

**THE  
INDIAN STUDENT'S  
GEOGRAPHY:**

COMPILED  
BY  
**A. H. PIRIE, Esq.,**  
PROFESSOR, CANNING COLLEGE.



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THE STUDENT'S GEOGRAPHY has been compiled to meet the wants of schools in India.

The *first* Part contains simple explanations of the more important principles of Mathematical Geography. The elementary style of the lessons on this subject has been purposely adopted to show the value of the evolution system of teaching.

The *second* Part comprises so much of the Descriptive Geography of the World as the compiler considers necessary for the ordinary education of Indian students. It aims throughout at giving descriptions of people and things rather than lists of names. The compiler believes that Geographical names and localities can be best taught by careful studies of the maps, and numerous examples are given of the style of questioning suitable for such lessons.

A detailed account is given of the Geography of the United Kingdom, and the book concludes with a full description of the Indian Empire.

CANNING COLLEGE: }

Lucknow, 1883. }

A. H. PIRIE.



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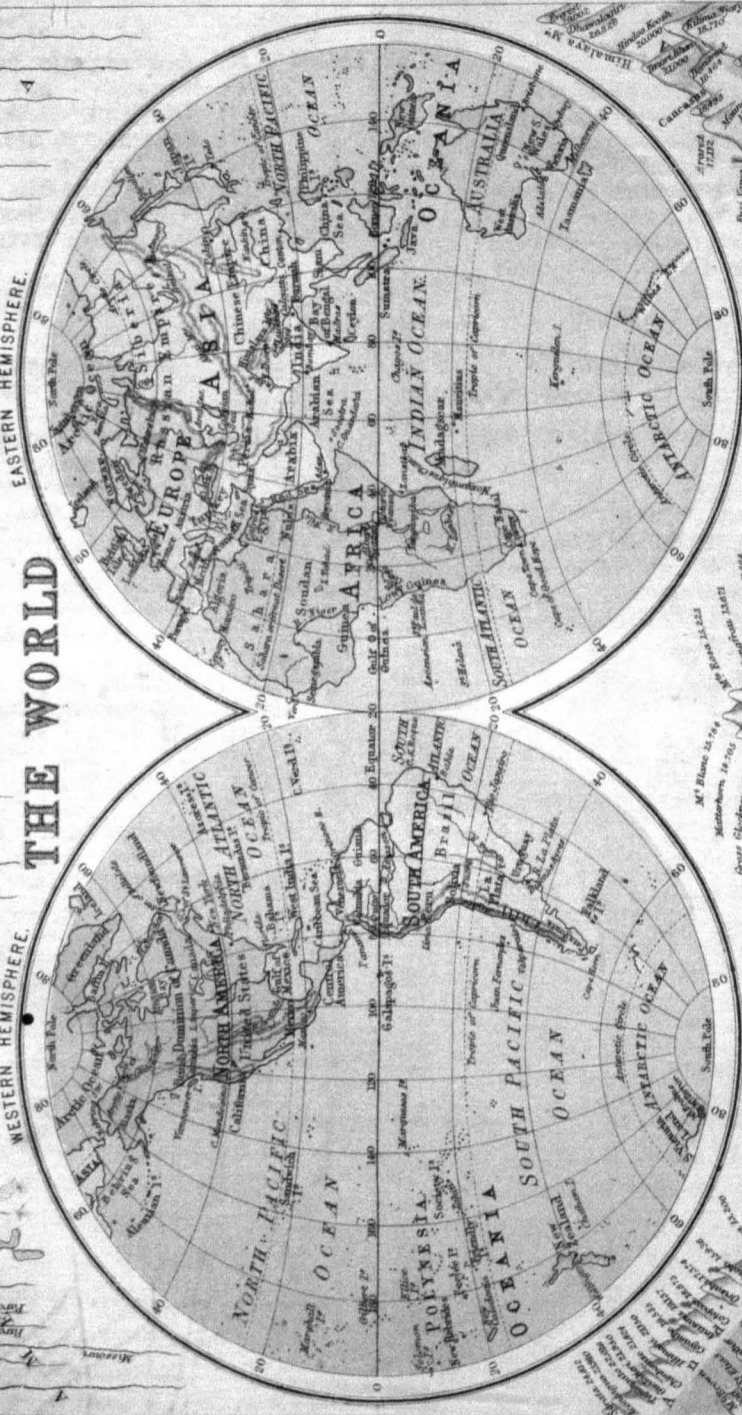
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Comparative View of the Principal Rivers with their Length in Miles

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Mississippi	3500	Indus	1800	Yangtze	3500	St. Lawrence	2100
La Plata	2400	Indus	1800	Yangtze	3500	St. Lawrence	2100
Parana	2200	Indus	1800	Yangtze	3500	St. Lawrence	2100
Orinoco	2000	Indus	1800	Yangtze	3500	St. Lawrence	2100
Colorado	1800	Indus	1800	Yangtze	3500	St. Lawrence	2100
Amazon	1700	Indus	1800	Yangtze	3500	St. Lawrence	2100
Orinoco	1600	Indus	1800	Yangtze	3500	St. Lawrence	2100
Colorado	1500	Indus	1800	Yangtze	3500	St. Lawrence	2100
Amazon	1400	Indus	1800	Yangtze	3500	St. Lawrence	2100
Orinoco	1300	Indus	1800	Yangtze	3500	St. Lawrence	2100
Colorado	1200	Indus	1800	Yangtze	3500	St. Lawrence	2100
Amazon	1100	Indus	1800	Yangtze	3500	St. Lawrence	2100
Orinoco	1000	Indus	1800	Yangtze	3500	St. Lawrence	2100
Colorado	900	Indus	1800	Yangtze	3500	St. Lawrence	2100
Amazon	800	Indus	1800	Yangtze	3500	St. Lawrence	2100
Orinoco	700	Indus	1800	Yangtze	3500	St. Lawrence	2100
Colorado	600	Indus	1800	Yangtze	3500	St. Lawrence	2100
Amazon	500	Indus	1800	Yangtze	3500	St. Lawrence	2100
Orinoco	400	Indus	1800	Yangtze	3500	St. Lawrence	2100
Colorado	300	Indus	1800	Yangtze	3500	St. Lawrence	2100
Amazon	200	Indus	1800	Yangtze	3500	St. Lawrence	2100
Orinoco	100	Indus	1800	Yangtze	3500	St. Lawrence	2100
Colorado	0	Indus	1800	Yangtze	3500	St. Lawrence	2100



Comparative View of the Principal Mountains with their Height in Feet



# GEOGRAPHY.

## INTRODUCTION.

### LESSON I.

#### GEOGRAPHY.

1. What is the name of the study we now begin?

2. In what city (town, or village) do we live?

How many people are there in it? Near what river is it situated? Name anything manufactured in this city. Has it a railway station? Name the nearest large town. How can we go to it?

**Teacher. Geography tells us about cities.**

3. In what District do we live? Is it level or hilly? Name any mountain in it. Name any rivers that flow through it. Name any lake in it. Name any kind of grain it produces. Another. Is cotton grown here? Name any wild animal found in this district. Another.

**T. Geography tells us about districts.**

4. In what country do we live? Is it large or small? What is its population? Is it a hot or cold country? Who rules over it? Name any of its religions.

**T. Geography tells us about all the countries in the world.**

5. What is the world in which we live called? Are there any other worlds?

Does the Earth move? What is the shape of the Earth?

**T. Geography tells us about the form and motions of the Earth.**

*Geography* is a description of the Earth's surface. It has three divisions, (1) Mathematical Geography, (2) Physical Geography, (3) Political Geography.

*Mathematical* Geography describes the Earth in its relation to the other heavenly bodies. Its topics are the Figure, Dimensions, and Motions of the Earth.

*Physical* Geography describes the Earth's surface in its *natural* state. Its topics are Land, Water, Climate Animals, and Plants.

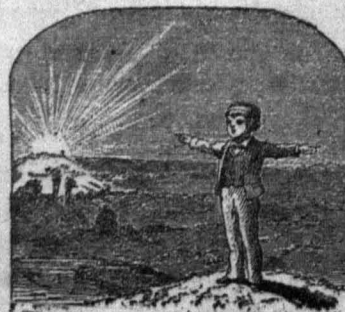
*Political* Geography describes the Earth's surface as divided and occupied by man. Its topics are Races, Nations, Religions, Governments, Industries, Civilizations.

### LESSON II.

#### DIRECTION AND DISTANCE.

1. Point towards your home. Point towards the court-house (*kachahri*).

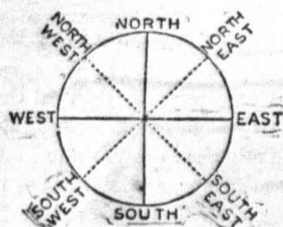
**T. By pointing towards a place we tell the direction in which it lies.**



2. Point to where the sun rises. Make a boy stand with his right shoulder towards the rising sun, and tell him to stretch out both

arms (as in the picture.) In what direction does his right hand point? Which hand points west? In what direction is he looking? What direction is behind him? In what direction does the sun set? In what direction is the sun at mid-day? Name something in the room that is north from him.

3. The direction that lies half-way between north and east is called northeast. What direction is half-way between north and west? Is it right to speak about the east-south direction?



Place one boy in the middle of the room, and make him call out the names of eight boys in succession who are to stand north, northeast, east, southeast, south, southwest, west, and northwest from him, as in the diagram. What is the name of the instrument by which the directions can be known at any time?

