

# GEOGRAPHY

FOR

#### THE USE OF

# AUSTRALIAN YOUTH.

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#### Wan Biemen's Land :

SOLD BY S. A. TEGG, HOBART TOWN; LAMES DOWLING, LAUNCESTON; AND AT SYDNEY, BY W. A. COLMAN.

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### PREFACE.

It may be deemed, at first, unnecessary to undertake the publication of a School Geography in Van Diemen's Land, since there are excellent works upon the subject from the English Press. But the writer, as a Teacher, has, in common with many others, experienced no little difficulty in communicating information respecting this land of our adoption and the various adjoining colonies, in consequence of the incorrectness or deficiencies of the usual school books. To supply such a demand, and to produce a Geography essentially adapted for Youth by the simplicity of its language, the following pages are respectfully submitted to the Public.

The three accompanying Maps will be found to exhibit the sites of the new Settlements in Australia and New Zealand; they are the first Maps of the kind which have ever appeared in a School Geography.

It is hoped that the notice taken of Physical Geography in this volume will serve as an additional recommendation of it, as considerable care has been employed in its compilation to render it comprehensive and attractive to the youthful reader.

Hofwyl House, Nov. 1, 1845.

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# GEOGRAPHY.

GEOGRAPHY is that division of knowledge which gives us an account of the surface of the earth.

The earth is a large round mass, called a Globe.

We are living on the surface of the earth.

We cannot be inside, else we could not behold the sun and stars, for they are certainly not enclosed in our globe.

We know of what the world is made for some distance down from the surface, but beyond a few miles

deep we know nothing.

The world does not rest upon anything.

The diameter of the earth, which means a line through its centre, is nearly 8000 miles in length.

As the shape of the world is that of a globe, the length of the circumference, or line round it, will be a little more than three times the length of the diameter; its circumference then is nearly 25,000 miles.

The sun is an immense globe, distant from us

ninety-five millions of miles.

The sun appears small to us because it is so far off.

It is nearly three millions of miles round.

The sun would make thirteen hundred thousand worlds as large as ours.

It never moves from its place.

The earth turns round, so that all countries may in

turn receive light from the sun.

Places generally have the same degree of light every twenty-four hours.

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The earth must then take twenty-four hours in revolving or rolling over once.

This motion is called its diurnal or daily revolu-

tion.

All places then have not an equal degree of light at the same time.

It may be night in one country while it is day in another.

While the people of England are breakfasting, we are taking tea in Van Diemen's Land.

The sun gives heat as well as light.

As the world is globular, the sun cannot shine so directly upon some places as upon others.

This makes the difference between hot and cold

countries.

The sun shines more directly upon Van Diemer's Land than upon England, and for this reason our country is warmer than England.

We have said that the world turns over once a-day, why then do we not fall off?

Because the earth, like a great magnet, attracts everything to it, but always toward its centre; this is called the attraction of gravitation.

The sun attracts the earth as the earth attracts us; if it did not, the earth would always move in a straight line. As the globe cannot go in a straight line while the sun is drawing it, it is led to take a middle course, and thus is always revolving or turning round the sun.

The world is 365 days in performing this journey. The attraction of the sun is called the centripetal

or centre-seeking force, and the resistance of the earth is called the centrifugal or centre-flying force.

If we take a string with a stone at the end, and twirl it quickly round, the centrifugal force so increases, that upon letting go the string, the stone will fly to a considerable distance.

The imaginary line upon which any ball or globe appears to revolve or turn is called its axis.

The axis of our earth would be a diameter. The two ends of the axis are called the Poles:—the North Pole and the South Pole.

England is towards the North Pole, and Van Die-

An imaginary line drawn round the globe, equally dividing the distance between the North and the South Poles, is called the Equator or Equinoctial Line.

There are two other imaginary lines drawn round the globe at about 1600 miles north and south of the equator, called *Tropics*: that towards the North Pole is the *Tropic of Cancer*—and the other towards the south the *Tropic of Capricorn*.

They extend  $23\frac{1}{2}$  degrees from the Equator, which is a space equal to about a quarter of a right angle; so that the tropics are about a quarter of the way from the Equator to the Poles.

At some place or other within these two tropics, the sun is seen exactly over head at 12 o'clock at noon.

The sun thus appears to travel these 3200 miles, across the Equator from Tropic to Tropic.

This course of the sun is called the *Ecliptic*; but this apparent motion is owing to the inclination of the earth toward the sun in its revolution, which

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in turn brings different parts of its surface, between these Tropics, exactly opposite the sun.

The space between these two Tropics is called the

Torrid or Hot Zone.

At a distance of  $23\frac{1}{2}$  degrees from the North Pole is the *Arctic Circle*, and the same distance from the South Pole is the *Antarctic Circle*.

Within these circles lie the Frigid or Cold Zones.

Between the Arctic Circle and the Tropic of Cancer is the North Temperate Zone, in which England is situated.

Between the Antarctic Circle and the Tropic of Capricorn lies the South Temperate Zone, in which Van Diemen's Land is situated.

Lines drawn upon maps and globes, from pole to pole are called *Meridians of Longitude*.

They are at a distance of one degree from each other, and there being 360 degrees or divisions in every circle, there will be 360 meridians of longitude.

The first meridian is reckoned from that passing through Greenwich, near London; so that the distance of any place from London is calculated by its degree east or west from the first meridian: there being 180 degrees of east longitude, and 180 of west longitude from London.

The difference of time in different countries is four minutes to each degree of distance;—360 times 4 minutes or 1440 minutes is equal to 24 hours, during which period the whole earth has been illuminated by the sun.

Lines drawn upon maps and globes from east to

west, parallel with the Equator, are called Parallels of Latitude.

They serve to mark the degrees of distance of any

place, north or south of the Equator.

The whole distance from the Equator to each pole is 90 degrees. England is about 50 degrees of north latitude, or 50 degrees north of the Equator.

Van Diemen's Land is about 40 degrees of south latitude, or 40 degrees south of the Equator, so that we are 10 degrees nearer the Equator than England is.

The distance between degrees of latitude is rather

more than 69 miles.

The distance between degrees of longitude on the Equator is 69 miles; but elsewhere it varies according to the distance from the poles, at which all meridians of longitude meet.

The length of a degree of longitude in England is 42 miles, and in Van Diemen's Land 51 miles; 360 times the length of a degree of longitude at any place will give the measure of a circle parallel to the Equator drawn through that place.

The circle at the Equator is 360 times 69, or 25,000 miles; in the latitude of Hobart Town, it is 18,000

miles, and in that of Englan 15,000 miles.

As we have only 18,000 miles to go in the daily revolution, which is at the rate of 750 miles an hour, and persons on the Equator 25,000 miles, or 1,000 miles an hour, we do not move so fast as they; for we have the same time for our journey, though not the same distance, as we travel on the smaller circle.

The Earth in its course round the Sun is inclined at an angle of  $23\frac{1}{2}$  degrees out of the perpendicular, so that different parts of the earth are at different times of the year brought opposite to the sun.

This is the cause of the seasons.

When the part of the earth near the Tropic of Cancer is brought opposite to the sun, which it is on the 21st of June, the northern hemisphere, or half the world, has summer, and the southern has winter; and, also, the northern has long days and short nights, while the southern has short days and long nights.

It is therefore winter in England when summer in

Tasmania.

When the Tropic of Capricorn is brought under the sun, which happens on the 21st of December, the southern hemisphere has the height of summer, and

the northern the depth of winter.

When the Equator is opposite to the Sun, which it is on the 21st of March and the 21st of September, there is equal day and night all over the world, and spring to one side of the equator, while it is autumn to the other side.

In proportion as countries are near the poles, so does their length of day in summer and night in

winter increase.

Some countries have three or four months day in summer. At the poles it is six months day and six months night.

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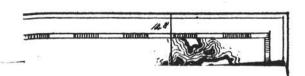
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### TASMANIA:

OR

#### VAN DIEMEN'S LAND.

Hobart Town is the capital or chief town of the country of Van Diemen's Land, and is situated in 43 degrees south latitude, and 147 degrees east longitude.

It is, therefore, distant from the equator 47 degrees, or a distance of about 3,300 miles. By the usual ship's course it is 16,000 miles from England.

The country of Van Diemen's Land includes Hobart Town and many other towns or townships. The rest of the country is composed of fields, forests or bush land, rivers, and lagoons or lakes.

This country is called an *Island*, because it is surrounded by water. Ships have sailed round it.

The first man who proved it to be an island was Mr. Bass, the Surgeon of the ship Reliance, in 1798.

Hobart Town is beside Sullivan's Cove, the piece

of water which forms the harbour or port.

There are two ways of getting into the broad open sea from this place;—one by Storm Bay, and the other by D'Entrecasteaux Channel.

Storm Bay is a body of water running into the

land from the sea.

There are several bays near Hobart Town; as Sandy Bay, Ralph's Bay, and New Town Bay.

Between Storm Bay and D'Entrecasteaux Channel is the narrow island of Bruni, (50 miles long,) so

named by the French Admiral Bruni D'Entrecasteaux in 1792; several whaling stations are here.

D'Entrecasteaux Channel or Strait is a narrow passage connecting the sea with the River Derwent, near the Iron-pot Light-house.

On the other side of Storm Bay lie Tasman's Pe-

ninsula and Forrestier's Peninsula.

They are connected by a narrow piece of land called an Isthmus, which is named the Eagle Hawk Neck; East Bay Neck joins Forrestier's Peninsula to the main land.

A Peninsula, then, must be almost an island.

On coming to this country from England, about the first land which shows itself is South West Cape, which juts out into the sea.

When a Cape is high land, it is generally called a

Promontory.

Capes are sometimes called Heads, as Circular Head on the other side of the Island; or Points, as

Cray-fish Point.

There are two principal Capes in Tasman's Peninsula,-Cape Pillar and the basaltic Cape Raoul. Between these Capes is the fine harbour called Port Arthur.

South Cape is between South West Cape and Bruni. Cape Grim is the most northern Cape of our Island, Tasman's Head is to the south of Bruni, Cape Portland to the north-east, and St. Patrick's Head on the eastern coast, not far from Avoca.

The River Derwent runs from Lake St. Clair, which

The the prime Intere V. French

is a long way in the interior, and empties itself into

the sea, after passing by Hobart Town.

Some other rivers in this country take their rise from the lakes; but the majority of them come from the hills. Much water sinks into the crevices of the hills at the time of rain, and afterwards oozes out in little streams, which meeting together form rivers.

The inclination of water to find a level causes it to flow onward toward the sea, and having to avoid high

ground, it can never go in a straight course.

The City of Hobart Town, as before mentioned, is situated in the 43rd degree of south latitude, and

about the 147th degree of east longitude.

It is bounded on one side by the water, and upon the other by ranges of hills. Mount Nelson ends

the range or tier behind Sandy Bay.

Mount Wellington is the highest of a long range of hills behind. The top of it is about 4000 feet above the level of the sea. Behind it are the magnificent Wellington Falls, 200 feet in depth.

Van Diemen's Land is full of hills and forests.

There are many delightful and fertile valleys in

this country.

Mount Wellington stands to the west of Hobart Town; that is, on the side upon which the sun is seen to set.

The opposite side is the east, where the sun is seen to rise. The side to the right hand as you face the east is to the south. The point opposite to the south is the north, which is the side where the sun appears in the middle of the day in these colonies.

The middle point between the north and the east, is called the north-east, and that between the south

and the east, the south-east, whilst that between the north and the west is the north-west.

When looking at a map, the top is the north, the bottom the south, the right hand the east, and the left hand the west.

Having now taken a view of Hobart Town and its neighbourhood, we will go a little further, remembering that this town is about 60 miles from the most southern point of the country, which is South West Cape.

If we go up the New Town Road from Hobart Town,

we shall proceed towards the north.

Continuing in that direction, we shall pass through Bridgewater, Brighton, the long District of Bagdad, Green Ponds, Lovely Banks, Spring Hill, Jericho, Oatlands, Salt-pan Plains, Ross, Campbell Town, Epping Forest, Perth, Cocked-hat Hill to Launceston.

Bridgewater is 11 miles from Hobart Town, Green Ponds 30 miles, Spring Hill 39 miles, Oatlands 50 miles, Campbell Town 80 miles, Perth 112 miles,

and Launceston 125 miles.

Launceston is the town next in size to Hobart Town; the latter containing 16,000 inhabitants, and the former rather more than 8000;

When at Launceston we can proceed still further north, by going down the river Tamar, passing George Town, 40 miles from Launceston. George Town lies near the mouth of the Tamar, which part of the river is called Port Dalrymple.

Some parts of the country run still further north than George Town; Circular Head is 30 miles further north, but is 100 miles more to the westward.

The whole country, reckoning from Circular Head to the South Cape, is about 230 miles in length.

The breadth is 200 miles on the northern side,

and only 100 on the southern.

The whole of the western side of the country is not

divided into districts, being little known.

There are there long ranges of hills and large elevated plains, which are often covered with snow. Some of these hills are above 5000 feet higher than the level of the sea.

There was once a convict establishment at Macquarie Harbour, which is on the western coast. Port \

Davey is near to South West Cape.

The northern side of the island is the warmest. most level, and most productive. The Van Diemen's Land Company's Establishment near Emu Bay, is on that side, and is between Circular Head and George Town.

Port Frederick and Port Sorell are between Emu

Bay and Port Dalrymple.

ay and Port Dalrymple.

In the sea north of Van Diemen's Land, and not far from the coast are the following islands :- King's Isle, the Hunter's Islands of the Three Hummocks and Barren Island, Great or Flinder's Island, Furneaux's Islands, and some others.

The Hampshire and Surrey Hills are toward the north-west. The Frenchman's Cap is a high mountain near Macquarie Harbour. The Arthur Range, and the Hartz Mountains are beyond the Huon

River.

Mount Dromedary is near the Derwent. The Black Tier is beyond Oatlands. The Table Mountain behind Oatlands is near Sorell Lake. Western Mountains are to the west of Epping Forest.

Adindes the income of the deriv from that of the Jordan

The lofty Ben Lomond is a range to the north-east, the highest point being a few hundred feet above Mount Wellington.

There are some considerable lagoons or lakes. The Western Lagoon is among the Western Mountains. A little to the south of these mountains are the Great Lake, Arthur's Lakes, and Lake Echo. Lake St. Clair is to the west of the Great Lake. Sorell Lake lies to the west of Salt-pan Plains.

There are no lakes of any size on the southern side of the island. Several of the lagoons become nearly dry in summer, as those near Jericho and Oatlands. The country is upon the whole not well supplied with

water.

The principal rivers on the southern side of the island are the Derwent; the Jordan, rising at Jericho, and running into the Derwent; the Coal River, running from Jerusalem to Richmond; Brown's River, and the Huon River, flowing from the west into D'Entrecasteaux Channel.

The following rivers run into the Derwent in succession:—The Nile in the New Country, the Dee, the Ouse, the Clyde at Hamilton; the Styx, the Plenty, the Jordan, the Hobart Town Creek, and Brown's River.

The Shannon runs from Great Lake into the Ouse.

The chief rivers on the northern side are the Tamar; the South Esk, flowing from Ben Lomond; the North Esk; the Western by Westbury; the Macquarie, rising near the Black Tier, and running by Ross

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and Longford; and the Elizabeth River, near Campbelton, flowing into the Macquarie.

The South Esk, the Western, and the Macquarie for the day deler

run into the Tamar.

The rivers Cam, Emu, Blythe, Forth, Don, Mersey, and Rubicon, are in the rich woody country between Circular Head and the Tamar.

Pittwater is a gulf flowing into Frederick Henry

Bay, and thence into Storm Bay.

The settled parts of Tasmania have been divided into eleven counties:-Devon and Dorset on the north: Cornwall and Glamorgan on the north-east; Westmorland, Somerset, and Cumberland in the middle; and Pembroke, Monmouth, Buckingham and Kent on the south.

Hobart Town is in Buckingham; Green Ponds in Monmouth; Richmond in Pembroke; Swan Port in Glamorgan; Westbury in Westmorland; Campbelton

in Somerset; and Launceston in Cornwall.

Deloraine is near Westbury; Cressy and Longford in Norfolk Plains, on the northern side; and Abyssinia near Bothwell.

The flourishing settlement on the Huon river, called after the Captain of one of the French discovery

ships is famous for its beautiful Huon pines.

Among the few settlements upon the eastern side are Great Swan Port, Waterloo Point, and Oyster Bay; and south of these are Prosser's Plains.

Maria Island and Schouten's Island are off the

eastern coast.

The convict establishment of Port Arthur is in

Tasman's Peninsula. Close to this is Point Puer. where are stationed several hundreds of youths transported from England, who receive education, and are instructed in useful trades.

A worthy teacher from home, Mr. B. Horne, laboured hard to organize this establishment after the method pursued in the reformatory prisons of England, upon benevolent and sound Christian principles; but ill health prevented him from carrying out his plans, and he sank into his grave-another martyr of devotedness to the noble work of teaching.

Tasman's Peninsula, on which are several thousands of prisoners, is placed under the control of a

Commandant.

The Coal Mines on the north side of the Peninsula

are worked by prisoners.

A small island, called Isle des Morts, opposite to the settlement of Port Arthur, is set apart as a place of interment.

The first European who discovered this country was a Dutchman, Abel Jansen Tasman, in 1642.-He named the land after Van Diemen, the Dutch Governor of Batavia, in Java.

Captain Cook visited the island and landed upon

Bruni.

In 1803, Lieutenant Bowers was sent from New South Wales with a small party to form a settlement here. He landed at a place on the River Derwent, which he called Restdown, but left soon after.

In 1804, Governor Collins was sent to form a colony with 400 prisoners and 50 marines, to form a colony In 1804, Governor Collins was sent from England

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at Port Phillip; but failing there, he sailed the same year up the River Derwent, and established his head quarters at a place which he called Hobart Town, after Lord Hobart, then Secretary for the Colonies.

In 1804 also, Colonel Paterson, with a party from Sydney, made a settlement at the mouth of the Tamar, and named it York Town; but this was quickly aban-

doned.

The first sheep and cattle were imported in 1807. Colonel Davey was in 1813 the second Governor, or rather Lieutenant-Governor of this island.

He was succeeded in 1818 by Governor Sorell, who formed the road between Hobart Town and Launceston.

Colonel Arthur became Governor in 1824, and was

succeeded by Sir John Franklin in 1837.

The present Governor, Sir J. E. Eardley Wilmot, arrived here in 1843.

In 1819, free persons were allowed to emigrate to

this colony.

In 1825, Van Diemen's Land was declared independent of New South Wales; before that time Judges came from Sydney to Hobart Town to try

persons who had committed crimes.

The population of the country in 1804 was 80 free persons and 400 convicts; in 1825, 6800 free and 6800 bond; in 1830, 13,000 free and 10,000 bond; in 1835, 22,000 free and 17,000 bond; in 1844, the population was 60,000, about half of which were free.

The imports of 1844 were valued at £443,000, and exports £409,000. Our imports are tea from China, sugar from Manilla and from the Mauritius, wine from the Cape of Good Hope, and manufactured goods from England. The exports are chiefly wool, wheat, and oil.

The expenditure of the Colonial Government for 1  $\times$  1844 was £160,500, and the revenue £164.300.

The government of this country consists of a Lieutenant-Governor and Council? The Governor rules as the representative of the Sovereign of the British Empire.

The Council consists of seven Government Officers. and eight independent Members, who are appointed

by the Governor.

The Government annually pays a large sum of money for the education of the people. The Public Schools, 24 in number, are under the control of a Board of Education.

Few countries in the world are better provided with the means of instruction than this, although the

population is so much scattered.

The Church of England, the Church of Scotland, the Roman Catholic Church, and the Wesleyan body, receive according to their numbers, aid from Government for the support of their Ministers, and for the erection of their places of worship.

Tasmania was erected into a Bishop's See in 1843; Dr. Nixon was appointed the first Bishop. Dr. Willson is the Bishop over the Roman Catholics in

this island.

The prisoners of the Crown have persons appointed over them by Government, called Religious Instructors, who are required to impart to them sound moral, and religious instruction; several of them are ordained clergymen of the Church of England.

Van Diemen's Land is now the grand depôt for the reception of transported criminals, from all parts of

the British dominions.

Upon their first arrival they are sent to some of the twenty-five probation stations, and are there em-

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ployed upon public works for a period according to

the extent of their sentences.

After this they become passholders, and exchange Government Service for that of masters, who may hire them. Eventually, they obtain a degree of freedom, called their ticket-of-leave.

The convict department is under the charge of a Comptroller-General of Convicts, and an Assistant

Comptroller.

The Aborigines, or original inhabitants of the colony, were not well treated by the early settlers. They are considered, for savages, a very harmless, happy race of people, but were rendered ferocious and blood-thirsty by the treatment they received from some badly disposed whites.

After what was called the Black War, the surviving natives were induced to surrender, upon promise of good treatment, and were placed on Flinders' Island, under the protection of the Government.

From various causes they have so decreased in number, that there are only 25 men, 22 women, 5

boys, and 5 girls remaining.

They are not the ignorant, miserable, and revengeful people which some writers have declared them to be. The majority of them have perpendicular foreheads, and they evince considerable shrewdness of thought. Several are able to read the Scriptures in the English language.

Being a wandering people, living by hunting and

fishing, they erected no substantial dwellings.

Though described as fond of their children, infanticide was not uncommon among them, on account of scarcity of food. The principal animals found in this country are

those having pouches.

We have the Kangaroo and Opossum, of many species; the Wallaby, a kind of Kangaroo; the Hyena Opossum; the Native Tiger; the Native Devil; the Bandicoot, which is the link between the Kangaroo and the Opossum; the Wombat, a sort of Kangaroo; the Native Porcupine; the Kangaroo Rat and Mouse, and the Ornithorynchus, or Platypus, with its duck's bill.

The Native Tiger and Devil are very destructive among the sheep; the former has been found five or six feet long.

The Devil is about the size of a Wolf.

The Lizards of the colony are very numerous, harmless, and beautiful. Some of the Snakes are not quite so harmless.

The animals of all the Australian colonies are very

similar in kind.

There are about 70 species of marsupial animals in Australia, and only 18 species of other kinds of quad-

rupeds.

The principal birds in the island are the Emu, the Eagle, the Hawk, the Pelican, the Black Swan, the Crow, the Magpie, the Parrot of many varieties, the Cockatoo, the Penguin, the Albatross, the Cuckoo, the Diamond-bird, the Owl, and the Laughing-jackass.

The vegetable kingdom of Van Diemen's Land greatly differs from that of the rest of the world; almost all of our trees being evergreen; and, among the many wonders, our cherry trees have the stone growing outside the fruit.

Some trees, as the Gum and the Stringy-bark, are treey valuable for building; the Wattle and She-oak

are good for fuel.

Many of our shrubs are very beautiful, and few countries can boast of such fine native flowers as Tasmania, especially with its splendid Warratau.

The gulleys or glens are ornamented with the graceful and wonderful tree ferns, many of which reach the

height of 12 or 15 feet.

So luxuriant is our vegetation that many gardens are surrounded with hedges of geraniums and sweet briar.

The general character of the rocks of our little island is decidedly volcanic. The granite formation in all its varieties is found all over the island. On the northern side are large quantities of porous rock. Mount Wellington is a mass of basalt.

Limestone abounds in all parts. The south possesses better building stone than the north side. Immense quantities of greenstone and basalt boulders are found everywhere, even on the tops of our highest

mountains.

Coal has been readily obtained in various parts of the colony, and some specimens equal any English coal in appearance and utility. The Port Arthur coal is not so bituminous as that of Sydney.

Copper, lead, iron, and other metals are to be

found in the island.

The climate of Tasmania is one of the most de-

lightful in the world.

Provisions are much cheaper here than in England, and the price of labour rather above the English market.

Colonial manners and habits are essentially Eng-

lish, and the hearts of our settlers beat with true

love for the land of their fathers.

Honest industry here, as elsewhere, meets with its own reward; and with a few more men of capital this beautiful country, so rich in natural resources, might vie with any other part of the habitable globe.

### PORT PHILLIP;

OR

#### AUSTRALIA FELIX.

We said that about 40 miles northward of Launceston we approach the sea. If we were to sail onward for a day or two in a course bearing slightly to the west, we should come to Port Phillip.

The beautiful harbour of Port Phillip, called after Captain Phillip, the first Governor of New South Wales, is 40 miles long and 35 broad; its entrance is

a mile in width.

The district round about has been also called Port Phillip; but the explorer, Major Mitchell, has named it Australia Felix, or Australia the Happy, because of its fertile plains.

Having less timber and fewer hills than Van Die-

for sheep.

The boiling down of sheep for tallow yields a good return to the grazier when the meat market is low.

This promising country was first settled in 1803; but the settlement being made on the sandy side, it was soon abandoned. In 1835, a few colonists from Van Henri's Land went over, and purchased land from the natives. In a very short time a considerable number followed, and a permanent and successful colony was established.

Melbourne, the capital, is situated to the north of the port, in lat. 38° S., long. 145° E., on the river Yarra Yarra.

williams Town, is a small place near Melbourne,

whilst Geelong lies to the west of Port Phillip.

Port Phillip District, or Australia Felix, is divided into six counties,—Grant, Bourke, Portland Bay, Western Port, Gipps' Land, and Murray.

Bourke is north of Melbourne, Portland Bay is 200 miles west of Port Phillip, Gipps' Land, called

after Governor Gipps, is on the eastern side.

Port Albert is in Gipps' Land, near to the river Tara. The district is divided into two townships,—Alberton and Tara Ville. Lake King is near to the sea coast in Gipps' Land.

Port Fairy is near Portland Bay.

Cape Otway is southward of Port Phillip.

The population of Australia Felix is 24,000. The Aborigines in the settled parts amount to 1400, and

in unsettled parts to 2600.

There is an average of one black person to every 30 square miles, and of one white to every five miles, so that there are in the country about 120,000 square miles.

A square mile is a piece of land a mile long and a mile broad. The average length of a country multiplied by its average breadth will give the number of square miles in it. England contains 60,000 square miles, . Scotland 30,000, Ireland 32,000, and Van Diemen's Land 24,000.

Lava rocks and other volcanic remains are not un-

common in Port Phillip.

Going eastward from Port Phillip, we have to round Wilson's Promontory, an immense projection into the sea, and about 100 miles further to the east we reach Cape Howe.

From Cape Howe the land runs northward for 2000 miles; we then sail westward along the coast for about 3000, descend southward for 2000, and return to Port Phillip with an easterly course of nearly 3000 miles more.

We thus perceive that the Port Phillip District is part of an immense island, the largest in the world, containing more than two millions of square miles.

The name of New Holland was formerly given to it, but it is now generally known as Australia, or the . inern land. the state state southern land.

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#### NEW SOUTH WALES.

At a distance of 300 miles northward of Cape Howe is the town of Sydney, situated in lat. 36° S., being 6 degrees or 400 miles nearer the equator than Hobart Town: its long. is 151° E.

Sydney has a population of 40,000, and is the capital of that District of Australia called New South

Wales.

New South Wales embraces the south-eastern part of Australia. It is divided into two parts,-Sydney or Middle District, and Port Phillip or Southern District.

The Middle District is that which is commonly

known as New South Wales, extending about 300 miles.

Between the Middle District and Port Phillip is a country about which little is known, but part of

which is already settled by flock-masters.

The Middle District is divided into 19 counties. Those to the north are Bligh, Brisbane, Durham, Gloucester, Wellington, Phillip, Hunter, and Northumberland.

Those to the south are Argyle, Murray, and St. Vincent. The others are Bathurst, Roxburgh, Cook, Cumberland, King, Georgiana, Westmorland, and Camden.

The chief townships are Parramatta, Newcastle, Windsor, Bathurst, Hawkesbury, Liverpool, and Yass.

Between Yass and Melbourne is the road or track along which sheep are conveyed from the Middle to the Southern District.

The population of Middle District for New South

Wales is 160,000.

The chief rivers are the Macquarie, Hunter, Lachlan, Murray, Murrumbidgee, Yass, Darling, Hawkesbury, Clyde, and Brisbane.

Hunter's River empties itself into Newcastle Har-

bour, above Sydney.

The Darling is a large river, which for 300 miles receives no stream into it; the water is very salt.

The Murray, Murrumbidgee, Lachlan, and Darling run westerly and meet not far from Adelaide. The river Hawkesbury, at Windsor, has been known to rise 90 feet above its ordinary level.

There are several ranges of hills in New South Wales, none of which are very high. The Blue Mountains are at the back of Sydney, and the Aus-

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tralian Alps or White Mountains connect Port Phillip with the Middle District of New South Wales. The Black Mountains are nearer the sea coast, and the Dividing Range is to the north.

Throughout the country are many salt lakes, some

of which are of great extent, but all very shallow.

The climate of this land is warmer than that of Van Diemen's Land. Near Sydney are vineyards and

orange groves. Hot winds prevail there.

The colony of New South Wales is governed by a Governor, an Executive Council of five, and a Legislative Council of 36, 12 of whom are non-elective; the others are chosen by the settlers to represent them. Port Phillip District sends six Members to the Council.

Australia Felix has a resident Superintendent under

the Governor, who generally resides at Sydney.

The city of Sydney has a regular Corporation like London, with a mayor, aldermen, &c.

All denominations of Christians are entitled to Government support. This support is given in payment of Ministers, and toward the erection of places of worship.

