meadow. A part of Armenia belongs to Russia.

581. Syria, another country in Turkey, is on the east of the Mediterranean. The *Mountains of Lebanon* are near the sea-coast, and beyond the mountains is a low plain. *Damascus*, where the Apostle Paul was cured of his blindness, and the oldest city in the world, is situated in this plain. The country for many miles around consists of gardens and orchards. *Beyroul* is an important port.

582. Palestine, the land of the ancient Israelites, situated in the south-west of Syria, is the most interesting part of Turkey. About forty years after the Jews had crucified the Saviour, they were expelled by a Roman army from the country which their forefathers had occupied fifteen hundred years. *Jerusalem*, the capital of the country, had strong, high walls around it, and the Jews from all the land ran to this city for protection. The Romans beat down the walls, destroyed the city, and burned the beautiful temple. The Jews are now scattered throughout almost all the countries of the world.

583. Palestine is quite a hilly country. The *Jordan*, a comparatively small stream, is the only river. It rises in the Mountains of Lebanon, flows southerly through the lowest valley in the world, and empties its waters into a remarkable lake called the *Dead Sea*. The waters of the Dead Sea contain so much salt and other mineral substances that they are very dense, and persons can lie on the surface without any danger of sinking. In the upper part of its course the Jordan forms a fresh-water lake, called the *Sea of Galilee*, or the *Sea of Tiberias*.

584. Palestine was once exceedingly fruitful; but



586. JERUSALEM.

except in some fertile valleys, it is now an unproductive country, and agriculture is greatly neglected.

585. Christians love to travel in Palestine, and visit the places in which occurred so many of the great events recorded in the Bible. But travelling in this land is toilsome and somewhat dangerous. Travellers employ armed guides to show them the way and protect them from robbers. There are no carriage roads, so that they must journey on horseback, and the animals to be obtained are generally very inferior.

586. **Jerusalem** is built on the ruins of the ancient city. The streets are narrow and the houses gloomy. Half the people are Mohammedans. Six miles to the south is *Bethlehem*, where Jesus was born; about a mile east of Jerusalem, across a valley, is the *Mount of Olives*, to which he went so frequently; and a little farther east is *Bethany*, where the family lived that he loved. In the hilly country of the north is *Nazareth*, where he spent his early life; and about twenty miles east of Nazareth is the *Sea of Galilee*, where he stilled the winds and waves.

RUSSIA IN ASIA.

587. Russia's Asiatic possessions are *Siberia*, *Trans-Caucasia*, and *Turkestan*.

588. **Siberia** is situated on the north of the Altai Mountains, and extends entirely across the continent to the Pacific Ocean. It is a cold, cheerless country. The soil is cultivated a little in the south, yielding barley and vegetables. Large forests of spruce and fir abound in foxes, ermines, otters, and other animals which have valuable fur; the rivers are full of fish; and the mountains yield gold and precious stones. The rein-deer is a very useful animal in this country. Some of the natives own large herds, and they subsist chiefly on the milk and flesh.

Many of the inhabitants of Siberia are exiles from Russia, who have been banished for crime or some political offence.

The principal towns are *Omsk*, *Tomsk*, *Tobolek*, and *Irkutsk*. **Kiachta** is a small town near *Lake Baikal*, through which Russia carries on trade with China.

589. **Trans-Caucasia** is a small country on the south of the Caucasus Mountains. It produces grapes, peaches, and other fruits. The men are noted for their fine form, the women for their beauty. **Tiflis**, the capital, manufactures carpets and shawls. **Batoum** is a fortified port on the Black Sea. **Kars**, a strong town in Armenia, was taken from Turkey.

590. **Turkestan** is on the east of the Caspian Sea, extending southerly to Persia and Afghanistan. It formerly included several small states, governed by *khans* or chiefs; but Russia has gained such control of the country that the native rulers have only nominal independence.

Except the eastern part of the country, which is mountainous, Turkestan consists of sandy plains, called *steppes*. These plains are occupied by wandering tribes, who live partly by plunder and partly on the products of their sheep, goats, and camels. The districts bordering on the rivers are fertile, yielding rice, cotton, and silk.

Tashkend is the capital of Russian Turkestan. **Bokhara** and **Khiva** are important places.

PERSIA.

591. Persia lies between the Caspian Sea and the Persian Gulf. A large part of the country is almost destitute of rain, and the soil is full of salt, so that it is quite barren. But there are many rich valleys watered by streams that flow from the mountains.

The fruitful districts produce grain, silk, grapes, peaches, and melons. There are also many beautiful flowers,—hyacinths, tulips, crocuses, and primroses. The Persians cultivate immense quantities of roses, from which they extract a costly perfume.

The pretty blue gem called *turquoise* is found in Persia.

592. **Teheran** is the capital, and **Ispahan** is the largest city. **Bushire** is an important port.

593. The Persians make beautiful carpets and shawls. They are said to be very polite, and to use rather extravagant language. Thus one would tell you that he was your slave, and that everything he had was at your service, when he would be astonished if you took him at his word.

594. The *Shah*, or sovereign, is a despotic tyrant, treating his people as if they existed only to minister to his pleasure. When he wants money, he demands it from his highest officers; these demand it from the lower officers; who, in turn, extort it from the people. No one likes to be thought rich, lest his property should be taken from him.

AFGHANISTAN AND BELOOCHISTAN.

595. These countries, situated on the east of Persia, are high and mountainous, varied with fertile valleys and dry desert plains. The valleys yield grain, cotton, grapes, and peaches. The date-palm flourishes on the borders of the desert in the south of Beloochistan. The sandy deserts are bordered by grazing-lands, where barbarous, roving shepherds pasture their flocks.

596. A high mountain wall, separating British India from Afghanistan and Beloochistan, is cleft by deep gorges, called *passes*, which are used as roads by merchant caravans. An invading enemy from the north-west would seek to enter India through these passes; hence Great Britain watchfully guards Afghanistan against the approaches of Russia.

597. The inhabitants are chiefly Mohammedans, and, except in the towns, they depend on their flocks and herds

for their subsistence. They are divided into different tribes; but in time of war they recognize the *Ameer* of Cabool as their leader.

598. **Cabool**, the capital and largest city of Afghanistan, has an elevated position near a mountain pass. **Herat** and **Candahar** are on the route of trade between Persia and India. **Kelat**, the chief town in Beloochistan, is strongly fortified.

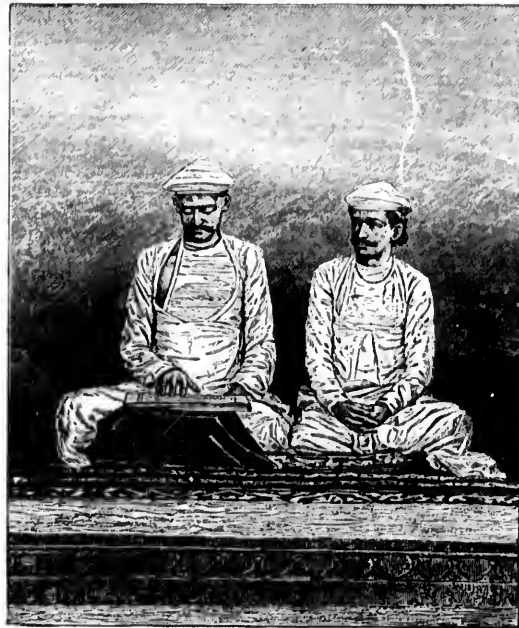
BRITISH INDIA.

599. This large country, situated on the south of the Himalaya Mountains, forms part of the British Empire. As it is near the Equator it has a hot climate. Unlike many of the countries of Asia, it has abundance of rain, and is very productive.

600. India has long been famed for the rich products of its fields, its forests, and its mines; and also for the skill of its inhabitants in the manufacture of costly silks and shawls.

601. Some of the most important products are rice, sugar, cotton, silk, opium, cinnamon, nutmegs, cloves, and other spices.

Cinnamon is the inner bark of the cinnamon tree; cloves



604. BRAHMINS READING THEIR SACRED BOOK.

(575)



604. NATIVE PRINCE.

are the dried flower-buds of the clove tree; opium is a gum obtained from a kind of poppy.

602. The forests are dense with shrubbery, and the sun's rays are shut out by broad leaves; so that the hot, damp air, mingled with poisonous gases from decaying plants, causes fevers and other diseases.

603. The diamonds, rubies, emeralds, and pearls of India, are sought after by the wealthy in all countries. Some of the diamonds are very costly, and adorn the crowns of the kings and queens of Europe.

604. Many English people live in India. Some come here to trade; others are officers and soldiers, sent by the British Government to preserve peace and order. The natives, called *Hindus*, are divided into four



606. RIDING THE ELEPHANT—A HUNTING PARTY.

classes, of different ranks. They do not intermarry, eat together, or associate with one another; and one must always remain in the same rank or caste as his parents. The highest class is that of the *Brahmins*. There are many separate States in India, ruled by native princes, but, with one or two exceptions, they are all subject to the British Government.

605. The Hindus are idolaters, and they have many splendid idol-temples. Several years ago they tried to drive the English from the country. They cruelly murdered many of them, and horribly mutilated others, cutting off their noses and ears; but after a terrible war they were subdued.

606. The people of India use elephants to carry heavy loads, and they sometimes ride on their backs. They also ride in an odd sort of conveyance called a *palanquin*; which is a covered seat placed on poles, and carried by men, who use the ends of the poles as handles.

607. *Calcutta*, the capital of India, is a great commercial city on the lowlands near the mouth of the Ganges. *Madras*, on the east coast, and *Bombay* on the west, are also noted for trade. *Benares* is a sacred city of the Hindus, containing over one thousand idol-temples. It is visited every year by crowds of pilgrims, many of whom come here to die. There are several other large cities.

608. The Island of *Ceylon* is south of British India. It forms a separate colony. It produces all kinds of spices, and in its dense forests are found elephants, lions, and tigers.

INDO-CHINA.

609. This country, sometimes called *Farther India*, occupies the large peninsula in the south-east of Asia. It includes several countries, the principal of which are *Burmah*, *Siam*, and *Anam*. The west coast of *Burmah* belongs to British India.

The climate is hot and moist, as in British India. In the dense forests are spices, sandal-wood, rose-wood, and many kinds of palm. India-rubber, gutta-percha, and varnish are made from the juices and gums of the forest trees.

610. Among the wild animals are the elephant, rhinoceros, tiger, buffalo, and monkey.

611. The people are all idolaters, and the idol temples are the finest buildings in the country. Sweet-scented wood is burned in the worship of the false gods.

Rice is the chief food, and is cultivated in large quantities.