#### A. The Compass.

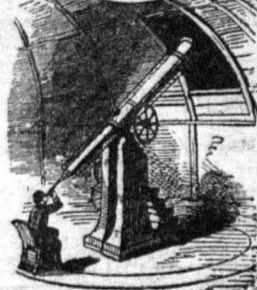
4. How far is it from your home? Name the nearest town. How far is it from here?

**By stating how far one thing is from another we tell the distance between them.**

5. What is the length of your pen? (Answer in *inches*). How far is it across the room? (Answer in *feet*). How far can you throw a stone? (Answer in *yards*). How far is it to Calcutta? (Answer in *miles*). What is the length of your ordinary steps



Methods of measuring distance.

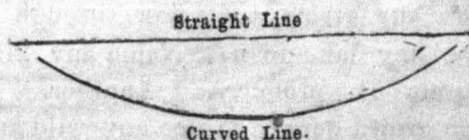


or paces? How many paces do you make in 100 yards? How many paces is it from your home to school? How many yards is it? What distance do you walk in one hour at your usual rate of walking? Name all the measures of distance you know.

### LESSON III.

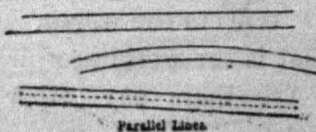
#### MEANINGS OF MATHEMATICAL TERMS.

1. Lines are either *straight* or *curved*.



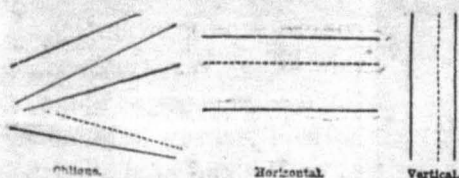
Which of these lines is the longer? What kind of a line is the shortest distance between two points? In how many directions is a straight line drawn? Is a curved line drawn in only one direction?

2. Lines that are always the same distance apart are called *Parallel* lines.

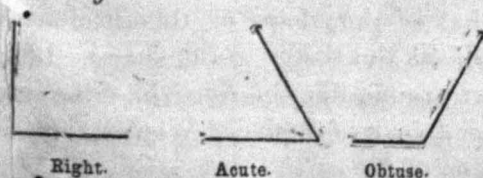


Are parallel straight lines drawn in different directions or in the same direction? If parallel straight lines are made very long will they ever meet? The teacher may show how to make two curved parallel lines by describing two circles from the same centre.

3. Straight lines may be drawn in various directions. A line drawn straight up and down is called a *vertical* line. A line drawn straight across from one side to the other is a *horizontal* line. A line drawn slanting downwards or upwards is called an *oblique* line.

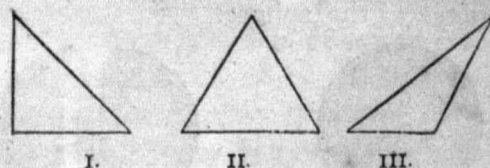


4. When two lines drawn in different directions meet each other they form an opening called an *angle*. The angle at which they meet is the difference of their directions. A vertical and horizontal line meeting each other form a *right angle*. When the opening is less than a right angle it is called an *acute angle*, and when greater than a right angle it is called an *obtuse angle*.



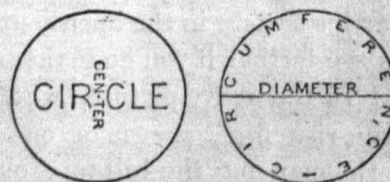
5. Figures that have three sides are called *triangles*. A *right-angled triangle* has one right angle. An *acute-angled triangle* has three acute angles. An *obtuse-angled triangle* has one obtuse angle. When the

three sides are each of the same length the triangle is *equilateral*. When two sides are equal it is called *isosceles*. When the three sides are unequal it is called a *scalene triangle*.



In the figure (I.) is a right-angled triangle and also isosceles; (II.) is an acute-angled triangle and equilateral; (III.) is an obtuse-angled triangle and scalene.

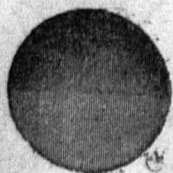
6. A *circle* is a figure contained by one curved line. This curved line is called the *circumference* and is such that every point of it is at the same distance from another point in the middle of the figure called the *centre*. The distance from the centre to the circumference is called the *radius*. The *diameter* is the straight line drawn from one side of the circumference through the centre to the other side. The diameter is thus double the radius.



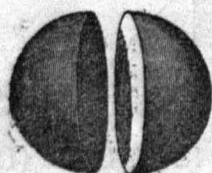
7. Anything which is exactly round in every way is called a *globe* or *sphere*. Any cut made in any way through a sphere is a circle. The largest cut, made through the centre of the sphere, is called a *great circle*; while the circles made by other cuts are called *small circles*. A *great circle* divides the sphere into two



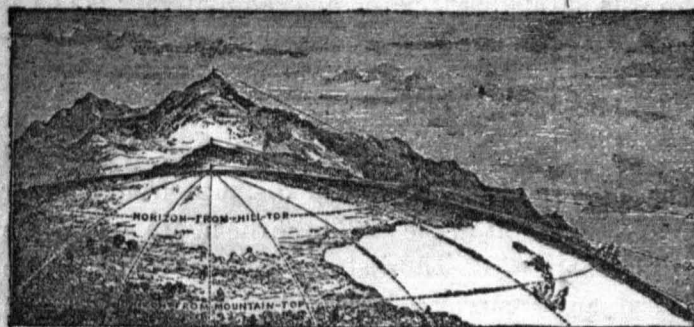
halves, each of which is called a *hemisphere*. The circumference of a great circle is the circumference or *measurement round* of the sphere. The diameter of a great circle is the diameter or *measurement through* of the sphere.



A Globe or Sphere.



Hemispheres.



## LESSON IV.

### THE EARTH'S FORM.

1. To what distance can you see objects on the earth's surface in the open country? Can you see farther if you go to the top of a house? In the above picture, who will see the sun rise first, the man on level ground, the man on the hill-top, or the man on the mountain? Why does the man on the top of the mountain see farthest? (Ans. Because the earth is round.)

2. Is there a line which limits or bounds our view all round? Does the sky seem to come down to the earth at this line? What is this line called? (Ans. The *horizon*). What is the horizon?

**The horizon is the circle which bounds the visible part of the earth's surface.**

3. In the picture notice the lines drawn from the men to touch the earth's surface. The lengths of these lines are the distances of their horizons, and show how far they can see objects on the earth's surface. Will the man on level ground see the top or bottom part of the building? Will he see the ship? Or the steamer? Why not?

4. Let some one stand who has ever travelled miles away from his home. Did the sky still seem to come down to the earth at a certain line? Was this horizon the same as you saw at home? The horizon you saw at home *seemed* to be the end of the earth's surface, but was it *really* so? Would you ever come to the end of the world if you were to travel far-

ther and farther? Why not? If a fly were to light on an orange and travel round it, would it ever come to the end of the orange? Why not? What is the shape of the earth?

**The earth is round.**

5. What is the shape of this coin? What is the shape of this lead-pencil? What is the shape of this ball? Is the earth round like the coin, like the lead-pencil, or like the ball? What is the exact shape of the earth?

**The earth is round nearly like a globe or sphere.**

6. How many miles is it from the most eastern to the most western point of India? (Answer by the Teacher). How

far from the most northern point of India to the most southern? (Answer to be told). How many miles is it all round the world? (Answer: Nearly 25,000). What is the measurement round a sphere called? What is the name for the measurement through? What is the size of the earth?

**The earth's circumference is nearly 25,000 miles and its diameter nearly 8,000 miles.**

Formerly even the wisest men believed that if they travelled far enough in one direction they would come to the world's end. But in the years 1518-21 a navigator named Magellan sailed from Spain across the Atlantic, through Magellan's Straits, across the Pacific to the Philippine Islands, across the Indian Ocean to the Cape of Good Hope, and thence north through the Atlantic back to Spain. He thus *circumnavigated* the world and proved that the earth is round. Every year now many people travel for pleasure round the world. The usual route that Englishmen take is as follows. Starting from London they go by rail to Dover. Crossing by steamer the Straits of Dover to Calais, they then travel by rail through France and Italy to Brindisi. Thence they cross the Mediterranean by steamer to Alexandria in Egypt. Passing by rail through Egypt they sail by steamer from Suez down the Red sea to Aden, and through the Arabian sea to Bombay. Crossing India by rail to Calcutta they again proceed by steamer to Hong-kong in China and Yokohama in Japan. Entering another steamer they cross the Pacific to San Francisco in America. They then cross that continent by rail to New York, from which they again take steamer to Liverpool in England, whence they travel by rail back to London. The whole journey can be performed in 71 or 72 days, but as they halt at different cities to see their places of interest, the usual time for the journey is six months. [Let the teacher trace these two journeys on the wall-map of the World.]



## LESSON V.

### THE EARTH'S ROTATION.

1. The earth seems to us a great plain placed in the centre of the universe, with sun, moon, and stars moving over and under it every day and night. It seems fixed and it is not easy to imagine that it is moving. Yet it is moving constantly and with great rapidity.