In 1843, the Church of England received £16,090, the Church of Rome £7,200, the Church of Scotland

£4,440, and the Wesleyan body £1,750.

This year the sum of £7,450 was voted for schools in the following proportion for the Middle District:—The Church of England £3,503, the Church of Rome £1,450, the Church of Scotland £1,200, and the Wesleyan body £350. The sum of £950 was voted for Port Phillip District.

In 1843, different educational parties received from Government £11,840.

The first settlement of New South Wales, which was the earliest made in Australia, was in 1788.

By advice of Captain Cook, the English Government sent out about a thousand prisoners under Captain Phillip, to Botany Bay.

Captain Phillip preferred going to Port Jackson, which is a little to the north of Botany Bay, and there established the town of Sydney.

Port Jackson was so named by Captain Cook, after

the seaman who descried it from the mast-head.

Many of the early prisoners perished in an attempt to run away to China, which they thought close by Sydney.

Some were shipped off to Norfolk Island in 1790. No prisoners are now sent to New South Wales.

It was in 1590, in the time of Queen Elizabeth, that criminals were first sentenced to banishment from

England.

This law was not carried into effect until 1619. . when such persons were sent to the American colonies, and sold to the settlers for slaves, at the rate of £20 each.

This horrid system continued until about 70 years ago. At that time, through the successful rebellion of the American colonists, the English Government were compelled to keep their criminals in prisons at home, until they were induced to send some out to Australia.

The following are the several Governors of New South Wales, and the dates at which they arrived in the colony. Captain Phillip, 1788; Captain Hunter, 1793; Captain King, 1800; Captain Bligh, of the

Fligh was Expelled by the moletary & smanowhist interests with whise wim18 lling and raw drinking he interferedthe free settlers were from of him-

Bounty, 1806, a tyrannical Governor, who was expelled by the colonists; General Macquarie, 1810; Sir Thomas Brisbane, 1822; General Darling, 1825; General Bourke, 1831; and Sir George Gipps, in 1837.

New South Wales, now rising from past difficulties, has every prospect of becoming a prosperous colony. By sol riety and perseverance, the settlers will not only be rich, but happy.

There are several fine bays on the eastern coast of Australia; as Port Stephens, near Sydney. Here was the chief settlement of the Australian Agricultural Company.

Moreton Bay, in lat. 27°, contains a settlement;

it is called Brisbane.

Two-fold Bay, in lat. 37°, is near Cape Howe, the south eastern point of Australia.

There are also on the eastern coast the bays of

Glasshouse, Hervey, Halifax, and Repulse.

The most northerly point of Australia is Cape York. Near that is the great Gulf or Bay of Carpentaria, so called after General Carpenter.

# NORTH AUSTRALIA.

North Australia, or Port Essington Province, is a settlement formed in 1838, in Van Diemen's Gulf, near Melville Island, on the north-west coast of Australia. The chief settlement is called Victoria, and is in lat. 12° S. long. 132° E.

The climate is much hotter than that of Sydney,

being 24 degrees nearer the equator.

A prosperous trade might be carried on here with the industrious Malays of the neighbouring islands.

Bathurst Bay and Admiralty Gulf are on the

northern coast.

# WESTERN AUSTRALIA.

This province is on the south western side of Australia, and is often known as the Swan River Settlement.

It is divided into 23 districts, and is 350 miles

long, and 200 broad.

The settlement was formed in 1828, under Captain Stirling, its first Governor, and Mr. Peel.

The land near the coast is very sandy, but good

soil is to be found further in the country.

The principal townships are Perth, Freemantle, and Albany. Perth is in lat. 32° S., and long. 116° E.

In the County of Wellington, in Western Australia, is the new settlement of Australiad, established in 1840.

The town of Australind is in lat. 33° S., and long. 116° E. It forms a distinct settlement under the government of a Chief Commissioner, appointed by a Company in London.

Geography Bay and Cape Naturaliste are on the

west of Western Australia.

Near these is Cape Leeuwin, which is the south-

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western extremity of Australia, named after a Dutch discovery ship.

King George's Sound, in which is a small settlement, runs into the south coast of Western Australia.

No prisoners have ever been sent to this colony.

The population of Western Australia consists of only a few hundreds.

# SOUTH AUSTRALIA.

Between the Swan River Settlement on the west, and Port Phillip on the east, lies the important province of South Australia, which has ever been a free colony.

South Australia was colonized in 1837, very soon after it was discovered, and extends from lat. 26° to

38° S., and from long. 132° to 141° E.

Many parts of it are extremely fertile, growing corn and melons in great quantities.

There are many sober, industrious, and well-con-

ducted German emigrants in this colony.

Its first Governor was Captain Hindmarsh.

South Australia has some fine bays; as Sleaford Bay, Encounter Bay, Investigator's Gulf, Gulf St. Vincent, and Spencer's Gulf.

To the south of Gulf St. Vincent is Kangaroo

Island, on which are some settlers.

Port Lincoln is in Spencer's Gulf.

The town of Adelaide stands on the river Torrens, in Gulf St. Vincent, in lat. 35°, and long. 138°.

The noble river Murray flows not very far east of Adelaide into the Lake Alexandrina, whose salt water

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extends for 60 miles in length and 30 in breadth. but is only a few feet in depth.

In the northern part of the colony is the enormous salt water Lake Torrens, shaped like a horse shoe,

and above 500 miles long, but very shallow. The mines of lead and copper in South Australia

promise to be very productive.

The Aborigines of Australia are but few in number, and belong to the same race as those of Van Diemen's Land, but in many instances have exhibited more intelligence.

There are many different tribes of them, which often differ much from each other in personal appear-

ance, in manner, and in mental capacity.

The Adelaide tribe is a superior one. The Aborigines receive great care and kindness from the South Australian Government, and every effort is made to civilize them, and to do them good.

The Natives are sometimes guilty of cannibalism; though without images and appearance of worship, they have an idea of a God, and of a future state.

Australia was discovered in 1605 by the Dutch, and was called the Unknown Southern land. Dutch afterwards named it New Holland.

Cape York was the first land discovered. The Dutch discovered more than any other people of the island of Australia.

Dampier, the English buccaneer, discovered part of

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the northern coast, and Captain Flinders the northeast and south-east coasts.

Captain Cook took possession of the eastern coast, now New South Wales, in the name of George III., in 1770.

The first English Settlement was made in 1788.

## NEW ZEALAND.

Sailing in an easterly course from Van Diemen's Land, for about 2000 miles, we come to the islands of New Zealand.

There are three islands;—the northern 500 miles, containing 40,000 square miles, the middle 540 miles, containing 50,000 square miles, and the southern or Stewart's Isle, 50 miles long.

The northern is now called New Ulster, the middle

New Munster, and the southern New Leinster.

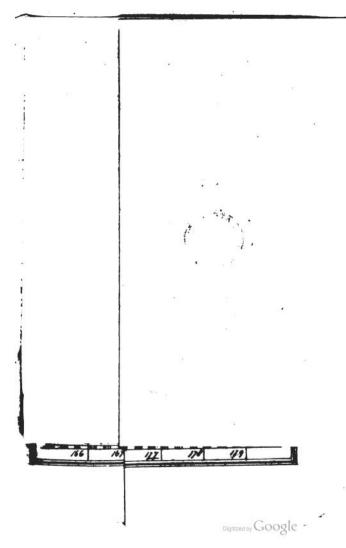
The native name for the northern island is Ea heino mauwe.

The middle or largest is called Te wai Pounamu, or the island having the Green-stone, of which the native stone axes are made.

The coasts of New Zealand had been for years frequented by whalers, and some regular settlements formed; but it was not until May, 1841, that the islands were declared an independent colony of Great Britain, under a Governor appointed by the Crown.

The interests of the natives are looked after by a Government Officer, called the Protector of the Aborigines.

Much evil has followed the connexion of the first



settlers, chiefly runaway sailors and convicts, with the poor natives.

New Zealand was discovered by Tasman in 1642,

after sailing from Van Diemen's Land.

The northern island is of very irregular shape,

being in some places only a few miles wide.

It is a very woody and mountainous country, and has far more wet than Van Diemen's Land. The valleys are very fertile. The native flax is valuable, and a large quantity of fine timber is exported.

The northern part of this island was first settled, chiefly about the Bay of Islands, which is in lat. 35°

S., and long. 174° E.

On one side of the Bay is Russell, and on the other Kororarika.

Wangaroa Bay is north of the Bay of Islands.

North Cape and Cape Maria Van Diemen, the most northern points of New Zealand, lie in lat. 34°.

The chief station of the Church Missionary Society

in the island is Waimate.

The chief Wesleyan Mission Station is at the Hokianga River, on the opposite side to that of the Bay of Islands.

The river Waikate is navigable to boats for 180

miles.

In the interior of the northern island is a lofty volcano called Tongariro. Not far from this is the Rotorua Lake, about which are several hot springs. Volcanic remains abound in New Zealand.

South of the Bay of Islands, is the bay called the Frith of Thames, beside which stands Auckland, the capital of the colony, in lat. 37° S., and long. 175° E.

Near the middle of the western coast rises the lofty Mount Egmont, nearly three miles high. Near this mountain is the settlement of New Plymouth, on Port Elliott, in lat. 39°.

On the eastern side of the northern island is the extensive Bay of Plenty, in which is the volcanic White Island.

The largest settlements of the northern island lie to the south in Port Nicholson, which is in lat. 41°.

The chief of these settlements is Wellington.

About 12,000 British settlers are on the southern, and 4000 on the northern side of the island. It is supposed there are about 120,000 natives.

The northern island is separated from the middle one by Cook's Straits, which are about 20 miles across.

Cloudy Bay, the resort of whalers, in which is Port Underwood, appears opposite Port Nicholson. Near this is Tasman's Bay, or Blind Bay, on the shore of which stands the settlement of Nelson, in the same latitude as Wellington, containing 4000 inhabitants.

Into Blind Bay runs Massacre Bay, or the Bay of Murderers, where Tasman, the discoverer, had several of his men killed by the natives.

There are very few British settlers, at present, in

the middle island, excepting at Nelson.

On the eastern side is Banks' Peninsula, possessing splendid soil. A few hundreds of French have been there settled at a place called Akaroa, in lat. 44°.

Ports Cooper and Levi are in this peninsula. There

is a lake near named Wihola, 50 miles in length. Greenstone Lake is about the centre of the middle island.

On Port Otago, in lat. 45°., is about to be formed, under the auspices of the New Zealand Company, a British settlement, to be called New Edinburgh.

On the western coast are to be found Cape Foulwind, Bold Head, Open Bay, and Doubtless Harbour.

Whales have been found in plenty off the shores of the Middle Island.

Very few natives are believed to be upon this island. Fouveaux Straits, 60 miles wide, separate the Middle from the Southern island.

The most southerly point of New Zealand is South

Cape, in lat. 47°.

The Auckland Isles lie below this, and also the islands of Judge and Clerk, and Bishop and Clerk.

The Aborigines of New Zealand are a fine race of men, but like most uncivilized people, they have been given to cannibalism. They are divided into tribes, and are very fond of war.

They were at one time much more numerous than now; but war, rum, and the diseases brought among them by white men, have greatly thinned their numbers.

They do not appear quite so willing to see their country governed by the English, as some think they ought to be, though they do not object to Europeans settling upon their coasts, and thus increasing their comforts and civilization generally.

At the present time the colonists in New Zealand are placed in a most precarious condition, in consequence of serious misunderstandings which have arisen between the natives and the colonial government there.

Twenty degrees south of New Zealand, portions of land have been discovered in several places, which are supposed to belong to an immense southern continent.

D'Urville, the Commander of the late French Discovery ship, named one part Adélie. Kemp land, in lat. 66° S., and long. 60° E., was discovered in 1835.

Captain Ross, in the *Erebus*, traced the coast in 1843, for nearly 1000 miles, running southward on the same longitude as New Zealand, and then 700 miles more to the east. He called the land South Victoria.

He then saw in lat. 77° S., rising to a height of 12,000 feet, a splendid volcano in action, which he called Erebus.

## NORFOLK ISLAND.

Norfolk Island is a small but very fruitful island, lying about 800 miles to the east of New South Wales, in lat. 30° S., and long. 170° E.

It was discovered by Captain Cook, in 1774, and colonized from Sydney, in 1790. The settlement was abandoned in 1812.

Beside Norfolk Island is a little rocky uninhabited island, called Philip Island.

Norfolk Island has been, since 1825, a penal settlement.

The benevolent Captain Maconochie here laboured for the good of the convicts for some years, and that with the happiest moral results.

The government of this island is now annexed to that of Van Diemen's Land.

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# AUSTRALASIA.

Going from Sydney northward, we pass Moreton Bay, and reach York Cape, the most northern point of Australia.

Beyond this is Torres' Strait, called after Torres, a Dutchman, in 1606, which is a very dangerous passage for ships, because of many rocks and islands. Her Majesty's ship Fly has lately discovered a safe

way through it.

On the other side of the Strait is the large island of Papua or New Guinea, which runs up to the Equator, and about which little is known. The people are like negroes; the beautiful birds of paradise are found in Papua.

To the east of New Guinea are the clusters of islands of New Britain, New Ireland, New Hebrides, New Caledonia, and Solomon: several of these are volcanic. Near New Caledonia is the Isle of Pines.

The inhabitants of these fine islands are much like the Aborigines of New Holland, excepting that they are not so good-natured. Most of them are cannibals.

All the islands over which we have now gone, form the division of the earth called Australasia or Southern Asia. They lie between the Indian ocean and the Pacific ocean. Their names are thus repeated :-

Australia, or New Holland | New Britain Van Diemen's Land New Zealand Norfolk Island New Guinea, or Papua

New Ireland Solomon's Isles New Hebrides New Caledonia.

#### ASIATIC ISLANDS.

Journeying westward from New Guinea, we find a great number of islands belonging to the continent or main land of Asia, between Australasia and Asia.

The climate of these islands is very warm from

their nearness to the equator.

We first come to the island of Timor, famous for

its ponies. The Dutch have settlements there.

Beyond Timor westward is the volcanic island of Sumbawa. A few years ago an eruption there covered the sea with ashes for hundreds of miles, and made so much noise, that Sir Stamford Raffles heard it when 1000 miles off.

To the north of Timor, and close to the equator are the Molluccas and Banda Islands, famous for their spices, belonging to the Dutch, who annually destroy great numbers of the trees to raise the price of spices.

Amboyna is the chief settlement of the Dutch there. Alongside of the Molluccas is the curiously shaped island of Celebes or Macassar. The inhabitants are a very intelligent and courageous people; their houses

are built upon posts for fear of the serpents.

Westward from Timor and Sumbawa is the valuable island of Java, which is 700 miles long, and 100 broad. The English have resigned the possession of this beautiful place to the Dutch, who with only a few thousands of European soldiers are able easily to govern the nine millions of gentle Javanese.

The chief Dutch settlement in Java is Batavia.

The Japanese are an ingenious people, and are partly Mahometans, and partly Pagans. The ancient Japanese were highly civilized, and had splendid temples dedicated to their god Boodh.



The St ait of Sunda divides Java from the fertile island of Sumatra, which is 1000 miles long, containing plenty of gold. The inhabitants are intelligent.

Once the island belonged to the English, but was given up by them to the Dutch, in 1824. Bencoolen

is the chief settlement.

The little island of Banca, close by, yields the

Dutch great quantities of tin.

Between Celebes and Sumatra lies Borneo, on the equator, 800 miles long and 600 broad. Plenty of gold, diamonds, and ourang outangs are found in this island.

The Dutch, Javanese, and Chinese have settlements upon the coast. The English are already fixing their eye upon the place. The Aborigines have been driven into the interior by the larger brained Malays.

To the north of Borneo lie the Philippine Islands, belonging to Spain, which are grossly mismanaged.

The principal town is Manilla, in the island of Luzon, a large and important place. Sugar is much cultivated in these delightful islands by the gentle, intelligent natives.

Still advancing northward we pass the island of Formosa, and go through the Loo-choo Islands, be-

longing to the Chinese.

The Loo-choo islanders are highly civilized. Lord Amherst received much kindness from them when shipwrecked upon their coast.

# JAPAN.

To the north of the Loo-choo islands are the Japan Isles of Niphon 800 miles long, Kiusiu 150, and Sikoke 100. The chief towns are Jeddo and Miaco.
The Japanese are Buddhist idolaters, and are very ingenious, polite, and generally well educated. In their manners and belief, they are much like their neighbours the Chinese.

They are governed by an Emperor, and by a sort of High Priest, called the Dairi. They will not trade with foreigners. Their number is about 40 millions.

At one time the Catholic Missionaries had made many thousands of converts in Japan, but a violent persecution has swept away every Christian from the islands.

Northward of Japan are the followingi slands; Jesso, conquered by the Japanese,—the long narrow island of Sagalien,—and the string of islands, called the Kuriles, leading to the north-eastern peninsula of Asia, Kamschatka, which is not very far from the north pole.

Volcanoes are found in action all the way from

Kamschatka.

We will now repeat the names of the Asiatic islands, over which we have passed.

lands, over which we ha
Timor.
Sumbawa, the volcanic
island.
The Molluccas and
Banda Isles; the
Spice islands.
Celebes, or Macassar.
Java; chief Dutch
Town, Batavia.
Sumatra; chief Dutch
Town, Bencoolen.
Banca, the island fortin

Borneo. Philippine Isles; chief

Spanish Town, Manilla.

Formoso and Loochoo Isles, belonging to China.

Japan; chief Town, Jeddo.

Jesso. Sagalien.

Kurile Islands.

# ASIA.

#### KAMSCHATKA.

Kamschatka is a peninsula 600 miles long. It is

intensely cold.

The people of the country are called Kamschadales; who live in houses under ground during their long winters, and travel in sledges drawn by dogs.

The Russians have settlements in Kamschatka.

# RUSSIA IN ASIA.

Russia in Asia reaches westward from Kamschatka

for 4000 miles, and is 2000 miles broad.

It occupies the whole extent of the north of Asia, and is separated from Russia in Europe by the Uralian Mountains.

Its scattered population is about 12 millions, con-

sisting of various nations.

The fair Georgians and Circassians live in the west, the barbarous and dwarfish Ostiacks and Samoides in the north, and different tribes of Tartars in the south and east.

Most of the people are idolaters, but some few are

Mahometans.

The country was first wholly conquered by the

Russians one hundred years ago.

Asiatic Russia is divided into the two parts of Siberia, which runs to the north and east, and the Caspian Provinces which are to the south-east. There are sixteen provinces altogether.

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Siberia is bounded to the north by the Frozen Ocean.

Its chief towns are Tobolsk, Okotsk, and Irkutsk in Siberia, Astracan and Teflis in the Caspian provinces, and Kiachtu, a place of great trade on the frontier of Siberia and China.

The Chinese have a strong town close to Kiachtu, called Maimatchin.

The chief rivers of Russia in Asia are, the Lena 2000 miles long, the Yenisi 3000, the Oby 2200, and the Oural 1000. The Irtish runs into the Oby.

The chief lakes are the Caspian Sea and Lake Baikal. Each of these is several hundreds of miles long.

The Caucasian range of mountains are in the west, and the Yablonnoy mountains divide Siberia from

Chinese Tartary.

Valuable furred animals, together with the reindeer, are found in Siberia. Russian convicts are employed in catching the sable and other animals having rich furs, and in labouring in the mines of gold, silver, platinum, copper, and iron.

## TARTARY.

Tartary extends below Siberia across Asia: it was formerly called Scythia.

It is divided into three portions—Eastern or Chinese Tartary, Western Tartary, and Independent Tar-

tary.

The Tartars of Eastern Tartary were great conquerers. The Moguls or Mongul Tartars conquered India, and the Manchews conquered China. Eastern Tartary is now included in the Chinese dominions.

Most of Western Tartary has been conquered by

the Russians.

Independent Tartary is to the north of Persia and west of Chinese Tartary, and contains five millions of people.

It is divided into Bokhara, Turkistan the original country of the Turks, Koukan, Khiva, and the country

of the Kirgis, a wandering tribe.

The Usbeck Tartars are in Bokhara. The desert of Kharasm and Khiva lies between Bokhara and the Caspian Sea.

The chief towns of Independent Tartary are Samar-

cand, Bokhara, Balk, and Khiva.

Tamarlane the conqueror was born at Samarcand.

Balk is called the mother of cities.

Bokhara is ruled by a cruel king, who holds in captivity many thousands of Persians, Russians, and others. Dr. Wolff went to Bokhara after two Englishmen, confined in that country.

The Oxus or Jihon is the chief river of Independent Tartary, and the Amoor or Sagalin of Chinese

Tartary.

The Mahometan religion prevails in Independent

Tartary, and the Pagan in Chinese Tartary.

The chief part of Tartary is an immense, elevated plain, consisting of steppes or moors; there are, also, extensive deserts.

The Tartars are a wild, wandering people, governed

by Chiefs called Khans.

### CHINA.

China has Eastern Tartary on the north and west, and upon the east it has the Pacific Ocean, wherein are the Asiatic Islands.

The country is 1400 miles long and 1000 broad, and contains according to different reports 200, 300, or 350 millions of inhabitants.

It is divided into 15 provinces, governed by Man-

darins.

The principal towns are, Pekin the capital in the north, with a population of two millions, in lat. 40°N. and long. 116°E., the port Canton in the south, and Nankin about the middle of the coast.

The Portuguese were permitted to make a settlement on an island near Canton, called Macao, for assisting the Chinese against some pirates.

The English have now obtained by conquest in the war of 1841, the island of Chusan near Nankin, and

the island of Hong Kong near Canton.

The chief rivers are the Hoang-ho, or Yellow River, and the Yang-tse-Kiang, or Blue River. They are each about 3000 miles in length.

There are many canals in China; one extends from

Pekin to Canton.

China is by no means a level country, but it is

generally very fertile.

The government of the country is despotic, though the Emperor seeks to act as the father of his people. The laws of the country are just and well administered.

There is no established religion in China. The

Emperor and learned men are followers of Confucius, who reformed the religion of the people. Some worship the Grand Lama, but the great majority are Buddhist idolaters. There have been Roman Catholic Missionaries in China for some hundreds of years.

Particulars respecting these different religions may be obtained towards the end of this Geography book.

The Chinese are industrious, intelligent, and peaceable. They greatly differ from their Tartar neighbours in their love for dwelling in towns.

China is one of the oldest nations of the world. The Great Wall, built along the northern boundary for 1700 miles to keep off the warlike Tartars, was erected 2000 years ago.

In 1644 the Manchew Tartars conquered China, and made one of their chiefs to be king; but they adopted at once the language, laws, and manners of

the people they conquered.

The Chinese are jealous of foreigners, though they

pretend to consider them as barbarians.

The manufacture of silk and earthenware is carried to great extent in China. The English carry woollen and cotton goods to China to exchange for tea, silk, and other commodities. The Chinese have abundance of the luxuries and comforts of life. Their manners differ greatly from those of Europeans.

## THIBET.

Thibet is a very mountainous country to the north of India and south of Tartary. The population is about six millions. The chief town is Lassa.

The mountains of Thibet are the highest in the world. The peak Dawalagiri in the Himalaya range, is 26,460 feet above the level of the sea.

The Grand Lama, or God upon earth, who is wor-

shipped in this country, is the governor of it.

Thibet was conquered by the Chinese in 1790.

# INDO-CHINA;

OR

#### INDIA BEYOND THE GANGES.

Upon leaving China to the southward, we enter upon a part of Indo-China; so called, because the countries composing it are between India and China.

The chief of these countries are, the Empire of Annam, Malaya, Siam, and the Birmese Empire.

The religion of the people is Buddhism, and the government is despotic.

# EMPIRE OF ANNAM, OR THE SOUTH COUNTRY.

This empire is about 1,000 miles long, and 300 broad.

It includes Cochin-China, the ruling state, and the conquered countries of Tonquin, Laos, and part of Cambodia. The population is nearly 20 millions. The capital is Hue, a strong town.

The people of Annam are very much like the Chi-

nese.

#### MALAYA.

This peninsula is about 600 miles long, and belongs to the English, being ceded to them by the Dutch in 1825, in exchange for the island of Sumatra.

The port of Malacca is a healthy place.

Prince of Wales Island and Penang Island, on the coast, are flourishing English settlements.

A settlement was formed in 1819, at the small

Island of Singapore, by Sir Stamford Raffles.

The island, 100 miles in circumference, is situated almost upon the Equator, in long. 104° E., and is to the south of Malaya.

It is a very prosperous trading colony, consisting of English, Chinese and Malays to the number of 60,000.

The Malays are said to be very ferocious, but they are not more so than most other barbarians. They have greatly progressed in civilization lately, and are a very industrious and sensible people.

#### SIAM.

Siam is a fertile country between Cambodia and the Birman Empire.

The former capital was Siam or Juthia, the present is Bankok.

The population is four millions. The industrious and thriving Chinese abound in this land of gold.

# THE BIRMAN EMPIRE, OR KINGDOM OF

This country was once larger than at the present period. It is now nearly as large as the Empire of Annam, and contains about eight millions.

The Birmese are a very gay, active, and warlike

people. They are fond of boat-racing.

The English gained from them in 1826, the important provinces of Assam, so famous for tea, Arracan, with 500 miles of coast, Tavoy, Mergui, Martaban and Tenasserim; being nearly the whole extent of coast westward of the Bay of Bengal.

The chief towns of Birmah are, Ummerapoora,

Ava, Rangoon, a sea-port, and Pegu.

The chief river is the Irrawaddy, running by Um-

merapoora.

The king's riches and power are very great; abundance of gold and precious stones is found in this fruitful country.

# INDIA.

India, or Hindostan, joins the Birmese Empire to the north; the Bay of Bengal being between the two countries; the Indian Ocean lies to the south. It is nearly 2,000 miles long, and 1,500 in its

greatest breadth.

The population is about 140,000,000; of whom 90,000,000 are directly under the English government, 40,000,000 own the superiority of the English, and only about 10,000,000 are really independent.

The principal provinces of India are,—Nepaul, Bootan, Bengal, Oude, Delhi, Lahore, and Cashmere in the north; Orissa, Beejapore, and Hyderabad in the middle; and the Carnatic, Mysore, Malabar and Travencore in the south.

The Deccan includes several of the middle provinces. The Coromandel coast is the eastern, and the Malabar the western one.

The only states independent of the English are, Nepaul, Bootan, Lahore, and some mountain districts.

The north-western province of Scinde, with its capital Hyderabad, has been lately conquered by the

English under General Napier.

The chief English settlement in India is Calcutta in Bengal, on the Hoogley, a branch of the Ganges, having 500,000 inhabitants, and being in lat. 23° N., and long. 88° E. Madras is on the eastern, and Bombay on the western coast.

The other principal towns are, Delhi the ancient capital of the Mogul Empire in India, Benares the holy city, Seringapatam in Mysore where Tippoo Saib was killed in 1799, Agra, Lahore, Oude, Patnah,

Tanjore and Lucknow.

The Portuguese have a settlement at Goa on the north-western coast, and the French have Pondicherry on the eastern side.

The chief rivers are the Ganges 1600 miles long,

and the Burrampooter 2000, running from the Himalaya mountains at the north of India into the Bay of Bengal; the Indus or Scinde from the Himalaya westward, forming the western boundary of India, the Nerbudda falling into the Indian Ocean; and the Godavery into the Bay of Bengal.

The principal ranges of mountains in India are, the Himalaya, some of which are five miles high, the Eastern Ghauts and the Western Ghauts. The Koosh or Indian Caucasus form part of the northern boun-

darv.

In India are found many mines of diamonds and other precious stones; great quantities of silk, cotton,

and sugar come from India.

It is a very hot country, subject to heavy rains in winter, and is remarkably fertile. The country near Calcutta is low.

The Hindoos, as the inhabitants are called, are idolaters of the Brahminical kind. Their priests are called Brahmins. About 2000 years ago the Brahmins succeeded in driving out of India all the Buddhists, who were then very numerous. There are ten millions of Mahometans now in the country.

The Hindoos are generally a gentle and intelligent race of people, warmly attached to their religious institutions, which they have followed for more than

3000 years.

As they are so peaceable, and have been from the nature of their country so rich, they have been repeatedly subject to the invasions of warlike nations.

Alexander the Great conquered part of this country. The Saracen Mahometans early invaded Hindostan; but their power was overthrown by Tamerlane the Mogul Tartar in 1400.

For a long time India was governed by Mahometan Tartar Emperors, under the title of the Great Mogul, residing at Delhi, having under them Nabobs of pro-

vinces, who gradually became independent.

The English first settled as humble traders, about 200 years ago, and have now obtained the possession of nearly the whole country. The Mahrattas were a courageous people, who long opposed the English.

The long neglected interests of the poor Hindoos

are now receiving attention.

The Governor-General of India, who is under the control of the East India Company of merchants, resides at Calcutta. There are also English Governors at Madras and Bombay.

#### CEYLON.

The beautiful island of Ceylon, which is somewhat larger than Van Diemen's Land, lies to the south of India, and now belongs to the English crown.

The Portuguese settled on a part of the coast in 1618, the Dutch in 1656, while the rest of the coun-

try was governed by a native prince called the King of Candy.

The English established themselves in 1796, and

afterwards conquered the whole country.

The chief towns are Colombo the capital, Candy, Trincomalee, and the old Portuguese town of Point de Galle.

The population is about 15,000 whites, and two millions of natives.

The Cingalese are a timid people, and are now B 7

deeply sunken in indolent and drunken habits. Their religion is the same as that of the Hindoos.