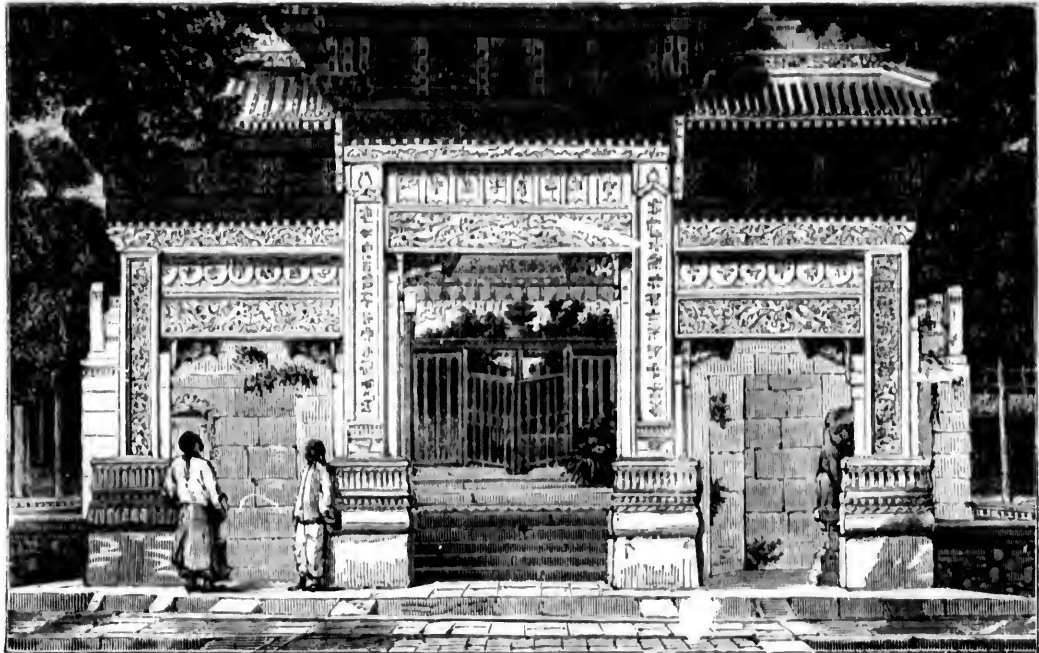
Slam.—612. This is the most important country in Indo-China. The people here have customs which would appear exceedingly strange to us. They have two kings. In the presence of the king every one must lie flat on his face, and approach him by creeping on his hands and knees. When the king dies, his body is dried by the application of certain drugs. It is then doubled up and placed in an urn, which is deposited in a splendidly decorated and costly funeral temple, built for this purpose. After the dried body has been kept a year it is burned.

613. *Bangkok*, the capital of *Siam*, is a large city on the *River Menam*. Many of the inhabitants live on the river in floating houses made of bamboo.

THE CHINESE EMPIRE.

614. The Chinese Empire is as large as the Dominion of Canada and the United States together. It is made up of several countries. The most important of these is *China*, on the eastern slope, along the great rivers *Yang-tse-Kiang* and *Hoang Ho*. The other countries of the empire lie to the west and north of China, on the highlands. The principal are *Tibet*, *Eastern Turkestan*, *Mongolia*, and *Manchooria*.

China.—615. This portion of the empire has a mild climate and a fertile soil. Every little patch of land is cultivated. The steep, rocky hill-sides, are formed into terraces; and the crops are carefully watered by hand. Nearly all the tea used in the world grows in China. It is the leaf of a low shrub. The leaves are picked, dried, rolled, and packed into tea-chests. China also produces much rice, cotton, and silk.



616. ENTRANCE TO A CHINESE TEMPLE.

616. China has a great many inhabitants. They are idolaters, and have large temples all over the empire. The people are so numerous that there is scarcely room for all. In fact many of them live on the rivers. They make a raft of logs, spread earth over it for a garden, and build a little bamboo house in the middle. The Chinese are skilled in the manufacture of porcelain, silks, and lacquered ware; also in carving wood and ivory.

617. The Chinese have an odd way of catching fish from the rivers. The fisherman goes out in his boat, taking with him a swimming-bird called a cormorant. The bird is very fond of fish, and dives into the water after them. The fisherman places a ring round the bird's neck, to prevent him from swallowing the fish until he has his basket full, when he allows him to catch some for himself.

The Chinese do not usually sit at table when they eat, but gather round the boiler, sitting on the floor or ground, each with his bowl and chop-sticks. Rice is their chief food; but they also eat cats, dogs, and rats.

The men in China keep their heads shaved quite bare except on the top, where they allow the hair to grow very long, and braid it into a kind of tail, which sometimes hangs half way down to their feet. The women have very small feet, which they think a great mark of beauty. To prevent their

feet from growing, the little girls are compelled to wear tight bandages, which cause much pain and make them walk awkwardly. They must submit to it, however, because it is the fashion!

618. **Tibet** is a high, cold country, on the north of the Himalayas. The care of cattle, sheep, and goats is the chief pursuit. *Lassa*, the capital, is noted for the splendour of its idol temples.

619. **Eastern Turkestan, Mongolia, and Manchuria** comprise vast deserts and pasture lands. For many centuries they have been occupied by wandering shepherds. An extensive trade is carried on between China and Russia, and also between China and Persia, across these deserts.

620. China has many large cities. **Pekin**, in the north, is the capital; **Canton**, in the south, is one of the greatest commercial cities of Asia.

621. **Corea**, a peninsula on the east of the Yellow Sea, is an independent kingdom. The inhabitants are very suspicious of foreigners. The products are grain, hemp, tobacco, and ginseng. *Kingkitao* is the capital.

JAPAN.

622. Japan comprises the four large islands, *Nippon*, *Shikoku*, *Kiushiu*, and *Yezo*, and many small islands on the east coast of Asia. *Nippon*, the largest island of the group, is about nine hundred miles in length.

The islands are subject to earthquakes, and they contain some of the most remarkable volcanoes in the world.



624. JAPANESE AT HOME.

623. The climate is varied according to the position, being cold in the north and almost tropical in the south. The soil is generally fertile, yielding tea, rice, the mulberry, and various kinds of grain and vegetables. The bamboo grows in Japan, and is used for many purposes. Japan has great mineral wealth, including gold, silver, copper, iron, lead, and coal.

624. There are more people in these islands than in the British Isles. The Japanese are intelligent and industrious. They carry on agriculture, mining, and manufactures with much success. They make beautiful silks, shawls, lacquer ware, and porcelain, and they have great skill in carving ivory.

Formerly the Japanese shut themselves out from the rest of the world, neither going abroad themselves nor allowing

foreigners to enter their country. But lately they have taken great pains to become acquainted with civilized countries. They have introduced many improvements, such as railroads, telegraphs, schools, colleges, and newspapers. Many of their young men have been educated in the colleges of Great Britain, the United States, and Germany.

625. The Japanese carry on a large trade with Great Britain and the United States. Their chief exports are silk, tea, porcelain, and lacquered ware; and their imports are cotton and woollen goods.

626. *Tokio*, the capital of Japan, is a very large city on the island of *Nippon*. *Yokohama*, seventeen miles from *Tokio*, is noted for its foreign trade. *Osaka*, *Kagosima*, and *Koumamotou*, are very large cities.

CHAPTER V. AFRICA.

History.—627. Excepting those countries bordering on the Mediterranean Sea, little was known of Africa in ancient times. About the time of the discovery of America, some bold navigators of Southern Europe kept sailing further and further south, until finally they went round the Cape of Good Hope, and found their way to India.

It was a long time after this before the countries in the interior of Africa were visited by civilized people. Indeed, although many distinguished men have lately travelled much among the negroes of Central and Southern Africa, our knowledge concerning this part of the world is yet quite limited. Travellers here are exposed to great hardships and dangers. There are no roads; in many places the climate is unhealthy; and some of the negroes are fierce savages.

Position.—628. The greater part of Africa is in the Torrid Zone, and no part of it extends to the cold regions of the north or south.

Africa is surrounded by the sea on all sides except at the north-east, where it is connected with Asia by the *Isthmus of Suez*. It has the *Mediterranean Sea* on the north, the *Red Sea* and *Indian Ocean* on the east, and the *Atlantic Ocean* on the west.

Coast.—629. We observe from the Map of Africa that there are no deep bays along the coast, as there are in Europe. This is a great disadvantage to trade.

The *Strait of Gibraltar*, on the north-west, is a narrow passage connecting the Mediterranean Sea with the Atlantic Ocean. The *Red Sea* and the *Gulf of Aden* are on the east, and the *Gulf of Guinea* is on the west.

The principal Capes are—*Bon*, *Guardafui*, *Good Hope*, and *Verde*.