2. The first way in which the earth moves is that it turns round on itself, or *rotates*. On what does a wheel turn? (T. The earth does not turn on an *axle*.) On what does a spinning top turn? (T. the earth does not turn on a *peg* or *pivot*.) Our earth floats in space much the same as a balloon floats in the air. Suppose a balloon while floating in the air keeps turning round and round. Does it turn on an axle like a wheel? Does it turn on a pivot like a spinning top? What does it turn on



(Ans. It turns on itself.) Can you *think* of a line like the axle of a wheel on which it turns? Does this line really exist? What kind of a line is it? (Ans. It is an imaginary line.) On what does the earth turn? *It turns or rotates on an imaginary line called the Axis.*

What is the earth's Axis?

**The axis of the earth is the imaginary line on which the earth rotates.**

3. Let the teacher take an orange or a soft ball and stick a needle through the centre of it. If this ball be supposed to be the earth what is its axis? Holding the two ends of the needle make the ball turn round. Show that the two ends of the needle are the "turning points." One word for turning point is *pole*. What are the poles of the earth?

**The Poles are the ends of the earth's axis.**

What names are given to the Poles?

**The North Pole and the South Pole.**

4. The North Pole of the earth's axis points towards a star called the Polar Star. In the northern part of the sky there is a well known cluster of stars, called in England *The Great Bear*, and in India the *Seven Rishis*. If we draw an imaginary line joining the two bright outside stars of this cluster and suppose this line continued it will pass through another bright star exactly in the north part of the sky. This star is the Polar Star.

What is the North Pole?

**The North Pole is the end of the earth's axis nearest the Polar Star.**

What is the South Pole?

**The South Pole is the end of the earth's axis farthest from the Polar Star.**

What is the most northern point on the earth? What is the most southern point on the earth?



## LESSON VI.

### DAY AND NIGHT.

[In this lesson the teacher requires a school-globe and a lighted lamp or candle. As a substitute for a school globe, a soft ball pierced through with a wire will do.]

1. When I place this globe before the light, how much of it is lighted up? Which half receives no light? As the globe is turned round on itself does every part receive the light in succession? When I carry the light round the globe is not every part lighted up in succession? Which is the easier way of lighting every part of the globe in turn?

2. In the same manner as the globe is lighted by the lamp so is our earth by the sun. The earth rotates on its own axis once in 24 hours. During that time each part of the earth's surface is alternately presented to, and turned away from, the sun. When any place on the earth's surface

is facing the sun it is *day*, and when it is turned away from the sun it is *night*, for that place.

3. What causes day and night?

**The earth turns round on its axis, one-half of its surface being always towards the sun; this half has then day and the other half night.**

4. How often does the earth turn round on its axis?

**The earth turns round once in twenty-four hours.**

5. Why does the sun appear to rise in the east and set in the west?

**Because the earth turns round from west to east, and the east therefore comes opposite the sun first.**

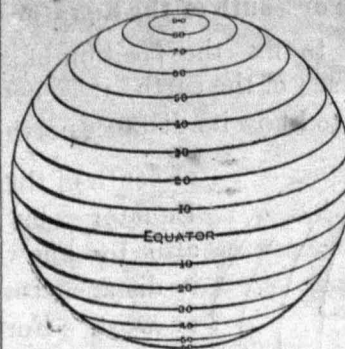
## LESSON VII.

### LATITUDE AND LONGITUDE.

1. What is the most northern point on the globe? What is the point directly opposite called? Place your finger half way between the Poles, on the line that goes right round the globe. This line is called the Equator. What figure is this line? Is this circle nearer the North or the South Pole? If the globe were cut through this circle what would the two parts be called? This circle is called the Equator, because it divides the surface of the earth into two *equal* parts. That half of the earth's surface between the Equator and the North Pole is called the Northern Hemisphere; the other half between the Equator and the South Pole is called the Southern Hemisphere.

What is the Equator?

**The Equator is an imaginary circle round the earth midway between the Poles.**



2. If a fly were to alight on a ball, and we wished to tell some one exactly on what part of the ball the fly is, would it be easy to do

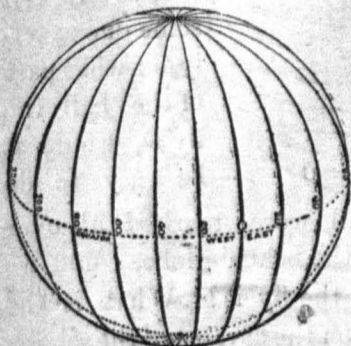
so? If the ball were marked all over with lines like the school-globe, could we then tell where the fly is? What is the use of the lines on the surface of the school-globe? (Ans. To enable us to tell the exact position of places.)

Some of the lines are circles drawn parallel to the Equator. Are these great circles or small circles? The whole circumference of the globe measured round the Poles is supposed to be divided into 360 equal parts called *degrees*. Thus there are 90 degrees from the North Pole to the Equator, 90 degrees from the Equator to the South Pole, 90 degrees from the South Pole round again to the Equator, and 90 degrees from the Equator back to the North Pole. The circles in the picture are drawn at equal distances of 10 degrees from each other. These circles are called *Parallels of Latitude*. The Latitude of a place means its distance from the Equator towards the North Pole or towards the South Pole. Are the latitude circles all the same length round? Imaginary lines like these are supposed to be drawn on the Earth's surface.

What is the latitude of a place?

**The latitude of a place is its distance in degrees North or South of the Equator.**

3. In order to fix the position of a place on the surface of the earth, it is necessary not only to know its distance north



or south of the Equator but also to know its distance east or west. For this purpose imaginary lines are supposed to be drawn from

north to south all round the world. These lines will be all great circles passing through the north and south poles. The Equator is divided into 360 degrees, and through every division of 10 degrees one of these circles passes. These circles are called *meridians*, and by these *longitude* is measured. Longitude means distance east or west of some fixed meridian. The fixed meridian in common use is that which passes through Greenwich, a famous observatory near London. What is the longitude of a place?

**The longitude of a place is its distance east or west from some fixed meridian, called the first meridian.**

4. As the Earth rotates from west to east, it follows that a place to the East comes opposite the sun earlier than a place to the west. Hence the sun is vertical over a place to the east before it is vertical over a place to the west. In other words it is mid-day with places to the east before it is mid-day with places to the west. Now the earth rotates round the sun once in 24 hours, and there being 360 degrees of longitude, it

therefore rotates through 15 degrees of longitude in one hour. Thus a place A which is 15 degrees east of a place B will have its mid-day one hour earlier; that is, when it is noon at A it will be only eleven o'clock in the forenoon at B. Difference of longitude may thus be reckoned as difference of time, allowing 15 degrees for every hour. If a place is in east longitude its time is earlier, if in west longitude its time is later. Calcutta is 8 degrees east longitude from Madras, what time is it at Calcutta when it is noon at Madras? Boston is in 70 degrees west longitude, what time is it at Greenwich when it is noon at Boston? Where will it be mid-night when it is noon at Calcutta?

5. How is latitude reckoned? Latitude is either north or south. It is reckoned from the Equator where the latitude is 0 degrees, to the North or South Pole where the latitude is 90 degrees.

How is longitude reckoned? Longitude is reckoned 180 degrees east and west from the first meridian, or half-way round the world either way.

What is the length of the Equator in miles? What is the length of the parallel of latitude at the North Pole? What is the length of the first meridian all round? What are the lengths of the other meridians? What is the distance from the North to the South Pole? What is the length of a degree of latitude? Are the degrees of longitude of equal lengths? What is the length of a degree of longitude at the Equator? What is the length of a degree of longitude at the North Pole? How many miles per hour does a person on the Equator move as the earth rotates round the sun?

## LESSON VIII.

### THE EARTH'S REVOLUTION.

1. It has been said that the Earth floats in space much the same as a balloon floats in the air. But it does not remain in the same place. It is continually moving through space.

2. Astronomers, that is men who devote their time to watching the heavenly bodies, tell us that there



are two kinds of stars, (1) fixed stars, and (2) *planets* or wandering stars. The planets move round the sun in paths that are nearly circular. Our earth is also a planet and travels round the sun once a year. Its distance from the sun is about 92 million miles; and as it travels round the circumference of a circle, of which this large distance is the radius, once in 365 $\frac{1}{4}$  days, it follows that the earth is moving through space at the great rate of 68,000 miles per hour. This yearly motion of the earth round the sun is called the earth's *Revolution*.

3. The earth's revolution round the sun is the cause of the varying length of the day and of the seasons. If the earth's axis formed a right angle with the line joining the Earth and the sun, every part of its surface would always be equally lighted up by day and equally in the shade by night. But the Earth's axis continually points towards the north star, and as it does not form a right angle with the radius of its path, it follows that the angle which these two lines make is continually changing all through the year. In our winter the North Pole is turned away from the sun, and in our summer it is turned towards the sun. At only two periods in the year is the earth's axis at right angles to the line joining it and the sun, and then we have equal day and night all over the world. These two periods are called the *equinoxes* and fall on the 22nd of March and the 22nd of September.

4. Some pupils are puzzled to understand how it is that, since the earth is round and floats in space, the people on the other side of the earth from us do not fall *downward*.

All bodies in the universe are subject to a certain law called the law of *Gravitation*. That law may be thus stated—“All bodies attract each other with a force proportional to their size and nearness.” By this law bodies on the earth's surface have *weight*. The weight of a body is the force with which it is attracted to the centre of the earth. The weight of a body is that which causes it to fall towards the centre of the earth. Hence *down* means towards the centre of the earth, and *up* means away from the centre of the earth. Thus there is no more reason why people on the other side of the world should fall *downward* than that we should fall *upward*. It is this force of gravi-

ation which pulls a stone down to the earth when we throw it into the air. We do not see the force but it must be there, otherwise the stone would not fall. It is the same force of Gravitation which keeps the earth and the other planets in their places moving round the sun.