Ceylon is famous for pearls, cinnamon, and pepper,

and for its immense elephants.

# AFFGHANISTAN OR CABUL.

Going westward from India by way of Scinde, we enter into Afghanistan, which is 1000 miles long and 800 broad, and contains 15 millions of inhabitants.

The chief towns are Cabul the capital, in lat. 35° N., and long. 70° E., Herat a trading town, Candahar,

Ghiznee and Jellahabad.

The religion of the Affghans is Mahometan.

Affghanistan is a mountainous country, and is in

some parts hot and in others cold.

The country is not under one head, but is divided under several chiefs. It was once a mighty empire, and the people are even now great conquerors.

The Affghans are a superior race of men; they

have generally a great dislike to living in towns.

Not long since an English army was cut to pieces by them, but another force has subsequently retrieved the British character.

# BELOOCHISTAN.

Beloochistan is to the south of Affghanistan beside the Indian Ocean.

The chief town is Kulat. There is no trading port.

The country is mountainous and barren.

The Belooches are a fine race of people. They are shepherds and herdsmen, but are occasionally warring robbers.

# PERSIA.

Modern Persia, extending westward from Affghanistan, is 1000 miles long, and 700 broad. Its population is 12 millions.

Persia includes the ancient Media, Parthia, Bac-

triana and Susiana.

The chief towns are Teheran the capital, with 80,000 persons, Ispahan the former capital, Shiraz, Tabriz, and Hamedan the ancient Ecbatana. The ancient city of Persepolis was burnt by Alexander the Great in a drunken frolic.

Persia is generally mountainous or barren.

The River Tigris and the Persian Gulf divide Persia from Arabia.

No country excepting India has been more often

invaded and desolated than Persia.

The Persians are Mahometans of the sect of Ali, and are, therefore, thought heretics by the Turks. In ancient times they were Fire-worshippers. They are a lively and intelligent people, but are much given to avarice and falsehood.

The government of Persia is that of a despotic

monarchy.

The Persians call their country Iran. The ancient

name was Elam.

In olden times the Persians were great conquerors. Under Cyrus they subdued the empire of Babylon, but were themselves overcome by Alexander the Grecian about 320 years before Christ.

## ARABIA.

Arabia, to the west of Persia, is 1400 miles long and 1000 broad. Its population is said to be 10 millions.

Arabia is divided into the three parts of the Deserta or Desert, the Petræa or Stony, and the Felix or Happy. The interior is wholly a desert of sand.

It was in Arabia Petræa that the Israelites wandered for 40 years. In this part are many remains of houses and temples cut out of the solid rock. Mounts Sinai and Horeb are there.

There are but few towns in the country, as the Arabs love a roving life. There are however Mecca the birth-place of Mahomet, in lat. 22° N. and long. 42° E., Medina the place of his burial, Sana, Muscat, Mocha, and Aden.

Aden is a strong English fortress on an extinct volcano. It is situated at the entrance to the Red Sea, and was gained from the Arabs by artifice in 1839. It is now used as a station for steamers running between India and Egypt.

Muscat, near the Persian Gulf, belongs to an intelligent and a prosperous prince, called the Iman or Pontiff of Muscat.

A prince of Yemen, whose capital is Sana, is a powerful chief.

Mecca, Medina, and Mocha are beside the Red Sea, which separates Arabia from Egypt. The prince of the Wahabees, or Mahometan Reformers, has been lately severely defeated by Mehemet

Ali of Egypt.

The Arabs are Mahometans. Under the name of Saracens or Moors they have been great conquerers. They are governed by Sheiks or Chiefs at the head of tribes. They love fighting and plundering.

People travel over the burning sands of Arabia on

camels, in numbers together forming Caravans.

All Mahometans are required to go or send a substitute on pilgrimage to Mecca once in their lives.

Arabia Felix, on the south-western coast, produces abundance of spices. Mocha and its neighbourhood is famous for its fine coffee.

# TURKEY IN ASIA.

Turkey in Asia extending northward and westward of Arabia is 1000 miles long. Its population is 14 millions; consisting of Arabs, Greeks and Turks. The principal divisions of Turkey in Asia are,

The principal divisions of Turkey in Asia are, Asia Minor, Armenia, Diabekir, Irak Arabi the ancient Chaldea, Algezira the ancient Mesopotamia, Kurdistan the ancient Assyria, and Syria, including Palestine.

Asia Minor consists of the provinces of Anatolia,

Roum, and Caramania.

It was anciently divided into the following provinces; Mysia, Lydia, Caria, Bithynia, Phrygia, Lycia, Pisidia, Pamphylia, Pamphlagonia, Galacia, Lycaonia, Pontus, Cappadocia, and Cilicia.

Paul was born at Tarsus in Cilicia. The seven

churches of Asia spoken of in the Revelations were in Asia Minor.

The towns of Smyrna, with 140,000 inhabitants, Bursa, and Angora are in Asia Minor, Bagdad and Bassora in Irak Arabi, and Erzeroum in Armenia.

The ancient city of Troy stood in Asia Minor, nearly opposite to where Constantinople now stands.

It was taken by the Greeks 1184 B.C.

The chief cities of Syria are Aleppo, Damascus, Beyrout, Acre, Jerusalem and Antioch. The ruins of the ancient cities of Palmyra or Tadmor, and Bal-

bec or Heliopolis are in Syria.

Mehemet Ali of Egypt obtained possession of Syria, and governed the people of it with justice. He was, however, obliged to leave the country to its old oppressive masters, the Turks, in consequence of the opposition of the English, who defeated his troops several times.

The chief rivers of Turkey in Asia are, the Euphrates 1500 miles long, which is called in Scripture by the name of the Great River, and the Tigris 1000 miles. Babylon stood upon the Euphrates, and Nineveh upon the Tigris.

The Mountain of Ararat, one of the Caucasian chain, is in Armenia, Lebanon in Palestine, and

Olympus in Asia Minor.

The prevailing religion of Turkey in Asia is Mahometanism.

# PALESTINE, OR THE HOLY LAND.

This country was the ancient Canaan and Land of Promise, and is 200 miles long. The Mediterranean Sea washes its western side, and the deserts of Arabia bound it on the south.

Joshua divided it into twelve portions, called tribes. They were called Asher, Naphtali, Zebulon, Issachar, the half tribes of Manasseh, Ephraim, Dan, Gad, Benjamin, Simeon, and Judah.

In the time of Rehoboam it was divided into the kingdoms of Judah and Israel; the former consisting of the tribes of Judah and Benjamin, and the latter

of the remaining ten tribes.

The kingdom of Israel was conquered by the Assyrians, and the people carried into captivity never to return. The Samaritans were placed in their country.

The kingdom of Judah was subdued by Nebuchadnezzar 588 years before Christ, and the people were

captives in Babylon for 70 years.

After this the Jews were in turn subject to the

Persians, the Greek-Syrians, and the Romans.

In the time of our Saviour the land was divided into five parts—three on one side of the river Jordan, and two on the other side.

Those on the one side were, Judea to the south, Samaria in the middle, and Galilee to the north; the

two other provinces were Perea and Iturea.

Judea included the tribes of Benjamin, Dan, Simeon and Judah; Samaria included Issachar, Ephraim, and one-half tribe of Manasseh; whilst Galilee comprised Asher, Naphtali, and Zebulon.

Reuben and Gad were in Perea, and one-half tribe

of Manasseh in Iturea.

Jerusalem was totally destroyed by Titus, the Roman General, in the year 70, because the people rebelled against the Romans.

The chief towns of Galilee were Nazareth, Cana,

Capernaum, Cesaræa, and Ptolemais or Acre.

Those of Samaria were, Samaria, Gilgal, and Sychar or Shechem.

The principal towns in Judea were, Jerusalem in lat, 31° N. and long. 35° E., Jericho, Bethphage, Bethel, Bethlehem, Hebron, Joppa, Gaza, Askelon, and Beersheba.

The chief cities on the other side of Jordan were, Edrei, Pella, Bethabara, Ramoth Gilead, Jazer, and Heshbon.

Tyre and Sidon were to the north of the Holy Land, and were inhabited by idolatrous Canaanites. They were powerful trading cities. Carthage in Africa was a colony of Tyre.

Tyre was twice destroyed; first by Nebuchadnezzar,

and afterwards by Alexander the Great.

The Philistines, the Amalekites, the Moabites, the Midianites, the Ammonites, and the Edomites lived to the south of Canaan.

The principal mountains of Palestine are, Carmel, Tabor, Gilboa, Gerizem, Nebo, and Mount Olives near Jerusalem.

The chief rivers were, the Jordan running through the country from Lebanon to the Dead Sea, and the brooks Kishon, Jabbok and Kedron.

The lakes are, Lake Gennesareth or Sea of Galilee, and the Dead Sea to the south of the country.

The Dead Sea is on the site of the plains of Sodom and Gomorrah, which were destroyed by a volcano, the crater of which is still to be seen; the shores of the lake are covered with volcanic matter.

Palestine is now in the province of Syria, under the oppressive yoke of the Turks, and is inhabited by a few people, chiefly Arabs.

Jerusalem is still a large city, and is called by the inhabitants the Holy City.

Among the mountains of Lebanon are some sin-

gular people called the Druses and Maronites.

The Druses are governed by a priestly chief; their religion is a mixture of Judaism and Heathenism.

The Maronites are Christians. These warlike tribes

are independent.

Having now gone through Asia, we will give a summary of the countries, chief towns, islands, seas, bays, &c. belonging to this continent.

## ASTA.

This continent is 6000 miles in its greatest extent from north to south, and 4000 from east to west. It contains 12 million square miles. Its population is nearly 500 millions.

#### COUNTRIES.

#### TOWNS.

Russia in Asia.	Tobolsk on the river Irtish.
Tartary.	Samarcand on the Oxus.
China.	Pekin near the Great Wall.
Thibet.	Lassa on the Burrumpooter.
Empire of Annam.	Huè.
Malaya.	Malacca.
Siam.	Bankok.

Ummerapoora on the Irrawaddy Birman Empire

COUNTRIES.

TOWNS.

India. Affghanistan. Calcutta on the Hoogley.

Beloochistan.
Persia.

Kulat.

Persia. Arabia.

Mecca and Medina.

Turkey in Asia.

Smyrna.

# Islands belonging to Asia.

Kurile Isles between Kamtschatka and Japan. Sagalim and Jesso to the west of Tartary. Japan Isles to the north-east of China. Loo-Choo Isles to the south of Japan. Formoso to the east of China. Macao near Canton. Hainan to the south of China. Philippine Islands to the south-east of China. Borneo on the equator. Celebes, or Macassar, to the east of Borneo. Moluccas to the east of Celebes. Java to the south of Borneo. Sumatra south of Malaya and north of Java. Sumbawa and Timor to the east of Java. Nicobar and Andaman Isles in the Bay of Bengal. Ceylon to the south of India.

Maldive and Laccadive Isles to the west of India.

Socatra to the south of Arabia.

Cyprus to the south of Turkey in Asia. Rhodes to the south west of Turkey in Asia.

# Seas, Bays, and Straits of Asia.

Sea of Okotsk near Kamtschatka.

Cape Lopatka to the south of Kamtschatka.

Strait of La Perouse between Sagalien and Jesso.

Sea of Japan between Japan and Tartary.

Yellow Sea between China and the peninsula of Corea.

Gulf of Tonquin to the south of China.
Gulf of Siam to the south of Siam.
Cape of Cambodia to the South of Siam.
Straits of Malacca between Malaya and Sumatra.
Straits of Macassar between Borneo and Celebes.
Straits of Sunda between Java and Sumatra.
Bay of Bengal between India and the Birman
Empire.

Cape Comorin to the south of Hindoostan.
Straits of Menaar between India and Ceylon.
Gulf of Cambay near Bombay.
Persian Gulf between Persia and Arabia.
Arabian Sea between Arabia and India.
Red Sea to the west of Arabia.
Straits of Babel-Mandeb between the Red Sea and the Arabian Sea.

# THE CONTINENT OF EUROPE.

# TURKEY IN EUROPE.

Crossing from the north-west extremity of Turkey in Asia a narrow strait called the Bosphorus, which leads into the Black Sea, we enter the fine town of Constantinople, in lat. 40° N. long. 29° E.

This is the capital of the whole Turkish dominions, though situated in European Turkey, and contains

500,000 inhabitants.

Turkey in Europe is 500 miles long, and about

500 broad. The population is 10 millions.

The chief towns are,—Constantinople or Stamboul, Adrianople in the province of Roumelia, Salonica in Macedonia, Belgrade on the Danube in Servia, Sophia in Bulgaria, Buchorest in Wallachia, Jassy in Moldavia, Larissa in Thessaly, and Janina in Albania.

The principal rivers are the Danube, flowing into the Black Sea, the Morava into the Danube, and the

Pruth between Turkey and Russia.

The Balkan range of mountains is in the centre of Turkey, Mounts Olympus and Pindus are in Thessaly, Parnassus and Athos, or the holy mountain, in Macedonia.

The Strait called the Dardanelles or Hellespont was passed over by Xerxes the Persian.

The once fruitful island of Crete, now Candia, in the Mediterranean Sea, was taken by the Turks in 1669, after a siege of 24 years.

The government of Turkey is a despotic monarchy, though the Sultan or Emperor assumes to rule by the laws of the Koran, the Mahometan scriptures.

The Turks were a Mahometan Tartar tribe, who gained their possessions in Europe about 400 years ago. They took Constantinople from the Greek Emperor in 1453.

The majority of the people of Turkey are still

Christians of the Greek Church.

The whole country has most miserably declined in wealth, intelligence, power and happiness, since it has been under Turkish rule.

## MODERN GREECE.

This country is joined to the south of Turkey in Europe, and consists of the peninsula of Morea, the province of Livadia, the island of Negropont, and other islands.

It is 200 miles long, and contains nearly one mil-

lion of people.

Greece is now divided into thirty governments. Of late the Greeks have been changing the Turkish names of their towns, mountains and rivers for ancient Grecian names.

The principal towns of the Morea are Tripolitza, Patras, Napoli, Corinth, Navarino and Misitra the

Ancient Sparta.

Those of Livadia are, Athens the capital of Greece, Missolonghi and Lepanto. The Gulf of Lepanto is between Livadia and the Morea: the Isthmus of Corinth connects them.

Greece is a mountainous, fertile, and healthy coun-

try. Raisins, figs, and olive oil are its exports.

The Greeks were long subject to the Turks, but obtained their liberty after a severe struggle in 1830; Colotroni and Marco Botzaris were their leaders.

Otho, son of the king of Bavaria, is now king of

Greece.

The modern Greeks are addicted to falsehood and dishonesty; but much of their bad character is owing to their oppression under the Turks.

The Ionian Islands to the west of Greece are, Corfu, Paxa, Santa Maura, Ithaca, Cephalonia, Zante,

and Cerigo.

These are now formed into a Republic, with a Representative Senate or Council under an English

governor.

The principal islands near Greece in the Archipelago Sea, between Greece and Turkey in Asia, are, Negropont, Lemnos, Mytyline, Andros, Scio, Samos, Naxos, Milo and Paros.

The religion of the Greek Church resembles the

Roman Catholic in many respects.

## ANCIENT GREECE.

Ancient Greece, or Greece as it was 2,000 years ago, was divided into a number of small independent states.

It was much more populous than the country now is.

Some of the states were much more advanced in civilization and influence than the others.

The Morea was formerly called the Peloponnesus.

The states of the Peloponnesus and their chief towns were as follows:—

STATES.

TOWNS.

Achaia. Corinth and Sicyon. Elis. Elis and Olympia.

Arcadia. Mantinea and Megalopolis.

Argolis. Argos and Mycenæ.

Messenia. Messene.

Laconia. Sparta and Lacedæmon.

The Grecian states not in the Peleponnesus were,-

Attica. Athens, Megaris, and Marathon. Bootia. Cheroneæ, Thespia, and Plateæ

Phocis. Delphi.
Locris. Naupactus.
Ætolia. Calydon.

Acarnania. Argos and Stratus.
Thessaly. Larissa and Pharsalia.
Epirus. Ambracia and Nicopolis.

Macedonia. Thessalonica, Philippi, Chalcis, & Berea

The principal rivers of Ancient Greece were, the Peneus in Thessaly, the Styx in Arcadia, the Eurotus by Sparta, and the Ilissus by Athens.

Corfu was anciently called Corcyra, Cerigo was Cythera, and Negropont was Eubœa.

Near the Isle of Salamis, opposite to Athens, the Greeks defeated the fleet of Xerxes the Persian.

The Pass of Thermopylæ was an opening between the Oeta mountains, which divided Phocis from Thessaly; here Leonidas the Spartan opposed Xerxes.

Alexander of Macedonia lived about 330 years before Christ. Ancient Greece was added to the Roman Empire

by conquest 150 years before Christ.

Ancient Greece produced the greatest of sculptors, as Phidias; of painters, as Apelles; of orators, as Demosthenes; of statesmen, as Pericles; of moral philosophers, as Plato; of warriors, as Alexander; of poets, as Homer.

## ITALY.

Crossing the Adriatic Sea, or Gulf of Venice, from Greece, we enter upon the delightful land of Italy.

Italy is 700 miles long and 400 at its greatest

breadth. Its population is 24 millions.

Though under the ancient Romans it was but one country, it is now divided into several unconnected states. They are, Lombardy and Venice, the kingdom of Sardinia, Parma, Modena, Massa Carrara, Lucca, San Marino, Tuscany, the States of the Church, and Naples.

# THE KINGDOM OF LOMBARDY AND VENICE.

This country, sometimes called Austrian Italy, once consisted of a number of free and independent states, as Venice, Milan, Mantua, &c.; but they were given to the Emperor of Austria by the Congress of European powers in 1815, to make amends for his loss in Germany.

The people of this part of Northern Italy by no

means approve of the change of government.

The chief towns are, Venice on 72 Islands in the Adriatic, Milan, Mantua, Padua, Verona, Pavia, Cremona, and Bergamo.

#### THE KINGDOM OF SARDINIA.

This despotic government includes the Island of Sardinia, and the countries of Piedmont, Savoy and Genoa.

Piedmont is among the Alpine Mountains; its capital is Turin. Chamberry is the capital of Savoy, Cagliari of the neglected Sardinia, and Genoa, once the trading rival of Venice, is the capital of Genoa.

The Dutchies of Parma, Modena, and Lucca, are very fruitful and delightful countries; their capitals bear the same names.

San Marino is a very small republic in the centre of the Pope's dominions, and consists of a single mountain. It has been free since its foundation by Marino a hermit, 1,300 years ago.

## TUSCANY.

Tuscany, the ancient Etruria, is 120 miles long and 80 broad. It has long been famous for its paintings and for its men of learning.

Galileo the philosopher, Americus Vespucius who gave name to America, Guido the painter, and Petrarch

and Dante the poets, were born in Tuscany.

The principal towns are, Florence the capital, Leghorn a sea port, Pisa, Sienna, and Arezzo.

Tuscany is governed by a Grand Duke.

The small island of Elba, in which Napoleon reigned for nine months, is near Tuscany.

## THE STATES OF THE CHURCH.

The States of the Church, or the Temporal dominions of the Pope, form a country about twice the size of Tuscany, and contain but three millions of people.

The Bishops of Rome had no possessions until

about 1000 years ago.

Few countries are more oppressed by taxes and more neglected than this country; the Pope is an

absolute sovereign.

The chief places are Rome the capital, in lat. 42° N. and long. 12° E., with a population of 160,000, Bologna, Ancona, Ravenna, Loretto, Urbino, and Tivoli.

The palace of the Pope at Rome is called the Vatican. There are many fine buildings and exhibitions

of pictures to be seen in Rome.

Rome, in its ancient splendour, when mistress of the world, contained two millions of people; but the vast Roman Empire was destroyed by repeated invasions of barbarians.

### NAPLES.

Naples, or the Kingdom of the Two Sicilies, includes the country of Naples and the island of Sicily.

The population is eight millions.

The whole is very delightful and productive, notwithstanding the miserably neglectful government. The Neapolitans are grossly ignorant, superstitious, and idle. The chief towns of Naples are, Naples the capital, near the volcano Vesuvius, containing 400,000 people, Capua, Otranto, Tarento, Salerno, and Reggio.

Sicily, which is 160 miles long, is separated from the south of Naples by the narrow Strait of Messina.

The chief towns of Sicily are, Palermo the capital, Messina, Syracuse the ancient capital, and Catania, which has frequently been destroyed by the volcano Etna.

In the year 79, a dreadful eruption of Vesuvius overwhelmed the towns of Pompeii and Herculaneum; these towns have lately been partially excavated.

Beside Sicily there is the celebrated rock Scylla

and the whirlpool Charybdis.

The King of Naples is despotic.

The islands of Malta and Goza to the south of Sicily are remarkable for their strength, and belong to the English. The capital of Malta is Valetta.

The mountains called the Appenines run the whole length of Italy. The Alps extend for 400 miles along the north of it.

The chief rivers are, the Po and Adige in the north,

the Arno in Tuscanv, and the Tiber by Rome.

The religion of the Italians is Roman Catholic.

The country is very delightful, and the people generally are good-tempered, intelligent, but not industrious. Italy during the middle ages was the seat of learning and of the fine arts.

## SWITZERLAND.

Switzerland lies to the south of Germany. It is 200 miles long and 140 broad, with a population of two millions.

It consists of 22 cantons or districts, which are independent of each other, but are united by a Diet or Council for protection.

The chief towns are Berne, Geneva, Zurich, Lau-

sanne, Basle, Lucerne and Schauffhausen.

There are some beautiful lakes here; as those of Geneva, Constance, and Zurich.

The rivers Rhine, Rhone, and Aar take their rise

in Switzerland.

The country abounds in mountains. The Alps run through it. The highest points of the Alps are, Mont Blanc, which is three miles high above the sea level, Mount Rosa, Jungfrau, St. Gothard, and St. Bernard so famous for its monasteries.

There are rather more Protestants than Catholics in the country. Excellent public schools exist in the

Protestant cantons.

Zuinglius began the Reformation in Switzerland at the time when Luther was preaching the same in Germany, Calvin in France, and Knox in Scotland.

The Swiss revolted from the Duke of Austria

under William Tell, in 1315.

They have always been considered good soldiers, and were often in the pay of foreign princes. They are fond of hunting the chamois.

The Swiss are an industrious, simple-hearted people.

## GERMANY.

Passing the northern frontiers of Switzerland we enter upon one of the nations or states forming the extensive country of Germany.

The German States are many in number; and though for mutual protection they are united together, like the Swiss Cantons, by a Diet or Assembly, they are independent of each other.

The following are the most important of these states: the kingdoms of Austria, Prussia, Bavaria, Saxony, Wirtemberg, and Hanover; the Dutchies of Baden, Hesse-Cassel, Hesse-Darmstadt, Mecklenberg, Nassau, Brunswick, Oldenberg, Saxe Weimar, Saxe Coburg and Gotha, (Prince Albert's country) Saxe Meinengen, and Saxe Altembourg.

Besides these there are the free and independent cities of Hamburg on the river Elbe, Bremen on the Weser, Lubec near Denmark, and Frankfort on the Maine in the interior of Germany.

For herly there was an Emperor over all this extensive region of Germany. But Napoleon Buonaparte in 1806 broke up this powerful dominion, in the conditions of a treaty he made with the conquered province.

By this treaty, the several states were declared independent of each other, the Emperor's dominions were confined to Austria, and his title was to be thenceforth that of Emperor of Austria.

The Congress of European Nations held at Vienna in 1815 confirmed this arrangement, but decreed that the Emperor should have Lombardy or northern Italy for his losses.

The Germans are a grave, honest, good-humoured, industrious, and well educated people, who while professing great love for liberty, enjoy very little political freedom.

They make good mechanics, good soldiers, good musicians, and good linguists. They are not speculative except in their writings.

The exports of the German states are chiefly wool,

wine, metals, hams, and manufactured goods.

The great obstacle to the commercial prosperity of Germany is its number of independent states, the princes of which think only of themselves. A vessel trading down the Rhine has to pay toll at 27 stations, and on the Elbe at 32 stations.

#### BAVARIA.

The first German country into which we enter from Switzerland is that of Bavaria, which is 200 miles long by 120 broad, containing five millions of inhabitants.

The chief towns are Munich the capital, called by the inhabitants Munchen, Ratisbon, Ingoldstadt, Nuremberg and Augsberg.

Bavaria was made a kingdom by Napoleon: it is a limited monarchy. In no country are the arts and sciences so encouraged by the government as in this.

Two-thirds of the Bavarians are Catholics, the remainder are Protestants, yet all are equally free. Bavaria, like the rest of Germany, is famous for its number of good schools.

#### WURTEMBURG.

Wurtemburg is to the west of Bavaria, and is 120 miles long by 60 broad, and contains two millions of inhabitants.

The chief towns are Stutgard the capital, and Ulm.

The famous Black Forest is in this country.

Wurtemberg was raised into a kingdom by Napoleon in 1805. Every person in the country can read and write.

Most of the people are Protestants, though all religions are tolerated.

#### BADEN.

The Dutchy of Baden lies between France and Wurtemburg, and is about half the size of the latter country.

The principal towns of Baden are Carlsruhe the capital, Baden, Manheim, Heidelburg, and Freiburg.

Baden enjoys much civil and religious freedom. The Duke is a Protestant.

The river Danube takes its rise in the mountains of Baden.

#### SAXONY.

This country is situated to the north-east of Bavaria, and is 100 miles by 50 broad, containing two millions of people.

The chief towns are Dresden the capital on the Elbe, and the University town of Leipsic, famous for

its annual book fair.

Napoleon made his friend the Duke of Saxony a king. After the fall of the French Emperor, the king of Saxony had one-half of his dominions taken from him.



The people of Saxony are Protestants, and are very well educated. The country is famous for its wool and manufactures.

## HANOVER.

Hanover is one of the most northern states of Germany, and is bounded by the German Ocean.

It is about the size of Bavaria, and contains two

millions of inhabitants.

The chief towns are Hanover the capital, and Gottingen a large University. The river Weser runs

through the country.

George, the Elector or Prince of Hanover, in 1714 became King of England. Hanover is now a kingdom under Ernest the First, the Duke of Cumberland, one of Queen Victoria's uncles.

# PRUSSIA.

Prussia has Hanover on the west and Saxony on the south. It is above 600 miles long and 400 in its greatest breadth, with a population of 16 millions.

The provinces of Prussia are Eastern and Western Prussia, Posen, Silesia, Brandenburg, Pomerania, Dutchy of Saxony, Westphalia, Neufchatel in Switzerland, Cleves, and the Grand Dutchy of the Lower Rhine.

Originally Prussia consisted only of the two small provinces of the Eastern and Western Prussia, the remainder having been gained by conquest and treaty. The Rhenish provinces were added to Prussia in 1815.

The capital of Prussia is Berlin in Brandenburg, having a population of nearly 300,000 inhabitants.

The other chief towns are, Potsdam in Brandenburg, Koningsburg and Memel in East Prussia, the port Dantzic and the city of Thorn in West Prussia, Stettin in Pomerania, Breslaw and Graeffenburg in Silesia, Magdeburg and Erfurt in Ducal Saxony, Munster in Westphalia, Cologne and Bonn in Cleves, Aix-la-chapelle and Coblentz in Rhenish Prussia.

The chief rivers are, the Vistula, entering the Baltic Sea by Dantzic, the Pregel by Koningsburg, the Elbe flowing past Dresden and Hamburg into the German Sea, and the Oder entering the Baltic by

Stettin.

Prussia has no mountains, but contains many

forests. It was first made a kingdom in 1701.

The majority of the people are Protestants, though there are many Roman Catholics. The religious belief of a man is no barrier to his success in Prussia.

The government is a despotic monarchy. There is no representative assembly in the country. Every

Prussian is trained for a soldier.

No country is better provided with schools than this; the religious instruction of the youth is under the care of the several pastors of churches. When freedom is given to the Prussians they will know well how to use it and value it, because they have had an enlightened education. This freedom will come, and come quickly, for the noble and generous King has promised a liberal constitution.

The Prussians with all the Germans are very fond

of music, and are a quiet, kind hearted people.

## AUSTRIA.

Austria is 850 miles long and 450 broad, containing

40 millions of people.

It comprehends the ancient province of Austria, Hungary, Bohemia, Moravia, Galicia, Transylvania, Slavonia, Croatia, Styria, Illyria, the Tyrol, Dalmatia, and Lombardy.

The capital of Austria is Vienna, on the river Danube, in lat. 48 o N. and long. 16 o E., and has a

population of 350,000 persons.

The other chief towns are, Prague in Bohemia, Presburg and Buda ou the Danube in Hungary, Austerlitz in Moravia, Hermanstadt in Transylvania, Gratz in Styria, Trent and Inspruck in Tyrol, Ragusa in Dalmatia, and the port Trieste by the Adriatic Sea.

The principal rivers of Austria are, the Danube, 1700 miles long, flowing past Ulm, Vienna, Presburg, and Buda into the Black Sea, and the rivers Inn,

Drave, and Save running into the Danube.

The Carpathian range of mountains divides Austria from Poland, and the Rhœtian Alps are found in the mountains Tyrol, whose inhabitants have so strong a love for liberty.

Austria consists of different people, with different

languages.

The Hungarians are a noble-minded people: the nobles enjoy great freedom, but the poor are wretched enough.