630. The principal Islands on the coast are—*Socotra*, *Madagascar*, *Bourbon*, and *Mauritius*, on the east;

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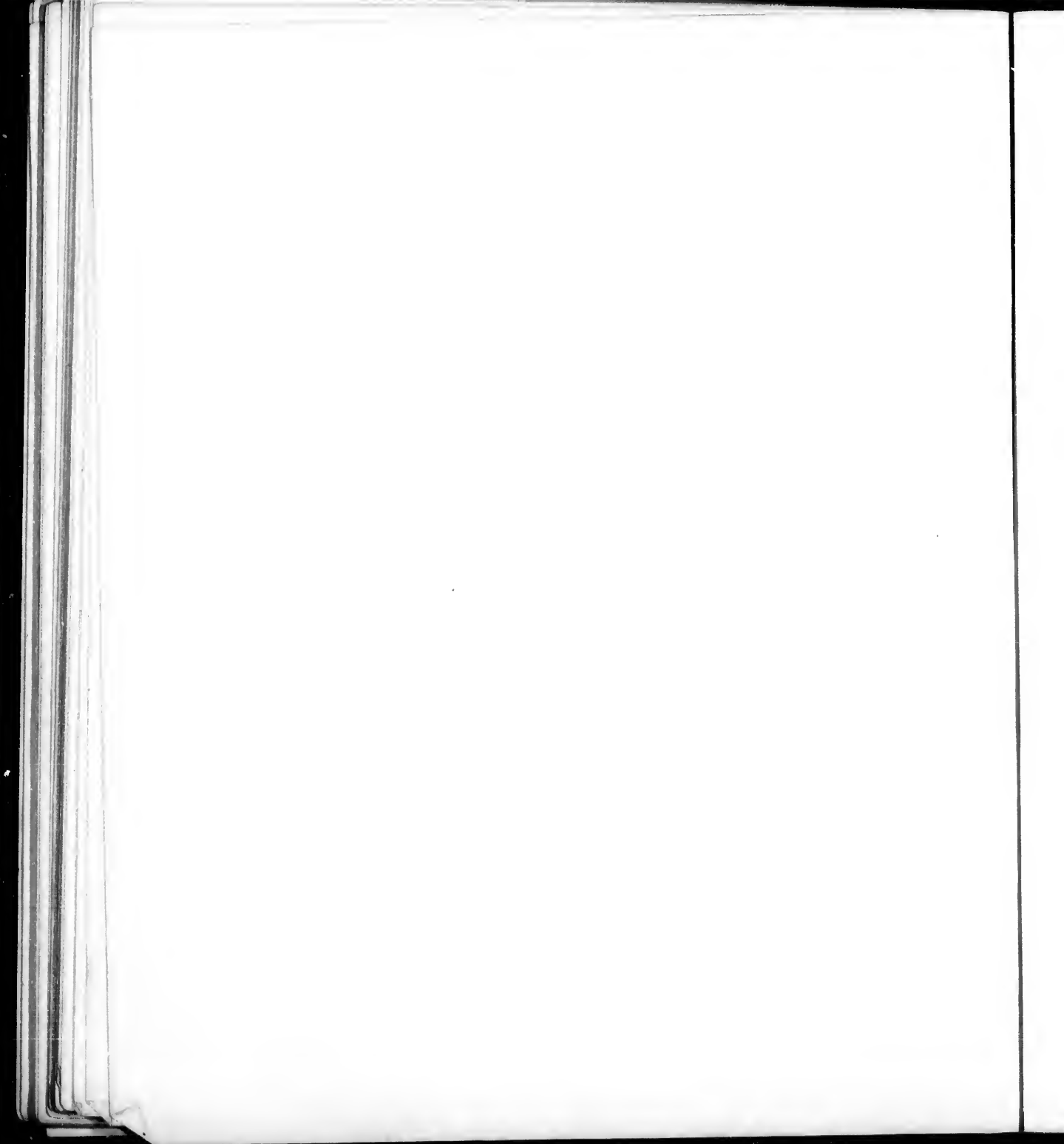
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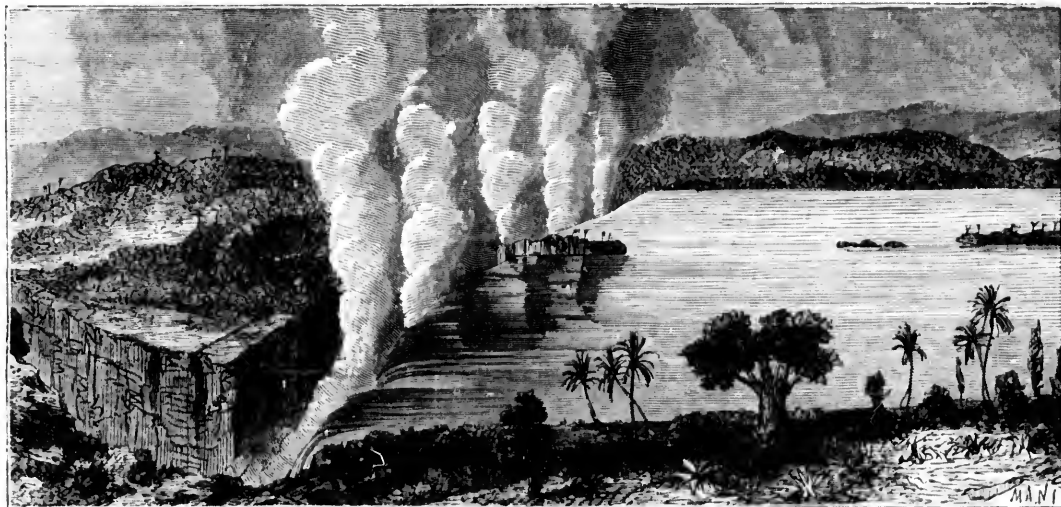
and the *Madeira Islands*, *Canary Islands*, *Cape Verde Islands*, and *St. Helena*, on the west.

631. Madagascar is one of the largest islands in the world. It yields spices and other tropical products. Pop. 3,000,000.

632. *St. Helena* is a small, rocky island. Napoleon I. of France was so troublesome—disturbing all Europe with his wars—that after the Battle of Waterloo the British Government banished him to *St. Helena*.

Area.—633. Africa is nearly one and a half times the size of North America.

Surface.—634. That part of Africa which borders on the sea is generally quite low; the interior is tableland.



637. VICTORIA FALLS, ON THE ZAMBESI.

636. The Nile is a very long river—as long as the Mississippi—and it is the most remarkable river in the world. Many ages ago, when only the northern part of Africa was known, people wondered where the waters of the Nile came from. It is strange to see so great a river flowing hundreds and hundreds of miles through countries in which it never rains. And then every year, in the month of June, without any rain or any streams flowing in, the river begins to rise, and for three months it rises higher and higher, until all Egypt is covered with water! But in modern times travellers have gone far into the middle of Africa, and have discovered the sources of this strange river. There, at the Equator, they have found two large lakes, which they have named the *Victoria Nyanza* and the *Albert Nyanza*, from which the river flows. They have discovered other rivers, also, which come from the mountains of Abyssinia, and help to form the great Nile. In the early summer months the rains fall in torrents on the mountains, and the waters rush

The mountains are not so grand as those in the other great divisions of the Earth. The *Atlas Mountains* lie along the north; the *Kong Mountains* are near the Gulf of Guinea; the *Snow Mountains* are in the south; and the *Mountains of Abyssinia*, and other mountains, extend along the east.

Rivers and Lakes.—635. Africa has only four large rivers—the *Nile*, *Zambesi*, *Congo*, and *Niger*. The large lakes are—*Albert Nyanza*, *Victoria Nyanza*, *Tanganyika*, and *Nyassa*. *Lake Tchad* is also an important lake.

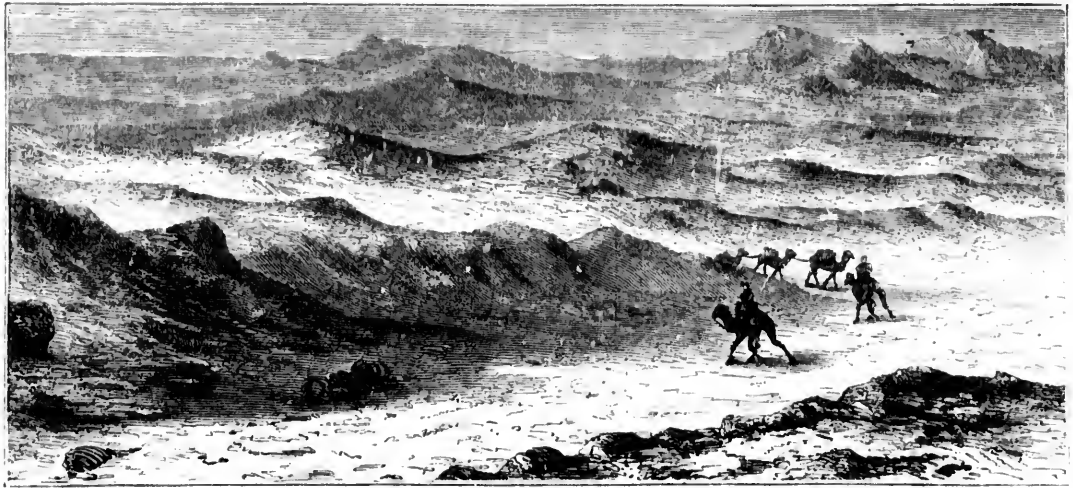
down until they come to Egypt, where the land is so level and the river-banks so low that they flow over all the country.

637. Zambesi, in Southern Africa—also a large river—is noted for *Victoria Falls*, which are said to be as grand as those of Niagara.

638. The Niger, in Western Africa, flows through a hot, marshy country. The forests along its banks are very dense, and the air is so poisonous that it is dangerous for those not accustomed to the climate to visit the country.

The Congo, in Southern Africa, has its source in Southern Africa. Next to the Amazon, it is the largest river in the world.

Climate and Products.—639. Africa is the hottest part of the Earth, and a large portion of it consists of rainless deserts. South of the Atlas Mountains is the great *Sahara*—the largest desert in the world, on which



642. THE SAHARA.

rain seldom falls, and where it is so hot that eggs can be cooked in the burning sand.

640. Travelling through Africa from north to south, we first cross the Barbary States, which have a tempe-



642. AN OASIS.

rate climate, and yield grain, olives, grapes, and mulberries. On the Atlas Mountains are forests of oak, beech, and juniper. The snow lies deep on the cold summits through the winter, and in the spring it melts and sends streams to the lowlands. The streams on the southern slopes flow down to the borders of the Desert, forming many a cheerful spot on the margin of that dreary waste; but they are soon lost in the hot sand or in salt lakes. This region is occupied by wandering shepherds, just as we found near the deserts of Asia. In summer the shepherds drive their flocks far up into the mountain-valleys in search of pasture.

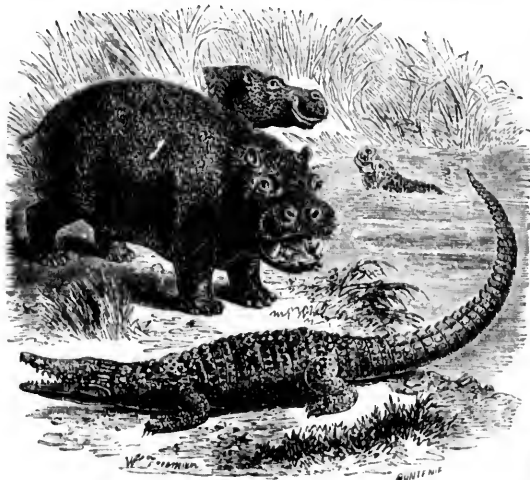
641. The Land of Dates lies on the south of the Atlas Mountains. In this country, which is watered a little by the streams from the mountains, and is moistened to some extent by springs of water here and there, and by deep wells made by boring into the earth, we find beautiful groves of the date-palm, which give food to the shepherds, and which shelter them and their flocks from the burning sun.

642. The Sahara is a dreary waste, almost as large as the Dominion of Canada. In some places, far as the eye can reach, not a tree, nor a blade of grass, nor a drop of water is to be seen; nothing but burning sand and barren rock. In other parts of this great Desert there are vast tracts of firm soil, yielding only dry, stunted herbage. Here and there, far apart, are springs of water; and all around are green grass, shady palms.

and fruitful vines. Such a fertile spot, called an *oasis*, must be very beautiful in the midst of the barren Desert. Travelling merchants cross the Sahara in large companies, carrying cottons and beads to the negroes of Central Africa; and bringing back gold dust, ivory, and ostrich feathers. They carry their goods on the back of the camel. This useful animal is sometimes called "the ship of the desert."

643. There is no road or beaten path across the Desert, for the sand drifts about in the wind as snow in our country. Sometimes the wind blows very strongly, and the air is filled with clouds of sand. When the traveller sees the sand-cloud coming he lies down, keeping his face close to the ground until the fearful storm has passed over. The camel also kneels and puts his nostrils down, so that he may not be suffocated with the driven sand. Travellers direct their course from one oasis to another, taking fresh supplies of water along with them.

644. Central Africa and the coast regions near the Equator have two seasons in the year—a rainy season (when the rain pours in torrents during a part of every day), and a dry season. This part of Africa is highly fruitful, yielding all kinds of tropical products. Here are palms, oranges, figs, and cocoa-nuts. In some of the low marshy countries near the rivers the climate is very unhealthy, and travellers are almost sure to be seized with malignant fevers. The native negroes do not suffer so much, but they are said to be short-lived. Little is known of Central Africa south of



646. HIPPOPOTAMUS AND CROCODILE.



646. THE GNU.

Soudan, except that it is extremely hot, and has dense forests abounding in wild animals.