5. The names of the planets in the order of their nearness to the sun are Mercury, Venus, The Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. For all these as for our world the Sun is the source of light and heat. They all rotate round their axes and consequently have days and nights like the earth. The periods of their revolution round the sun,—in other words the lengths of the year,—are different. For instance in Mercury the year is only 88 days, while in Jupiter it is 4,332 days.

6. While the earth is travelling round the sun, another heavenly body which we call the *Moon*, keeps all the time revolving round the earth. The Moon makes a complete revolution round the Earth in 29 $\frac{1}{2}$  days, which period is called a *month*.

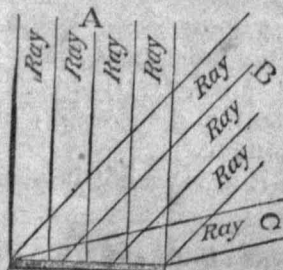
## LESSON IX.

### CLIMATE.

1. Where does our heat come from?  
**Our heat comes from the rays of the sun.**

When do the rays of the sun give most heat?

**The sun's rays give most heat when they fall vertically upon any part of the Earth.**



When do the sun's rays give least heat?

**The sun's rays give least heat when they are oblique.**

In the picture which rays will give most heat? Which will give least? Do you get more heat from a fire by standing directly in front of it, or on one side?

2. At what time of the day are the sun's rays most vertical? When are they most slanting? Why is it cooler in the morning than at mid-day? Why is the night cooler than the day? What is the hottest part of the day?

3. By the aid of the school globe or the ball with a needle through it and a lamp show that the sun's rays are most direct over those parts of the earth's surface near the Equator. Show also by inclining the axis from the line joining the centre of the globe and the lamp that the days are longer in summer than in winter.

Is the sun higher up in the sky in summer or in winter? In which of these seasons are the sun's rays most vertical? Is it hotter in summer or in winter? If you want to get very warm do you stand before the fire a long time or only for a short time? In what season are the days longest? In what season are the nights longest?

4. Why do we receive most heat from the sun in summer?

**We receive most heat from the sun in summer because, firstly, his rays are then most vertical and secondly, because the days are longer.**

Why is it always hot in places near the Equator?

**It is always hot near the Equator because there the sun's rays are always nearly vertical.**

Why is it always cold at places near the poles?

**It is always cold at places near the Poles because there the sun does not shine sometimes for months and when it does shine the rays are always very oblique or slanting.**

5. Has any one ever heard of the Himalaya Mountains? What is the meaning of the word Himalaya? Why are these mountains so called? (Ans. Because they are always covered with snow.) Is snow produced by heat or cold? Are the Himalaya mountains near the Equator or near the Pole? Are they in a hot or in a cold country? Are they cold at the top or at the foot of the mountains? What effect has height on the heat of a place?

**The heat always becomes less as we ascend heights.**

6. What is meant by the *climate* of a place?

**The climate of a place means the kind of weather whether hot or cold, wet or dry, of that place.**

On what two things does the climate of a place mostly depend?

**The climate of a place depends mostly on the latitude or distance from the equator and on the altitude or height above the level ground.**

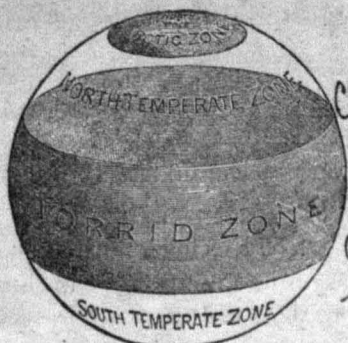
## LESSON X.

### ZONES OF CLIMATE.

[The school globe or wall-map of the world should be used with this lesson].

1. Where is the hottest part of the earth's surface?

**The hottest part of the earth's surface is in a broad band or belt extending on each side of the Equator.**



The zones : viewed from the North Pole.

What is this belt called ?

**It is called the Torrid Zone.**

(Torrid means scorching or roasting. Zone means belt.)

2. Where are the coldest parts of the earth ?

**The coldest parts are in the region of the Poles.**

What names are given to these parts ?

**The region round the North Pole is called the North Frigid Zone and that round the South Pole is called the South Frigid Zone.**

3. What is the name of the zone between the North Frigid and the Torrid Zone ?

**The North Temperate Zone.**

What is the name of the zone between the South Frigid and the Torrid Zone ?

**The South Temperate Zone.**

4. What line is the boundary between the Torrid and North Temperate Zones ?

**The Tropic of Cancer.**

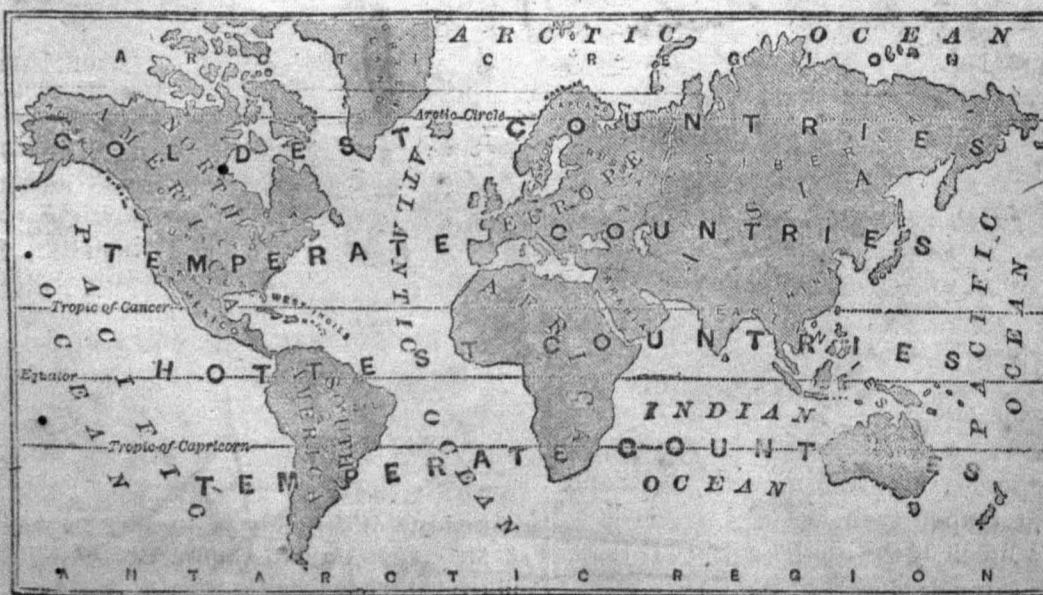
What is the boundary line between the South Temperate and the Torrid Zone called ?

**The Tropic of Capricorn.**

What lines bound the Frigid Zones ?

**The Arctic circle on the north, and the Antarctic circle on the south.**

5. Point out the Tropic of Cancer. Point out the Tropic of Capricorn. What Zone is between these ? The Torrid Zone is about 45 degrees wide ; what part of the circumference of the Earth is that ? How many miles wide is the Torrid Zone ? What two great divisions of land have their greater portion in the Torrid Zone ? Which Zone has the most land in it ?



Map of the world showing Countries by Climate.



In what Zone is Southern India? Between what circles is the North Temperate Zone?

### LESSON XI.

#### MAPS.

1. Let the teacher take the wall-map of Asia and lay it flat down on the floor with the top of the map towards the North.

What is a map?

**A map is a representation, on a flat surface, of any part of the surface of the earth.**

2. Is the earth's surface curved or flat? Is the map curved or flat? Does then the map represent the earth's surface exactly?

How is the earth's surface supposed to be seen in a map?

**A map represents the earth's surface as it would be seen by a person looking down from a great height.**

3. As the map lies on the floor make

a boy point towards the north, towards the east, towards the south, and towards the west, in succession. Then hang the map on the wall.

What part of the map is the north?

**The top of the map is the north.**

What part of the map is the south?

**The bottom of the map is the south.**

What part of the map is the east?

**The right-hand side of the map is the east.**

What part of the map is the west?

**The left-hand side of the map is the west.**

Is north the direction of the roof of this room? Is the floor of this room on the south? Point to the north side of this room. Point to the south side of the room. On the map point to the east. Point to the northwest on the map. To the southeast.

### LESSON XII.

#### LAND AND WATER.

1. Of what is the earth's surface made up?

**The earth's surface is made up of land and water.**

In the picture the two halves, or hemispheres, are shown, with the land and water upon each.

How much of the earth's surface is land, and how much is water?



Eastern Hemisphere.



Western Hemisphere.

About one-fourth of the earth's surface is land, and about three-fourths is water.

Of what does the land of the earth's surface consist?

**The land of the earth's surface consists of two very large parts and of many smaller parts.**

What are the names of the two very large parts?

That in the Eastern Hemisphere is called the **Old World**; and the other in the Western Hemisphere is called the **New World**.

[The New World is so called because it was not known to the ancients. It was discovered by Columbus in the year 1492 A. D.]



The Old World.

2. What is a *continent*?

**A continent is the largest division of land.**

(*Continent* means "held together." A continent is so called because it is nowhere separated by water.)