Bohemia is a very mountainous country, with valuable mines and many apple trees. Dalmatia

is beside the Adriatic Sea. Galicia was a part of Poland, and has large salt mines.

The chief religion of the Austrians is the Roman

Catholic, though all religions are tolerated.

The government of the Empire is despotic; but the several divisions of the country are generally governed by their own laws. The army consists of 300,000 men.

Schools are now spread by the government throughout Austria; but freedom of thought is most effectually repressed.

## RUSSIA.

This country lies to the east and north-east of Austria. European Russia is 1600 miles long and 1400 broad. Its population is sixty millions.

Russia is made up of several countries, and is

divided into forty-eight governments.

The principal parts of this immense country are, Muscovy the Ancient Russia, Lithuania, Poland, Esthonia and Finland.

Lithuania was formerly part of Poland. Finland was taken from Sweden in 1809. Part of Turkey was added to Russia in 1812.

The Don Cossacks, formerly from Poland, now famous for their wild cavalry, reside on the banks of the River Don.

The capital of the country is St. Petersburg on the River Neva, near the Gulf of Finland, in lat. 58° N. and long. 20° E., with a population of 500,000.

The other principal towns of the Empire are, Moscow the ancient capital, Archangel by the White Sea, Riga by the Baltic, Cronstadt, Novogorod, Abo in Finland, Tula, Smolenska, Warsaw, Odessa and Cherson by the Black Sea, Bender and Ismael near Turkey.

Petersburg was built by Peter the Great in 1703, and is a handsome town. Moscow was burnt in 1812 by the Russians to prevent the French wintering

there.

The chief rivers are, the Wolga 2000 miles long, running into the Caspian Sea, the Don flowing southward into the Sea of Azof, the Dnieper and Dniester into the Black Sea, the Dwina by Archangel into the White Sea, the Vistula through Poland, and the Neva by Petersburg.

The largest lakes are, Ladoga and Onega near

Petersburg.

The Uralian chain of mountains 1300 miles long, in which are many mines of gold, platina and other metals, divides European from Asiatic Russia.

The north of Russia is rough, barren and very cold, the middle and southern parts are very level and fertile.

The religion of the Russians is of the Greek Church.
Russia sends furs to China, and tallow, hides and
tar to England and other countries.

A little more than 100 years ago the Russians were barbarous, but they are now rapidly advancing in a knowledge of the arts. They are a quiet race.

The government is a despotic monarchy, and the people or serfs are willing to submit to the rough and unjust treatment of tyrannical masters. The Russian army consists of 800,000 men.

## POLAND.

Poland was formerly a powerful and independent monarchy. The climate is good and the land productive of corn.

The religion of the Poles is the Roman Catholic, though at one time the majority of the nobles and gentry were Lutheran Protestants; systematic persecution by one King during a reign of fifty years having made the change.

There was formerly a diet or assembly of nobles, who with the King governed the nation; the poorer

Poles are serfs or slaves to the nobles.

The Jews received kindness and protection in Poland when ill-treated everywhere else; they abound in this country. The Russian government has lately shown much cruelty to the Jews of their Empire.

The Poles some years ago quarrelled among themselves, when the Russians taking advantage of their

disunion deprived them of their country.

The Prussians and Austrians joined the Russians in this ungenerous work. A remaining portion, with Warsaw the capital, which had been left with some sort of freedom remaining, was at length taken by the Autocrat of Russia.

The last attempt of the brave Poles to gain their

liberty was in 1830.

A small part of Poland, about twenty miles long, called Cracow, was made an independent republic, though under the protection, so called, of Russia, Austria and Prussia.

# SWEDEN AND NORWAY.

Sailing from Petersburg down the Gulf of Finland and across the Baltic Sea we come to Sweden, and going across that country we enter Norway.

Sweden is 1100 miles long and 200 broad, with a population of three millions: Norway is 1000 miles long and 80 broad, with a population of one million. The two countries form a large peninsula.

Norway is separated from Sweden by a range of mountains called the Dofrafell, in which are

the mountains of Dalecarlia.

Sweden is divided into twenty-five governments,

and Norway into four provinces.

Norway, formerly belonged to the King of Denmark; but at the end of the war, in 1815, it was united to Sweden, though against the wishes of the people; it is, however, governed by its own laws and legislature.

Both countries are very mountainous and cold, but abound in timber and metals, which are exported

in large quantities. The climate is healthy.

The chief towns of Sweden are, Stockholm the capital, situated upon some islands, in lat. 60° N., long. 18° E. Upsal, Gottenburg, Tornea, Carlscrona, Calmar, and Lund the most ancient town.

The chief towns of Norway are, Christiana the capital, Bergen, Drontheim, and Frederickschall,

where Charles XII. was killed.

Most of the rivers of Sweden are from the Dofrafell

The Tornes, which separates Sweden from Russia, and the Dahl are the principal rivers.

The largest lakes are Wener and Wetter.

The islands of Gothland and Oland are in the Baltic Sea.

The religion of the Swedes and Norwegians is the Lutheran Protestant.

The people are industrious and honest, but, like the Russians, too fond of brandy.

The government of the country is a limited monarchy.

#### LAPLAND.

Lapland is a very cold and barren country north of Sweden.

The rein-deer is a most useful animal to the Laplanders: it transports them over the snow in sledges: its skin furnishes them with dress, and its flesh with food.

The ancient name of Sweden, Norway, and Lapland was Scandinavia. The people were much given to piracy in former times.

The Normans, or Northmen, who conquered England eight hundred years ago, came originally from Scandinavia.

## DENMARK.

Denmark lies to the south of Sweden across a little strait.

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It consists of the peninsula of Jutland, the provinces of Sleswick, Holstein, and Lauenburg, and the islands of Zealand, Funen, Laland, and others.

Altogether it is not much above half the size of Tasmania, and contains two millions of people.

Many horses are exported from Denmark.

The chief towns are, Copenhagen the capital, with 120,000 inhabitants, and Elsinore in Zealand, and Altona, Sleswick, and Kiel on the main land.

The great trading town of Hamburg joins the

province of Holstein.

The isles of Iceland and Feroe belong to the

Danes.

Iceland contains the celebrated volcano of Hecla, and the Geysers or boiling springs. The chief town is Reikiavic. The people are kind.

Denmark is a very level country, and contains

many lakes.

The religion is Lutheran Protestant.

The Government is despotic, as the nobles, clergy, and people resigned their liberties to the King in 1660; but it is a mild, enlightened rule under the present King, who is a true friend to his subjects.

Denmark, Sweden, and Norway were united from

1387 to 1520.

In ancient times the Danes were great pirates and conquerors: they succeeded in subduing the English under their King, Canute, in 1024.

## HOLLAND.

Holland is south of the German Ocean and west

of Hanover. It is 150 miles long and 100 broad.

The population is three millions.

It formerly consisted of seven provinces; there are now eight; viz., Holland, Friesland, Groningen, Overyssel, Guelderland, Utrecht, Zealand, and North or Dutch Brabant.

The principal towns are, Amsterdam the capital, with 250,000 people, Rotterdam, the Hague, Leyden, Haarlem, Delft, and Utrecht.

The chief rivers are, the Rhine, the Scheldt,

and the Meuse.

Holland is very level. It is so low that dykes are obliged to be used to keep the sea from flooding the

country.

The Dutch are mostly Protestants of the Presbyterian form. All ministers, however, are paid by the government, even though Dissenters from the prevailing church.

The government is a limited monarchy. The

language is a sort of German.

Great attention is paid to education and the moral training of prisoners in this country. Redemption

Institutes originated in Rotterdam.

The Dutch are a very clean, quiet, industrious and thriving people. Beggars and drunkards are seldom seen. The Dutch have also been great traders and discoverers.

Canals run through the streets of most of the towns

of Holland.

Holland was for a long time a republic, but it is now a monarchy.

## BELGIUM.

Belgium, or Flanders, joins Holland to the south and west. It is about the same size as Holland, containing four millions of people; a large number for so small a country.

It is divided into nine provinces, viz., West Flanders, East Flanders, Antwerp, Limburg, South Brabant, Hainhault, Namur, Liege, and Luxemburg.

North Brabant was formerly included in Belgium. The chief towns of Belgium are, Brussels the

capital, Antwerp, Ghent, Luxemburg, Bruges, Liege, Mechlin, Louvain, and the sea-port of Ostend.

About eight miles to the south of Brussels lies the village of Waterloo, near which was fought a battle on the 18th of June, 1815, between Wellington and Napoleon, in which the latter met with his last and great defeat.

Antwerp was formerly the chief trading town

of Europe.

The principal rivers of Belgium are, the Scheldt by Antwerp, and the Meuse. They run into the North Sea or German Ocean.

Belgium has very few mountains and lakes, but

many forests.

The Belgians are mostly Roman Catholics, though all religions are tolerated.

The country is rapidly increasing in wealth by its manufactures and railways. Much lace is exported.

The Flemings, or people of Flanders, as the country was formerly called, were a very industrious and wealthy people in the middle ages.

Formerly Holland and Belgium were united under

the name of the Netherlands or Low Countries; but, in 1579, seven provinces of the seventeen rose against the tyranny and persecution of Philip, King of Spain, who ruled over them, and, after a desperate struggle, established their independence.

For many years Holland was a republic. In 1815 Holland and Belgium were united under the name of

the Kingdom of the Netherlands.

In 1830 the Belgians revolted from the King of the Netherlands, and elected Leopold, Prince of Saxe Coburg, to be their King. The two countries have been distinct ever since.

# ENGLAND AND WALES.

We will now enter a steam vessel at Ostend, as Queen Victoria lately did, and after a voyage of a few hours in a north-easterly direction we come to the great city of London, the capital of England.

London is situated upon the banks of the river Thames, in lat. 51½° N., and contains about two mil-

lions of people.

England is nearly 400 miles in its greatest length, and 300 in its greatest breadth. The populatian is sixteen millions.

It is divided into forty divisions, called counties or shires; these are—

#### IN THE NORTH.

Northumberland. Cumberland. Westmoreland. Durham. Yorkshire. Lancashire.

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#### IN THE MIDDLE.

Cheshire. Lincolnshire. Leicestershire. Worcestershire. Huntingdonshire. Gloucestershire. Bedfordshire. Wiltshire. Derbyshire. Shropshire. Rutland.

Cambridgeshire. Oxfordshire. Hertfordshire. Berkshire. Nottinghamshire. Staffordshire. Herefordshire. Northamptonshire. Monmouthshire. Buckinghamshire. Somersetshire. Middlesex.

#### IN THE EAST.

Suffolk.

Warwickshire.

Essex.

Norfolk.

#### IN THE SOUTH.

Cornwall. Devonshire. Dorsetshire. Hampshire.

Surrey. Sussex Kent.

The following are the chief towns:-

London in Middlesex. Liverpool in Lancashire.

Southampton in Hampshire.

Birmingham in Warwick- Truro in Cornwall. shire.

Sheffield in Yorkshire.

Bristol in Somersetshire. Bosworth in Leicestershire.

Manchester in Lancashire. Dover in Kent.

Leeds in Yorkshire. Kidderminster in Worces-Portsmouth in Hampshire. tershire. Norwich in Norfolk. Yarmouth in Norfolk. Plymouth in Devonshire. Pontefract in Yorkshire. Chatham in Kent. Exeter in Devonshire. Brighton in Sussex. Hastings in Sussex. Litchfield in Staffordshire. Launceston in Cornwall. Stratford-upon-Avon, in Woolwich in Kent. Warwickshire. St. Alban's in Hertford-Chester in Cheshire. shire. Newcastle in Northumber- Bath in Somersetshire. land. Gravesend in Kent. Hull in Yorkshire. Falmouth in Cornwall. Canterbury in Kent. Windsor in Berkshire. Winchester in Hampshire. Maidstone in Kent. York in Yorkshire. Ipswich in Suffolk.

Wales, which is united to the western side of England, is divided into twelve counties, viz. :—

Anglesea.
Flintshire.
Cardiganshire.
Pembrokeshire.
Carnarvon.
Merionethshire.

Radnorshire.
Carmarthenshire.
Denbighshire.
Montgomeryshire
Brecknockshire.
Glamorganshire,

The chief towns in Wales are-

Beaumaris in Anglesea.
Bangor in Carnarvon.
St. Asaph in Flintshire.
Landaff in Glamorganshire
Aberystwith in Cardiganshire.
Swansea in Glamorganshire.
St. David's in Pembrokeshire.
Cardiff in Glamorganshire.

The chief ports of England are London, Liverpool, Bristol, Hull, Portsmouth, Plymouth, and Falmouth.

The principal town for the cotton trade is Manchester. Norwich is famous for silks. Birmingham and Sheffield for iron and steel goods. Kidderminster for carpets. Staffordshire and Worcestershire for earthenware. Leicester and Nottingham for stockings.

Leeds and other parts of Yorkshire are famous for cloth manufactures. Northumberland, Cumberland, Durham, Yorkshire, Lancashire, and Staffordshire for coal mines. Cornwall and South Wales for mines of metals, and Anglesea for its large copper mines.

Stratford-upon-Avon was the birth-place of Shak-

speare, and Litchfield of Dr. Johnson.

Oxford and Cambridge are the two Universities.

The principal rivers of England are, the Thames, 220 miles long, running by London, the Severn through Wales and by Bristol, the Trent through the middle of England into the Humber, the Mersey by Liverpool, the Tyne by Newcastle, the Medway flowing through Kent, the Tweed between England and Scotland, the Humber by Hull, beside the Avons, the Ouses, and the Derwents.

There are several long ranges of hills in England, but they are not very high. One range extends from Cornwall to Northumberland. The Cheviot hills are between England and Scotland, the Wolds are in Yorkshire, the Wrekin in Shropshire, and the Peak in Derbyshire.

The highest mountains are the Helvellyn and Skiddaw in the north, 3000 feet high. Wales is very mountainous; Mount Snowdon is 3600 feet high.

The chief capes are, Flamborough Head and Spurn Head in Yorkshire, the North and South Forelands and Dungeness in Kent, Beachy Head in Sussex, Start Point in Devonshire, Lizard Point and Land's End in Cornwall, and St. David's Head in Pembrokeshire.

The islands near England are, the Isle of Wight to the south, the Isle of Man between England, Scotland, and Ireland, the Scilly Isles near Cornwall, Sheppy by Kent, Holyhead near Anglesea, and the Channel Islands of Jersey, Guernsey, Alderney and Sark between England and France.

The majority of the people are Protestants, but

about one million are Roman Catholics.

The system of religion established by law, and supported by the Government, is called the United Church of England and Ireland. Those persons, whose views do not agree with this Church, are called Dissenters: being Wesleyans, Independents, Baptists, Presbyterians, Roman Catholics, Quakers, Unitarians, &c.

The Church of England was established in the reign of Queen Elizabeth, nearly three hundred years ago. It has two Archbishops and 24 Bishops.

The Government is that of a limited monarchy. There are two Houses of Parliament, for the framing of laws, which have to be sanctioned by the Sovereign. The present Ruler is the much beloved Queen Victoria.

The two assemblies are, the House of Lords, or Nobles, who hold their seats for life, and the House of Commons, composed of persons chosen by the people, to represent them. There are about 420 in the Upper House, and 658 in the Lower House.

As England, Wales, Scotland, and Ireland are united together in the same Government, each country sends a certain number of members to Parliament. The Sovereign can make Peers or Nobles

of whom he or she pleases.

In the House of Commons 471 are English members, 29 are Welsh, 53 are Scotch, and 105 are Irish. Of the House of Lords, of which the Bishops form a part, 16 are Peers of Scotland, and 28 are Peers of Ireland.

About £60,000,000 of money is raised every year by taxes; half of this goes to pay off the interest of the national debt, which amounts to nearly £800,000,000, and which was incurred by the many wars in which the English have been engaged.

The English are the greatest trading people in the world. Their exports amount to £50,000,000 a year; half of which consists of cotton goods, and

one-fifth of woollen goods.

The annual income of the English from their commerce, manufactures, and agriculture is about £500,000,000. The amount of property in the British empire is thought to be worth £5000,000,000.

The English have colonies and other possessions in

all parts of the world.

In Europe they have Gibraltar in Spain, Malta, and the Ionian Isles, the island of Heligoland near Denmark, and the islands of Jersey, Guernsey, Alderney,

and Sark near France.

In Asia they have the islands of Chusan and Hong Kong in China, Tenasserim, Assam, and other provinces south and west of the Birmese Empire. The Peninsula of Malacca, the islands of Singapore and Penang near Malacca, almost the whole of Hindostan, the island of Ceylon, and the fortress of Aden in Arabia.

In Africa they have Sierra Leone, the Gold Coast,

the Cape colony, and Natal. They have also the islands of the Mauritius, the Seychelles, Ascension, and St. Helena.

In North America they have Honduras in Mexico, Canada, New Brunswick, Nova Scotia, Newfoundland, Prince Edward's Island, Breton Island, and an immense extent of forest land and hunting grounds north and west of Canada, toward the North Pole and toward the Pacific Ocean.

In the West Indies they have the following islands: Jamaica, Antigua, Montserrat, Barbadoes, Dominica, St. Lucia, Nevis, St. Christopher, Granada, the Bermudas, the Bahamas, the Caymans, the Virgin Isles, and others.

In South America they have the country of Guiana, the islands of Tobago and Trinidad, and the Falkland Isles.

In Australasia they have North Australia, South Australia, Western Australia, New South Wales, Tasmania, New Zealand, the Chatham Islands, and Norfolk Island.

Our gracious Queen rules over eight millions of square miles of territory, containing above 150 millions of inhabitants. The sun never sets upon her dominions.

England was first inhabited by the ancient Britons, who were subdued by the ancient Romans soon after

Christ appeared in the world.

The Anglo Saxons, from whom the English are descended, were the next people who conquered the country. These were, for a time, placed under the dominion of the Danes, but were, in 1666, defeated at the battle of Hastings by William the Conqueror Duke of Normandy.

All the English Sovereigns since the Conquest detive their descent from William the Norman.

Ireland was subdued in the time of Henry II., and

Wales was conquered by Edward I., in 1284.

# SCOTLAND. .

Scotland is 300 miles in its greatest length and 150 in its greatest breadth. The population is three millions.

It is divided into 33 counties :-

#### COUNTIES.

Caithness

#### CHIEF TOWNS.

Sutherland	Dornoch
Ross	Tain
Cromarty	Cromarty
Inverness	Inverness
Nairne	Nairne
Elgin or Murray Banff	Elgin
Banff	Banff
Abordoon	Abordoon or

Aberdeen and Peterhead Aberdeen

Wick

Kincardine Kincardine

Angus or Forfar Forfar, Montrose, and Dundee

Perth and Dumblane Perth

Argyle Inverary Dumbarton Dumbarton

Stirling, Bannockburn, and Carroti Stirling

Clackmannan Clackmannan Kinross Kinross St. Andrew's Fife Linlithgow Linlithgow

#### COUNTIES.

#### CHIEF TOWNS.

Bute Rothsay

Renfrew Renfrees, Greenock, and Paisley

Ayr and Kilmarnock

Lanark Lanark, Glasgow, and Hamilton Edinburgh Edinburgh, Leith, & Musselburgh

Haddington Haddington and Dunbar

Peebles Peebles

Selkirk Selkirk and Ettrick
Roxburgh Jedburgh and Kelso
Berwick Greenlaw and Coldstream

Wigton Wigton

Kirkcudbright . Kirkcudbright
Dumfries Dumfries and Gretna Green.

The isles of Orkney form one county, the chief town being Kirkwall. To the north of the Orkneys are the Shetland Isles.

Edinburgh is the capital of Scotland, and is in lat. 56° N. and long. 3° W., with a population of 150,000; but Glasgow is the largest town.

Glasgow and Paisley have large manufactories of cotton, linen, and silk goods. Carron has the greatest iron works in the world.

Four towns have Universities,-Edinburgh, Glas-

gow, Aberdeen, and St. Andrew's.

The principal rivers of Scotland are, the Clyde by Glasgow, the Forth by Stirling, the Tay in Perth, the Sprey in Inverness, and the Dee in Aberdeen.

The most considerable lakes are Loch Lomond and Loch Tay in Perth, Loch Ness in Inverness, and Loch Awe in Argyle.

The chief mountains are Ben Nevis 4,400 feet high,

about the same as our Mount Wellington, Ben Lomond 3,200 feet, and the Grampian Hills.

Scotland has many islands off the western coast, forming the Hebrides or Western Isles; the principal of which are Lewis, Skye, Iona, Staffa, Mull, and Arran.

Scotland is colder, more barren, and more mountainous than England, but yet through the industry and talent of the people is rendered productive.

The religion of the Scotch is that of the Presbyterian Protestant. The ministers in the Scotch church are all equal, there being no bishops among them.

In olden times the English and Scotch were continually at war. On the death of Queen Elizabeth in 1603, James VI. then king of Scotland, son of Mary Queen of Scots, became by right of relationship to Elizabeth, the king of England under the name of James I.

In 1707 in the reign of Queen Anne, the two countries were united under one law and parliament. They are together called Great Britain.

# IRELAND.

Ireland is rather larger than Scotland, and contains nine millions of inhabitants.

It is divided into four provinces; Ulster on the north, Munster on the south, Leinster in the east, and Connaught in the west. It is divided into thirty-two counties.

The counties of Ulster are, Cavan, Down, Armagh,

Monaghan, Fermanagh, Donegal, Londonderry, An-

trim, and Tyrone.

Those of Leinster are, Dublin, Longford, Westmeath, Louth, King's County, Queen's County, Meath. Kildare, Wicklow, Carlow, Kilkenny, and Wexford.

Those of Munster are, Tipperary, Waterford, Cork,

Limerick, Kerry, and Clare.

Those of Connaught are, Galway, Leitrim, Mayo,

Sligo, and Roscommon.

The chief towns of Ulster are, Londonderry, Belfast, Antrim, and Armagh; those of Munster are, Cork, Waterford, Limerick, Tralee, Tipperary, and Clonmel.

The chief towns of Leinster are, Dublin, Kingstown, Wicklow, Kilkenny, Wexford, Kildare, and Maynooth; those of Connaught are Galway, Roscommon, Tuam, and Sligo.

Dublin, the capital, the second city in the British empire, and the seat of a University, is in lat. 53° N., and long. 6 °W., and contains nearly 300,000 inhabitants.

Dublin, Cork, Waterford, Wexford, and Belfast are great trading towns. Much linen is exported from

Belfast.

The principal rivers are the Liffey running by Dublin, the Shannon, 200 miles long, flowing through Connaught and Munster, the Blackwater in Munster, the Boyne above the Liffey, the Ban in Ulster, and the Barrow flowing through Leinster into the Waterford Harbour.

The largest lakes are Lough Neagh (25 miles long) and Lough Erne in Ulster, Lough Corrie in Connaught, Lough Derg and the Lakes of Killarney in Munster.

Ireland is a hilly country. The Reeks in Munster,

3,400 feet high, are the loftiest hills. There are also the Croughpatrick in Connaught, and the Wicklow in Leinster.

The Giant's Causeway, consisting of a vast number of basaltic columns, is in the county of Antrim in Ulster.

The great majority of the people of Ireland are Roman Catholics, but the established religion by law, to the support of which the people pay tithes, is the

Protestant English Church.

The Established Church in Ireland is governed by two Archbishops and 20 Bishops. The Irish Roman Catholics are under the pastoral charge of four Archbishops and 22 Bishops, who with their clergy are dependent upon their flocks for support.

The Irish as well as the Ancient Britons derive their origin from the Celtic race, and are most pro-

bably descended from the Phœnicians.

Ireland was conquered by the English in 1172, in the reign of Henry II., to whom the country was given by the Pope; before that time it was governed by five kings, who were always at war with each other, and oppressing their subjects.

Many English gentlemen settled in Ireland in the reign of Queen Elizabeth, having land granted to them. The last of Ireland chiefly settled by the English was

called the English Pale.

Ireland was united to England in 1801, having the right of sending a certain number of representatives to the British Parliament; before that period it had a powerless parliament of its own.

The education of the country is now undertaken by the British Government in a national system of in-

struction.

The soil of Ireland is very fertile, and its natural

resources great; but a long continued course of bad government, together with the national improvidence of the Irish people, have made this fine country little better than a land of beggars.

Father Mathew has now, however, set his countrymen on the road to real prosperity and happiness, by the establishment of Temperance Societies in all parts

of the country.

# FRANCE.

After a sail of 20 miles across the British Channel from Dover, in Kent, we enter the important country of France.

France is 550 miles long and 500 broad. Its

population is about 35,000,000.

It formerly was divided into 32 provinces; but since the revolution of 1792 it has been divided into 86 departments, 21 military divisions, 368 arrondissements, and these again into cantons, and the cantons into communes or parishes.

The principal of the provinces were, Normandy and Britany in the north, Champagne and Burgundy in the east, Anjou, Guienne, and Gascony in the west, Berri and Auvergne in the middle, and Languedoc,

Dauphiné, and Province in the south.

Paris, the beautiful capital of France, is in lat. 49° N. and long. 2° W., with a population of

950,000 people.

The other principal towns are, Lyons, Rouen, Rheims, Amiens, Strasbourg, Orleans, Toulouse, Avignon, Poictiers, Cressy, Agincourt, and the sea ports of Toulon, Marseilles, Brest, Bordeaux, Havre, Rochelle, Boulogne, and Calais.

The chief rivers are, the Seine flowing through Paris and Rouen into the English Channel, the Rhine separating France from Germany, the Rhone flowing from Lake Geneva by Lyons and Avignon into the Mediterranean, the Garonne through Toulouse and Bordeaux into the Bay of Biscay, and the Loire by Orleans and Blois into the Bay of Biscay.

France is not generally mountainous. The Alps and Jura mountains separate it from Italy and Switzerland; the Cevennes are in the south, and in Auvergne are several extinct volcanoes. The Pyre-

nees divide France from Spain.

The island of Corsica, in which Buonaparte was born, belongs to France. Its chief towns are Bastia and Ajaccio.

Wine, lace, silk, and fancy goods are the chief ex-

ports of France.

If England be the first country in the world, France is decidedly the next in rank.

The French are an ingenious, a polite, and an ex-

citable people.

All religions are tolerated in this country. Both Roman Catholic and Protestant ministers are paid by the government. There are only 5,000,000 of Protestants, although at one time there were many more; but persecution, particularly the massacre on St. Bartholomew's day in 1572, has reduced their number.

The French government is now taking great interest

in schools.

France has but few colonies and foreign possessions.

The government is that of a limited monarchy, assisted by two Chambers or Councils;—the one a Chamber of Peers; and the other a Chamber of Depu-

ties, chosen by the people, like the English House of Commons.

France has seen two great revolutions; one in 1788, when it became a Republic and the king, Louis XVI., was beheaded; and another in 1830, which placed Louis Philippe on the throne.

Napoleon was made Emperor of France in 1804,

and reigned 10 years.

France has a standing army of 400,000 men, but

its navy is not so powerful as that of England.

It is of great importance to the welfare of the world at large that the English and French continue friends.

# SPAIN.

. Crossing the Pyrenees mountains to the south of France we enter Spain.

Spain is about 500 miles long and 500 broad, with

a population of 14,000,000.

Its 14 provinces and their chief towns are as follows:—

#### PROVINCES.

#### TOWNS.

### On the North.

Galicia St. Jago and Corunna
Asturias Oviedo
Biscay Bilboa and Vittoria

Navarre Pampeluna Aragon Saragossa Catalonia Barcelona. PROVINCES.

TOWNS.

In the Middle.

Leon Old Castile New Castile Leon and Salamanca Burgos and Valladolid Madrid and Toledo.

Estremadura Valencia Badajos Valencia and Alicant.

In the South.

Andalusia. Seville, Cadiz, Cordova, and Gibraltar Granada. Granada, Malaga, and Almeira

Granada. Murcia.

Murcia and Carthagena.

Part of the north of Spain is called the Basque Provinces, the people of which are descended from the original Celtic settlers.

Madrid, the capital, is in the centre of Spain, in lat. 40° N. and long. 4° W., containing 250,000

people.

Cadiz is the chief port. Leon was the capital of the first Christian kingdom of Spain. Seville, under the Moors, had 600,000 inhabitants.

Gibraltar was taken from the Spaniards by the English in 1704. This very strong fortress is separated from the continent of Africa by a Strait of 14 miles wide.

The chief rivers are, the Tagus flowing through New Castile into the Atlantic, the Ebro flows into the Mediterranean, the Douro into the Atlantic, the Guadiana to the south of the Tagus, the Guadalquiver through Seville into the Atlantic, the Xenil, on which Granada stands, and the Manzanares, a small branch of the

Tagus, on which Madrid stands.

Spain is a very mountainous country. The most considerable mountains are, the Pyrenees which divide it from France, the range Sierra Morena in Andalusia, Sierra de Toledo, Sierra Nevada in Granada, and Montserrat near Barcelona.

The religion of Spain is the Roman Catholic.

The government is now a limited monarchy,

assisted by the Cortes, an elected assembly.

Spain is a very fruitful country, and would be wealthy and happy but for the ignorance, indolence, and bad government of the people.

Its exports are few-consisting of wine, wool, and

fruits.

This country has been in turns under the power of the Gauls, Carthaginians, Romans, Goths, and Moors.

Spain was conquered in 713 by the Moors or Saracens, a people originally from Arabia. Though Mahometans, they allowed full religious freedom to others. Spain was never so prosperous, so populous, so well cultivated, so adorned in cities, and so honoured by its schools as under the Moors.