645. Southern Africa has less intense heat, and in the far south the climate is temperate, like that of the north. A great plain towards the south, called the *Kalihar Desert*, is quite barren in the dry season; but when the rains set in, it is soon covered with tall grass and beautiful flowers.

Animals.—646. In the dense forests south of the Great Desert, and in the thickets along the margins of the lakes and rivers, are many large wild animals—the largest in the world—as the elephant, rhinoceros, hippopotamus, crocodile, lion, and hyena. On the plains towards the south are beautiful antelopes and striped zebras. Here also is found a singular animal called the *gnu*, or horned horse.

647. The large lakes and rivers abound in crocodiles, and it is very dangerous to bathe or swim in them, on account of these fierce reptiles.

648. Monkeys are numerous in the forests. The chimpanzee and gorilla somewhat resemble man.

649. The ostrich, found in almost all parts of Africa, but particularly near the deserts, is the largest bird in the world. It cannot fly, but it runs swiftly, spreading its wings as it runs. Its speed is said to be twenty-five miles an hour, and the length of its step twelve feet! The feathers of this bird are brought to our country to adorn ladies' bonnets and hats.

650. In some parts of Central Africa there is a little fly called the *tsetse*, which, although it is no larger than a house-fly, can do much harm. The horse, ox, dog, and some other animals, are so poisoned by its sting that they die in a few days.

Inhabitants.—651. We know so little of many parts of Africa, that it is difficult to find out how many people it contains. Some estimate the number at 100,000,000.

652. The northern countries are inhabited by white people, many of whom are Mohammedan Arabs, who came long ago from Arabia, and conquered the country. South of the Great Desert nearly all the people are Negroes. They are ignorant savages, and have many barbarous customs. They often go to war with one another. Some of them eat the prisoners whom they have captured, and others sell their captives for slaves. Nearly all the coloured people in America are descended from those who were brought from Africa as slaves.

653. The Hottentots, who live towards the south, are a most degraded race. One tribe, called *Bushmen*, are said to be only four feet high, and to be very ill shaped. They have flat heads, crooked backs, short noses, and little twists of wool on their heads in place of hair. They have no houses or tents, but sleep under bushes, in the cleft of a rock, or in a hole which some wild animal has made in the earth. They eat roots, grasshoppers, worms, and whatever comes to hand. When they get a large animal, they eat so much that they can take no more food for several days!

The Kaffirs, in the south-east, are quite a fine race of people, living principally by their flocks.

654. In the south are many English people. Near the Orange and Vaal rivers are many Dutch, whose forefathers came from Holland.

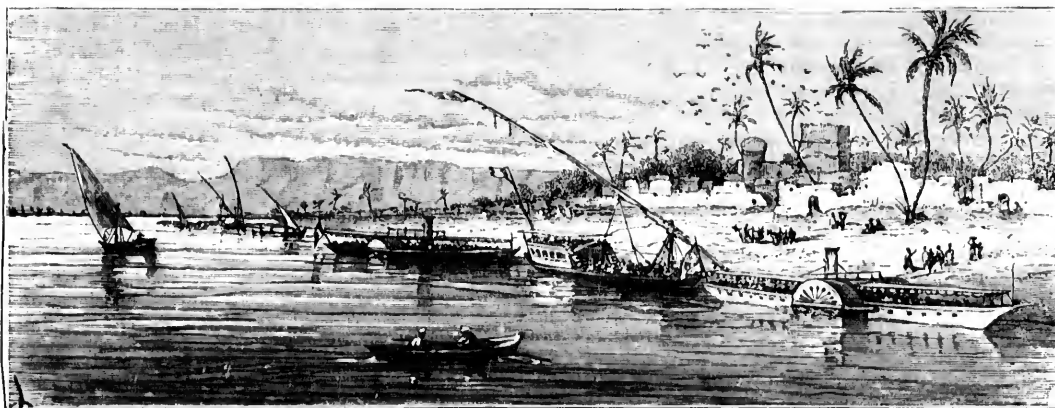
Countries.—655. The most important countries of Africa are *Egypt* and the *Barbary States*, in the north; and the British Colonies—*Cape Colony*, *Natal*, and *Griqua Land West*—in the south.

656. *Senegambia*, *Upper Guinea*, and *Lower Guinea*, in the west, and *Soudan*, and other parts of Central Africa, are divided into many Negro States.

657. Nubia, Kordofan, and other territories further south, belong to Egypt. *Abyssinia* is a mountainous country, including several small States.

658. *The Orange River Free State* and the *Transvaal* are two Republics. Some parts of these countries, especially Griqua Land, have lately become celebrated for their diamonds.

Towns.—659. The cities of Africa are generally small. *Cairo*, in Egypt, is the largest. Many of the Negro towns of Central Africa are built of mud.



664. SCENE ON THE NILE.

EGYPT.

660. Three or four thousand years ago, when almost all other parts of the world were inhabited by barbarous tribes, Egypt was occupied by a powerful nation. We read of this country and its people in the Bible—particularly in the times of Joseph and Moses.

The ancient Egyptians were very learned in some things. They built large cities and idol-temples, which were adorned with immense stone columns and

statues, many ruins of which are still to be seen in the country. Among the wonderful remains of ancient Egyptian art are the Pyramids. These are immense stone buildings, large at the bottom, and drawn in on all sides, as one stone rises above another, till they come to a point at the top. The largest pyramid is four hundred and sixty feet high.

661. The ancient Egyptians did not bury their dead as we do. They first embalmed the body, by applying spices and

drugs, so that it could not decay, and they then laid it in a sepulchre hewn in the rocks on the borders of the country. Many of these embalmed bodies, called *mummies*, have been brought to Europe and America, and are kept in museums as curiosities.

On the sepulchres and sculptured rocks are found ancient inscriptions in picture-writing and curious characters. Learned men in our times have discovered how to read these inscriptions, and have thus gained much knowledge of the early history and customs of the country.

662. Egypt is a long narrow country by the River Nile. It seldom rains there, and the land would be a

desert like the Sahara, if it were not for the river. Every year, for two or three months, the whole country is covered with water. This moistens the land, and leaves rich earth behind. The farmers do not need to plough the land or manure it; but when the water has run off they sow their grain in the mud. There are many canals through the country, from which water is taken and applied to the growing crops.

Egypt has always been noted for its grain. It has no forests, but there are many beautiful groves of the



663. CAIRO.

date-palm. It also produces cotton, sugar-cane, and indigo.

663. **Cairo** (368,000), near the Nile, is the capital and largest city. Its numerous mosques are the most attractive feature of the city. The great pyramids are a few miles distant. **Alexandria** (208,000) is the largest sea-port in Africa.

664. The **Suez Canal**, extending from *Port Said* on the Mediterranean to *Suez* on the Red Sea, is a great highway for commerce between Western Europe and Southern Asia.

665. The ruler of Egypt is called the *Khedive*. He pays an annual tribute to Turkey. The government is largely controlled by Great Britain.

666. Egypt claims territories on the south as far as Lake

Victoria Nyanza, including Nubia and the eastern portion of Soudan. **Khartoum** is noted for its connection with the history of General Gordon.

THE BARBARY STATES.

667. On the west of Egypt, along the Mediterranean, are *Tripoli*, *Tunis*, *Algeria*, and *Marocco*, often called the *Barbary States*.

668. **Tripoli** and **Tunis** are provinces of the Turkish Empire; **Algeria** belongs to France; and **Marocco** is an independent State. The people in these countries are nearly all Mohammedans.

THE BRITISH COLONIES.

669. **Cape Colony, Natal, and Griqua Land West**, in the south of Africa, belong to Great Britain. The moist warm lowlands near the coast yield grain, grapes, tobacco, cotton, and other products of warm countries. The elevated plains of the interior are too dry for agriculture; but they are good pasture-lands, so that cattle and sheep are kept in large numbers. Griqua Land West contains valuable diamond fields. The chief exports of Cape Colony are wool, wine, diamonds, and ostrich feathers.

Natal is similar to Cape Colony in climate and products.

670. **Cape Town**, the capital of Cape Colony, is on the coast, near a singular flat-topped mountain called *Table Mountain*. This town is on the way to India and China, and ships call here, going and returning. **Pietermaritzburg** is the capital of Natal.

CHAPTER VI.

OCEANIA.

671. Oceania is the general name given to the islands of the Indian and Pacific Oceans. It is usually considered in three divisions,—*Malaysia, Australasia,* and *Polynesia*.

MALAYSIA.

672. The islands in this group lie near Asia, on the south. They are sometimes called the *East India Islands*. The most important islands are, *Sumatra, Java, Borneo, Celebes, the Moluccas,* and the *Philippine Islands*.

673. The Philippine Islands belong to Spain; the others belong principally to Holland, except the northern portions of Sumatra and Borneo, which are independent.

674. All the islands are near the Equator. The climate is hot and moist, and the soil is fertile. The products are, rice, sugar, coffee, tobacco, and various fruits of hot countries.

The forests are dense like those of Brazil. They yield dyewoods, ebony, rose-wood, fragrant sandal-wood, camphor, cinnamon, and all kinds of spice.

675. The shores are covered with beautiful shells, and the coast waters yield valuable pearls.

Pearls are found in the oysters which are obtained among the rocks at the bottom of the sea. Men go out in boats and dive for the oysters. This is dangerous, hard work, and those who follow it are said to be short-lived.

676. Some of the islands are noted for volcanoes. They are also often visited by destructive hurricanes and earthquakes.

677. **Borneo** is about six and a half times larger than Nova Scotia and New Brunswick together, and, with the exception of Australia, is the largest island in the world.

678. **Sumatra and Java** are also large islands. *Batavia*, a large commercial city in Java, is the capital of the Dutch possessions. The **Moluccas** yield the finest spices.

679. The **Philippines** form an important Spanish colony. *Manilla*, the capital and the largest city of Malaysia, is celebrated for its cigars.

AUSTRALASIA.

680. Australasia includes the islands on the south-east of Malaysia. The principal islands are, *New Guinea, Australia, Tasmania,* and *New Zealand*. The last three and a part of New Guinea belong to Great Britain.

681. The *New Hebrides, the Feejee Islands,* and many other small islands, belong to this division.

AUSTRALIA.

682. Australia is the largest island in the world, having an area equal to the Dominion of Canada.

683. This island was discovered about two hundred and fifty years ago, and has been occupied by the British about one hundred years. Great Britain first used portions of it as places of exile for criminals. Since it has been discovered to be a good agricultural country, well suited to the raising of cattle and sheep, and rich in gold, many colonists from the British Islands, and from other countries, have settled in different portions of the island. The population is now about 2,200,000.

684. Australia includes five British Colonies, which are here given:—

Colony.	Capital.
QUEENSLAND.....	Brisbane.
NEW SOUTH WALES.....	Sydney.
VICTORIA.....	Melbourne.
SOUTH AUSTRALIA.....	Adelaide.
WEST AUSTRALIA.....	Perth.

685. The interior of Australia is imperfectly known. Near the east side are low mountains; but the country generally consists of plains and table-lands.

The *Murray*, and its tributary the *Darling*, are the principal rivers.