Name the continents of the Old World?

**The continents of the Old World are Asia, Europe, and Africa.**



Which continent of the Old World is the largest? Which is the smallest? Which extends furthest east? Which extends furthest south? Which is nearest the South Pole? In what direction from Asia is Europe? Which continent do we live in? In what direction are the continents narrowest? Whether is the greater mass of land north or south of the Equator?



The New World.

3. What are the continents of the New World?

**The continents of the New World are North America and South America.**

Which is nearest the North Pole? Which is nearest the South Pole? In what direction from North America is South America? Which of these extends furthest west? Where is North America broadest? Where is it narrowest? Where is South America broadest? Where narrowest?

4. What is an Ocean?

**An ocean is the largest division of water.**

Is the water on the earth's surface all joined together? Are the different portions entirely separated by land?

What are the names of the different oceans?

**The Atlantic Ocean, The Pacific Ocean, The Indian Ocean, The Arctic Ocean, and The Antarctic Ocean.**

In this picture point to the Old World. Point to the New World. Point to the water between the two. What name is marked on this body of water? On what side of the New World does it lie? In what direction is the Atlantic Ocean from the Old World?

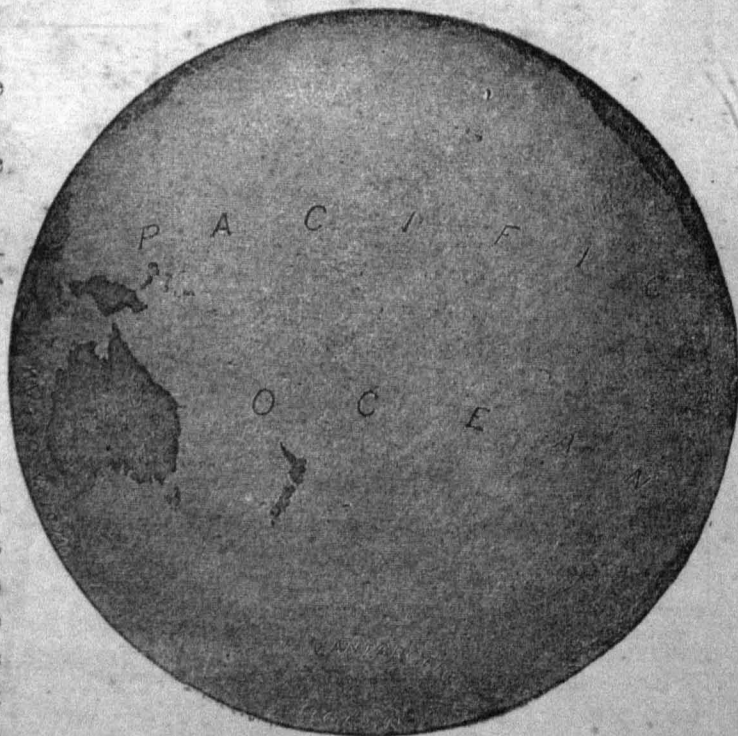
Where is the Atlantic Ocean?

**The Atlantic Ocean is situated between the west side of the Old World and the east side of the New World.**

5. In this picture what name is marked on the great body of water? On what side of the Old World does the Pacific Ocean lie? On what side of the New World does it lie? Which is broader, the Atlantic ocean or the Pacific ocean? Which is the largest ocean on the surface of the



The Atlantic Ocean.



The Pacific Ocean.

earth? (Ans. The Pacific ocean.)

6. In the picture of section 2. what is the ocean called which lies south of Asia?

Near which pole is the Arctic Ocean? Where is the Antarctic Ocean? Is the water of the oceans salt or fresh?

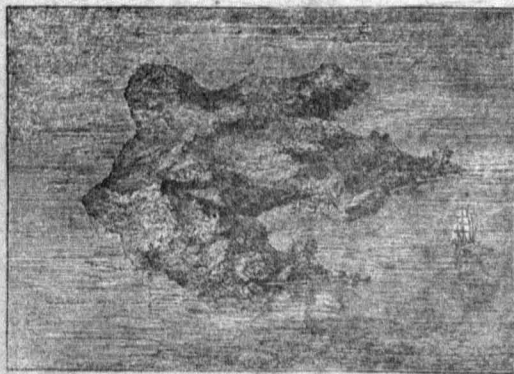
**The water of the oceans is salt.**

### LESSON XIII.

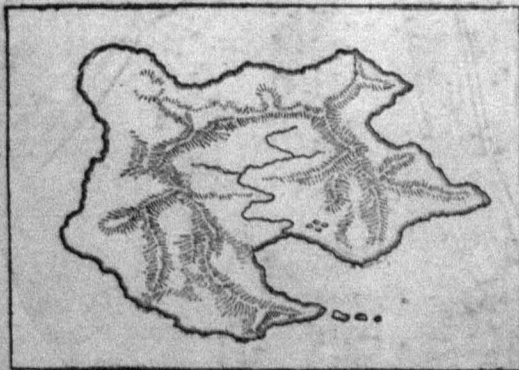
#### NATURAL FEATURES OF THE LAND

1. What is an island?

**An island is a portion of land entirely surrounded by water.**



Picture of an Island.



Map of the same Island.

Name any island you have ever heard of. What is the largest island in the world? (Ans. Australia).

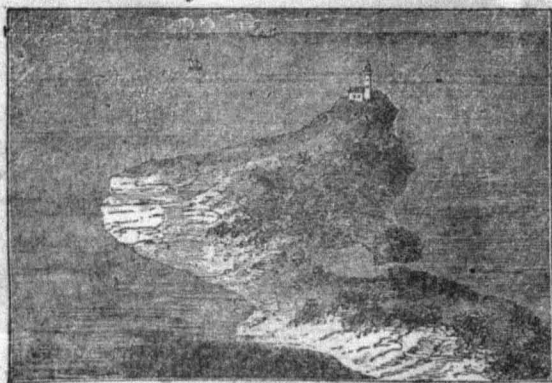
What island is near the southern point of India? Is the island in the picture flat or hilly? Is the map of the island flat? How are the hills shown in the map? Let the pupils copy the map.

What is the name of a number of islands near each other?

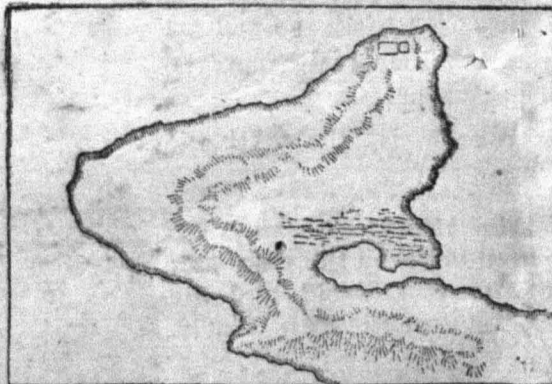
**A number of islands near each other, is called a group.**

2. What is a *peninsula*?

**A peninsula is a part of the land nearly surrounded by water.**



Picture of a Peninsula and Isthmus.



Map of the same Peninsula and Isthmus.

What is an *isthmus*?

**An isthmus is a narrow neck of land joining two larger portions.**

In the picture point to the peninsula. Point to the isthmus. In the map point to the isthmus. Is a peninsula the same as an island? How might a peninsula be made into an island? Why is India called a peninsula? What is the name of the isthmus?



mus between Asia and Africa? How has Africa been made an island? (Ans. By the Suez Canal.) Let the pupils copy the map on their slates.

### 3. What is a *cape*?

**A cape is a point of land running out into the water.**

In the picture of a peninsula point out a cape. In the map of an island point out *two* capes. What is the cape to the south of India called? (Ans. Cape Comorin.)

Is a cape ever called by any other name?

**A cape is sometimes called a promontory point, or a head.**

### 4. What is meant by the *coast* or *shore*?

**The coast, or shore, means that part of the land which borders on the water.**

In the picture of an island trace the coast line. In the map of a peninsula carry your finger all along the shore. What is the name of the east coast of India? (Ans. The Coromandel coast.) What is the name of the southwest coast of India? (Ans. The Malabar coast.)

## LESSON XIV.

### NATURAL FEATURES OF THE LAND CONTINUED.

#### 1. What is a plain?

**A plain is a portion of low and nearly level land.**

Can you see any plain from here? Are there any plains in India? Name some of them? (Ans. The Gangetic Plain, The Plain of the Indus.) What is a barren plain called? (Ans. A desert.) Name a desert in India. (Ans. The Rajputana desert.)

#### 2. What is a table-land or plateau?

**A table-land or plateau is a plain at some height above the sea level.**

What is the plateau in the centre of India called? (Ans. The Deccan.)

Are there any other names for plains?

**Plains are also called prairies, steppes, savannahs, and pampas.**

What is an oasis?

**An oasis is a fertile spot in a desert.**



An Oasis.

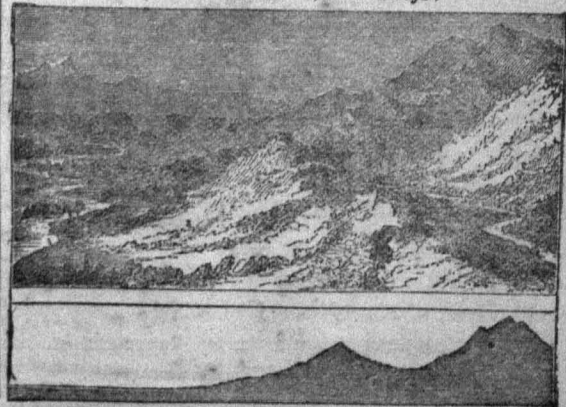
#### 3. What is a mountain?