Ferdinand King of Castile and Aragon succeeded after many years in conquering them. Their last town Granada was taken in 1492. After a short time these industrious people were obliged by persecution to leave Spain altogether.

Christopher Columbus, a Genoese, took possession of America in the name of Ferdinand in 1492, and immense wealth flowed into Spain by the American

conquests.

Now Spain has lost almost all its foreign posses-

sions, and is, through idleness and civil wars, miserable indeed. It once contained four times the number of its present inhabitants.

## PORTUGAL.

Portugal joins Spain on the western side; the two countries together form a Peninsula.

Portugal is 350 miles long and 100 broad, containing

4,000,000 of inhabitants.

The chief towns are Lisbon the capital, with a population of 250,000 people, Oporto famous for wine, and Coimbra.

Lisbon was destroyed by an earthquake in 1755.

The river Minho divides Spain from Portugal on the north, and the Douro flows by Oporto.

The climate of Portugal is delightful. Its exports

are wine and fruits.

The religion is the Roman Catholic, and the government a monarchy.

The Portuguese are very ignorant. They are more lively but less honest than their Spanish neighbours.

Three hundred years ago they were the greatest discoverers and traders in the world.

#### EUROPE.

Its greatest length is 3,400 miles and greatest breadth 2,400. It contains 3,000,000 square miles, and a population of 250,000,000.

COUNTRIES.

TOWNS.

Turkey in Europe. Constantinople near the Bosphorus.
Athens.

COUNTRIES.

TOWNS.

Italy

Rome on the Tiber

Switzerland

Rerne

Bavaria

Munich on the Iser

Wurtemberg

Stutgard

Baden

Saxony

Carlsruhe near the Rhine

Hanover

Dresden Hanover

Prussia Austria Berlin on the Spree Vienna on the Danube Petersburg on the Neva

Russia Sweden'

Stockholm on seven islands

Norway Denmark Christiana

Holland

Copenhagen on the Isle of Zealand Amsterdam beside the Zuider Zee

Belgium

Brussels

England

London on the Thames

Scotland Edinburgh on the Frith of Forth Ireland Dublin on the Liffey

France

Paris on the Seine Spain

Portugal

Madrid on the Manzanares Lisbon on the Tagus

Seas, Gulf, Bays, and Straits of Europe.

White Sea to the north of Russia.

North Sea or German Ocean between Britain and Norway.

The Skaggerack, a strait between Norway and Denmark.

The Categatt, a strait between Sweden and Denmark. Baltic Sea between Russia and Sweden.

Seas, Gulf, Bays, and Straits of Europe.

Gulf of Bothnia, the continuation of the Baltic Sea. English Channel between England and France.

Straits of Dover between the North Sea and the English Channel.

Irish Sea and St. George's Channel between England

Bay of Biscay on the west side of France.

Atlantic Ocean bounding Europe to the west, and being 5,000 miles in width.

Mediterranean Sea, 3,000 miles long, bounding Europe to the south.

Straits of Gibraltar between the Atlantic and the Mediterranean.

Straits of Bonifacio between Corsica and Sardinia. Straits of Messina between Sicily and Italy.

Adriatic Sea or Gulf of Venice between Italy and

Turkey.

The Levant or eastern part of the Mediterranean.

Sea of the Archipelago or Ægean Sea to the east of

Greece.

Black Sea to the south of Russia.

Sea of Marmora between the Archipelago and the Black Sea.

The Dardanelles or Strait of Galipoli, anciently the Hellespont, joins the Archipelago with the Sea of Marmora.

Sea of Constantinople, anciently the Bosphorus, between the Sea of Marmora and the Black Sea.

Sea of Azof flowing into the Black Sea.

## Islands belonging to Europe.

Spitzbergen to the north of Russia in lat. 80° N. Nova Zembla to the north of Russia. Iceland between Scotland and Greenland. Shetland Isles between Scotland and Norway. Faroe Isles between Iceland and the Shetland Isles. Orkney Isles to the north of Scotland. Hebrides or Western Isles to the west of Scotland. Isle of Man between England, Scotland, and Ireland. Zealand and Funen beside Denmark.

Gothland beside Sweden.

Guernsey, Jersey, and Alderney between England and France.

The Balearic Isles of Majorca, Minorca, and Ivica, off the eastern coast of Spain.

Corsica between Italy and Spain. Sardinia to the south of Corsica. Elba between Corsica and Italy. Sicily to the south of Italy. Malta and Goza to the south of Sicily. Ionian Isles off the western coast of Greece. Eubea the largest island of the Archipelago. Candia, formerly Crete, to the south of the Archipelago.

## AFRICA.

# NORTHERN AFRICA.

### THE BARBARY STATES.

Crossing over the Straits of Gibraltar, we shall find ourselves on the continent of Africa, near to the town of Tangiers, which was recently taken by the French.

The Barbary States consist of the northern part of Africa, as far as Egypt; and include Morocco, Algiers, Tunis, Tripoli, and Barca.

This part of Africa was anciently known under the names of Mauritiana, Africa Proper, Numidia, &c.

At that time those countries were highly civilized, possessed flourishing cities, and contained ten times the number of inhabitants which are now found there. Under Mahometan misrule they exhibit the features of semi-barbarians.

The Saracens or Moors conquered what is now called the Barbary States about 1,100 years ago. The inhabitants were at that period Christians.

All the States have been noted for piracy during some centuries, making slaves of the Christian captives.

#### MOROCCO.

This country is opposite to Spain, and is 500 miles long and 200 broad, with a population of 14,000,000.

The chief towns are Morocco the capital with 250,000 inhabitants, Fez, and the ports of Tangiers, Salee, and Mogador.

Mount Atlas is in Morocco.

The government is a cruel despotic monarchy. The Jews are badly treated here by the bigoted Mahometans.

Although the country is intensely hot it is very fruitful.

Beside the Moors, there are dwelling in the country the Bedouin Arabs, a wandering people—the negroes, as slaves,—and the wild Berbers living among the mountains, who are the descendants of the original inhabitants.

The name of Barbary is derived from the Berbers.

### ALGIERS.

Algiers to the east of Morocco is about 500 miles long, and has 6,000,000 of people. The Mediterranean Sea bounds it on the north.

The chief towns are Algiers, Bona, Constantine,

and Oran. Algiers is very strongly fortified.

The Algerines have been cruel enemies of the Christians. The English punished these pirates in 1816, but the French have now entirely conquered the whole country.

Algiers was formerly governed by an absolute prince

called the Dev.

To the south of Algiers lies Beled el Jerid, or the Date Country.

#### TUNIS.

Tunis to the east of Algiers is 150 miles in extent, with a population of 3,000,000.

The chief town is Tunis; near which are the ruins of Carthage, a colony from Tyre, and once the rival of Rome.

Tunis is better governed than the other Barbary States, and there is there more toleration towards Jews and Christians.

The Tunisians are a superior people in mind and body.

#### TRIPOLI.

Tripoli extends 800 miles along the coast. It is the weakest of the Barbary States, and is most miserably governed by a Dey.

Tripoli, a pirate port, is the chief town.

#### LYDIA OR BARCA.

Barca between Tripoli and Egypt is called by its Arab inhabitants the "Desert of Whirlwinds."

Though once a populous and fertile country it is

now barren and thinly peopled.

The Turkish Emperor assumes a power over these Mahometan Barbary States which is little felt now. When under the Roman dominion they were called "The Garden of the World."





Egypt is bounded on the north by the Mediterranean, on the west by Lydia, and on the east by the Arabian Deserts.

It is 500 miles long and 100 broad, containing a population of 4,000,000.

The part near the sea is called Lower Egypt; the

southern part is Upper Egypt.

The principal towns are, Cairo the capital in lat. 30° N. and long. 32° E., Alexandria the trading port, Rosetta, Damietta, and Suez.

The sandy isthmus of Suez, which connects Asia with Africa, and divides the Mediterranean from the Red Sea, is about 50 miles across.

The town of Suez is to the north of the Red Sea; near the site of this town the Israelites crossed over.

In the Bay of Aboukir near Alexandria, Lord Nelson gained his Battle of the Nile over the French fleet.

The river Nile runs through Egypt from north to south, and is nearly 3,000 miles long: it rises from among the mountains of Abyssinia.

Egypt is a flat country, uncommonly hot, and very fruitful where it is watered by the overflowing of the

Nile.

Under Mehemet Ali Egypt is now making rapid progress in civilization, though the poor Fellahs or peasants suffer much at present. While there is much ambition in Mehemet Ali, it is evident that he greatly exerts himself to improve the condition of his people.

The Egyptians are either Arabs, Turks, or Copts. The Copts, said to be descendants of the aucient

Egyptians, profess a kind of Christian religion.

Egypt has been under foreigners for 2,500 years, having in turns the Babylonians, the Persians, the Romans, the Saracens, and the Turks for its masters.

Under the ancient Pharaohs it was the most pros-

perous and learned country in the world.

The pyramids and ruins of their temples show us that the Egyptians were a great people. They had in use a sort of picture writing, called hieroglyphics, to which Dr. Young and others have found an explanation.

Ancient Egypt was divided into three portions, the Delta near the sea, Heptanomis in the middle, and the Thebaid in the south.

Memphis was the capital of Lower Egypt, and Thebes with its hundred gates the capital of Upper

Egypt.

Ruins of celebrated towns are found at Rameses, Pelusium, Arsinoe near the artificial lake Mœris, Denderah, Esne, Edfon, Heliopolis, and Syene.

The arts and sciences were much cultivated by the

Egyptians.

Their religion was idolatry of a debased kind: the people worshipping cats, mice, serpents, crocodiles, flowers, &c. The priests, their teachers, were, however, acquainted with the doctrine of the Unity of God, that of the Immortality of the Soul, and of the Last Judgment.

### EASTERN AFRICA.

After leaving Egypt we proceed southward to Nubia, the ancient Ethiopia, most of which is a desert.

The fertile parts form the kingdoms of Dongola and Sennaar, whose capitals bear the same name.

The inhabitants are semi-barbarians, but yet maintain a considerable trade with Egypt and the interior of Africa in gold dust, elephants' teeth, slaves, &c. Their religion is the Mahometan.

At a very ancient date Nubia was a powerful and

civilized state.

The present Pasha of Egypt claims a rule over Nubia.

To the west of Sennaar is the Mahometan kingdom of Darfur.

Passing through Nubia we approach the Christian kingdom of Abyssinia, from the mountains of which the river Nile rises.

The capital is Gondar. The language spoken is a

dialect of Arabic.

The country has been for a long time in a state of anarchy.

The small kingdom of Adel lies south of Abyssinia. Its chief town is Zeila. It is peopled by some Arab tribes.

The fertile island of Socotra is between Adel and Arabia.

Proceeding along the eastern coast we pass through several barbarous countries about which little is known; as, Zanguebar, Mozambique, Sofala, Mocaranga, and Natal. The inhabitants are mostly Pagans.

The Portuguese have a few settlements at Sofala, and Mozambique, from which are procured gold, ivory,

and slaves.

Almost all the eastern coast is now under the authority of the Iman of Muscat.

Lying off the coast of Mozambique lies the large and beautiful island of Madagascar.

It is 1000 miles long and 250 broad, with a popu-

lation of 2 millions

The inhabitants are negroes and Malagashes; the latter are of Arab descent, and are intelligent and handsome. They grow rice, sugar, and corn plentifully, and have made considerable advances in civilization.

The Queen of Madagascar is a great enemy to Christianity and to Europeans. Most of the people are Pagans, others are Mahometans, and some few nobleminded fugitive ones are Christians.

Between Madagascar and the main land are the Cormoro Isles, at which East Indian vessels some-

times call.

At Natal, the southern part of the eastern coast of Africa, are some prosperous Dutch settlements, which are now a part of the British empire, being under the rule of the Governor of Cape Colony.

## THE MAURITIUS OR ISLE OF FRANCE.

To the east of Madagascar are the productive islands of Bourbon and the Mauritius.

Bourbon is in the hands of the French.

The Mauritius is an island 40 miles long and 24

broad, in lat. 21° S. and long. 57° E. It is rather mountainous.

The Dutch settled it in 1598, naming it Mauritius

after their Prince Maurice.

After abandoning the island, they were succeeded by French settlers in 1721, who came from the neighbouring islands of Bourbon and called it the Isle of France.

The English conquered it in 1810. The chief town

is Port Louis.

The population consists of 100,000 Africans, 25,000 East Indian coolies, and 15,000 white people.

The exports of this delightful little island are sugar.

cotton, spices, coffee, and indigo.

The fruitful and numerous Seychelles cluster of islands in lat. 5° S. long. 55° E., have belonged to the English since 1810, being taken from the French. The chief settlement is Mahé.

## SOUTHERN AFRICA.

### CAPE COLONY.

The most southern point of Africa is the Cape of

Good Hope in lat. 34° S. and long. 18° E.

This land was first discovered by Bartholomew Diaz, a Portuguese, in 1487. It was so called from the hope entertained of finding by that way a passage to India; travellers at that period going to India by means of the Mediterranean and the Red Sea.

Vasco de Gama sailed round the Cape to India in

1497.

The English took possession of the country in 1620 in the name of James I., but made no settlement upon it.

The Dutch were the first colonists in 1651. The

English have held dominion there since 1806.

Cape Colony extends from east to west in the widest part 600 miles, and from north to south 300 miles. The population consists of 70,000 white people, 75,000

aborigines and negroes, and 5,000 Malays.

The aborigines are Hottentots; an indolent but good-humoured people. Up to the period when slavery was no longer permitted in the English colonies, there were 35,000 slaves in British South Africa; this year of freedom was 1840.

The Boors or Dutch settlers are very fond of ease

and smoking.

The Cape government shows great interest in the instruction of the people; and the present excellent Governor, Sir Peregrine Maitland, seeks the real

welfare of all under his control.

The people called the Griqua, a mixture of Dutch and Hottentots, have a very flourishing town called Griqua Town, containing 20,000 inhabitants; they are a well educated and religious people.

The Bosjemen or Wild Hottentots are the most wretched-looking, ferocious, and ill-treated of creatures,

and are always at war with the Dutch settlers.

The chief towns of Cape Colony are, Cape Town the capital, George Town, Graham Town, and Bathurst; the two latter are near Algoa Bay. The Orange River runs along the north of the colony into the Atlantic Ocean, and the Great Fish River runs to the east.

Several considerable mountains are found in the country; as, Table Mountain, behind Cape Town, the Sugar Loaf, &c.

The Lion, Elephant, Giraffe, Hippopotamus, and Ostrich are to be met with in the more unfrequented parts.

The soil of the country is in many parts very fertile;

there are, however, extensive sandy plains.

People in the interior travel in waggons drawn by oxen.

The climate of the Cape is mild and pleasant, but

it is warmer than that of Tasmania.

Employment is easily obtained, and provisions are cheap. Considerable quantities of wine are exported from the Cape.

The Cape of Good Hope is about 7000 miles west

of Tasmania.

#### CAFFRARIA.

To the north of Cape Colony is the land of the Caffres or Caffraria.

The Caffres are a fine race of men, superior in intelligence, courage, and personal appearance to the neighbouring tribes. They are supposed to be descended from the Arabs.

There are above 100,000 of them. Most of them have been converted to Christianity by the labours of

Missionaries.

The Bichuanas are a very noble, happy, and enlightened people, whose chiefs exhibit a conduct

toward their subjects worthy the imitation of even European monarchs.

Their country, which is well cultivated, has been

for some time blest with the news of salvation.

Their chief town Lattakoo, 600 miles north-east of Cape Town, being in lat. 27° S. and long. 25° E., contains 12,000 inhabitants.

# WESTERN AFRICA.

Ascending along the western coast from the Cape of Good Hope, we should find the countries of Benguela, Angola, and Congo, over which the Portuguese have some influence.

Many slaves are brought from this part of Africa and carried over to America. The natives are jet black. The chief towns are Benguela and St. Salvador.

#### ST. HELENA.

In the Atlantic Ocean, 1,200 miles from the coast of Benguela, and 2000 miles from the opposite coast of America, is the rocky island of St. Helena.

This strongly fortified and important island is in lat. 16° S. and long. 6° W., and is 30 miles in circumference. The East India vessels call there.

It was discovered by the Portuguese in 1502, settled by the Dutch in 1645, abandoned by them in 1651, and taken possession of by the English in the same year.

James Town is the capital. The country is fertile

and well cultivated; sugar, cotton, and tobacco are grown.

Napoleon Buonaparte was sent to this island upon his surrender to the English in 1815, and died there in 1821.

About 600 miles to the north-west of St. Helena is the small island of Ascension, also belonging to the English, which is rocky and well fortified.

The kingdom of Loango is north of Congo. The capital is Bosali. The inhabitants are a simple-hearted hospitable people.

The country is fertile, and well cultivated. Sugar,

tobacco, and cotton are produced in abundance.

The extensive kingdom of Benin is to the north of Loango near the Equator. The capital is Benin. The inhabitants are numerous, and partly civilized.

Below Benin is the large Bay of Biafra; in it is the island of Fernando Po. Not far from the bay are the

lofty Cameroon mountains.

Dahomey is a large country to the west of Benin by the Gulf of Guinea; the people of which are very barbarous. Its capital is Abhomey.

The powerful kingdom of Ashantee extends west-

ward of Dahomey. Its capital is Coomassie.

The inhabitants have been long celebrated for their superiority over their neighbours in mind and arms, being great conquerers.

Until of late they were very barbarous and cruel; now by the influence of Christianity a great and pleasing change has taken place.

There is a singular similarity between the manners

D 4

and customs of the Ashantees and that of the ancient Egyptians.

#### THE GUINEA COAST.

Westward of Ashantee lie those parts of Guinea called the Gold, Ivory, and Grain Coasts, north of the Gulf of Guinea. The inhabitants are warlike.

This part of Africa, and all the coast northward to Morocco is considered very unhealthy to Europeans.

A people called the Foulahs inhabit the country

above the Guinea coasts.

The Gold Coast belongs to the English. Gold, ivory, and palm oil are obtained here. The chief town

is Cape Coast Castle.

At the south-west corner of the Guinea Coast is the free settlement of Liberia, to which many emancipated negro slaves from America are sent, and where also are landed the poor creatures taken from the slave ships when captured by the British ships of war.

Monrovia and Sanguin are towns of Liberia.

### SIERRA LEONE.

Northward from Liberia lies the British settlement of Sierra Leone. This settlement was made in 1787.

The chief towns are, Freetown and Bathurst. There are about 300 white people to 50,000 negroes in the colony.

The Moors in the inland country are an intelligent race; and though living among the negroes for a

thousand years are still as distinct a people in their features and manners as ever.

The British trade in slaves was abolished in 1807. The Spaniards and some others still carry on this wicked traffic in vessels called slavers.

English ships of war are stationed about the western coast of Africa to capture these slavers.

Northward from Sierra Leone is the extensive country of Senegambia; so called from being watered by the rivers Senegal and Gambia.

This is divided into a number of native kingdoms, which are inhabited by the Foulahs, Mandingoes, and

Yaloffs.

The river Senegal is 1,000 miles long. Both it and the Gambia rise from the Kong Mountains.

The English have a settlement on the Gambia named Bathurst.

# Islands off the Western Coast.

Cape Verde is a cape of Senegambia in lat. 12° N. Near this cape are the Cape Verde Islands; the chief of which are, St. Jago, Brava, St. Anthony, and Bonavista. They belong to the Portuguese. Ships often call at these islands on their way to India, Cape Colony, and the Australian colonies.

Many piratical schooners lurk about these islands. Nearly 1,000 miles northward of the Cape Verde Isles are the Canary or Fortunate Islands, belonging

to the Spaniards.

**D** 5

Teneriffe, with its peak 12,000 feet in height, is the chief island. Santa Cruz is the principal town.

The soil is productive, and the climate pleasant.

The aborigines of the Canaries were an intelligent and a handsome people, called the Guanches. They were industrious, courageous, polite, and amiable; but they all perished in their noble struggle against the cruel Spaniards.

The Madeira Isles are a little above the Canaries. The largest, Madeira, in lat. 32° N. and long. 18° W., is a beautiful and healthy island, producing abundance

of grapes.

Though under the government of the Portuguese, the English inhabitants are many in number. The

chief town is Funchal.

The Azores or Western Islands, claimed by the Portuguese, are northward of the Madeira Isles, being nearly opposite Portugal.

The chief island is St. Michael, famous for oranges.

## CENTRAL AFRICA.

Very little is known of Central Africa, because the savage character of the natives and the great heat of the climate make travelling dangerous.

Mungo Park, Clapperton, Denham, and the two Landers have been the greatest travellers through that

region.

The Mahometan rulers of the different countries in the interior think it right to take for slaves all the Pagans living around them.

The chief trade of Central Africa is in slaves, ivory,

and gold-dust. The people seem to live more by robbing than by any other means.

An immense desert, called Sahara, reaches almost from Guinea to the Barbary States; a space of more than 2,000 miles in length and 1,000 in breadth.

There are, however, oases or fertile spots in it, especially on the borders, upon which kingdoms have been established.

Bornou is one of these states, and is 200 miles long. It lies to the west of Lake Tchad, which is 200 miles in length. The islands in this lake are inhabited by many pirates. Lake Tchad is in about lat. 13° N. and long. 15° E.

The Mahometan Sultan of the ugly, but good-hu-

moured people of Bornou, is absolute.

To the south of Lake Tchad is Loggan, the females of which are the most handsome of the negro race, but are great thieves.

The Bergami, near to Loggan, are excellent lancers,

and wear plate armour.

Houssa is a large oasis to the west of Bornou.

The warlike Fellatahs, originally emigrants from Arabia, reside about Houssa. Their capital, Sackatoo, in lat. 13°N. and long. 6° E., is the largest city in Central Africa, having 90,000 inhabitants.

The city of Timbuctoo, on the edge of the Great Desert, in lat. 17° N. and long. 1° W., stands near the great river Niger or Quorra, which is called the

Joliba as far as Timbuctoo.

This river rises from among the Kong mountains, near the Grain Coast, and after flowing near Sackatoo and Boussa for 2,400 miles, falls into the sea by Benin.

The Tuaricks, the scourge of their neighbours, are

a superior race to the negroes, paying respect to their wives and engaging in extensive commerce.

All Central Africa about the Niger and Lake Tchad

is called Soudan, or Nigritia.

The large oasis of Fezzan, to the south of Tripoli, is 300 miles long, and is governed by a Mahometan Sultan.

Its capital is Mourzouk, a place of great trade be-

tween Egypt and the Barbary States.

Darfur, to the west of Sennaar, governed by a Sultan, is a place of great traffic in slaves. The capital is Cobbé.

The Mountains of the Moon are supposed to run the whole way across Africa from Benin to Abyssinia.

### AFRICA.

	COUNTRIES.	TOWNS.
Africa.	Morocco and Fez. Algiers.	Morocco. Algiers.
Northern Africa.	Tunis. Tripoli. Lybia or Barca.	Tunis. Tripoli. Derna.
	Egypt.	Cairo.
oast.	Nubia. Abyssinia.	Sennaar. Gondar.
Eastern Coast.	Adel. Mozambique. Sofala.	Zeila. Mozambique. Sofala.
East	Mocaranga. Natal.	botala.

	COUNTRIES.	TOWNS.
Cape Colony. Caffraria. Bichuana country.		Cape Town.
So	Bichuana country.	Lattakoo.
	Benguela.	Benguela.
Western Coast.	Congo	St. Salvador.
	Loango.	Bosali.
	Benin.	Benin.
	Dahomey.	Abhomey.
	Ashantee.	Coomassie.
	Guinea Coast.	Cape Coast Castle.
	Sierra Leone.	Freetown.
	Senegambia.	Bathurst.
	(Sahara, or the G	reat Desert.
	Bornon, chief to	vn Kouka.
	Bornon, chief too Houssa, ditto Fezzan, ditto	
	Fezzan, ditto	Mourzouk.

## Islands belonging to Africa.

ditto Cobbé.

Azores, or Western Isles, to the north-west of Africa. Madeira, to the south of the Azores. Canary Isles, to the west of Morocco. Cape Verde Islands, to the south of the Canaries. Fernando-Po, Prince's Isle, and St. Thomas's Isle in the Gulf of Guinea.

Ascension Isle, a little south of the Equator.
St. Helena, in the South Atlantic Ocean.
Tristan da Cunha, to the south-west of the Cape of Good Hope.

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## Islands belonging to Africa.

St. Paul's and Amsterdam Islands, in the Indian Ocean, about half way between the Cape of Good Hope and Tasmania.

Madagascar, to the east of Africa.

Comoro Isles, between Madagascar and the coast of

Isle of Bourbon, to the east of Madagascar.

The Mauritius, or Isle of France, to the east of Madagascar.

Socotra, between Adel and Nubia.

Seychelles, between Socotra and the Mauritius.

# AMERICA.

Gladly leaving the deserts of Africa and their barbarous inhabitants, we will cross the Straits of Gib-

raltar from Tangier in Morocco.

Calling at Cadiz, in Spain, we now take a voyage across the Atlantic Ocean, in the course taken by Christopher Columbus, when he attempted to find a new way of getting to the East Indies.

This great Genoese, in the pay of Isabella of Castile, set sail in the year 1492; but instead of finding the East Indies, he met with a cluster of islands on the

14th of October, which he named-

### THE WEST INDIES.

These islands lie between North and South America, and are a little to the north of the Equator. They extend over a space of 1800 miles in length by 1200 in breadth.

The island first discovered by Columbus was named St. Salvador, but afterwards Cat Island. It is one of a large cluster of small islands, called the Bahamas, all of which belong to the English; there are nearly 500 of them.

Cuba is the largest of the West Indian islands, being 700 miles long and 60 broad. It belongs to Spain. The population is 800,000, half of them are slaves, who are treated there with great cruelty.

Cuba exports sugar, coffee, and tobacco. Its capital

is Havannah.

St. Domingo, Hispaniola or Hayti, is next in size to Cuba, being 400 miles in length and 120 in breadth.

It is a very fertile island, and is rich in timber and mines.

Formerly it belonged partly to the French and

partly to the Spaniards.

The negro slaves rose up against their oppressive masters, drove out all the white people, and established

a flourishing Republic of their own.

This negro Republic consists of a million of inhabitants, who are rapidly advancing in knowledge and riches.

Port-au-Prince is the capital.

#### JAMAICA.

This very productive island is 150 miles long and 50 broad. It was taken from the Spaniards by the English Admiral Venn, in 1655.

The Chief Towns are, Spanish Town in lat. 17° N., and long. 77° W., Kingston, Port Royal, St.

Anne's, and Montego Bay.

The Blue Mountains run through the island, and a number of streams flow from them, rendering the soil very fertile.

The Guinea-grass and all kinds of tropical fruits

grow abundantly in Jamaica.

Like all the West Indian Islands, Jamaica is very much subject to earthquakes and hurricanes.

The number of inhabitants in the country is 400,000, only 40,000 of whom are white people, the rest being negroes.

The slaves in the British dominions obtained

their entire emancipation or liberty in 1840.

Since that time Jamaica has greatly prospered.

The exports are sugar, rum, coffee, and spices.

The island is ruled by a Governor, a Council of twelve, and an Assembly of forty-five persons. The British Parliament is over these, as is the case with all English colonies.

Many excellent Missionaries are engaged in the British West Indies, in giving religious instruction to

the negroes and others.

The island of Porto Rico, near Hayti, belongs to Spain.

The other West Indian Islands are divided into two classes:—The Windward and the Leeward Isles.

Of these, the French have Martinique and Guadaloupe; the Swedes have Bartholomew; the Dutch have St. Eustatius and St. Martin; and the Danes have three of the Virgin Islands,—St. Croix, St. Thomas, and St. John.

Besides Jamaica and the Bahamas, the English have the islands of Trinidad, Tobago, Grenada, Barbadoes, St. Vincent, St. Lucie, Dominica, Montserrat, Antigua, Barbuda, St. Christopher or St. Kitt's, and most

of the Virgin Isles.

These islands are productive of great quantities of sugar, cotton, rum, tobacco, spices, coffee, cocoa, and mahogany. Most of the West India Islands are very unhealthy for Europeans.

# NORTH AMERICA.

## UNITED STATES.

About 500 miles to the north of the island of Cuba across the Gulf of Mexico, we approach the busy seaport of New Orleans, in lat. 30° N., and long. 90° W.

This town is upon the mainland or Continent of North America, and in that part of it called the

country of the United States.

The United States extend from the Atlantic Ocean on the east to the Pacific Ocean on the west, a distance of 3000 miles; from New Orleans on the south to Lake Superior on the north. It is 1,300 miles in extent.

This extensive country was formerly thinly peopled by barbarous Indians; but now emigrants from Europe are rapidly spreading over it.

It was first colonised by a few English in the time

of Queen Elizabeth.

Many persecuted English Dissenters, or Puritans as they were called, fled for shelter from the unkindness of their countrymen to the woods of America; they had there to endure great privations.

In 1621 the first body of these refugees landed in the new country, and founded the city of Plymouth. Another party of them founded the city of Salem,

in 1628.

In 1632 Lord Baltimore, a Roman Catholic nobleman, obtained a grant of land from Charles I., and called his new settlement Maryland, after Maria, the wife of the King. In 1682 Pennsylvania was colonised by a number of persecuted Quakers or Friends, under the excellent and learned William Penn; who, though he had received from Charles II. a grant of land for services rendered to the country by his father, Admiral Penn, honourably paid the Indians of the territory for the land claimed by them.