AUSTRALIA &c.



(Divided into Squares of 2000 Miles.)

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686. The northern half of the island is near the Equator, and has a hot climate; the southern half has a temperate climate.

Grain, grapes, cotton, and the various fruits of warm countries, are successfully cultivated. Cattle and sheep are numerous, and immense quantities of wool are exported.

The forests are not tangled with vines as in most warm countries. The foliage is scanty, and the leaves often present their edges to the sun, so that the light is not excluded. Many of the trees have beautiful blossoms.



687. KANGAROO.

687. The largest wild animal is the *kangaroo*. This animal and many of the smaller ones have pouches in which they carry their young. The birds are beautiful, but they are not noted for richness of song. The *emu* is a large bird resembling the ostrich. The *lyre bird* has a remarkable tail.

688. New South Wales and Victoria have the most renowned gold mines in the world. South Australia has rich copper mines.

689. The *inhabitants* are for the most part colonists from the British isles and their descendants. The natives are degraded savages. They are black, but have not features like the Negroes of Africa. Their hair is not woolly, nor have they flat noses or thick lips.

690. Sydney and Melbourne are the largest cities of Australia.

Tasmania.—691. This island, situated on the southeast of Australia, is about the size of New Brunswick.

The climate, native plants and animals, are like those of South Australia. Agriculture and the rearing of sheep are the chief occupations. *Hobart Town* is the capital.

New Zealand.—692. This British Colony, situated nearly half way between the Cape of Good Hope and Cape Horn, consists of two principal islands and one of smaller size.

The total area is over three times as great as New Brunswick.

693. The climate is temperate and healthful, and the soil is fertile. Wool and flax are the chief exports. The hottest season is near Christmas.

694. The natives are a much finer race than those of Australia. They were formerly fierce cannibals, feasting on the bodies of their captive enemies. The inhabitants are chiefly of British origin. **Wellington** is the capital.

New Guinea.—695. This island is nearly as large as Borneo. It is occupied wholly by degraded savages, resembling the natives of Australia.

The tropical forests yield spices, cocoa-nuts, sago, camphor, and many fine fruits. The beautiful *bird of paradise* is a native of this island.

696. The **New Hebrides** include many small islands. Some of the natives have been converted to Christianity by missionaries from our Provinces.

697. The **Feejee Islands** yield cotton, cocoa-nuts, yams, and arrow-root. Wesleyan missionaries have converted many of the inhabitants to Christianity. These islands have lately, at the request of the natives, been annexed to Great Britain.

POLYNESIA.

698. Polynesia includes numerous groups of islands in the Pacific Ocean east of the Philippine and Feejee Islands.

699. Many of these islands are but slightly elevated above the surface of the sea, and cannot be seen until you are close upon them. When first coming into view, the trees seem to rise out of the water. These are *Coral Islands*. In some cases a coral island consists of a ring of land with a lake in



703. SCENE IN THE SANDWICH ISLANDS.



701. BREAD-FRUIT.

ual summer, and many of them are remarkable for

thocentre. Along the inner and outer shores is a beach of pure white sand.

700. Other islands, formed by volcanoes, are elevated and mountainous. Some of them are surrounded by a low coral island in the form of a broken ring or band. Vessels can sail through the openings of the ring into the peaceful waters within.

701. The Islands of Polynesia enjoy perpet-

ual summer, and many of them are remarkable for

their beauty. The natives subsist largely on the products of the cocoa-nut palm, the bread-fruit tree, and on other fruits which cost them little labour.

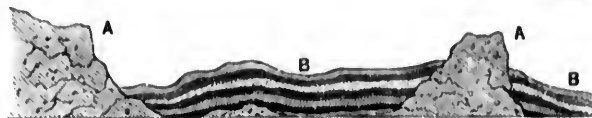
702. The Society Islands, owned by France, are among the most important of Polynesia. One of the group, called *Tahiti*, has mountains nearly two miles high, and is celebrated for its beautiful scenery.

703. The Sandwich Islands, of which *Hawaii* is much the largest, have an independent government. About one hundred years ago the natives were fierce savages, who killed the celebrated navigator Captain Cook. Through the labours of missionaries these people are now greatly changed. Churches and schools have been established, and the king and nearly all his subjects have embraced the Christian religion. *Honolulu*, the capital, is frequently visited by ships crossing the Pacific between America and Asia.

PART III.

PHYSICAL GEOGRAPHY.

The Earth's Structure.—704. Near the surface of the Earth we usually find loose earth or soil, gravel, and stones. On digging through these we come to solid rock.



A A UNSTRATIFIED ROCKS. B B STRATIFIED ROCKS.

705. The loose earth called soil is formed from decayed vegetable and animal matter, mingled with particles of rocks broken up by rain, frost, and other forces in the air.



706. FOSSIL FISHES.

706. Rocks belong to two great classes. If we examine a deep railway cutting or a cliff, we shall find the rocks either arranged in layers (or strata) one above another, or in irregular masses. The first

kind is called *Stratified*, the second *Unstratified*.

When loose earth is carried by streams into lakes or seas, it settles at the bottom in layers or strata, and, by pressure, becomes solid rock. It is supposed that the stratified rocks have been formed in the same way; hence they are also called *Aqueous* (water-formed) and *Sedimentary*. Remains of animals and plants (fossils) are often found in these rocks. In volcanoes (fire-mountains) vast masses of molten matter called *lava* are thrown out. When the lava cools, it takes the unstratified form. Hence unstratified rocks are supposed to have been formed by fire, and are sometimes called *Igneous* (fire-formed) rocks. They contain no fossils.

The Interior.—707. We cannot speak with certainty respecting the condition of the interior of the Earth. It is now generally believed that the Earth is a solid mass throughout, but that there are scattered through it,

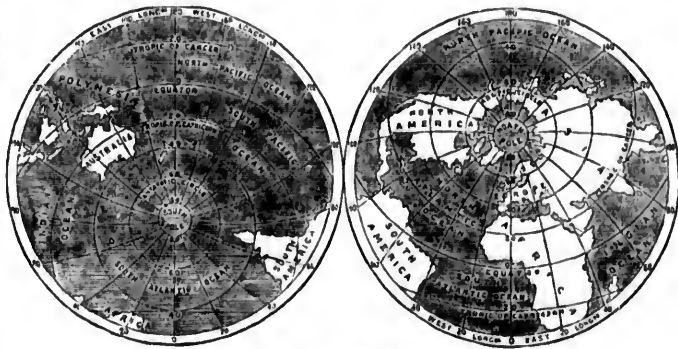
especially near the surface, lakes of molten matter. To this it is due that, in many places on the Earth's surface, volcanoes send out flame, smoke, and molten lava. In other places, too, there are hot springs, as the *geysers* of Iceland, from which issue boiling water and steam.

The Globe.—708. If we could rise a few miles above the Earth and look down upon it, one of the first things to catch the eye would be the land and water surface. A glance at the hemispheres will show that about three-fourths of the surface is covered with water, and one-fourth

with land; also, that about three-fourths of the land is on the north of the Equator. Further: it will be seen that the Earth's surface may be so divided that nearly all the land will be in one hemisphere, of which London will be nearly the centre.

709. The boundary line between the land and the water—that is, the *shore line*, or *coast line*—is very irregular, the land jutting out into the sea, and the sea running up far into the land.

710. This mingling of the ocean with the land is one of the most important points to be noted in the physical features of a country. The sea lessens the extremes of heat and cold in those countries which are broken up by it. Another great benefit arising from the breaking up of the land by inlets of the sea, is the ease thus afforded for ships passing from one country to another.



708. LAND AND WATER HEMISPHERES

THE LAND.

Divisions.—711. The land forms about one-fourth of the Earth's surface, and is 1917 times larger than New Brunswick.

LAND.	WATER.
WATER.	WATER.

The principal part of this area is found in two great bodies called *Continents*, the *Western Continent* and the *Eastern Continent*. The Eastern Continent is about twice as large as the Western.

There is also a large number of smaller portions of land, surrounded by water, which are called *Islands*. Australia is by far the largest island, and is sometimes called a continent.

The Continents.—712. The Western Continent has its greatest length north and south, and consists of two divisions,—*North America* and *South America*, which are connected by a narrow neck of land called the *Isthmus of Panama*. (See Map 1.)

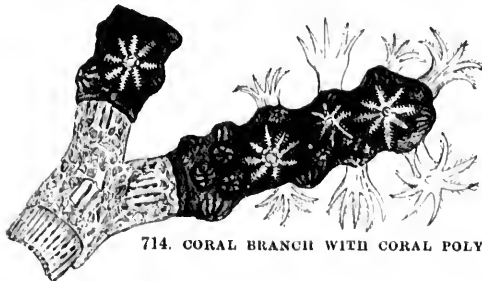
The Eastern Continent stretches furthest east and west, and consists of three divisions—*Europe*, *Asia*, and *Africa*. (See Map 2.)

Including *Australia*, we have thus six great divisions of land, each of which is sometimes called a continent.

Islands.—713. Islands differ from continents in being of smaller size. They usually occur in groups near the continents, as the West Indies and the British Isles. It is supposed that many islands so situated were once connected with the mainland.

Islands are very numerous in the Pacific and Indian Oceans. The groups in these oceans all taken together are called *Oceania*.

714. Many islands, particularly in the tropical parts of the



714. CORAL BRANCH WITH CORAL POLYPS.

Pacific, have been made by the coral polyp. These little creatures draw lime and other substances from the water, and with them form rock. It used to be supposed that these islands were formed only in shallow water, but great depths have lately been found around coral islands. (See page 10.)

Surface.—715. The land is very varied in respect to height above the sea. Sometimes the slope from the water's edge is gentle; in other places the shore line is steep, varying in height from a few feet to several hundred feet. The highest land is usually in the interior. Tracts of land are called *plains*, *table-lands*, *hills*, *mountains*, or *valleys*, according to their height.

716. The widest plains in the Western Continent are in the middle of North America from the Arctic Ocean to the Gulf of Mexico, and on the east of South America; the greatest in the Eastern Continent are in the north of Europe and Asia.

717. Lofty mountains are found in all the great



Rocky Mountains.

Mississippi Valley.

Alleghany Mountains.

718. NORTH AMERICA.

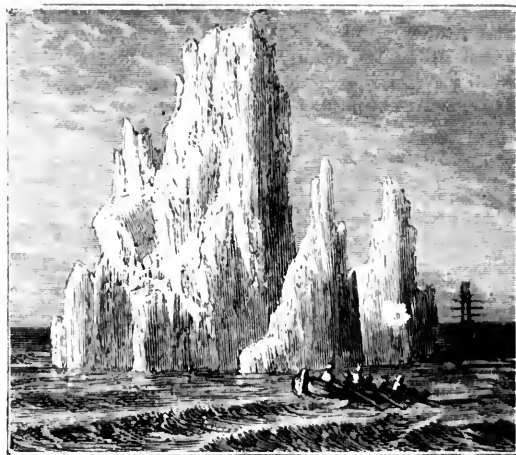
divisions, but those of Asia surpass the others in height. Mount Everest, a peak of the Himalayas, 29,002 feet, is the highest known land.