**A mountain is land rising much higher than the general surface. A hill is lower than a mountain.**

In the picture of an island point out a hill. How is this hill represented on the map? How are mountains generally arranged? (Ans. In chains.) Name the chain of mountains on the north of India? Which mountain is the highest in the world? (Ans. Mount Everest). Where is it? (Ans. In Nepal.) What is its height? (Ans. 29,000 feet). What is the *base* of a mountain? What are the *slopes* of a mountain? (Ans. Its inclined sides.) What is the *summit* of a mountain? What is the *crest* of a mountain chain? (Ans. The line along the tops of the mountains composing it.)

What is a volcano? (Ans. A volcano is a mountain that sends forth smoke, ashes and melted matter called *lava*, through an opening in its summit called its *crater*.)

(Plains, Mountains, and Valleys.)



Section of country showing differences of elevation.

## 4. What is a valley?

**A valley is a low land between hills or mountains.**

In the above picture what is the low land to the left called? What is the very high land on the right called? What is the lower portion of land in the centre called? What is the narrow deep portion between these called? If a cut were made down through the ground from the trees on the river bank across to the mountain on the right, you would have a section of the country, as in the drawing below the picture. This shows the heights of the plain on the left, of the hill next it, of the valley next that, and of the mountain on the right. Make the pupils copy the section of country on their slates.

## LESSON XV.

## NATURAL DIVISIONS OF WATER.

## 1. What is a sea?

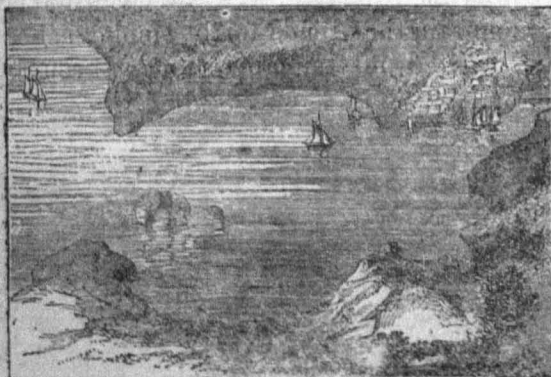
**A sea is a body of salt water smaller than an ocean, and more or less surrounded by land.**

What sea is on the west of India?

(Ans. The Arabian sea).

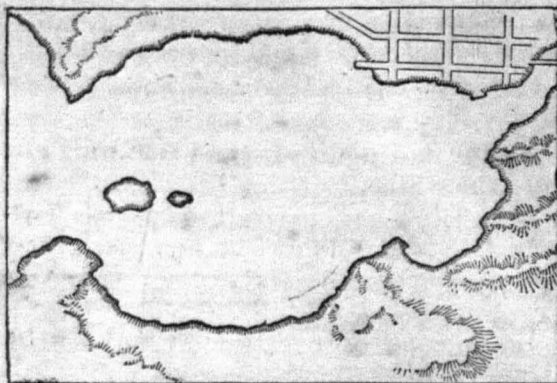
## 2. What is a bay or gulf?

**A bay or gulf is a portion of water running into the land.**



Picture of a Bay.

If the water in this map were to be land, and the land water, what portion of land would it represent? (Ans. A peninsula). What is the name of the bay on the east of India? (Ans. The bay of Bengal.)



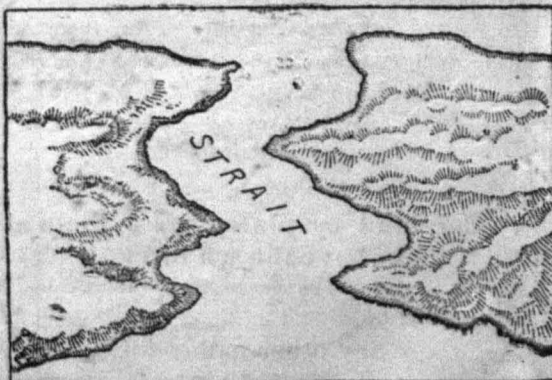
Map of the same Bay.

## 3. What is a strait?

**A strait is a narrow passage of water connecting two larger bodies of water.**



Picture of a Strait.



Map of the same Strait.

What other names are sometimes used for strait?

**A channel, which is a wide strait, and a sound, which is a narrow strait.**

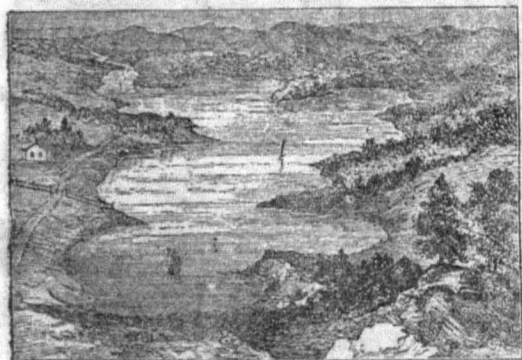
What is the name of the strait between India and Ceylon? What natural feature of the land corresponds to a strait? Let the pupils copy the map of a strait.

#### 4. What is a lake?

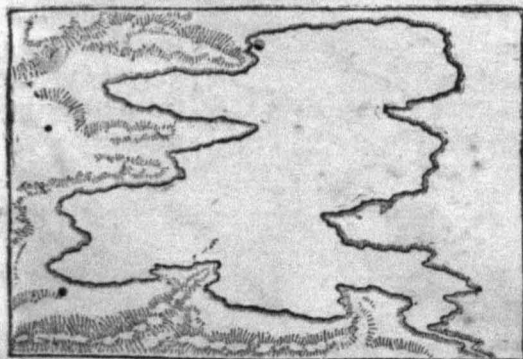
**A lake is a body of water wholly surrounded by land.**

What is the difference between an island and a lake? Are there any large lakes in India? What is the largest fresh water lake in the world? (Ans. Lake Superior, in America).

Salt water lakes are sometimes called *seas*; as the Caspian Sea. Let the pupils copy out the map of a lake.



Picture of a lake.



Map of the same lake.

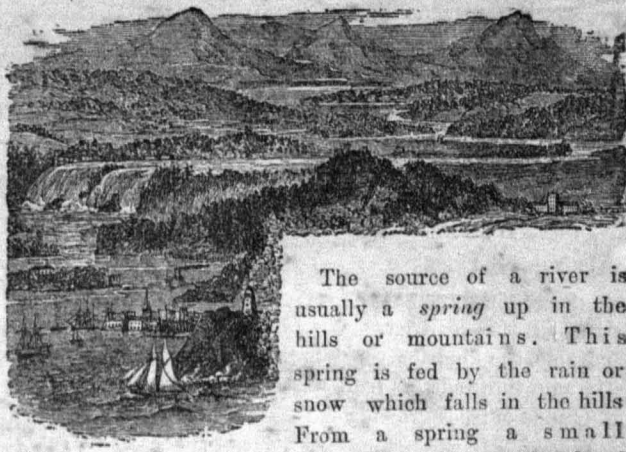
#### 5. What is a river?

**A river is a stream of fresh water flowing**

**into the ocean or some other body of water.**

What is the source of a river?

**The source of a river is where it rises or begins.**



A river from source to mouth, thread of water, called a *brook* or *rivulet* flows down the hillside. Several of these brooks or branches unite to form a river. In the picture the whole course of a river is shown from its source to its mouth. We see the small stream at first bending several times round the foot of the mountains. Then we see a place where it broadens out and forms a lake. After issuing from the lake we see it joined by another river, which is called a *tributary*. Farther on, still following the slope of the land, we see a place where the land falls abruptly forming a *precipice*. Over this too the river falls in the form of a *waterfall* or *cataract*. Thence it flows on smooth, deep, and wide, fertilising the soil and bearing ships upon its waters, until it empties itself into the ocean. We see then that the rain which falls on the mountains flows down the slope of the country to the sea. But where does the rain come from? The rain comes from the clouds. Where do the clouds come from? The clouds come from the sea. The heat of the sun is continually turning the surface water of the sea into vapour or mist. This vapour rises in the air and forms clouds. The winds blow the clouds away over the country till they strike against the cold summits of the mountains. The cold turns the vapour into water and it falls in the form of rain. Hence the river comes from the sea and goes back to the sea. This continual round is called the



circulation of the waters.

The sun draws up vapour from the ocean, the vapour is carried in the clouds to the mountain tops, and there falls as rain or snow.

## LESSON XVI. PLANTS.

1. Name the kinds of grain which grow in this district.

Name the kinds of vegetables which grow here.

Name the kinds of fruit which grow here. Name the kinds of trees growing in this part of the country.

Where do all these things grow out of? What name

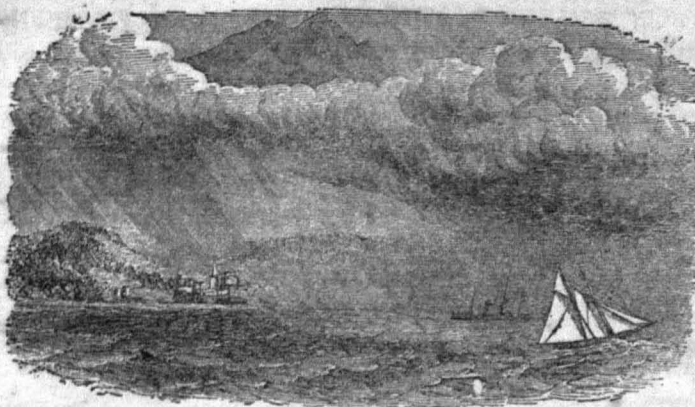
can be applied to all these things?