This great man drew up an admirable code of

laws for the government of the settlement.

Gradually other provinces or states were formed by emigration, and each one was ruled by a Governor appointed by the British Sovereign.

After a while the American settlers were required to pay taxes, not only toward the support of their own Government, but of the Home Government also.

The colonists complained of this, inasmuch as they were not represented in the British Parliament, for according to English law, the taxed ought always to have a voice in the distribution of the taxes.

After much dispute the colonists of the different states formed a union, and declared their independence of Great Britain. This great event happened on July

4th, 1776.

After an unhappy war of nearly seven years, the English Government was induced to acknowledge in 1782 the independence of the States.

Thus free, the Americans formed themselves into a

Republic.

Every state is independent of the others, being governed by a Senate and a House of Representatives of its own. In most of the states all white men who have been in the country for a certain time, have the right of voting at the election of the Representatives.

In eight of the northern states free coloured men

have the same privilege.

The Union of the States is acknowledged in a sort of Council called the Congress, which consists of a Senate and a House of Representatives, with a President over these.

The members of the House of Representatives in Congress are chosen by the people. The legislature of each state elects two persons every six years towards the formation of the Senate.

A certain number of electors, appointed by the general body of voters, have a right of choosing the President. He has but little power and little pay, and is in office only four years.

The district of Columbia, ten miles square, containing the city of Washington, in which the Con-

gress meets, is declared an independent state.

At the time of the Revolution, in 1776, there were thirteen states, viz., New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, and Maryland in the north; and Virginia, North Carolina, South Carolina, and Georgia in the south. All these are bounded by the Atlantic Ocean.

Since that period the following states have been added, being newly formed colonies:—Maine and Vermont on the north; Alabama, Missisippi, and Louisiana on the south; Arkansas, Tennesse, Kentucky, and Missouri in the interior; and Ohio, Michigan, Indiana, and Illinois toward the lakes.

The three districts of Florida on the south, Wisconsin or North-west Territory beside Lake Superior, and Iowa to the west of Wisconsin, are not yet formed into states, though under the American

Government.

The fur trading settlement of Oregon, on the shores of the Pacific, near the Columbian or Oregon River, is claimed both by the English and by the Americans.

The chief town of the territory is Astoria, so called after an American merchant. It is now called Fort

George, and is in lat. 46° N.

Some of the northern states are known under the name of the New England States, and have much the same climate as England, excepting that their summers are hotter and winters colder than those of that country.

The climate of the southern states is much warmer; by reason of which sugar, cotton, tobacco, and rice can be produced in great quantities.

The United States are naturally divided into three portions. One of these, about 200 miles broad, is between the Atlantic Ocean and the Alleghany chain of mountains, and was settled the earliest. Another comprehends the vast valley of the Mississipi, between the Alleghany on the east, and the Stony Mountains on the west. The third, situated between the Stony Mountains and the Pacific Ocean, is called the Western Territory.

The fertile valley of the Mississipi, consisting of millions of square miles, is entered by many magnificent rivers, and has an inland navigation of 2,300 miles. Emigration is constantly setting in toward this part from the eastern states.

If the whole of the United States were peopled proportionably as well as England, they would contain

500 million of inhabitants.

The chief towns are, Washington upon the Potomac, New York on the Hudson, Boston in Mas-

sachusetts, Orleans at the mouth of the Mississipi, Philadelphia on the Delaware in Pennsylvania, Albany in New York, Baltimore in Maryland, and Charlestown in South Carolina.

Some of the other principal towns are, Indianopolis, Newhaven, New Bedford, Plymouth, Columbia,

Savannah, Cincinnati, Mobile, and Buffalo.

New York is, next to London, the greatest trading town in the world. It has a population of more than 300,000 inhabitants, and is situated in lat. 41° N.,

and long. 74° W.

The principal rivers are, the Mississipi and the Missouri. The Missouri rises among the Stony Mountains, and falls into the Mississipi after a course of 2,400 miles, and it is not until 2,200 miles more that the united streams reach the Gulf of Mexico. There are about 400 steamers trading upon the noble Mississipi.

In the States are other fine rivers, as the Ohio of 1000 miles length, the Arkansas 2000, the Tennesse, and the Illinois; all these fall into the Mississipi.

The rivers flowing into the Atlantic are not long, as they principally rise in the Alleghany Mountains. These eastern rivers are the Hudson, the Connecticut, the Susquehanna, the Potomac, and the Savannah.

The Alleghany mountains extend for 900 miles, at a distance varying from 100 to 300 miles from the Atlantic Ocean; the Rocky Mountains are far to the west, and run nearly parallel to the Pacific Ocean.

The chief islands belonging to the States are, Long Island and Staten Island near New York, and Nantucket, near Massachusetts, the chief seat of the Southern Whale Fishery.

The fruitful Bermudas or Somers' Island in the Atlantic are about 500 miles from the shores of the United States. They belong to the English, in lat. 32° N., and long. 65° W. St. George is the name of the chief island and settlement. Many of the islands are mere rocks, and several of them are very strongly fortified. In the event of a war with America the Bermudas would become a powerful British naval station.

The Delaware and the Chesapeake are the chief bays.

The Gulf of Mexico, situated to the south of the

States, is 1200 miles long, and 600 broad.

The United States are greatly prospering. The Americans have nearly as many ships of trade as the English. They export cotton, rice, wheat, and manufactured goods; they are also general carriers for several other nations. Their imports amount to 100,000,000 dollars, and their exports to 105,000,000.

In 1800 the population of the country was 5,250,000 of white people, and 700,000 negroes. In 1830 it was 13,000,000 white, and 2,000,000 of coloured people. It may now be estimated at 20,000,000. The population is doubled every twenty-five years.

The number of Indians now in the States is only a few thousands. By treaty and by unfair means they are rapidly losing their territories, and war, rum, and the small-pox will, it is to be feared, soon exterminate them.

Attempts to civilize them have failed, for they love a free life in the woods, with hardships, better than a fixed residence, with many comforts.

Slavery exists in all its horrors in several of the states, especially the southern ones; although, by the

constitution of the country, it is held that all men are born free and equal. The white people will not associate with the free coloured.

There is more attention paid to morality and education in the northern states than in the southern.

The English language and the Christian religion are common to this country. No form of religion receives support from Government. The majority of the people are Baptists, Presbyterians, and Methodists.

Many excellent societies are liberally supported in the states, and strenuous efforts are being made in the northern states to put down the two great evils of slavery and intemperance.

# BRITISH AMERICA.

## CANADAS.

Crossing the lakes to the north of the United States we enter the important colony of Canada; and this is divided into Upper Canada which is inland, and Lower Canada toward the sea.

Upper Canada is 560 miles long, and contains 400,000 white people, and 10,000 Indians. It is divided into thirteen districts, and twenty-six counties.

The chief towns are, Toronto or York, and Kingston.

Lower Canada, which is about 500 miles in length, has a population of 500,000.

Quebec and Montreal, on the river St. Lawrence, are the chief towns.

Quebec lies in lat. 47 °N., and long. 72° W.

Canada was discovered by the English in 1497, and colonised by the French in 1608, under the name of New France; but was conquered by the English and added to their dominions in 1763. General Wolfe was killed at the capture of Quebec from the French.

This country is ruled by a Governor appointed from England, Executive and Legislative Councils, and an Assembly of Representatives. A few years ago some of the French Canadians made an attempt to obtain the independence of their country.

The French Canadians are a very polite people; they are Roman Catholics. Government support is granted to both Protestant and Catholic Churches.

Great numbers of English and Scotch have emigrated to this healthy and fertile country. The winters are much colder and the summers hotter than those of England.

Immense quantities of timber and furs are exported

from Canada.

The noble river of St. Lawrence, 90 miles wide at its mouth, runs south of the country from the Lakes.

These lakes are of great extent, and form a natural boundary between Canada and the United States.

Lake Superior is 480 miles long, Michigan 400,

Huron 250, Erie 270, and Ontario 200.

Between the lakes Erie and Ontario, about fifteen miles from each, are the celebrated Falls of Niagara, 160 feet in depth; the two Falls are together a quarter of a mile broad.

#### NEW BRUNSWICK.

This is a British Colony separated from Lower Canada by the river St. Lawrence. It is 200 miles long, and contains 120,000 inhabitants.

The principal settlements are, Frederickton the capital, and St. John's.

The country is covered with large and valuable

forests.

#### NOVA SCOTIA.

This country, which is 300 miles long, is separated from New Brunswick, by a small isthmus near the Bay

of Fundy.

It is divided into ten counties, of which Cape Breton island is one. The chief towns are, Halifax. Annapolis, and Sydney. The inhabitants are 200,000 in number.

The French colonized the country in 1604, and the

English took it from them in 1713.

Much timber is exported from Nova Scotia.

## PRINCE EDWARD'S ISLE.

This productive island, formerly called St. John's, lies in the Gulf of St. Lawrence, to the north of Nova Scotia.

It is 100 miles in length, and has a population of 35,000. The English took it from the French in 1713.

#### NEWFOUNDLAND.

This is an island about the size of England, lying between Nova Scotia and Labrador. The population is 90,000.

The inhabitants gain an excellent livelihood by cod-fishing, which is carried on near the Great Bank or Shoal, which is 600 miles long, and many yards beneath the surface of the water.

In winter this country is very cold and foggy.

capital is St. John's.

Like the other British possessions of Nova Scotia, New Brunswick, and Canada, the island of Newfoundland is ruled by a Governor, two Councils, and an Assembly of Representatives.

## LABRADOR, GREENLAND, &c.

North of Lower Canada is the dreary country of Labrador.

Labrador, extending 700 miles in each direction, is bounded on the east by the Atlantic, and on the west by Hudson's Bay. This is supposed to be the country of Vinland, discovered by some Norwegian voyagers, about a thousand years ago.

To the west of the extensive Hudson's Bay are the provinces of New North Wales and New South Wales; which, though in a very cold country, contain many

fertile spots.

The Esquimaux, who live in these desolate regions, are a quiet, athletic, good tempered, but gluttonous race. They gain a subsistence by hunting the seal and walrus.

At Nain, in Labrador, a number of devoted German Moravian Missionaries have spent years in endeavouring to teach the poor Esquimaux the Christian faith.

The Hudson's Bay Company of fur traders was established in 1670. The chief settlements are at Fort York and Fort Churchill.

Advancing northward across frozen lakes, straits, and bays, we come to Greenland, supposed to be a large island, but the intense cold has prevented the discovery of its northern side.

To the west of Greenland are Davis's Strait and

Baffin's Bay.

Vessels have attempted by a passage up Baffin's Bay, through Barrow's Strait, to discover a course to the north of the frozen land as far as Kamtscatka; that is, from the 80th to 170th degree of west longitude; but ice has always prevented this being done.

However, a few degrees south of Barrow's Strait, on the 70th degree of latitude, the greater part of the coast line has been traced from the Atlantic to the

Pacific.

Sir John Franklin, in one of his northern expeditions, nearly lost his life from cold and hunger; he could not get beyond Cape Turnagain.

The principal navigators attempting this northwestern passage to China and India were Captains

Parry, Franklin, Lyons, Ross, and Back.

Captain Ross discovered a country which he called

Boothia Felix.

His nephew, Commander Ross, lately a voyager to the Southern Seas, was the fortunate discoverer of the North Magnetic Pole; that is, the place where the needle of the mariner's compass loses its power, and will turn any way. It was observed to follow the sun in its apparent daily revolution.

The North Magnetic Pole lies near lat. 70° N.,

and long. 97° W.

The north-western peninsula of NORTH AMERICA is called RUSSIAN AMERICA, having one or two small Russian settlements upon it.

In 1825 it was agreed by the two nations that the

146th degree of longitude should be the boundary between Russia and British America.

Bhering's Strait separates the Russian American territory from Kamtscatka. The volcanic Aleutian or Fox Islands are near there; the simple-hearted people of these islands are said to be cruelly treated by the Russians.

The English lay claim to the whole of that part of North America extending from Greenland and Labrador to Russian America, a distance of above 3000 miles.

There are not 10,000 white people in this immense district; the Indians and Esquimaux there are not 100,000 in number. Some of the tribes do not muster fifty men, and several of the tribes have wholly disappeared within the last few years.

The American Indians are a proud and unsubmiting, but noble race of men. The white traders by giving them rum and fire-arms in exchange for furs

are fast hastening their destruction.

The principal tribes of Indians are the Sioux, the Chippiway, the Cree, the Blackfoot, the Kite, the Crow, the Dog, the Beaver, the Hare, the Copper, the Stone, the Pierced-nosed, and the Dog-ribbed.

There is a large river called the Mackenzie 2,800 miles long, between Hudson's Bay and the Pacific, which commences from the Slave Lake, and flows by Great Bear Lake into the North Frozen Sea.

Near Hudson's Bay is a large lake called the Winnipeg, which like the Slave Lake is nearly 300 miles

in length.



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Descending from Russian America we approach the islands of George III., Queen Charlotte, and Vancouver. These are all in the North Pacific Ocean and close to the Continent of America.

Nootka Sound, with its curious flat-headed Indians, is off the coast in lat. 50° N., and long. 125° W. The river Columbia is 150 miles south of this.

In the bays off the north-west coast of America are found many large whales. Numbers of the American whalers go there.

## MEXICO.

Mexico lies to the south and west of the United States, and is bounded on the west by the Pacific Ocean. It is above 2000 miles long and contains 8,000,000 of people.

The chief towns of Mexico are, Mexico the capital, with 200,000 inhabitants, Santa Fe, Guadalaxara, the the port Vera Cruz on the Gulf of Mexico, and the

port Acapulco beside the Pacific.

The largest rivers are, Rio del Norte, or River of the North, 1500 miles in length, Red River, 1500 long flowing into the Mississipi, and Rio Colorado flowing into the Gulf of California.

There are many volcanoes in Mexico; one is called

Popocatepetl, or the Smoking Mountain.

Mexico produces more silver than all the rest of the

world together.

The religion is Roman Catholic, and none other is allowed.

The Government is a Republic like that of the

United States. The country is divided into nineteen

independent states, united by a Congress.

The present ruling Mexicans are chiefly descendants of Spanish settlers. The tyranny of Spain caused the colonists to revolt and obtain their independence in 1821.

It is remarkable that the infamous Ferdinand Cortes conquered Mexico from the gentle and intelligent Indian natives three hundred years before, in 1521.

These Indians had reached a high state of refinement before the arrival of the avaricious and cruel Spaniards. They had a sort of picture writing like the ancient Egyptians. There is the pyramid of Cholula in that country 172 feet high, and 1330 feet long.

More than 3,000,000 of Indians still roam about the wilds of Mexico. The Creoles or Mexican Spaniards number nearly 2,000,000. There are only a

few thousands of native Spaniards.

The mixed races amount to 3,000,000 more; being either mullatoes, a mixture of whites and negroes, or mestizoes of white and Indian parentage.

No slavery is now allowed to exist in Mexico.

The province of Old California is an extensive barren peninsula. In New California, the large northern province, are some thousands of Indians in settlements under Roman Catholic Missionaries.

The British have a settlement on the peninsula of Yucatan in Mexico called Honduras, from which the wood mahogany is obtained. The chief town is Belize.

The English Government has now taken under its protection the Mosquito Indians, who were never conquered by the Spaniards.

## TEXAS.

This lovely and fertile country, formerly a province of Mexico, declared itself an independent Republic in 1836.

It has the United States of America on the east, the Rio del Norte to the west, Arkansas River to the north, and the Gulf of Mexico on the south. It is 900 miles long and 600 broad.

The settlers, who are Mexicans and Americans, do not amount to a million in number. The Mexican Government is seeking to recover Texas, and the Americans are determined to procure its aunexation as one of the states,—another star in their banner.

The chief settlements of this flourishing Republic are, Austen the capital, Columbia, Houston, and and Texana.

### GUATEMALA OR CENTRAL AMERICA.

Guatemala is to the south of Mexico, and was formerly a province of that country, but was declared independent under the name of Central America in 1823.

Though situated near the Equator it has a very fine, mild climate, being very mountainous. The land is extremely fertile. It is 1000 miles long and 300 or 400 broad, with a population of 2,000,000.

The chief towns are, Guatemala the capital, St. Salvador, and Truxillo.

The fine lake of Nicaragua is above 200 miles long. The San Juan connects it with the Atlantic Ocean, and a few miles only divides it from the Pacific.

It is proposed to make a canal there so as to have a passage from the Atlantic to the Pacific; but this

was found not to be very practicable.

In the forests of Guatemala there have lately been found ruins of magnificent cities, the architecture of which evinces the taste of a very polished people long since departed from the earth.

## SOUTH AMERICA.

### COLUMBIA.

At the extremity of Guatemala is the Isthmus of Panama or Darien, which serves to connect North with South America.

As this isthmus is very narrow it is thought to afford a better means of communication between the

two oceans than the Lake Nicaragua.

Beyond the isthmus, stretching southward of the Caribbean Sea, is Columbia, the most northern country of South America. The Equator passes

through it.

Freed from the Spanish yoke in 1819, under the Generals San Martin and Bolivar, it became divided into the three Republics of Venezuela, New Granada, and Equador or Quito. Slavery is abolished in all of them.

The noble river Orinoco, traced by Humboldt, runs through Columbia, and is 1500 miles long; the island of Trinidad, belonging to the English, is at its mouth.

VENEZUELA is 800 miles long and 700 broad, with a population of one million.

The chief towns are, Caraccas, Cumana a seaport, and Maracaybo.

The exports are cocoa, coffee, sugar, tobacco, and

cotton.

NEW GRANADA abounds in mountains rich in gold and silver. The population is two millions. The capital is Santa Fe de Bogato.

EQUADOR, EQUATOR TERRITORY, OR QUITO is

very mountainous.

The principal towns are, Quito the capital, and the port Quayaquil on the shore of the South Pacific. Quito stands close by the Equator, but being two miles above the level of the sea it has a mild climate.

The lofty range of mountains called the Andes or the Corderilla runs through Columbia, and extends the whole length of South America; it is generally within 100 miles of the Pacific.

There are many volcanoes among the Andes; the chief of these are, Cotopaxi and Pichincha near Quito, which are nearly four miles in height. The roaring of Cotopaxi has been heard for 600 miles.

The highest peaks of the Andes are, Chimboraso in Columbia, and Sorata and Illemani in Upper Peru; they are more than four miles above the level of the sea.

### GUIANA.

This country lies to the east of Columbia and is washed by the Atlantic. It is divided into English, French, and Dutch Guiana.

BRITISH GUIANA is 600 miles long and 250 broad. The chief towns are, George Town the capital, containing 25,000 inhabitants, and New Amsterdam.

The climate is good, and the land astonishingly productive. This thriving colony is in want of labourers.

The three provinces, called after three rivers are, Essequibo, Berbice, and Demerara.

Schools are efficiently supported and controlled by the Government.

The exports of the colony are, sugar, coffee, rum, and cotton.

There are there two wet seasons and two dry ones in the year.

The Government is a representative one, under a

Governor appointed from home.

FRENCH GUIANA, OF CAYENNE, formed by a colony from Caen in Normandy, is far inferior to British Guiana. Its capital is Cayenne.

DUTCH GUIANA consists of the province of Surinam, and is 200 miles in length. Its population is 60,000, and its principal settlement Paramaribo.

## BRAZIL.

This rich and immense country is above 2000 miles in length, and nearly the same in breadth, being equal in size to Europe. The population is 6 millions, nearly half of whom are slaves.

Very little of the country is settled; the Indians

possess more than half of it.

The interior has vast plains of grass which feed innumerable herds of buffaloes and wild horses. There is one sandy plain extending 300 miles.

Hides, sugar, cotton, and rice are the exports of the

country. The Brazilians import manufactured goods

from England.

The chief towns are on the coasts of the Atlantic: Rio de Janeiro the capital with a population of 200,000. Bahia or St. Salvador with 150,000, Pernambuco and Maranham.

Rio is in lat. 23° S., and long. 43° W.

In Brazil are the largest rivers in the world. Amazons or Maranon rising among the Andes is 4000 miles long, and can be ascended by large ships for 2,500 miles. The Madeira and San Francisco are also large rivers.

Abundance of gold and diamonds is found in the

Brazilian rivers.

Brazil formerly belonged to the Portuguese Government, but became independent in 1822, and is now governed by an Emperor.

### PARAGUAY.

Paraguay, so called from a river of that name, is 300 miles long, and lies to the south of Brazils.

It was independent about the same time as the

other American States; but instead of a republic it became a despotic Government for nearly thirty vears under Dr. Francia.

A kind of tea called Matté grows in this country.

The capital of Paraguay is Assumption.

About two hundred years ago a number of Roman Catholic ecclesiastics, called Jesuists, established a government of their own among the Indians in Paraguay.

The people made much progress in knowledge and general civilization under these remarkable teachers. This community lasted for one hundred and twenty

years.

## MONTE VIDEO.

## (Formerly Banda Oriental.)

This Republic is to the south of Paraguay, and is 450 miles in length. It became independent of Spanish rule in 1828.

The river Uraguay divides it into the two parts of Uraguay and Parana. The river Parana divides it

from Paraguay.

Few countries have a finer climate than Monte Video; and were the people of this and the other South American Republics better educated and more peaceable, great prosperity would follow.

The capital, Monte Video, situated at the mouth

of the river La Plata, is a very thriving port.

### LA PLATA.

This Republic, separated from Monte Video by the noble river La Plata, extends from the Atlantic to the Andes Mountains; being 1500 miles long and 800 broad.

There are thirteen provinces united together to form

this Republic.

La Plata gained freedom from the Spanish yoke in 1821, having had the honour of commencing the war of independence. Its supreme council is called the Junta.

A great part of La Plata consists in extensive grassy plains called Pampas, one of which is 1000 miles long and 300 broad.

The inhabitants of this country export hides and dollars.

Buenos Ayres is the most important province, and the capital bears the same name; it is a flourishing seaport. Mendoza, Cordova, and Santa Fé are large settlements.

The splendid river La Plata, or Silver River, 2400 miles in length, is the eastern boundary of the Republic.

### BOLIVIA OR UPPER PERU.

This very mountainous country, northward of La Plata, became an independent Republic in 1825, by means of the brave Bolivar, who was the deliverer and afterwards the President of Columbia. In gratitude the country was called after him.

The population is nearly two millions.

The chief towns are, Potosi the capital, Le Paz, and Santa Cruz.

Near Le Paz are the mountains of Illimani and Sorata, the highest of the Andes, being more than 25,000 feet above the level of the sea.

Lake Titicaca, 150 miles long and at an elevation of two miles and a-half, has several large islands in it, and some flourishing settlements on its banks.

The silver mines of Potosi have produced in 300 years the sum of £400,000. Gold is obtained in large quantities from the sands of rivers.

#### PERU.

To the north and west of Bolivia, and bounded by the Pacific, is the rich country of Peru, 1000 miles in length. The population of Spaniards, Creoles, Indians, and

Negroes is about two millions in number.

The chief towns are, Lima the capital, Cuzco, Callao, and Truxillo. Lima has been three times destroyed by earthquakes.

Peru became independent of Spain in 1825, but since that time this Republic, like its neighbours, has

suffered much from civil war.

Pizarro conquered the country about 300 years ago. The natives have been cruelly treated by their Spanish masters.

#### CHILI.

Chili extends southward of Peru beside the Pacific for 1300 miles with an average breadth of 100 miles.

It has a healthy climate and a fertile soil, with a

population of 600,000.

The chief towns are Santiago, the capital, Concep-

tion, and the ports of Valparaiso and Valdivia.

Valparaiso, in lat. 31 ° S., and long. 70 ° W., exports much corn, and is distant from Van Diemen's Land in an easterly direction 4000 miles.

In Chili there are fourteen volcanoes among the

Andes which are always in action.

Through the victories of Bolivar the country became independent, and a Republic was established in 1824.

To the south of Chili reside the noble and intelligent Auraucan Indians, who have never been subdued.

The island of Chiloe is in the same latitude as Hobart Town.

About 500 miles westward of Chili is the island of Juan Fernandez, upon which Robinson Crusoe is said to have lived. The real Crusoe was Alexander Selkirk.

### PATAGONIA.

This barren and miserable country is the most southern of all the American countries. It is 1000 miles long and 300 broad.

It is inhabited by a tall, gaudily dressed, race of Indians, who roam about like Tartars; they are well

provided with horses.

The Cordilleras or Andes extend to the south of

Eastward of Patagonia are the Falkland Islands, on which the English have made some settlements. The climate is cold but healthy, and the soil fertile. To the east of them is the island of Georgia,

The cold and barren islands of Terra del Fuego or Land of Fire, so called from the ever active volcanoes,

form the most southern land of America.

Between them and the mainland of Patagonia are the Straits of Magellan, named after an early navigator.

The most southern point of America is Cape Horn, which is situated in lat. 56° S. and long. 67° W.

Having now reached Cape Horn, which is rounded by vessels going home from Tasmania, we will take the opportunity of visiting the Land of our Fathers, calling at Bahia or at Pernambuco in Brazil, and at Teneriffe in the Canary Isles.

Returning from England, we may call at St. Jago,

one of the Cape Verde Isles, and sailing pleasantly along with the Trade Winds reach the Equator.

The great heat of the sun in the torrid zone rarifies the air in this region. The denser atmosphere around the Poles rushes forward to fill the vacant space.

These winds, which are called the North and South Trade Winds, do not go in a direct line to the

Equator, because of the motion of the Earth.

Crossing the *Line* we may touch at Rio in Brazil, and then by a south-easterly course reach the Cape of Good Hope, after passing the islands of Tristan d'Acunha which are in lat. 38° S., and long. 12° W.

About half way between the Cape and our Colony are the two small islands of St. Paul's and Amster-

dam in lat. 39° S., and long. 71° E.

An easterly voyage of 3000 miles from St. Paul's will bring us to our own delightful little Island, after a voyage round the world.

### NORTH AMERICA.

North America is 5,500 miles long. It contains 8,300,000 square miles, with a population of 30,000,000 inhabitants.

COUNTRIES.

TOWNS.

Russian America to the north-west.

Greenland.
Labrador. Nain.

Hudson Bay Territories. Fort York.

Canada. Quebec. New Brunswick. Frederickton.

E 3

COUNTRIES.

Nova Scotia. Newfoundland.

United States.

Texas. Mexico.

Guatemala or

Central America.

TOWNS:

Halifay St. John's.

Washington and New York

Austin. Mexico.

Guatemala.

### SOUTH AMERICA.

This continent is 4,500 miles long. It contains 6,500,000 square miles, with a population of 20,000,000 inhabitants.

#### COUNTRIES.

TOWER.

Venezuela. New Granada.

Equador or Quito.

Guiana. Brazil.

Peru. Bolivia. Paraguay.

Monte Video. La Plata. Chili.

Patagonia.

Caraccas.

Bogota.

Quito. George Town and Cavenne.

Rio Janeiro. Lima.

Potosi.

Assumption. Monte Video. Buenos Avres.

St. Jago.

## Islands belonging to America,

Melville Island in the Frozen Sea. Southampton in Hudson's Bay. Prince Edward's Isle.

Breton between Nova Scotia and Newfoundland. Anticosti between Canada and Newfoundland.

Long Island near New York.

The Bermudas or Somers' Islands near the United States.

The West Indies between North and South America. Terra del Fuego to the south of South America. Falkland Isles to the east of Terra del Fuego. Isle of Georgia east of the Falkland Isles. Chiloe to the south of Chili.

Juan Fernandez to the west of Chili.

Isles of St. Felix to the north of Juan Fernandez.

Gallapagos near the Equator.

Queen Charlotte's Isle off the north western coast. Vancouver's Isle near Nootka Sound.

King George's Isle near Russian America.

The Alentian or Fox Islands between Russian America and Kamtscatka.

### The West Indian Islands.

The Bahamas belonging to the English. Chief town-Havannah.

Jamaica. Chief town-Kingston.

Hayti, Hispaniola, or St. Domingo. Chief town-Port au-Prince.

Porto Rico belonging to the Spaniards.

The French have Martinique and Guadaloupe.

The Danes have St. Croix, St. Thomas, and St. John.

The Swedes have Bartholomew.

The English have Barbadoes, Trinidad, Tobago, St. Christopher or St. Kitts', Antigua, Barbuda, Montserrat, St. Vincent, St. Lucia, Dominica, Grenada, and most of the Virgin Isles.

Almost all the smaller islands are called the

Caribbees.

## Seas, Bays, and Straits of America.

Baffin's Bay and Davis' Strait west of Greenland, Hudson Strait between Hudson's Bay and the Atlantic.

Cape Farewell south of Greenland.

Hecla and Fury Strait to the north of Hudson's Bay.

Franklin Bay in the north-west passage through

the Polar Sea.

Cape Race the eastern point of Newfoundland.

Bay of Funday by Nova Scotia.

Delaware and Chesapeake Bays in the United States.

Cape Cod near Boston.

Gulf of Mexico between North and South America.

Gulf of Honduras in Guatemala.

Caribbean Sea north of South America.

Gulf of Darien running into the Caribbean Sea.

Straits of Magellan between Patagonia and Terra del Fuego.

Cape Horn the most southern point of America.

Gulf of Quayaquil near the Equator.

Bay of Choco west of Columbia.

Bay of Panama running into the South Pacific Ocean.