The mountains of America are more easily traced than those of the Eastern Continent.

718. Mountain ranges generally form the parting ground or *water-shed* between streams flowing in opposite directions. The Rocky Mountains and the Andes are water-sheds. The above diagram shows the Rocky Mountains in the west and the Alleghany Mountains in the east of North America, with the great Mississippi Valley between.

719. On mountains and table-lands the cold increases with the height above the sea.

720. The tops of lofty mountains, even in the Torrid Zone, are covered with snow all the year round. The pressure of the snow massed on the upper regions causes frozen rivers, called *glaciers*, to flow down the sides of the mountains and through the valleys. Boulders (rounded blocks of stone) and the waste of the rocks are carried down on the surface of glaciers; and



721. ICEBERG.

when a warmer region is reached, the snow melts, giving rise to rivers, and the debris (rubbish) settles on the plains.

721. In the polar regions the glaciers go down to the sea, and there huge masses break off by their own weight and form *icebergs*, which are carried by ocean currents into warm latitudes, and there melt. An iceberg reflecting in dazzling colours the rays of the sun is one of the grandest objects in nature.

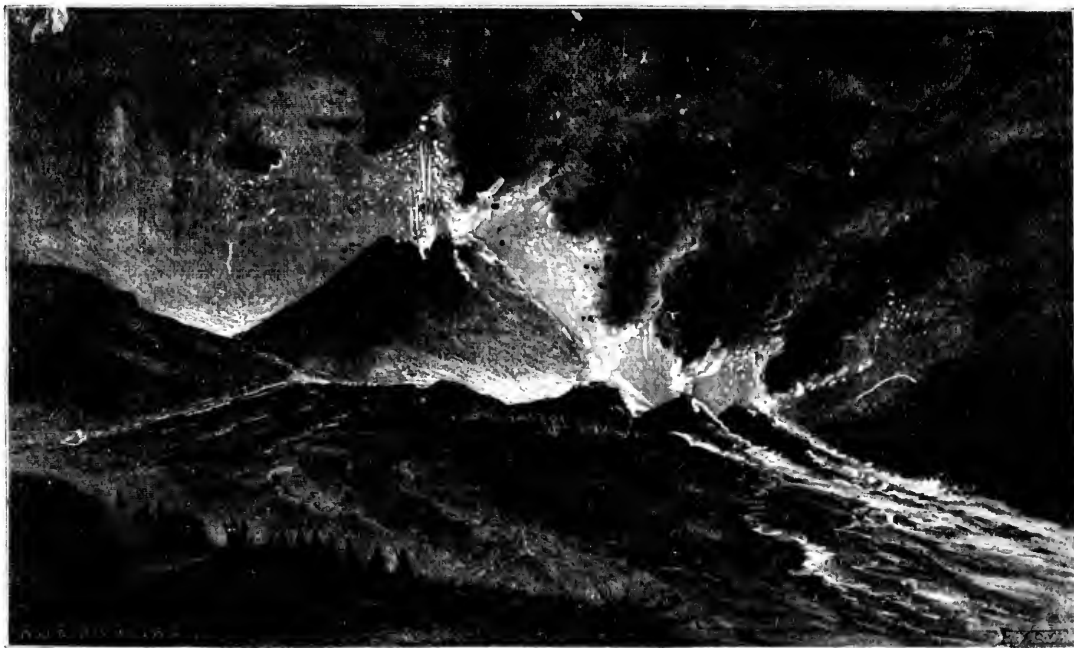
722. In various parts of the Earth the interior fires have broken through the crust in the form of *volcanoes*, where vast quantities of lava are poured out.

Volcanoes are usually near the sea, and often on islands. Some of the most noted volcanoes are *Cotopaxi*, in South America; *Vesuvius*, in Italy; and *Ætna*, in Sicily.

723. Earthquakes are movements of the ground, varying from slight tremblings to violent outbursts. They are most common in volcanic regions, and are supposed to be due to the same causes as volcanoes.

In the great earthquake of 1757, which lasted about six minutes, almost every building in Lisbon was laid in ruins, and 60,000 persons lost their lives. Caraccas was destroyed in 1812, and 10,000 persons were killed in less than a minute.

724. Mountains and hills are of great use in aiding the drainage of a country, and in supplying it with streams. The rain which falls upon their higher parts re-appears in springs along their sides; and instead of standing in pools and poisonous marshes, it flows down the slopes in brooks and rivers



722. VESUVIUS DURING THE ERUPTION OF 1858.

Rivers.—725. If all the rain which falls on the Earth were to run off at once from its surface, the lowlands would in the wet season be flooded, and in seasons of drought we should have no water—neither streams, nor springs, nor wells. A large portion of the rain and melted snow sinks into the ground, and makes its way to the surface again in the form of springs. Springs give rise to brooks, and brooks to rivers.

726. "When water from rain or melted snow sinks below the surface into the soil, or into rock, it does not remain at rest there. If you were to dig a deep hole in the ground, you would soon find that the water which lies between the particles would begin to trickle out of the sides of your excavation, and gather into a pool in the bottom. If you baled the water out, it would still keep oozing from the sides, and the pool would ere long be filled again. This would show you that the under-ground water will readily flow into any open channel which it can reach.

727. "Now the rocks beneath us, besides being in many cases porous (full of small holes) in their texture, such as sandstone, are all more or less traversed with cracks—sometimes mere lines, like those of a cracked window-pane, but sometimes wide and open clefts and tunnels. These numerous channels serve as passages for the under-ground water. Hence, although a rock may be so hard and close-grained that water does not soak through it at all, yet if that rock is plentifully supplied with these cracks, it may allow a large quantity of water to pass through. Limestone, for example, is a very hard rock, through the grains of which water can make but little way; yet it is so full of cracks or "joints," as they are called, and these joints are often so wide, that they give passage to a great deal of water.

728. "In hilly districts, where the surface of the ground has not been brought under the plough, you will notice that many places are marshy and wet, even when the weather has long been dry. The soil everywhere around has perhaps been baked quite hard by the sun; but these places remain still wet, in spite of the heat. Whence do they get their water? Plainly not directly from the air; for in that case the rest of the ground would also be damp. They get it not from above, but from below. It is oozing out of the ground; and it is this constant outcome of water from below which keeps the ground wet and marshy. In other places you will observe that the water does not

merely soak through the ground, but gives rise to a little runnel of clear water. If you follow such a runnel up to its source, you will see that it comes gushing out of the ground as a **Spring**. Springs are the natural outlets for the under-ground water.

729. "But it must happen that a great deal of the under-ground water descends far below the level of the valleys, and even below the level of the sea. And yet, though it should descend for several miles, it comes at last to the surface again. To realize clearly how this takes place, let us follow a particular drop of water from the time when it sinks into the



729. ORIGIN OF SPRINGS.

earth as rain, to the time when, after a long journeying up and down in the bowels of the Earth, it once more reaches the surface. It soaks through the soil together with other drops, and joins some feeble trickle, or some more ample flow of water, which works its way through crevices and tunnels of the rocks. It sinks in this way to perhaps a depth of several thousand feet, until it reaches some rock through which it cannot readily make further way. All this while it has been followed by other drops, coursing after it through its winding passage down to the same barrier at the bottom. The union of all these drops forms an accumulation of water, which is continually pressed by what is descending from the surface. Unable to work its way downward, the pent-up water must try to find escape in some other direction. By the pressure from above it is driven through other cracks and passages, winding up and down until at last it comes to the surface again. It breaks out there as a gushing spring."—*Geikie*.

730. The course of a river depends on the slope of the land. The area drained by a river and its tributaries is called the *river basin*. The length of a river depends on the distance of the water-shed from the sea, and on the windings of the river. The volume or size of a river depends on the extent of its basin and the moisture of the country. The velocity or speed of a river depends on the slope along which it flows, on the depth of water, and on its windings. A very deep stream flows rapidly, driven forward by its own weight, although there may be little fall.

731. Brooks and rivers are of great use to man. They supply him with pure water, they make his fields fruitful, drive his machinery, and form a highway for the traveller and the merchant. The most fruitful soil is found along the margins of rivers: here are the chief inland towns, and the most busy scenes of human industry.

Lakes.—732. Lakes are usually formed of fresh water gathered in basin-like hollows.

733. Some lakes have no outlet. Their excess of water is drawn up into the air, in the shape of vapour. They are all

salt except *Lake Tchad*, in Africa. The *Caspian*, *Aral*, and *Dead Seas*, in Asia, and *Great Salt Lake* of North America, belong to this class.

734. Lakes are most numerous along the courses of rivers. The great lakes of North America and of Central Africa are the largest fresh-water lakes. The *Dead Sea*, 1312 feet below the sea level, is the lowest lake known.

THE SEA.

Extent.—735. The sea covers about three-fourths of the Earth's surface. (*See Diagram*, p. 78.)

Saltness.—736. "Take a drop of sea-water, and allow it to evaporate. You find a little white point or film left behind; and on placing that film under a microscope you see it to consist of delicate crystals of common or sea salt. There are some other things besides common salt in sea-water; but the salt is the most abundant, and we need not trouble about the rest at present. Now, where did all this mineral matter in the sea come from? The salt of the sea is all derived from the waste of the rocks.

737. "Both under ground and on the surface of the land water is always dissolving out of the rocks various mineral substances, of which salt is one. Hence the water of springs and rivers contains salt, and this is borne away into the sea. So that all over the world there must be a vast quantity of salt carried into the ocean every year.

738. "The sea gives off again by evaporation as much water as it receives from rain and from the rivers of the land. But the salt carried into it remains behind. If you take some salt water and evaporate it, the pure water disappears, and the salt is left. So it is with the sea. Streams are every day carrying fresh supplies of salt into the sea. Every day, too, millions of tons of water are passing from the ocean into vapour in the atmosphere. The waters of the sea must, consequently, be getting saltier by degrees. The process, however, is an extremely slow one."—*Geikie*.

Depth.—739. The bed of the sea consists of hills and plains, just like the surface of the land. Hence the depth varies greatly in different parts. The greatest depth found by the *Challenger* Expedition (1872-76) was in the South Pacific: it was five miles and one-fifth. The average depth is two miles and three-quarters.

The pressure on the lower waters of the sea is very great. If a corked bottle be let down empty, the cork will be forced in.

Divisions.—740. Although the sea forms one great body of water, it is usual to speak of it as separated into five oceans:—

The *Atlantic*, *Pacific*, *Indian*, *Arctic*, and *Antarctic Oceans*.

741. Branches of these oceans, extending into the

land, take various names, as *seas*, *bays*, *gulfs*, *channels*, and *straits*.

742. The Atlantic lies on the east of America, which it separates from Europe and Africa. The Polar Circles are its northern and southern limits, and the Equator divides it into *North* and *South Atlantic*.

The Atlantic forms the great highway between America and Europe. A table-land under the North Atlantic forms the bed of the telegraph cables between Newfoundland and Ireland.