Whether do most plants grow in hot or in cold countries? Whether do plants grow more rapidly in moist or in dry weather?

Upon what does the vegetation of a country depend?

**Plants require heat and moisture. The hotter and more moist a country is the more rapidly do plants grow.**

2. In what Zone are the hottest parts of the earth? Where are the coldest parts of the earth? Do many plants grow in a desert? Why not?



What is meant by vegetation?

**Vegetation means all the forms of plant-life.**

What kind of vegetation is found in the Torrid Zone.

**The Torrid Zone nourishes a rank and luxuriant vegetation, especially in these parts where rain is abundant.**

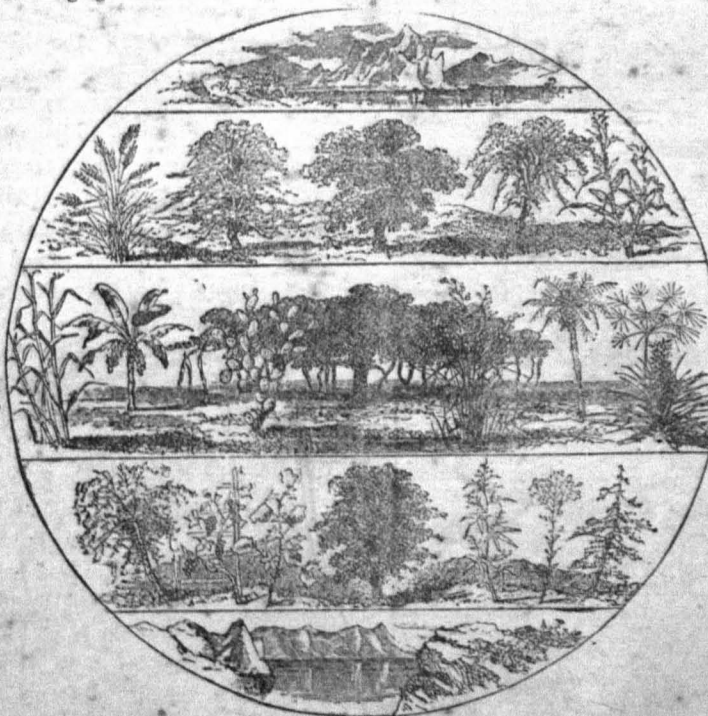
Give examples of the vegetation of the Torrid Zone?

(Ans. Palms, plantains, tall grasses, the Banyan tree.)

What kind of vegetation is found in the Temperate Zones?

**The Temperate Zones are distinguished by the great variety of useful plants they produce.**

Give examples of the vegetation of the Temperate Zones. (Ans. The oak, pine, wheat, barley, apple,



Plants by Zones.

peach, vine, flax, potatoes.)

What kind of vegetation is found in the Frigid Zones?

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The only vegetation of these cold regions consists of mosses, lichens, and dwarfed willows, birches and firs.

3. Are plants useful to man? In what way are plants useful to man?

**Plants supply man with food, beverages, clothing, and shelter.**

What are the five kinds of food plants? (Ans. Grain, vegetables, fruits, spices, and medicines).

Give the names of all the kinds of grain you know. (Ans. Wheat, Rice, Barley, Indian-corn, Bajra &c.) Give the names of all the kinds of garden vegetables you know. (Ans. Cabbage, Potatoes, Turnips, Onions, &c.) Give the names of all the fruits you know.

(Ans. Mangoes, Plantains, Dates, Apples, Peaches &c.) Give the names of spice plants (Ans. Cinnamon, Pepper, Cloves &c.) Give the names of any Medicines obtained from plants. (Ans. Camphor, Opium, Quinine &c.)

What beverages are supplied by plants? (Ans. *First*, non-alcoholic, as Tea and Coffee; *Secondly*, alcoholic, as wine, beer, brandy.)

What plants supply man with clothing? (Ans. Cotton, Flax, Hemp, Jute, &c.)

Name some trees that are used for building houses to supply man with shelter. (Ans. Oak, mahogany, teak, &c.)

Name some other useful things that we get from trees. (Ans. India-rubber, gutta-percha, paper, dyes, &c.)

## LESSON XVII.

### ANIMALS.

1. Into what two classes are Animals usually divided?

Animals are usually divided into vertebrate or back-boned animals, and invertebrate, or animals which have no back-bone.

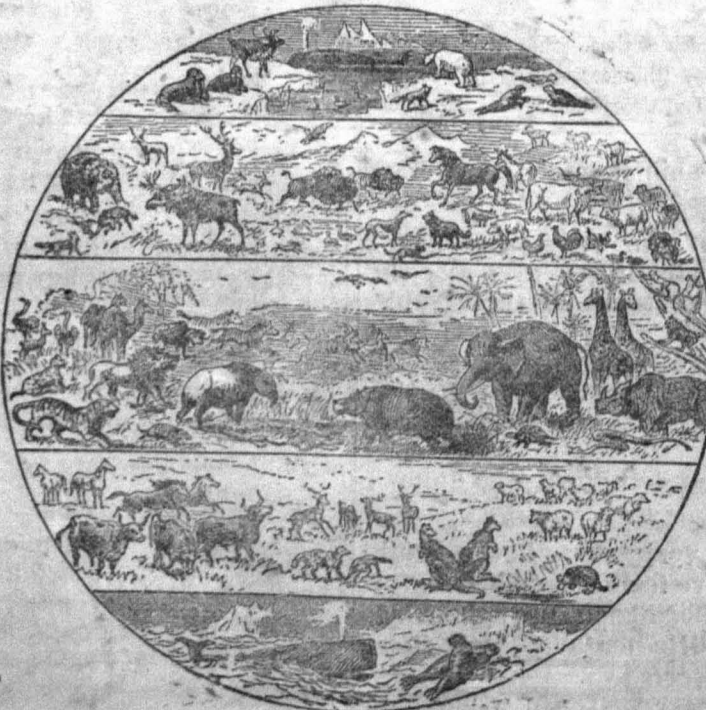
Name the different kinds of vertebrate animals.

**The kinds of vertebrate**

animals are

- (1) Mammals,
- (2) Birds,
- (3) Reptiles,
- (4) Fishes.

*Mammals* are animals which nourish their young with milk. Give examples. *Birds* are animals which have the power of flying in the air. Give examples. *Reptiles* are animals which crawl along the ground. Give examples. *Fishes* are animals which have the power of living in water. Give examples.



Animals by Zones.



What name is usually given to the most common invertebrate animals?

**Invertebrate animals are usually called insects.**

Give examples.

2. Name animals that are used as beasts of burden. Name animals that are used for food. Name animals from which we get cloth. Name animals which furnish leather. What animal gives us silk? What is fur? What is the flesh of the sheep called? Name some game-birds. Name animals noted for their fierceness. What is the largest land animal? What is the largest sea animal? To which class of animals does the whale belong?

3. What are the animals of the Torrid Zone noted for?

**The wild animals of the Torrid Zone are noted for their size, strength, or fierceness; the birds, for their brilliant plumage; the reptiles for their size; and the insects, for their great number and poisonous nature.**

Give examples of each of these kinds in the Torrid Zone. (Ans. Elephant, Rhinoceros, Tiger; Peacock, Parrot, Bird of Paradise; Crocodile, Python; Scorpion, Centipede, Mosquito.)

What are the animals of the Temperate Zones noted for?

**The animals of the Temperate Zones are noted for their utility to man; the birds for the sweetness of their song; reptiles are few and harmless; and insects are generally small.**

Examples:—Horse, Dog, Sheep, Deer; Thrushes, Larks, Linnets; Frogs, Lizards; Bee, Silk-worm, Flies.

What can you tell about the animals of the Frigid Zone?

**Animal life is very scarce in the Frigid Zone; many live in the sea, but the few land animals afford good furs; the birds have usually white feathers; and there are very few insects.**

Give examples. (Ans. Whale, Seal, Walrus; Polar Bear, Sable, Ermine; Ptarmigan, Bunting, Sea-fowl.

## LESSON XVIII.

### RACES OF MEN.

1. How many races of men are there?

**There are five races of men, the Negro, the Malay, the Mongolian, the Red Indian, and the Caucasian.**

How are these races distinguished from each other?

**These races are distinguished from each other partly by the colour of the skin, partly by the kind of hair, and partly by the formation of the head and face.**



Negro.

2. How is the Negro race known?

**The Negro has a pure black skin, short black woolly hair, flat and low forehead, lips large and protruding, and short**

**chin. They are mostly found in Africa.**

3. How is the Malay race known?



Malay.

**The Malay has a brown skin, black stiff hair, broad face, short head, with prominent nose and lips. They are found in the Malayan Peninsula and the islands of the**

**Pacific ocean.**

4. What are the distinguishing marks of the Mongolian race?



Mongol.

**The Mongol has a yellow skin, straight black hair, short head, round face, high cheek bones, broad nose, and eyes slanting down at the inner corners. Their home is Central**

and Eastern Asia.