Gulf of California between California and Mexico. Cape St. Lucas south of California. Nootka and Queen Charlotte's Sounds north of the Columbia River.

Cook's Inlet in Russian America. Icy Cape north of Russian America.

Behring Strait between Rusisan America and Kamtscatka.

## POLYNESIA.

After a brief stay in Hobart Town, we prepare to visit the remaining portion of the world; namely, the numerous islands lying to the east and north-east of Australia.

They are situated in the Pacific Ocean and the South Sea, and are known under the name of POLYNESIA, or many islands. They are almost all of coral formation, and reefs of coral commonly surround them at some little distance from the shore.

The Polynesian Islands extend from lat. 30 N., to lat. 30 S., and from long. 160 E., to 130 W.; a space equal to 4500 miles in length and 4000 in breadth.

They are some thousands in number, and are inhabited by uncivilized natives, to the number of about a million altogether.

Most of these islands were discovered by Captain

Cook in his voyages between 1767 and 1779.

Very few animals are found in Polynesia. From the bread-fruit and cocoa-nut trees the inhabitants chiefly obtained their sustenance previous to the introduction of pigs and potatoes by Captain Cook and others. Sailing from Hobart Town in a north-easterly direction for 5000 miles, we come to the delightful island of Otaheite or Tahiti; which is 108 miles

round, with a population of 10,000 persons.

There were there many more inhabitants in the time of Captain Cook; but the visits of European sailors have greatly thinned the population by the introduction of rum, which has proved a frightful source of disease and crime among this interesting

people.

Tahiti is in lat. 18 S., and long. 150 W. The first Christian Missionaries to the South Sea Islands, from the London Missionary Society, came to Tahiti in 1797, in the ship *Duff*, Captain Wilson, Commander. Very pleasing results have followed the labours of these good men among the Polynesian Islands.

Of late the French have forcibly taken possession of Tahiti, under the character of Protectors of the island. The Queen Pomaré was obliged to fortify herself in the neighbouring island of Eimeo, the centre of civilization in the South Seas.

Raiatea near Tahiti is 60 miles round. Both these islands form 'part of a very extensive cluster called the Society Isles. The Krusenstern, King George, Prince of Wales, and Hervey's Isles, belong to the

Society Group.

Pitcairn Island, noted as the retreat of the mutimeers of the ship *Bounty*, commanded by Captain Bligh, is the most southern of the Society Islands. Cook's Islands of Raratonga and Mangeea lie to the east of this cluster.

Low Islands are to the north-east of Tahiti. Still further to the eastward are found the MARQUESAS

group, which were discovered by the Spaniards in 1569, and named after the Marquis de Mendoza. The French have tried to settle among the cannibal inhabitants.

The Marquesas are about 3000 miles to the west of Peru. Near them are the Washington Islands.

Northward of the Equator are the Sandwich Isles, thirteen in number; the chief of which are Owyhee or Hawaii, Atoo, and Mowee. Hawaii contains 150,000 persons.

In Hawaii is the celebrated volcano of Mouna Roa,

16,000 feet high.

It was in this island that Captain Cook was killed an a sudden fit of anger by the idolatrous inhabitants in 1779. Now, by the efforts of the American Missionaries, they are an industrious, a civilized, and a truly Christian people.

To the west of the Sandwich Isles are the LADRONES, or Islands of Thieves. The Caroline Islands lie between the Ladrones and the Philippine Isles.

The interesting Pelew Isles are between the Philippine and the Caroline Islands. Captain Wilson when shipwrecked at Pelew was treated with great kindness by the people. The amiable Prince Le Boo, the son of the king, accompanied the Captain to England.

The Chatham Isles and the King Mill's Group are about the Equator.

Between the King Mill's Group and the Society Isles is to be found the extensive and highly interesting cluster of the Navigator's Islands. The natives are a tall, handsome and intelligent race of

men, who are now making great progress in civilization under the tuition of Christian Missionaries.

The FRIENDLY ISLES OF TONGA ARCHIPELAGO are south of the Navigator's and west of the Society group. The principal islands are Tongataboo, Eooa, and Annamooka, all of which were discovered by Tasman. The Harpee Isles are southern Friendly Isles.

The inhabitants are gentle in their manners, unless when excited in warfare. Many of them

are now Christians.

The Feejee group, north-west of Tonga, was discovered by Tasman. The principal islands are Vavaoo, Amboa, and Tacanova or Sandal-wood Isle.

The inhabitants were formerly barbarous cannibals, but are now through the efforts of Wesleyan Mission-

aries converted to Christianity.

Westward of Feejee is the island of Erromanga, in the New Hebrides group, on which John Williams the enterprising Missionary, was murdered, in 1839.

The island is situated a little to the north of New

Caledonia

Southward of Erromanga is Tanna; and south of that again is the Isle of Pines, which is about 500 miles to the north of Norfolk Island.

From the rock-girt Norfolk Island, which possesses not a single harbour nor any anchorage for ships, we soon regain our home in fair

## TASMANIA.

## Polynesian Islands.

Society Islands; Tahiti, Eimeo, Raiatea, Pitcairn, &c., Krusenstern and Hervey's Isles. Cook's group of Raratonga, Mangea, &c.
Low Islands.
The Marquesas.
Sandwich Islands; Hawaii, Atoo, Mowee, &c.
Ladrone Islands.
Caroline Islands.
Pelew Isles.
Chatham Isles.
King Mill's group.
Navigator's Islands.
Friendly Isles or Tonga Archipelago; Tongataboo,
Eooa, Annamooka, &c.
Harpee Isles.
Feejee Islands; Vavaoo, Amboa, Tacanova or
Sandal-wood Isle, &c.

[End of Descriptive Geography.]

New Hebrides; Erromanga, Tanna, &c.

## GOVERNMENTS.

Governments are either Patriarchal, Monarchical, Oligarchical, or Republican.

The Patriarchal is a government by a father, or

by a chief as a father.

The Monarchical is a government by one person, as a king or queen.

The Oligarchical is a government by a few persons,

as nobles.

The Republican is a government by persons wholly

chosen by the people.

The times of Abraham, Isaac, and Jacob were Patriarchal. The present state of the wandering Arabs is an instance of Patriarchal government.

The great majority of countries are governed by

monarchs.

A territory governed by one person, and yet composed of various people, is called an Empire. Russia,

Turkey, and China, are Empires.

Monarchies are either Despotic or Limited; that is, either having all power, or being limited in power. The Emperor of Turkey is despotic, the Queen of England is limited in her power by the Parliament.

The ancient government of Venice by the nobles is

an instance of the rule of an Oligarchy.

The United States of America have a Republican government.

Ancient Rome in its greatest power was a Republic, and the ancient Grecian States were also Republics.

"A country is said to be civilized, when the people have comfortable clothing and dwellings, when they cultivate the ground, when they trade among themselves and with other nations, when they possess the means of obtaining a knowledge of books, and when they have an established government and suitable laws."

## RELIGION.

Originally men knew and worshipped the true God. Afterwards the sun, moon, and stars, were bowed to as gods, under the great God.

Then great men after death were worshipped.

The gods, or souls, thought to be inhabiting the stars, were afterwards worshipped under forms of images and animals; as Jupiter, Venus, &c.

The priests knew much more of the truth than

they chose to teach the people.

The worship of fire was a very old form of religion. Some modern Persians and others still follow it; they are called Parsees.

All nations in the world, including the English and

French, have been heathens.

In China are many followers of Confucius, a wise and good man, who reformed the religion of China about 500 years before Christ; and who taught that idols ought not to be worshipped, that there is but One God, and that our souls are immortal.

The Hindoos, Birmese, Chinese, and Japanese are mostly believers in the transmigration of souls; that is, that the human soul passes a certain time in the bodies of the lower animals.

The priests of the Hindoos are called Brahmins, who believe in the Unity of God, but allow the people to be gross idolators. There is much truth hidden

under their superstitions.

The Hindoos are divided by their religion into four castes or classes; namely, 1st Brahmins, 2nd Rulers and Soldiers, 3rd Merchants and Farmers, 4th Labourers and Servants. No one can change the caste into which he is born.

The Buddhist religion is a very singular one.

The Buddhists believe that God in the form of mancomes to reside a while on earth, then goes to dwell in another world, and is at length annihilated; that is, he ceases to exist.

They worship in images such a person, whom they call Boodh. Their worship is performed in silence,

and each person presents his own offering.

They say that there have been four Boodhs who have appeared; that one who is now annihilated lived in 400 millions of worlds in different conditions in each, and that the next Boodh will come in 8000 years time.

By the Buddhist religion war, revenge, and the drinking of intoxicating liquors are prohibited, though

the two former are not unfrequently practised,

The Buddhists hold that good people will be annihilated after death, but that the souls of the wicked will be punished by passing for a certain time into the bodies of base animals.

The people of China, Japan, Indo-China, and other countries are followers of this strange religion, which has lasted for 4000 years. The ancient Buddahists were very great Astronomers.

The Jains of India are a sort of Buddhists.

In Thibet the people worship a person called the Great Lama, whom they believe to be God upon earth.

Many Tartars and Chinese are of this faith, which is called Lamaism. They believe that about 3000 years ago, one of their gods instituted the worship of a living representation of himself.

The religion of Mahomet has spread over a great part of Asia and Africa, and over some part of

Europe.

Mahomet was an Arabian, who 1200 years ago reformed the religion of his idolatrous countrymen, and declared himself a Teacher sent from God.

The Mahometans believe in the book of Mahomet, called the Koran; which teaches that there is but one God, that Mahomet was greater than Moses and Christ, that all but Mahometans will be in eternal torment, and that there should be abstinence from intoxicating liquors, from gambling, from usury, and from tasting of blood.

The Mahometans are required to be very charitable

to the poor.

The grand error of all false religions is the doctrine of merit. It is thought that people may purchase the favour of God by certain works.

The Christian religion teaches us that it is only by the merits of Christ our Saviour, that we can hope

for heaven.

The professors of the Christian religion are divided into several parties: as the Protestants, the Roman Catholics, and the professors of the Greek Church.

The Greek Church is similar in most respects to the Roman Catholic. Its followers acknowledge the Patriarch, or Pope, of Constantinople as their head. The Greek and Roman Churches became divided chiefly through a dispute about the time of keeping Easter. This was about 1000 years ago.

The Roman Catholics follow the doctrines of the Church of Rome as set forth by the Council of Trent, which was held about 300 years ago. They acknowledge the Pope or Bishop of Rome as their spiritual head.

The Protestants are so called, from protesting against a law of Charles the Fifth, Emperor of Germany, which affected their religious liberties. Though divided into several sections, such as, Lutherans, Calvinists, Episcopalians, Presbyterians, &c., who differ on some minor points, they agree in all the fundamental doctrines of Christianity.

Martin Luther, Calvin, Zuinglius, Knox and Cranmer were the leaders of what is known as the Reformation about 300 years ago.

Calculating the world to contain 1000 millions of inhabitants, the numbers following each religion are about as follow:—Christianity 300 millions, Mahometanism 100 millions, Buddhism 400 millions, Brahminism 100 millions, other pagan religions 100 millions, Judaism 8 millions.

## VARIETIES OF THE HUMAN RACE.

The human family differ in colour and appearance as well as in habits.

We know that the people of Africa are generally black, the Chinese yellow, the American Indians red,

and the Europeans white.

The difference of colour is accounted for by the different coloured pigment, or matter just beneath the outer skin.

In a general way children are of the same colour as their parents. The offspring of black people will be black although born in a cold country, and the children of white people will be white although born in a hot country.

From paintings on the walls of Ancient Egypt, we perceive that 3 or 4000 years ago Negroes and Jews

bore the same appearance as they now do.

There are five great varieties of the Human Species; viz., the Caucasian, the Mongolian, the Malay, the American Indian, and the Ethiopian or Negro.

The Caucasian may be divided into two branches,

the Scythian, and the Indo-Persian.

The people of Europe are of the Scythian Caucasian; the Persians, Hindoos, Arabs, Jews, and Ancient Egyptians belong to the Indo-Persian Caucasian.

The people of Europe are either of Celtic, Scla-

vonic, or Teutonic origin.

The Ancient Britons, Gauls, Irish, aud Scotch

Highlanders belong to the Celtic.

The Sclavonic includes the Russians, Poles, Moldavians, Servians, Bulgarians, and Russian Tartars. The Teutonic, or Gothic, variety embraces the Germans, English, French, Dutch, Swedes, Danes, Belgians, Spaniards, and Lowland Scotch.

The Caucasian variety is the superior one for

intellect, strength, and beauty.

The Mongolian variety is shewn by the yellow complexion, square flat face, straight hair, large eyes and lips, smooth skin and small retreating forehead.

Most of the Tartar tribes, the Chinese, Japanese, Birmese, Kamtscadales, Esquimaux, Fins, and Laplanders belong to the Mongolian race.

They are inferior to the Caucasians in morals, as

well as in intellect and beauty.

The Malay variety is known by the brown colour, black and abundant hair, large mouth, and projecting upper lip.

This race is found in Malacca, Java, Sumatra,

New Zealand, and most of the Asiatic Islands.

These people display great energy, but are still

very inferior to the Caucasians.

The Aborigines of New Holland and Van Diemen's Land are a degraded branch of the Malay family. They would appear by their woolly hair, to have a mixture of the Negro blood with that of the Malay.

The American Indian variety is perceived in the copper-colour, spare body, sunken eye, and retreating

forehead.

The Indians display some ability of mind in rude eloquence, and in contrivances for destroying their enemies, but are very inferior in powers of reasoning; they are slow in acquiring knowledge. Some branches of this family, as the Ancient Peruvians and Mexicans, have given evidence of considerable progress in civilization.

The Ethiopian or Black variety is seen not only in the colour, but in the prominent cheek-bone and chin, long narrow head, narrow and projecting jaws, and forehead sloping in front and projecting behind.

Some of this race, as the Caffres, Ashantees, and others, display in several instances superior intelligence; but in all these cases, the head will be found approaching in form that of the Caucasian variety.

The Caucasian head is the largest in size, and the Ethiopian the smallest.

Education, mode of existence, food, and the physical character of the country, have each and all a material effect in changing the appearance of a people.

# PHYSICAL GEOGRAPHY.

#### CLIMATE.

Climate, or that condition of the atmosphere which

affects animal life, varies in different places.

One country will generally be hotter than another if it has more direct heat from the sun. But two countries may be in the same latitude, and yet one be much colder than the other, by being more mountainous.

Land on the side of a hill exposed to the sun will have a better climate than land not so favoured in

situation.

The character of the soil, the degree of cultivation, the amount of vegetation, and the prevalence of hot or cold winds, are also modifying causes of temperature.

An Isothermal line, or line of equal heat, with a mean or average temperature of 80 degrees, will pass through Mulgrave Isles on the Equator, St. Domingo, Liberia, Mecca, Madras, and the Pelew Isles; the difference of latitude on this line is 20 degrees.

An Isothermal line with a mean temperature of 50° passes through New York, the North of Eng-

land, Saxony, the sea of Azof, and Pekin.

The following places have a mean temperature of 32°—that is, at the freezing point; Kamtscatka, Nain in Labrador, Iceland, North Cape, and Lake Baikal in Siberia. The difference of latitude on this line is 15 degrees.

The eastern coast of Asia is much colder than the

western coast of Europe in the same latitude; this is owing to the difference of winds.

The tropical zone of the Western Hemisphere has an average heat of 82°; that of the Eastern Hemis-

phere has 84°.

The Western, or American Pole of the greatest cold is in latitude 80° North, and longitude 100° West, with a mean temperature of 3 degrees below Zero, or 35 degrees below the freezing point.

The Eastern, or Asiatic Pole of extreme cold is in latitude 80 ° North, and longitude 95 ° E., with a

mean temperature of 1 degree above Zero.

Sir John Ross in one of his northern expeditions observed the thermometer to stand as low as 90 ° be-

low the freezing point.

The situation which is always at the freezing point varies according to latitude. In latitude 10° it is at the height of 15,000 feet; latitude 20° at 13,500; in 30° at 11,500; in 40° at 9000; in 50° at 6000; in 60° at 4000; in 70° at 1500; in 80° at 400 feet.

The following table gives the latitude of a place, its mean temperature, the mean degree of its hottest month, the mean degree of its coldest month, and the difference of the two latter.

	Lat.	Mean	Hot	Cold	Diff.
Petersburg	60 °	39 0	66 0	80	56 0
Edinburgh	5510	48 0	590	38 0	210
London	5130	50 °	64 0	37 0	270
Vienna	480	500	70°	26 0	44 0
Quebec	470	420	73 0	130	600
New York	40 0	53 0	81 0	25 0	56 0
Pekin	390	55 0	84 0	24 0	600
Havannah	23 0	78°	84 0	70 0	140
Cumana	100	82 0	84 9	79 0	5 0

### AIR AND WATER.

Without the atmosphere the light from the sun would not be scattered over the earth, but sent only to one spot.

The air carries the small particles that fly off from different substances, and which, reaching our

nostrils, give us the sensation of smell.

Sound is occasioned by a movement among the particles of air; it moves at the rate of 1100 feet a second through air, and 4700 feet through water.

An echo takes place when the time of going and returning of the sound is more than one-twelfth of a second; therefore, the two objects between which the echo is observed cannot be less than 50 feet apart.

The light in passing through the air gets refracted, or bent down; it is in consequence of this we have

twilight.

The air is of weight, pressing equally every way 14lbs. upon every square inch; this will give a weight of 14 tons upon a man, and 5000 millions of millions of tons upon the whole earth.

The height of the atmosphere is not above 50 miles. The air is composed of two gases, about three-

fourths being nitrogen and one-fourth oxygen.

Wind, which is air in motion, changes in force. Light winds move only a mile or two in an hour. strong breezes 20 or 30 miles an hour, stormy winds 50 or 60, and hurricanes 80 or 100.

The Monsoons are periodical winds prevailing in the Indian Seas. The word Monsoon comes from a

Malay word, signifying Season.

On the north side of the Equator the Monsoon

blows from the south-west from April to October, and is succeeded by the north-east Monsoon from October to April.

The south-west Monsoon blows from off the sea toward the heated lands of India, Indo-China, and China.

The north-east Monsoon is a return of the current of air in the winter season.

On the south side of the Equator the south-east Monsoon blows from off the Continent of Australia during the winter months, and the north-west sets in toward Australia from October to April.

The Trade Winds blow from the north-east and from the south-east towards the Equator, because of the rarification of air in the torrid zone.

They are carried a little eastward by the effect of the daily motion of the earth. They are never known to blow beyond 30 degrees north and south of the Equator.

The western breezes, or more properly the northwestern, are the downward returning south-eastern Trade Winds in triumphal conflict with the southern polar currents of air.

The south-westerly breezes in the north Atlantic, are the downward returning north-eastern Trade Winds in triumphal conflict with the northern polar currents.

Water is composed of equal quantities of the two gases,—oxygen and hydrogen. It freezes at 32° of heat, and boils at 212°.

It presses equally on all sides, and will not rise in a

pump higher than 34 feet. It is about 850 times heavier than common air.

Steam is water in a state of vapour.

Clouds are formed of collections of vapour, ascending from the surface of waters by evaporation. The heat of the sun causes the expansion of the water.

Evaporation is twice as great from water at the temperature of 212° as when it is at 180°, and six

times as great as when at 130 °.

Air always contains moisture. The cold in the upper regions of the atmosphere condenses the vapour; that is, draws closely together the particles of it, and drops of water are formed: these fall in the form of rain, because the air cannot sustain their weight.

The degree of temperature at which moisture falls.

is called the Dew-point.

This particular amount of temperature, or the Dewpoint, is found to sink one-quarter of a degree for every hundred yards of ascent of the moisture. The difference, therefore, between the degrees of Dewpoint and those of the temperature of the air at the time, will enable us to know the height at which clouds will be formed.

If the weather be warm the vapour will have to ascend much higher before it can be condensed than if the air be cold.

In hilly countries the temperature of the air and the Dew-point are so nearly alike that rain is soon formed. Clouds readily gather over our mountains, when the sky elsewhere may be clear. Among the hills of Westmorland there is twice as much rain as in London.

Clouds are of various kinds. A light feather-like

cloud is called a Cirrus; one in lines, a Stratus; one in round heavy masses, a Cumulus; a black, rain cloud is a Nimbus. Cirrus clouds have been known 7 and even 10 miles high.

As winds are the carriers of clouds, the leeward

side of high mountains receives no rain.

In Egypt there is little rain, because the south, the east, and the west winds come over the parched deserts. Bolivia has little rain, because the high mountains around it have the rain to themselves.

The average annual depth of rain in different places is as follows: in Petersburg, 16 inches; London 26; Dublin 27; Cork 36; Rome 40; Calcutta 81; Bombay 110; St. Domingo 150; Cayenne in South America 250. There is, therefore, far less rain near the Poles than near the Equator.

About 300 tons of water annually fall on every acre

in England.

The western side of Tasmania receives far more rain than the eastern side, because the prevailing westerly breezes carry there the moisture from the ocean. Hobart Town would catch a little more rain from the western side, if no ranges of mountains were between.

When the particles of water are frozen before the formation of rain, Snow is produced. If the water be frozen after the union into drops, Hail falls instead of rain. Hail-stones of large size have been thrown out of volcanoes.

Dew is moisture deposited in the night from the chilliness of the atmosphere. It either falls from the air, or rises from the ground which parts with its

heat.

Excitation of air is one cause of rain; this is the stand of the stand

evinced in the showers which descend at the time of volcanic eruptions, battles, and accidental fires.

The Tides form a motion of the sea caused by the attraction of the Moon and Sun. As water is the lightest part belonging to the earth, it will be most excited by such attraction.

The Moon has eleven times as much influence

upon the waters as the Sun.

When the Moon is brought opposite to a certain place by the daily motion of the Earth, the waters of that place will be drawn somewhat up towards it, and

high-tide is produced.

On the contrary side of the Earth the water will also be high at the same time; as that side being less attracted by the Moon than the centre of the world, will have its waters recede or rise up from the Earth.

The Tide is six hours rising, and, after a quarter of an hour spent in turning, it is six hours going down; we have, therefore, high water every twelve hours and a-half.

When the Sun and Moon attract together, the highest Tides take place; the Tides are lowest when the Sun is attracting one side of the Globe while the Moon is on the other side.

Under currents are courses of water below the surface; such as that one which constantly sets in from the polar seas toward the Equator, to supply the loss by evaporation in the torrid seas.

There is an Equatorial current running at the rate of 10 miles in 24 hours, caused by the impulse of the

winds coming from the Poles.

A waterspout is occasioned by a whirlwind at sea. When a cloud is caught by the winds, it is brought

down in a spiral manner toward the sea.

The water beneath, being thus deprived of much of the atmospheric pressure, and acted upon by the solar heat, readily ascends the cloudy tube in the form of vapour.

It is an error to suppose that the water rushes up into the cloud. When the waterspout bursts a heavy

shower of rain falls.

Water is at the greatest density, or weight, at 40 ° of heat. As water freezes at 32 °, the coldest will always be at the top, thus preventing seas and lakes from being frozen to the bottom. This shows the

wisdom and goodness of the Creator.

If the surface of the globe were divided into 1000 parts, 734 would be water, and 266 land; a proportion of 3 to 1. Of the 266 parts of land, Europe has 16½, Australia 16, Africa 59½, Asia 89, and America 85. The two polar zones have 65 parts water and 18 land, the north temperate zone 132 water and 127 land, the south temperate 237 water and 22 land, and the torrid zone 300 water, and 99 land.

## LIGHT.

Light comes from the sun, and all other self-luminous bodies.

It proceeds in straight lines at the rate of 200,000 miles in a moment of time. This is ascertained from observations made on the eclipses of Jupiter's moons.

These eclipses take place 161 minutes earlier when the world is on the same side of the sun as Jupiter than when on the other side.

The light must then be that time in coming a distance equal to the diameter of the earth's orbit. This distance is 190 millions of miles: which allows 81 minutes for the passage of the light from the sun to us.

The length of an undulation, or a wave of light, is ascertained to be only one-fifty thousandth part of an inch, and it is found that 500 millions of millions of them arrive in a second.

Light, though apparently simple, is known to consist of seven colours, commonly called the colours of the rainbow; namely, red, orange, yellow, green, blue, indigo, and violet.

This can be seen by observing light broken into colours when passing through a glass drop belonging to a chandelier.

Objects by absorbing one or more of these colours in certain proportions have their several natural tints.

The light of the sun is 200,000 times greater than that of the moon.

The rays proceeding from the sun are found to consist of three kinds,-enlightening, heating, and chemical rays.

The green rays have far less heat accompanying them than the red ones.

The chemical rays produce changes of colour in particular substances. Muriate of silver in a blue light would have a blue colour, in violet a reddish brown, and in yellow a white colour. Violet rays are magnetic.

The chemical rays produce the effect seen in

photogenic drawings.

According to the state of the air, so is the amount of the reflection of light. Light is refracted, or bent out of its course, by passing out of the air into a denser substance; a walking-stick held in the water appears bent.

The Halo surrounding the moon is owing to the refraction of light in the small drops of rain, or the

fine particles of ice floating in the air.

Halos always show that there is humidity, or

moisture, in the atmosphere.

Parhelia, or Mock Suns are seen in frosty weather only.

Six Suns have been beheld at once in the polar

regions.

The Mirage is an optical delusion, or deception of sight, which is observed in sandy deserts. The thirsty traveller fancies that he sees lakes and trees, when nothing is really before him but a dreary waste.

The air near the surface of the burning sands has a high refracting power by reason of its heat, and this occasions the distortion of objects seen through it.

Sometimes vessels are seen in the air upside down; this is also owing to the refracting power of heated

In the polar regions the air is found sometimes to have great power of refraction, so that objects appear very differently from what they really are. This is owing to the commingling near the surface of the sea or land of currents of air with different temperatures and different degrees of moisture.

A Rainbow is the appearance of the seven prismatic colours in the form of an arch in the heavens. This is produced by the breaking of the white light of the sun, through its refraction and subsequent

reflection in the drops of rain.

Rainbows are always double. The inner one has the red outside and the violet inside, while the outer one has the red in and the violet out.

No two persons see the same rainbow, as the sun,

the observer, and the bow must be in one line.

The Aurora Borealis or se Northern Lights, and the Aurora Australis or the Southern Lights, are appearances which, in the polar regions, supply the absence of the sun in the winter months.

Meteors are luminous objects observed moving with great velocity, and occasionally bursting with a

loud report.

One was noticed in 1783, which was calculated to be 120 miles high and the size of Great Britain. It

was seen by all Europe at the same moment.

Upon the bursting of a meteor a shower of stones descend. These stones all bear the appearance of having passed through great heat, and are found to consist chiefly of iron combined with nickel, silica, and other mineral substances.

Meteoric stones have fallen in most parts of the earth; they have been supposed by Arago, the French Philosopher, to have been cast out of volcanoes in

the moon.

In order to send a stone beyond the attractive influence of the moon, so that it could not return, a lunar volcano would have to exert a force equal to five times that which is required to discharge a cannon ball; this power our volcanoes have often exhibited; the volcano Cotopaxi once threw a mass of rock 15 miles.

Aërolites, or falling stars, are meteors which have been supposed by Arago to be fragments of some planets, and which are performing revolutions round the earth, becoming luminous in their passage through our atmosphere. It is more likely that they

owe their origin to electricity.

Showers of falling stars have been often noticed on the nights of the 11th and 12th of November. On one occasion a great shower of stars, which lasted for some hours, was observed in America to come from a point in the heavens to the east, and in Europe to come from the west; that is, from over the Atlantic.

### HEAT.

Heat is produced from various causes. Solar heat comes from the Sun. The evolution, or giving out, of Electricity is a source of heat.

In the combustion of gases, and in the solidifica-

tion or freezing of liquids, heat is also evolved.

Percussion, friction, and compression produce the like results. The natives of these colonies used to rub two pieces of wood together to obtain fire. Pieces of ice melt when rubbed together. Iron may be made red hot by being hammered.

Chemical combination, that is, the natural or artificial union of certain substances, is another source

of heat.

Great heat is given from lime when water is mixed with it. This particular kind of heat is called latent or hidden, because it is only under certain circumstances that it is called forth.

While water is freezing a considerable amount of latent heat is evolved. In consequence of this, it takes some time for the liquid to become solid, though there is but a very small difference of sensible heat in these two states of the same substance.

Ice cannot be converted into the liquid state again until it has received about a thousand degrees of heat, and which heat becomes latent, as it exerts no sensible effect upon the ice. If it were not for this, water would become ice in a moment, and the frozen river would as suddenly become liquified.

Animal life is another source of heat. The combustion produced by the oxygen of the air coming into contact in the lungs with the carbon contained in venous blood is supposed to produce animal heat.

The temperature of the blood is at 98 degrees, alike in the depth of winter and in the height of summer; this is nearly half the heat of boiling water, which is 212°.

A mixture of 8 parts of snow and 10 of sulphuric acid, would cause the temperature to sink from 32° to 91°, or 91 degrees below zero, a difference of 123 degrees; this is the greatest artificial cold ever produced.

Air compressed to one half its space gives out a heat of 180°; but if it were reduced to one three-thousandth part of its volume, 13,500°, would be disengaged.

A mixture of quicklime and nitric acid yields the

enormous heat of 23,837 °.

#### ELECTRICITY AND MAGNETISM.

Electricity is found everywhere. It is a source of heat and light. In an explosion it makes a report and gives a shock.