743. The Pacific is on the west of America, separating it from Asia and Australia, and it extends from Behring Strait, on the north, to the Antarctic Circle. It is divided into *North* and *South Pacific* by the Equator.

The extreme breadth of the Pacific is about 10,000 miles, or nearly half the measurement round the Earth. It is deeper than the Atlantic, and is noted for the number of its islands. Magellan, who crossed this ocean in 1521, called it the Pacific, because he met with no storms on his voyage.

744. The Indian Ocean lies south of Asia, having Africa on the west and Australia on the east. The Antarctic Circle is the southern limit.

745. The Arctic or Northern Ocean is on the north of America, Europe, and Asia, within the Arctic Circle. It is much broken by islands on the north of America.

Throughout a long winter this ocean is covered with ice of great thickness, which breaks up in the spring and drifts down in vast masses, called *ice-floes*, into the North Atlantic.

The existence of an Arctic passage from the Atlantic to the Pacific was proved by Sir John Franklin and by Captain M'Clure; but it is always blocked up with ice, and no use can be made of it.

Sailors have often tried to reach the North Pole, but they have never succeeded. The nearest point yet reached is $83^{\circ} 20'$, by the English Polar Expedition under Captain Nares in 1876.

746. The Antarctic Ocean is situated within the Antarctic Circle. The cold is even more severe than in the Arctic, and the ice extends further from the pole.

The highest latitude reached in this direction is $78^{\circ} 4'$, by Sir James Ross.

The Arctic and Antarctic Oceans are the favourite resort of whales, in catching which many vessels are engaged.

Motions of the Sea.—747. The waters of the ocean have three kinds of movement,—*waves*, *tides*, and *currents*. By the unceasing motion of its waters the ocean is kept pure.

Waves.—748. Waves are movements of the surface water, usually caused by wind. Except in shallow water, and when the wind is very strong, there is no onward flow of water, but each wave sets the next in motion.

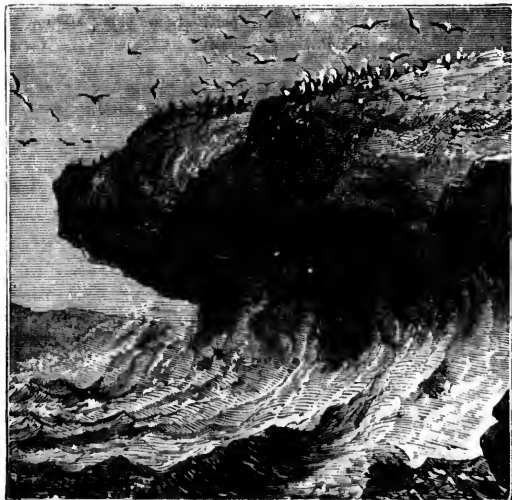
It is thought that even by the most violent winds the water is not disturbed to a greater depth than 200 feet.

749. "Great is the destruction which is worked by the waves of the sea. Every year piers and sea-walls are broken

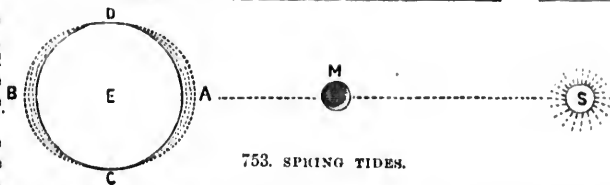
down, pieces of the coast are washed away, and the shores are strewn with the wreck of ships. So that, besides all the waste which the surface of the land undergoes from rain, and frost, and streams, there is another form of destruction going on along the coast-line.

750. "On rocky shores the different stages in the eating away of the land by the sea can sometimes be strikingly seen. Above the beach perhaps rises a cliff, sorely battered about its base by the ceaseless grinding of the waves. Here and there a cavern has been drilled in the solid wall, or a tunnel has been driven through some projecting headland. Not far off we may note a tall buttress of rock, once a part of the main cliff, but now separated from it by the falling in and removal of the connecting archway. And then, further off from the cliff, isolated, half-tide rocks rise to show where still older detached buttresses stood; while away out in the sea the dash of breakers marks the site of some sunken reef, in which we see the relics of a still more ancient coast-line. On such a shore the whole process whereby the sea eats into the land seems to be laid open to our eyes.

751. "On some parts of the coast-line of the east of England, where the rock is easily worn away, the sea advances on the land at a rate of two or three feet every year. Towns and villages which existed a few centuries ago have, one by one, disappeared, and their sites are now a long way out under the restless waters of the North Sea. On the west coast of Ireland and Scotland, however, where the rocks are usually hard and resisting, the rate of waste has been comparatively small."
—Geikie.

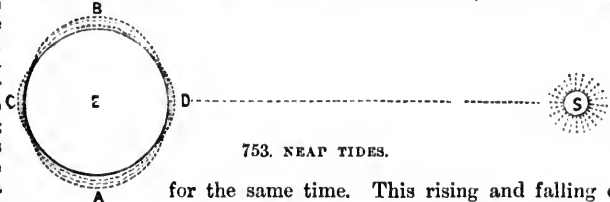


750. WASTE OF ROCKS.



753. SPRING TIDES.

Tides.—752. The ocean is ever changing its level. The waters rise for about six hours, and then fall



753. NEAP TIDES.

for the same time. This rising and falling of the ocean is called the *tide*. When the water is rising we call it *flood tide*; when it is falling, *ebb tide*.

753. The tides are caused chiefly by the attraction of the moon. They are also affected by the attraction of the sun.

When the sun and the moon are on the same side of the Earth, and also when they are on opposite sides of the Earth, the tides are very high, and are called *spring tides*. (See Diagram above.)

At the moon's quarters the sun and the moon act at right angles. The tides are then low, and are called *neap tides*. (See Diagram above.)

Currents.—754. Broad currents, like vast rivers, are ever flowing through the sea. An exchange of waters is thus kept up between the Equator and the poles, and among the different oceans.

755. Sailors are in the habit of throwing bottles into the sea, containing slips of paper stating where they were cast into it, and when. The bottles course along with the current. When a sailor falls in with one of them, he notes the place and time of finding it on the paper, and sends it on its voyage again.

The products of the West Indies are often cast upon the shores of the Azores and Ireland; the products of China are carried to the Aleutian Isles; and drift-wood is carried from Northern Europe to Iceland.

These are some of the proofs of the existence and direction of ocean currents.

756. The Gulf Stream, flowing north-eastward from the Gulf of Mexico, is the most remarkable of all the currents. A volume of water, much warmer than the surrounding ocean, passes through Florida Strait at the rate of four miles an

hour. As it proceeds northward it becomes broader, and loses both speed and heat. Near Newfoundland it turns to the east, and, while crossing the Atlantic, it divides into two branches—one passing to the British Islands, the other southward toward the coast of Northern Africa. It is a westward current, caused by the trade-winds (par. 769), till it reaches the Gulf of Mexico, from which it issues as a current flowing north-eastward.

757. The effects of ocean currents are very important. They speed the sailor in his distant voyages, and they have a great effect on climate.

THE ATMOSPHERE.

Extent.—758. The atmosphere, or air which we breathe, surrounds the Earth on all sides to the height of forty-five or fifty miles. It is wrapped round the Earth, and travels with it in its movements through space.

Composition.—759. The atmosphere consists chiefly of a mixture of two gases—*nitrogen* and *oxygen*—there being nearly four times as much of the former as of the latter. It also contains a small amount of carbonic acid gas, and a quantity of watery vapour which is always changing.

Properties.—760. Air is easily displaced, and we move about in it without feeling the slightest hindrance.

Except when laden with mists and clouds the atmosphere is perfectly clear, so that objects are seen through it with the greatest distinctness. It is not, however, quite colourless; for when we look through a large volume of it, as upwards into the sky, or at a distant mountain, it appears of a blue tint.

If we draw off nearly the whole of the air from a closed vessel, the little that remains will spread out and fill the whole space. Air is therefore said to be very *elastic*.

761. The air has *weight*. At the level of the sea it presses with a weight of nearly 15 pounds on every square inch. A column of air of the full height of the atmosphere is equal in weight to a column of water 34 feet high, or to a column of mercury 30 inches in height.

762. It is the oxygen of the air that makes things burn; hence where there is a scanty supply of air, fire goes out or burns feebly. Air is also necessary to animal and vegetable life. The Creator has wonderfully provided that the two kinds of living things—animal and vegetable—shall each give to the atmosphere something of use to the other. Carbonic acid, which is highly poisonous to animals, and is plentifully thrown from the lungs in breathing, is the most nourishing food of plants.

Reflection.—763. Objects become visible by the light which passes from them to the eye. Some bodies, like the sun, shine with their own light; others are dark, and are seen by reflecting or throwing off the light which they receive from some light-giving body.

The atmosphere reflects the light of the sun, and thus sheds its rays over the Earth. Were it not for this power of the atmosphere the sun would appear as a bright spot in the heavens, while all else would be as dark as night.

Temperature.—764. The air receives but little heat from the sun's rays in their passage through it, but is chiefly heated by contact with the Earth, or by the heat thrown off from the land and water. The heat becomes less and less as we rise above the sea-level.

Vapour.—765. Water, in the form of invisible vapour, is constantly rising from the Earth into the atmosphere.

In a hot day we sometimes sprinkle the floor with water to cool the room. In a short time the water has all disappeared, for its particles expanded with the heat and floated away.

Very little watery vapour rises higher than five or six miles above the sea-level.

WINDS.

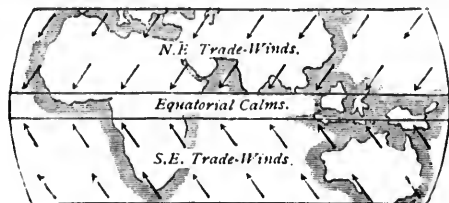
Origin.—766. Winds, or currents of air, are occasioned chiefly by heat.

767. "Hot or warm air is lighter than cold air. Heat expands bodies. It is this expansion of air, or the separation of its particles further from each other, which makes it less dense or heavy than cold air, where the particles lie more closely together. As a consequence of this difference of density, the light warm air rises, and the heavy cold air sinks. You can easily satisfy yourselves of this by experiment. Take a poker, and heat the end of it in the fire until it is red-hot. Withdraw it, and gently bring some small bits of very light paper or some other light substance a few inches above the heated surface. The bits of paper will be at once carried up into the air. This happens because the air heated by the poker immediately rises, and its place is taken by colder air, which, on getting warmed, likewise ascends. The upward currents of air grow feebler as the iron cools, until, when it is of the same temperature as the air around, they cease." —*Geikie*.

768. If the door be set open between two rooms, one of which is warmer than the other, a current of cold air will be found near the bottom of the door, flowing from the cold room into the warm; while near the top of the door a warm current will flow from the warm room into the cold one. A lighted taper held in the door-way will show the direction of the currents.

In like manner, there are currents in the atmosphere. We often see clouds near the Earth moving one way, and others higher up moving the opposite way.

Trade Winds.—769. The trade winds prevail over the greater portion of the Torrid Zone, extending a few degrees on each side into the Temperate Zones. They are more regular



769. TRADE WINDS.

on the ocean than on the land. On the north of the Equator they blow from the north-east, and on the south from the south-east.

770. The trade winds are due to the fact that the air in the Torrid Zone is more highly heated than elsewhere. Currents set in from the north and the south, which the spinning of the Earth turns into north-east and south-east winds.

771. Monsoons are periodical winds in the Indian Ocean. The south-west monsoon blows from March till September; and the north-east monsoon from September till March.

Land and Sea Breezes.—772. Along the coast, particularly in tropical countries, about the middle of the forenoon, the air over the land becomes more highly heated than that over the sea, accordingly a sea-breeze sets in towards the land. In the evening, the land cools more rapidly than the sea, and a land breeze blows towards the sea.

773. Winds are affected by the region over which they blow. Those that have crossed large bodies of water are moist; those that have crossed a continent or a high mountain are dry; those that have come over frozen lands or seas of ice are cold; and those from burning deserts are hot and dry.

The deserts of Africa and Asia give rise to hot, suffocating winds—as the *Simoom* of Arabia, and the *Harmattan* of the west coast of Africa.

DEW, CLOUDS, RAIN, AND SNOW.

Dew.—774. A cold pitcher or bottle placed in a warm room is soon covered with drops of water. The air of the room contains invisible vapour, which is turned into water by the cold surface of the pitcher or bottle. Dew is formed in much the same way. After sun-down the earth cools rapidly; the air next the earth is cooled by meeting its cold surface, and it lets fall some of its vapour in the form of dew.

Clouds.—775. When vapour is condensed in the upper parts of the air and becomes visible, it forms *clouds*. Clouds resting on the earth are called *fogs*.

Rain, &c.—776. When clouds are further condensed by currents of cold air, by mountain ridges, or by electricity, the particles become large and heavy, and they fall to the earth as *rain*, *snow*, or *hail*. Snow is frozen vapour, hail is frozen rain.

777. "The mist on the glass (par. 774) and the cloud in the sky are both formed of minute particles of water separated by air. It is the running together of these particles which gives rise to the drops. In the one case, the drops run down the cold glass: in the other case, they fall as drops of rain through the air. Rain, therefore, is thus a further stage in the condensation of the aqueous vapour of the atmosphere. The minute particles of the cloud, as condensation proceeds, gather more moisture round them, until at last they form drops of water too heavy to hang any longer suspended in the air. These then fall to the earth as rain-drops."—*Geikie*.

778. The sea is the great store-house from which rain is drawn up. Some of the rain which falls on the land is turned into vapour. The rest feeds brooks and rivers, and is returned again to the sea.

CLIMATE.

779. The climate of a country is the condition of its atmosphere, particularly in respect to *heat*, *moisture*, and *healthiness*. We thus speak of a *hot* climate, a *dry* climate, a *healthy* climate, &c.

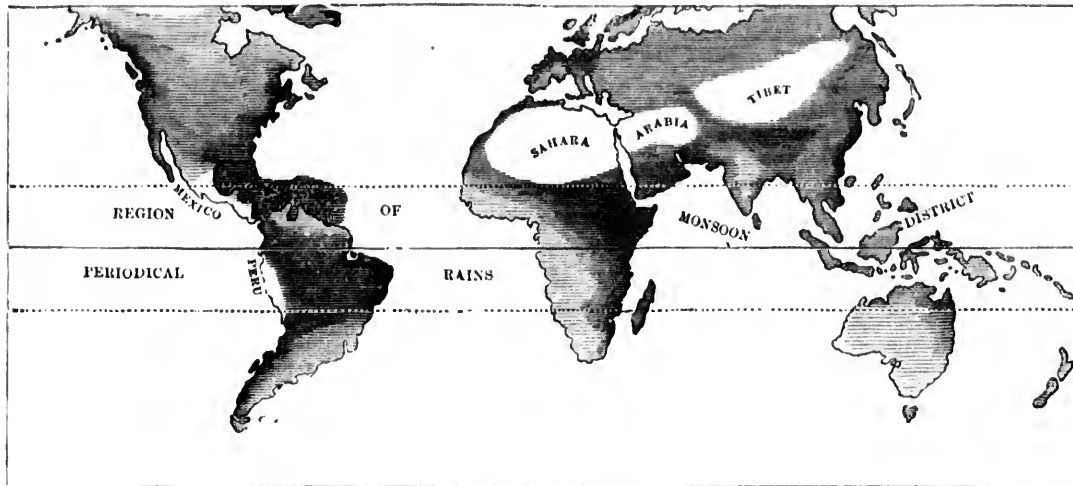
Climate has an important influence on the plants and animals of a country, as well as on the way of life and the habits of its people.

Trees attract and condense the vapours of the atmosphere; hence the rain-fall is lessened by clearing away forests. In some countries destitute of forests rain has been increased by planting trees.

780. The climate of a place depends on a variety of circumstances, as its latitude, its height above and distance from the sea, the slope of the land, its drainage, and cultivation, and winds.

The hottest countries are those near the Equator, because they are most directly under the sun's rays. Height above the level of the sea has also a great effect on climate. The tops of high mountains are always cold. Even in the hottest regions, there is a line, called the *snow-line*, above which the snow never melts. (See par. 784.)

781. The amount of rain varies greatly in different countries. In desert places, as in the Sahara, in the north of Arabia, and in the regions around Thibet,



781. RAIN MAP OF THE WORLD.

rain hardly ever falls. There are also rainless districts in Mexico and Peru. In places near the Equator, as in the West Indies, rain falls on most days of the year. In some other places, as in India, the rains are periodical, falling abundantly during the one half of the year, and not at all during the other half. In the North and South Temperate Zones, rain and sunshine follow each other all the year round. In the above Rain Map, the dark shades show the regions where most rain falls; the light ones, countries where little or no rain falls.

PLANTS.

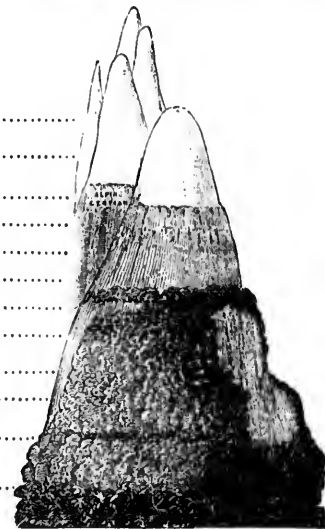
782. Vegetation is richest and most varied in the Torrid Zone. The forests contain majestic evergreens, whose trunks and branches support twining plants or parasites in such abundance that it is sometimes difficult to tell to which stem the leaves and blossoms belong. (See page 35.)

783. Some of the most noted trees of the Torrid Zone are the huge baobab, with trunk 30 feet through; the wide-spreading banyan; and the majestic palm, yielding food, drink, and clothing. Here also we find various ornamental woods, dye-woods, gums, drugs, spices, and choice fruits. The chief food-plants are

rice, durra, bananas, bread-fruit, dates, cocoa-nuts, and Indian corn.

784. In the Temperate Zones plants of a different kind are found. The oak, maple, beech, and other forest trees, cast their leaves in the autumn. The

- Limit of Vegetation
- Snow Lichen
- Mosses and Lichens
- Limit of Grasses
- Barley
- Rye
- Shrubs
- Limit of Great Trees
- Wheat
- Limit of Vines
- Limit of Ferns
- Limit of Palms



786. VEGETATION OF THE ANDES.

chief food-plants are wheat, rye, oats, and maize; potatoes and other vegetables; and such fruits as the vine, apple, pear, and plum.

785. In the warmer parts of the Frigid Zone different kinds of fir and dwarf birches are the principal trees; and barley is the chief grain. As we near the pole we find shrubs of alder and willow, and finally the mosses and lichens, which bring us to the regions of eternal snow.

Mountain Slopes.—786. Mountains in the Torrid Zone whose summits rise above the snow-line, present, within narrow range, nearly all the variety of vegetation found between the Equator and the poles. At the foot of the Andes are the tropical palms; rising one stage, we find tree ferns; then the vine; next the grains and shrubs; then the grasses; and finally the mosses and lichens. A similar variety is found on the slopes of the Alps and other mountains in the Temperate Zones.

ANIMALS.

787. Most animals can live only in a certain climate. A hot climate suits some; a cold climate suits others. But the same kinds of climate in different parts of the Earth have not always the same animals.

788. The Torrid Zone surpasses the other parts of the Earth in the number, size, and beauty of its animals. Some of the most important are the elephant, rhinoceros, hippopotamus, camelopard, lion, tiger, leopard, panther, monkey, crocodile, alligator, boa, and ostrich. Insects are very numerous in this zone.

There are two species of elephants; the larger is confined to Asia, the smaller to Africa. The lion belongs to Asia and Africa; the puma is the lion of America. The camel also belongs to Asia and Africa; the llama of the Andes is the American camel.

789. The animals of the Temperate Zones are less fierce than those of the Torrid Zone. Some of the more important are the bison, deer, ox, sheep, horse, boar, wolf, bear, fox, beaver, and hare; and among the birds, the eagle, turkey, goose, and pheasant.

790. The animals of the Frigid Zones are generally of a dusky colour. There are but few species. The more important are the reindeer, musk-ox, polar bear,

grisly bear, arctic fox, ermine, sable, sea otter, whale, walrus, and seal. The birds are generally waders and swimmers, found along the shores in summer. There are no reptiles, and but few insects.

The grisly bear is peculiar to the Rocky Mountains of North America.

MAN.

791. The total number of human beings on the Earth is now supposed to be 1400 million.

Man can live on almost all kinds of food. In the tropical regions he lives principally on rice, cocoa-nuts, bananas, and various fruits; in the temperate regions he lives on vegetables mixed with animal food; in the frozen regions, where the earth yields nothing, he betakes himself almost entirely to animal food. He thus flourishes under every condition of climate, and takes the whole Earth as his domain.

792. It is only in temperate climes, however, that man's powers appear in all their strength. Intense heat in the Torrid Zone renders him feeble; pinched by cold in the Arctic regions, and requiring to exert all his strength to sustain the body, he makes but little progress in civilization; in temperate climates activity is both needful and agreeable, a moderate amount of labour secures the necessaries of life, and there are leisure and desire for training the mind.

793. In the temperate regions of Europe and North America we find a fixed population enjoying free intercourse with other countries, and enlightened by Christianity. In these parts of the world we find the highest civilization and the greatest power.

794. Mankind is usually considered as divided into *five* races, or varieties:—

The Caucasian, or white race; *the Mongolian*, or yellow race; *the Ethiopian*, or black race; *the Malay*, or brown race; and *the American*, or red race.

These five races are not separated by very sharp lines, but gradually shade into each other. The Mongolian race is the most numerous, and the Caucasian stands next to it in point of numbers. The American race is the least numerous, and is gradually dying out.

According to varieties of speech there are three great families of the human race:—the *Aryan* (most Europeans, Persians, Indians), the *Semitic* (Arabs, Jews, Syrians, and North Africans), and the *Turanian* (all the peoples not included in the other two).

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