The Electric Fluid may be excited, or become an

object of the senses, by means of friction.

A piece of glass when rubbed over with silk becomes electric, so as to attract and repel substances, and so that sparks may be drawn from it by the presence of metallic points; this is seen in the use of the Electrifying Machine.

Metals are excellent conductors of Electricity, and woollen and silken goods are bad conductors. Much Electricity appears to come out of the ground.

When a body contains more than its natural amount of the electric fluid, it is said to be Positive,

and when less it is said to be Negative.

Two substances in these opposite states being brought together, a spark and an explosion immediately take place, in the passage of the fluid through the air from the overcharged body to the other one, in order to restore the balance.

While positive and negative electricity attract one another, positive repels positive, and negative repels negative. A body is generally positive when at rest.

The phenomena of Thunder and Lightning are owing to electricity. When a positive cloud approaches a negative cloud the electric fluid escapes in the form of Lightning, and the report of the explosion is known as Thunder.

Lightning is sometimes observed to pass from the

ground to the clouds, or from the clouds to the ground; this takes place when the earth and the clouds are in different states of electricity.

Thunder is unknown in the Arctic regions. The

torrid zone is the great seat of electrical action.

That Lightning is nothing but common electricity has been proved in the experiments of Dr. Franklin, who, by means of a kite drewthe lightning into a bottle.

There appears to be far less electricity in the Southern Seas than in the Northern Hemisphere.

It is well known that one end of 'he needle in the mariner's compass points towards the north and the other towards the south.

The Mariner's Compass consists of a box in which is suspended, so as to move with freedom any way, a piece of fine magnetized-steel, called the needle.

At the bottom of the box is a card divided into 32 division, scalled the Points of the Compass. The Chinese, who knew the use of the Compass before we,

divide theirs into 24 parts

The four grand divisions are, North, East, South, and West. The eight points between North and East are, N. by E., N.N.E., N.E. by N., N.E., N.E. by E., E. N.E., E. by N., East. The other three quarter divisions are similar to this one.

That which causes the needle to point towards the

North and South is Magnetism.

Magnetism is the electric action of a Magnet. A Magnet produces the same effects as common Electricity, attracting, repelling, &c., Iron can be made magnetic. An ore of iron, called Loadstone, is found naturally to possess the power of Magnetism. The force of a Magnet increases with exercise.

The magnetic fluid flows in a regular course round the earth, having its equator and its poles. It runs

from those poles to that equator.

The Northern Magnetic Pole was ascertained by Captain Ross to be in latitude 70° 5' N. and long. 96° 45' W. The Southern Pole is about 30° south Calculof Hobart Town in long. 130° E. Magnetic meridians or lines pass over the earth from one magnetic pole to the other.

When going from the magnetic equator towards the north magnetic pole the needle begins to dip down towards the north side. Towards the south magnetic pole the needle dips on the southern side.

In England the needle dips towards the north at the angle of 70°; in Iceland and New York it is much the same. In Tasmania the dip is towards the south. The dip increases according to the magnetic latitude.

All around the north magnetic pole the needle dips nearly 90 ° out of the perpendicular.

There are situations in which the needle points to the true pole. In all other places it deviates sometimes to the east and sometimes to the west of the true pole; so that mariners are obliged to make allowances for these variations in their reckonings.

The lines drawn on the globe through places where the needle points due north and south are called *lines* 

of no variation.

One line of no variation runs from the north magnetic pole through Washington, and through Bahia in Brazils. The other line of no variation runs in a very irregular course through Japan, Canton, Bombay, Java, and Australia to the south magnetic pole.

The variation of the needle at London is 24 °

to the west of north; at Sydney it is 9 ° to the east of south, and at Hobart Town the variation is Area less than at Sydney.

In all parts of the Southern Ocean between the Cape of Good Hope and the longitude of Adelaide

the variation is west.

It is a remarkable fact that there are progressive

changes in the variation of the needle.

Though now the variation at London is 24 degrees west, it is not two hundred years since there was no variation, and before that period it was easterly.

These singular changes in the course of the magnetic fluid are accounted for by a progressive move-

ment of the two magnetic poles.

There are, however, two other centres of magnetic action, which exert much less force than the others. but have still great influence upon the needle.

They are known by the names of the Weak North Pole and the Weak South Pole. The former situated in Siberia in about lat. 85 ° N., and long. 139 ° E., the latter in about lat. 80 ° S, and long. 140 ° W.

These four poles continually shift their places, and thus cause a continual change of magnetic direction. The strong north pole performs its complete revolution of changes in 1890 years, the strong south pole in 4605, the weak north pole in 860, and the weak south pole in 1303 years.

By the supposition of the four poles it appears easy to account for the changes in the variation of the

needle.

When the variation was easterly in London, the weak eastern north pole was much nearer England, and the strong western north pole at a greater distance than at present; therefore the action of the weak one drew the needle eastward from the north. But when the weak pole withdrew to Siberia, and the strong one approached nearer to Europe, the needle turned westward. It has now passed its greatest westerly variation in England, and is slowly going back to the state of no variation.

On our southern side of the world, the strong south pole was in about 150° E. in 1605, and the weak south pole 76° W. The strong pole was then much farther off from the Cape of Good Hope than now, and the weak pole much nearer. The effect of this Garrier would be to cause the north pole of the needle to move toward the east, and its south pole toward the west; whereas, now that the magnetic poles are changed, the variation is changed at the Cape to the very opposite.

In Hobart Town and Sydney the variation is easterly, because the strong south pole, being a little to the west of these places, would attract the south pole of the needle toward it, so that the part which should point to the north is turned somewhat to the east-

ward of it.

There has also been observed an annual and a di-

urnal variation besides the progressive one.

The true direction of the needle is liable to be affected by other causes which are not so uniform as those we have mentioned. The presence of iron in a ship hinders the free action of the needle.

Storms at sea often much disturb it by the strong collection of electricity then existing in the atmos-

phere.

Earthquakes have considerable influence upon it.

The Aurora is found very sensibly to affect the
meedle, sometimes diverting it 7 or 8 degrees out of

its direction. This could not happen if the Aurora were, as some say, mere gaseous matter ignited by

electricity.

It is always noticed that the highest point of an Aurora is seen on the magnetic meridian of the place in which the observation is made. The part of the heavens where its radiations unite is exactly that to which the needle directs itself when suspended by its centre of gravity.

The higher the Aurora, the greater is its disturbing

effect upon the needle.

By this it seems pretty certain that the Aurora has much connection with magnetism, and that its beams are governed in their course by Terrestrial Magnetism; that is, the magnetism of the earth.

The effect of terrestrial magnetism is found not to be diminished even at an elevation in the air of 13,000 feet; this was ascertained by two French Philoso-

phers in a balloon some years ago.

To the interesting question respecting the cause of the earth's magnetism, no satisfactory answer has yet been decided upon, and as little do we know of the design of its creation; though we may feel certain it was not for the mere purpose of acting upon magnetic needles.

As there is now no doubt that Electricity and Magnetism, as well as Galvanism, are perfectly identical in their natures, although we call them distinct fluids, so is there reason to think that heat and light are but different operations proceeding from the same grand cause.

### FORMATION OF THE EARTH.

The science which describes the formation of the earth is called Geology, while that which speaks of its relation to the sun and stars is called Astronomy.

There are many kinds of rocks of which the crust of the earth is composed. It has been discovered that these different kinds are found in a regular order one above the other.

The lowest and first formed rock is Granite.

Other rocks are produced from Granite when worn down by air and water, and afterwards deposited by water: Gneiss is an instance of this.

These newly formed rocks, when acted upon in their turn by air, water, heat, electricity, or other causes, are converted into fresh forms of mineral matter.

We can observe about us this progress of destruction and reformation going on at the present time. The river Ganges every year carries into the sea 240 millions of cubic yards of soil.

As we find so many different rocks, and some of these of immense thickness, even miles in depth, we can form some idea of the vast time taken to produce the world as it now is.

Even those strata or formations nearest the surface have probably taken millions of years to come to their present state.

The period during the deposition of matter to produce rocks must evidently have been long, from the way in which some of these rocks are formed.

The stone of which the pyramids are built consists of a collection of very small shells, too small to be distinguished by the naked eye, cemented together by lime.

Such shells must have been gradually deposited by the water, as they are found in a perfect state, unbroken by any violence.

The shell fish evidently lived, died, and were buried in the same spot; and it would surely occupy a considerable time for the sea to deposit shell fish toform huge masses of hard rock.

The common Tripoli polishing stone is found toconsist of shells which are so small that five millions of them would only fill the space of a cubic inch.

A Scottish lake has been ascertained to deposit soil at the bottom at the rate of six inches in a hundred years: according to this calculation a rock of sandstone 3000 feet thick would be 600,000 years in formation.

Shells, plants, and remains of animals found in rocks are called Fossils.

Fossils have been found in all kinds of rocks excepting some of the very lowest. The earliest fessils are shells, fishes, and plants; quadrupeds are not seenuntil after these. The earliest quadruped discovered is a sort of Opossum.

Many of the fossil animals were of immense size: some of them, of the lizard family, being forty to sixty feet in length. Others were of great strength, and covered with a sort of armour; as the Megartherium, or great beast.

There are very, very few animals now living which

are similar to the fossil ones.

No bones of man have been found with these ancient fossils: therefore, we are led to believe that man was not created until long after the creation of other

animals; though the present race of living creatures was formed about the same time as himself, for so the Bible declares, and so Geology proves.

It appears certain that there have been many dis-

tinct creations of vegetable and animal life.

When looking upon the earth we see marks of great convulsions, and we know that at the present time volcanoes and earthquakes are not unfrequent. There are now 200 active burning mountains.

Earthquakes are connected with volcanic action. That one which destroyed Lisbon in 1755 was felt over a surface of 4,000,000 square miles. The Geysers or hot springs of Iceland are owing to the neighbouring burning mountains.

Volcanoes throw out burnt matter, called cinders, as well as stones, smoke, gases, mud, and the melted

rocks called lava.

The gases which escape are chiefly carbonic acid and sulphuretted hydrogen. There is no flame from volcanoes, but a reflection upon the ascending smoke.

Lava is generally light and porous, from the action of gases. Sometimes it is found very hard, and to all appearance like the ancient rocks of granite, basalt, and greenstone.

We are thus led to think that those rocks have an

origin similar to that of the lava.

It has been discovered that as we descend into mines, the heat becomes greater at the rate of about a degree for every fifty feet in depth. This proves that towards the centre of the earth there must be a mass of fluid matter strongly heated.

nature of of the months Google

This Central Heat, as it is called, may account for volcanic action, as the lava may be some of the fluid matter rising through the crust of the earth, cooling,

and flowing over.

The fossil plants and animals in the old formations of rocks show a higher degree of heat than is now found in the earth; many of those fossils have been discovered in the frigid zone, and bear no appearance of being drifted there.

The world, then, is gradually cooling.

The effect of the central heat is not now observed on the surface of the earth, which receives its heat solely from the sun.

Earthquakes do great good in disturbing the strata of the earth. They must have been very powerful in olden times, for we find many miles of rock to a great depth heaved out of its horizontal position.

By this means parts of a rock are raised to the surface, which would otherwise lie very far below us. Rocks containing metals are thus brought

within our reach.

Some persons think that the Deluge was the cause of marks of violence among rocks, and also of the existence of fossils in them.

But the Bible bears out no such theory of convulsions, as it informs us that even trees were left standing with the leaves upon them.

Coal is found to be produced from vegetable matter,

under great pressure and heat.

How kind and provident was it of the Creator to cause luxuriant forests to grow so long ago, which should be subjected to the enormous pressure of several strata of rocks, and afterwards be brought toward the surface by earthquakes, in the form of so useful a substance as coal.

#### STRATA OF THE EARTH.

The different mineral materials of which the crust of the earth is composed have been arranged under the divisions of the PRIMARY, the SECONDARY, and the TERTIARY formations; the primary being the lowest, and the tertiary the uppermost.

The Primary formations are either Stratified or Unstratified; that is, with or without layers. The stra-

tified rest upon the unstratified.

The Unstratified rocks are, Granite, Syenite, Greenstone, Basalt, Claystone, Compact Felspar, and Pitchstone. Pitchstone is very similar to the Obsidian and Trachyte now ejected from volcanoes.

The Stratified rocks are Gneiss, Mica-slate, Hornblende-slate, Talc-slate, Chlorite-slate, Serpentine,

Quartz-rock, and Crystalline-limestone.

Primary stratified rocks differ from other stratified rocks in being the lowest of all, in being highly crystalline, in having no organic remains, and in containing no rolled stones or sand.

The Secondary formations are classified under several systems; as, the Cumbrian, the Cambrian or Greywacké, the Silurian, the Carboniferous, the Saliferous, the Oolitic, and the Cretaceous.

The Cumbrian or Clay-slate system is the lowest of these, and contains no fossil remains; it extends

to the depth of many thousands of feet.

The Greywacké, which rests upon the Cumbrian, consists of Slate and Slaty-limestone. In it are found the earliest fossils.

The Silurian system is composed of Sandstones and Limestones. The Cumbrian, Cambrian, and Silurian form what is called the *Transition* series.

The Carboniferous system consists of Sandstones, Shales, Limestones, Ironstone, and Coal. It is subdivided into the three series of the Old Red Sandstone, the Carboniferous or Mountain Limestone, and the Coal formation.

The Coal formation is composed of irregular alternations of Sandstone, Limestone, Shale, Clay, Iron-

stone, and Coal.

The Saliferous system is so called from the amount of Rock-salt found in it. It is sometimes called the New Red Sandstone system. There are here many remains of gigantic reptiles.

The Oolitic is so called from the egg-shaped stones which abound in some of its formations. The Lias rock so rich in fossils, Jura limestone, Portland stone, Fuller's earth, and Weald clay, are in the Oolitic series.

The Cretaceous or Chalk system, which is the uppermost of the Secondary rocks, contains abundance of shells of most kinds. Basalt Trap Rock overlays chalk in Ireland, forming the Giant's Causeway.

The Tertiary formations are alternately of fresh water and marine origin, being chiefly Clays, Marl, Gravel, and Limestone.

London stands upon the Tertiary formation of Blue Clay, and Paris upon Gypsum or Sulphate of Lime.

The Tertiary series are arranged in divisions according to the age of the fossil shells contained in them. In the oldest of these strata about 5 per cent. only of the fossils are of existing species, while in the most recent there are 90 per cent. of them.

The Post Tertiary formations rest upon the Tertiary. Great quantities of *Boulders*, or masses of rounded rock, were rolled by the waters of this period.

Remains of man, and of animals now existing, are

found in the Post Tertiary formations only.

The age of a rock is determined by the kind of fossils which it contains.

Metals are found in various strata. Tin is only obtained from granite and other ancient rocks. Gold and silver are more modern. Iron, copper, lead, and zinc are found in strata of nearly all ages.

Metals were formed after the rocks in whose fissures they are found. Metallic veins appear to have been governed in their formation by electricity.

All rocks are compound bodies. For instance, granite is composed of felspar, mica, and quartz. Quartz consists chiefly of silica, the basis of flint.

Mica contains silica, aluminum, lime, manganese, potash, oxide of iron, and water. Felspar contains nearly the same substances as mica, but has more silica and potash, and less oxide of iron.

These constituents of the composition of granite can be again resolved into their component parts, until at length nothing remains but irresolvable, simple,

substances.

The primitive or elementary bodies are 54 in number. Of these 42 are metals, and 6 are gases. The union of oxygen gas with some of the metals produces the various kinds of earths; as, clay, lime, magnesia, &c.

The simple gases are oxygen. hydrogen, nitrogen,

chlorine, bromine and fluorine. The other 6 bodies are, carbon, boron, phosphorus, sulphur, silicon and iodine.

All animal, vegetable, and mineral substances are composed of different proportions of these 54 elementary bodies.

### ROTUNDITY OF THE EARTH.

A ship when coming into port is not seen wholly

at once by those on shore.

At first the flag shows itself, then the masts appear, and at length, upon coming nearer, the main body of the ship is beheld. The vessel looks as if coming up a hill to us.

This is a proof that the world is round; for if it were flat, the whole of the ship would be seen at once, though indistinctly.

Persons have sailed from a port, keeping always in the same direction, and yet have returned to the same place.

This is another proof of the rotundity or roundness

of the world.

Everything which is spherical or round, as an orange for instance, will present to the eye a roundness of edge whichever way it may be turned.

When in a ship away from the sight of land, the edge of the sea in the distance appears circular. This

could not happen if the world were flat.

When the earth, in turning round the sun, happens to come exactly between the sun and the moon, there is an eclipse or darkening of the moon, which shines only by the sun's light.



Of course the shadow of the earth is thrown upon the moon. This shadow, as any one may see, has a round edge.

Now, nothing can cast a round shadow unless it be round. The earth then is a solid round body called

a Globe or Sphere.

By always remaining in one country we can never see all the stars that are to be seen.

If we were to start from England and travel southward, some stars would appear nearer the horizon than they did in England, while others would appear higher up.

Many stars will present themselves which we had never before observed, and others disappear altogether

which had formerly been in view.

The further we go southward, the more stars would we lose sight of which we had before seen, and the more new stars would arise before us.

At the Equator we should be delighted with the spectacle of the Southern Cross, and have still in view the constellations which are observed in England.

When we come to the Australian colonies, we should find the appearance of the Heavens above us so different from what we saw at home, as to be unable to see many stars that were formerly familiar to us.

Orion and the beautiful Sirius, which were upon the southern side of us when in England, are noticed

by Tasmanians to be in the north.

If the world were flat we should not have such wonderful changes as these among the Fixed Stars in sailing to the southern hemisphere.

In going from Hobart Town to London, or from

London to Hobart Town, it seems, by the appearances among the heavenly bodies, as if we first went up a hill and then down again on the other side; although we thought we were sailing upon a level surface.

The apparent movements of the stars afford a decided

proof of the rotundity of the earth.

· In looking upon the stars at night we perceive them moving from one side to the other.

This appearance is caused by the daily motion of the world in turning over so as to receive light from the sun.

But some stars seem to take a much greater journey across the heavens than others.

There are those which appear to describe a circle round a particular fixed spot in the heavens; while others form part of their circle above the horizon, and the rest of it below. There are some stars whose circles are very small; for they appear hardly to move all night.

We know that the stars have no motion of them-

selves.

The daily revolution of the globe is not sufficient to account for the peculiar motion of different stars, which motion must be owing to the shape of our world.

If the earth were flat, and had a diurnal motion, the stars would all appear to perform the same journey in the same time.

We should not then see them making circles of different sizes round a particular point as we now ob-

serze them to do.

The world, then, cannot be flat.

If the earth were shaped like a cylinder, or drum, the stars would all appear to rise and set in lines parallel to the earth's surface.

We should see more stars at a time than if the

world were flat.

There would also be observed at night on each side of us an arc of stars near the horizon.

As the world turned over, the stars would appear to perform equal revolutions round the earth, and not to move in different sized circles, as we find them to do.

The world, then, cannot be the shape of a cylinder.

If the world were of a spherical or globular shape, and revolved daily, the stars would present the ap-

pearances we now see.

As the earth presents a greater extent of surface at the equator than elsewhere, and all the zones have equal time to perform the daily revolution, the stars over the equator describe a greater circle than those shining over countries nearer to the poles.

A person at the equator would move at the rate of 17 miles a minute in the daily motion of the earth; one at Hobart Town 13 miles; a person at London 10 miles; while one nearer the poles will move still

slower.

As the motion of the stars depends upon the motion of the earth, the different rates of motion among the stars are owing to the different rates of motion in different parts of the earth.

The nearer a place is to either of the poles, the less will be the distance it has to go, and the stars over such a place will of course appear to go a shorter

course.

As the poles of the earth are immoveable, the points of the heavens immediately over them will appear also immoveable.

These points are called the North and South Poles of the Heavens, and it is round these two points that the stars on either side of the equator appear to turn.

If we stand near the equator, and look on both sides of us, we should see stars performing circles round two Poles of the Heavens.

All this proves the rotundity of the earth.

Mr. Sadler, a few years ago, ascended in a balloon from Dublin to go across the Irish Channel to England.

After being some time in the air he saw the sun set. He then threw out some ballast, and rose to a very great height, and saw the sun rise on the western side. Descending, he again saw the sun set for the second time that evening.

This appearance could not have been witnessed if

the world were flat.

### THE EARTH NOT QUITE ROUND.

In order to beat seconds at London, a pendulum must be 39 inches and 1-7th of an inch from the top to the middle of the swinging-bob.

The gravitation of the earth makes the pendulum descend, and the force of its motion downward

causes it to ascend.

The longer the pendulum, the longer is the arc or line made by it in its motion, and the longer time will it take to perform this motion. It has been found that a pendulum which beats seconds in London, would not beat seconds near the equator. A correct clock with such a pendulum would lose, by the change of place, about sixteen hours a year. To enable it to beat seconds at the equator, it should be shortened about one-tenth of an inch.

Near the equator a clock goes slower, and near the

poles faster.

The pendulum that performs its oscillation or swing in a second at London, would take more than a second to do it in Hobart Town. A London clock, therefore, would not keep exact time here. An Australian clock would always be too fast in London.

The greater the degree of gravitation, the quicker will the pendulum be brought down; and, therefore,

the quicker will it perform its swing.

If the pendulum moves slower in Van Diemen's Land than in England, it must be because gravitation is stronger in England than in Van Diemen's Land.

As the pendulum goes slower at the equator than at the poles, the gravitation must be less there than

at the poles.

As it has been before shown that gravitation increases in proportion to nearness to the centre of the earth, if there be more gravitation at the poles than at the equator, the poles must be nearer the centre of the earth than the equator is.

The Earth then is not a sphere, but an Oblate Sphe-

roid, being flattened at the poles.

If we wish to make the same pendulum beat seconds in different places, we shall have to shorten it as we get to the equator, and lengthen it as we get towards either of the poles. It has been found in like manner that on different parts of the Earth's surface, the same thing has different weights, weighing more at the poles than at the equator. This fact, which is owing to difference of gravitation, proves that the earth is not completely globular in shape.

Those imaginary lines drawn on the Globe, called Degrees of Latitude, ought to be at equal distances from one another.

It is found by observation, however, that this is not

the case, but that they slightly differ.

The distance from the equator to either of the poles is 90 degrees.

A degree close to the equator measures 68 miles

and 72-100th of a mile.

A degree at the distance of 11 degrees off from the equator measures 68 miles and 23-100th of a mile.

A degree in Van Diemen's Land is 69 miles and 4-100th; in England 69 miles and 12-100th; in Lapland 69 miles and 26-100th. Close to the poles

the degree would be longer still.

The mean or middle length of a degree of the world is about 69 miles and 1-20th; and as there are 360 of those distances, 360 times 69 miles and 1-20th will show the circumference of the world to be 24,858 miles.

By observing this difference in the length of the different degrees of latitude we get another proof that the world is not a true sphere, but an oblate spheroid.

The compression of the Spheroid is 1-285th part.

The shorter diameter which connects the poles is 7899 miles in length. The longer diameter which

passes from one side of the equator to the other is 7925 miles. The difference of length between the two diameters is 26 miles.

The mean diameter, which is 7912 miles, being multiplied by 3 and 1-7th, will give the circumference of the earth—24860 miles.

## ANNUAL MOTION OF THE EARTH.

The stars appear to move from one side to the

other at a regular rate.

They appear to be moving in circles round the earth, and to take 24 hours to complete their revolution.

If we watch the stars for several nights together, we shall find that those which rise at a certain time one night will rise nearly four minutes earlier the next night, and so vary four minutes every night.

It would be 365 days before the stars rise at the same hour as they did when we first observed them.

They appear as if they had been going a journey of 365 days round the earth.

The appearance of the daily motion of the stars is accounted for by a daily revolution of the earth to

get the sun's light.

The appearance of the yearly motion of the stars can only be accounted for by the supposition of the yearly revolution of the earth round the sun, which is between us and the stars.

If the sun turned round the earth, it would cause

the same appearances among the stars.

But it is much more likely, upon the principle of attraction, that a small body like the earth should revolve round the sun, than that the sun should revolve round the earth. The sun appears to make a year's journey between us and the stars.

Every month it is between us and a particular

cluster of stars.

There are twelve of these constellations or clusters, forming a broad ring, that are in a line with the sun

and the earth during the year.

They are, Aries the Ram, Taurus the Bull, Gemini the Twins, Cancer the Crab, Leo the Lion, Virgo the Virgin, Libra the Scales, Scorpio the Scorpion, Sagittarius the Archer, Capricornus the Goat, Aquarius the Water-bearer, and Pisces the Fishes.

These are commonly called the twelve Signs of the

Zodiac.

This apparent journey of the sun or stars is owing to the real annual revolution of the earth.

### THE SEASONS.

Every one must have observed that the sun appears to change its place of rising every day. It appears to rise exactly in the east one morning, then for three months it continues progressively to rise on the north side of the east, as far as E.N.E.

After this it takes the same time to return to the eastern point, and then goes on towards the south for three months as far as E.S.E.; it then gradually returns once more to the eastern point of rising during another quarter of the year.

Now all these singular changes are accounted for by the annual motion of the earth round the sun in

its inclined position.

The sun is seen to rise exactly in the east on the 21st of March and the 21st of September: that is, when the equator is opposite to the sun.

It rises furthest from the east upon the northern side on the 21st of June, and it is nearest the south on the 21st of December: that is, it is over the Tropic of Cancer in June, and over that of Capricorn in December.

These two days are called the winter and summer solstices; meaning, the time when the sun stands still.

The word tropic is derived from a Greek word, meaning to return; because the sun, after approaching the tropical line, appears to return back in its course.

The word pole is derived from a word, meaning to revolve, as the globe revolves upon an imaginary line, called the axis, drawn from one pole to the other.

All this will be made clearer to the mind of the youthful reader, if he only take a large ball, chalk out upon it the equator, the tropics, and the arctic circles, hold it inclined about the quarter of a right angle out of the perpendicular, and carry it with a fixed hand slowly round a lighted candle.

He will find that at one part of the circle the north polar regions will be pointed most to the light, then the equatorial will be chiefly directed towards it, afterwards the southern regions, and then again the equatorial. This will give amusement as well as instruction.

The Wisdom of the Deity is shewn in thus placing our earth in such a relation to the sun, that every country may have light and regularity of seasons.

#### CHANGES IN THE ANNUAL MOTION.

The sun does not appear to us at all times of the same size. It looks larger in January than in July.

Its nearest distance is found to 12 93,500,000 miles, and its greatest distance 96,500,000.

We discover, then, that the world makes its annual revolution in an elliptical orbit, and not in a circular one.

It is found that the sun does not appear in one year exactly opposite that part of the constellation which it was the same month and day in the year before.

Many hundreds of years ago the sun was seen in the constellation of the Ram in the month of March; it is now seen in the same place in April.

This alteration is owing to the earth not maintaining constantly the same position with respect to the perpendicular.

It is now inclined at an angle of 23½ degrees; or more truly, 23° 27' 46"; that is, 23 degrees, 27 minutes and 46 seconds. 60 seconds make a minute, and 60 minutes a degree.

The poles of the earth shift their places with something of the swinging motion of a spinning-top, slowly describing a circle, while revolving rapidly at the same time. The cause is said to be the sun's attraction for the equatorial regions.

The effect of this upon the heavenly bodies is seen in some of the stars being made to approach nearer the poles, and others to recede from it.

At the end of 25,868 years this polar circle of error will be completed, and the earth will be again in the same relative position with the sun and stars.

# CHANGES OF THE MOON.

The moon in its monthly journey round the earth presents different appearances.

If the moon shone with its own light, it never could show half light at one time, quarter light at another, and afterwards hide its light altogether from us.

The moon, therefore, cannot shine with its own light, but must borrow it from the sun; it is then

able to cast a reflected light upon the earth.

When the moon is on one side of the earth and the sun on the other, we shall have the full moonlight, because the shining face of the moon is directly opposite to us.

If the moon be on the other side, we shall not be able to see it, because the shining face is turned from

the world.

When the moon moves a little from that situation, a small part of the face shone upon will be turned towards us, and we call it new moon.

Continuing its course, more of the enlightened face is turned to us, and then we have the quarter moon,

the half moon, and the three-quarter moon.

#### THE FIXED STARS.

The numerous stars about us, with the exception of the planets, are independent of our sun, and are supposed to be suns themselves. Light, which comes from the sun in 8 minutes, would be, perhaps, thousands of years in visiting us from some of the fixed stars, because of their great distance.

They are arranged in constellations or clusters, of which 38 are north of the twelve signs of the Zodiac,

and 55 south of them.

Sir William Herschel once counted 116,000 stars passing the opening of his telescope in a quarter of an hour, though only 3,000 altogether in the heavens are visible to the unassisted sight. Thousands of the stars which appear single to the naked eye, are

double and triple.

There are periodical stars, which go and return after a certain time. Some are Binary, revolving round each other, taking in some cases hundreds of years to perform their revolution.

The Milky Way consists of an immense collection

of stars.

Comets are composed of a filmy substance, called nebulous matter, and have generally a nucleus or star. The tails of comets are turned from their course because of the resistance of the Ether, a very fine fluid diffused throughout space, and which is between all particles of matter.

Light and heat are supposed to be produced by the vibrations of Ether; which vibrations may be excited by the luminous fluids surrounding the sun.

As we increase in knowledge, we discover more and more of the Power, Wisdom, and Goodness of our Heavenly Father.

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