5. What can you say of the Red Indian race?



A Red Indian

The Red Indian or Native American race have a red or copper-coloured skin, straight black hair, medium sized head, broad and low forehead, large and prominent nose,

high cheek bones, and thin lips. They are found in America chiefly in the extreme North and South.

6. What are the characteristics of the Caucasian race?



Caucasian.

The Caucasian has generally a fair complexion, soft and flowing hair, broad and usually long head, regular features, high brow and straight set eyes. The hair of the beard is stronger than

in any of the other races. They are now found all over the world but their original home is Europe and South-western Asia.

7. What are civilized races?

Those that are most intelligent and powerful and that lead the world.

Which of the five races is most civilized?

What are the least civilized races called?

They are called savages or barbarians.

Which races are most savage?

Which race has the most people? (Ans. The Caucasian). Which is next? (Ans. The Mongolian). Next? (Ans. The Negro). Which race has the fewest people? (Ans. The Red Indian.)

## LESSON XIX.

### THE WANTS OF MAN.

1. What is necessary to keep us alive? (Ans. Food, clothing, and shelter.) How long can a man live without food? Is food a want of the body or of the soul? What kind of a want is food? (Ans. A physical want.)

What is the first physical need or want of man?

**The first physical want of man is food?**

Name an animal whose flesh is used for food.

Name a vegetable used as food. Name a mineral used as food. (Ans. Salt.)

What three classes of food are used by man?

**Animal, vegetable, and mineral food.**

What three classes of animals are used as food? (Ans. Beasts, Birds, and Fishes.) Name a domestic

beast used as food. A wild beast used as food? A domestic bird used as food? A wild bird used as food?

What are wild beasts and birds used as food called?

(Ans. Game.)

Name kinds of fishes used as food.

What parts of vegetables are eaten as food? (Ans. Roots, Stalks and Leaves, Grains, Fruits.) Give examples of roots used as food. (Ans. Potatoes, Beet, Yams, &c.) Name plants whose stalks and leaves furnish food. (Ans. Sugar-cane, Tea plant, Cabbage &c.)

Name all the kinds of food grains you know. (Ans. Wheat, Barley, Rice, Jowar, &c.) Name fruits that are used as food. (Ans. Apples, Peaches, Nuts, Melons &c.)

What kind of food is eaten in cold countries? (Ans. Mainly animal.) What kind of food is eaten in hot countries? (Ans. Mainly vegetable.) What kinds of food are eaten in temperate countries? (Ans. Partly animal and partly vegetable.)

2. What is the second physical want of man?

**The want of clothing.**

What clothing-materials are supplied by animals?

**Wool. Fur. Leather, Silk.**

What clothing materials are supplied by plants?

**Cotton, Linen, India-rubber.**

In what kind of countries is clothing most required? Where is clothing not much wanted? (Ans. In hot countries.)

3. What is the third physical want of man?

**The want of shelter.**

What does a bee construct for shelter? A bird? A bear? What kinds of dwellings has man made for shelter? (Ans. Caves, Tents, Huts, Houses.) Which of these is used by civilized man? What are used in building a house? Give one name for all these things. (Ans. Building materials.) Name some kinds of minerals used for building materials. (Ans. Brick, stone, lime, iron, lead, glass.) What building materials are supplied by the vegetable kingdom? (Ans. Wood, Cloth, India-rubber.) Name some trees that supply good wood for buildings. (Ans. Teak, sal, bamboo.) What productions of the animal kingdom are sometimes used for building materials? (Ans. skins.)

## LESSON XX.

### THE OCCUPATIONS OF MAN.

1. How do men obtain food, clothing, and shelter? (Ans. By work.) Are all men engaged in the same kind of work? What are the kinds of work called? (Ans. Occupations). What is Agriculture?

**Agriculture is the occupation of men who cultivate the soil for the purpose of procuring vegetable productions suitable for food and clothing.**

What is the occupation of a farmer?

What occupation is closely connected with Agriculture? (Ans. Grazing.)

What is Grazing?

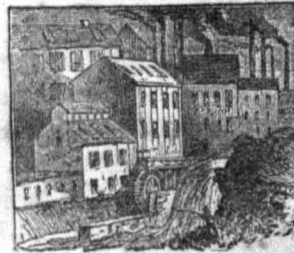


Agriculture.

**Grazing is the care bestowed in raising flocks and herds of animals which supply food and clothing.**

2. Are the grains, cotton, wool and the like produced by agriculture ready for our immediate use? What do we make from wheat? What from cotton? From wool? What is the process of making these things called? (Ans. Manufacturing).

What is Manufacturing?



Manufacturing.

**Manufacturing is the occupation of men who work up, either by the hand or by machinery, natural products**

**into forms suitable for use.**

What kinds of power are generally used for machinery? (Ans. Water power, steam power, and wind power.) Name any kinds of factories you have seen or heard of. (Ans. Cotton factory, Flour mill, Saw mill &c.)

3. Name some articles made of iron. Name five metals. Name a mineral used for fuel. Where are minerals obtained? What is the process of obtaining them called?

What is mining?



Mining.

**Mining is the occupation of men who obtain metals and minerals from within the earth.**

What are the different kinds of mines? (Ans. Coal mines, Iron

mines &c.)



4. Does a farmer require all the grain his farm produces? What does he do with the surplus? Does a farmer need many things not produced by his farm? How does he obtain these? Is all the cotton, tea, indigo, produced in India consumed in this country? Name some things required here that are not produced in India? Where do they come from?

What are exports?

**Exports are the products sent out of a country.**

What are imports?

**Imports are the products brought into a country.**

Name some things exported from India.

Name some things imported into India.

What is commerce?

**Commerce is the occupation of men who exchange the products of one country, or part of a country, with those of another.**



Commerce.

What is domestic commerce? (Ans. Trade carried on between different parts of the same country.) What is foreign commerce? (Ans. Trade carried on between two different countries.

How is commerce carried on? (Ans. By means of transport.) Name some of the means of transport. (Ans. Beasts of burden, carts, railways on land; sailing ships and steamships on water.

What other occupations can you name? Ans. Fishing, Engineering, Teaching, Practising law, Practising medicine.

## LESSON XXI. GOVERNMENTS.

1. Do you live in a town or in a village?

(A). If in a town, what is the name of the town?

What is a town? (Ans. A large collection of houses and people.)

Who takes care that the town is kept in proper order? (Ans. The Municipality). Let the teacher explain what is meant by the Municipality and its functions.

(B. If in a village, what is the name of the village.

What is a village? (Ans. A collection of houses and people smaller than a town and without a municipality.

What is the head man of the village called? To whom does he report the state of the village?

2. In what district do we live?

What is a district? (Ans. A portion of a state containing several towns and many villages.)

Was this district marked off by nature or by man? Is it a *natural* division or a *political* division of the country? What is the officer called who maintains order in the district, and collects the revenue? What is the officer called who decides cases by law in the district? Can this officer make his own laws? Let the teacher explain the difference between the executive and judicial powers.

3. In what Government is this district situated? Who holds the executive power in this Government? What is his name? Who holds the Judicial power? Is this government a natural or a political division of the country?

4. In what country do we live? What is the chief officer in this country called? (Ans. The Viceroy and Governor-General.) What is a Viceroy? One who rules a country as a substitute for the King, Queen, Emperor, or Empress. What is the Viceroy's name?

Name some of his powers. (Ans. Over the revenue, over the army, over commerce, over all Government officials &c.)

Who make the laws of this country? (Ans. The Legislative Council.)

5. Of what Empire does this country form a part? (Ans. The British Empire.) Who is the ruler of this Empire?

What is an Empire?

**An Empire means the dominion or jurisdiction of an Emperor or Empress;**

**it comprises various nationalities and forms of government.**

Name some other nationalities under the British Empire? (Ans. England, Scotland, Ireland, Canada, Australia, The West Indies, Cape Colony &c. &c.)

Can the Empress make any laws? Who makes the laws of the Empire? (Ans. The Houses of Parliament, viz: Lords and Commons.)

Can the Emperor of Russia make his own laws? What is the difference between these? *The British Empire is a limited monarchy, whereas the Russian Empire is an absolute monarchy.*

**6. What is Government?**

**Government is the established form of law and rule.**

What is a monarchy?

**A monarchy is a government in which one person holds the executive power.**

What is a limited monarchy?

**A limited or constitutional monarchy is a government in which the power of the ruler is limited by laws made by representatives of the people.**

What is an absolute monarchy?

**An absolute monarchy or despotism is a government in which the sovereign has unlimited power to make as well as to execute the laws.**

What is a republic?

**A republic is a government in which the supreme power is exercised by the people, who elect representatives to make the laws and appoint certain officers to execute them.**

What is the capital of a country?

**The capital of a country is that city which is the seat of government.**

**REVIEW OF PART I.**

TABLE I.

SUBJECT	DE-	Geography and its Subdivisions	Mathematical.
FINED.			Physical.
			Political.

DEFINITIONS OF TERMS. { Sphere and Hemisphere.  
Diameter.  
Circumference.  
Circle.

SHAPE AND SIZE OF THE EARTH. { General shape.  
Proofs of roundness.  
Circumference.  
Diameter.  
Axis.  
Poles.

CIRCLES OF SITUATION. { Their use. { Equator.  
Their names .. { Parallels.  
Meridians.  
Latitude .... { North.  
South.  
LONGITUDE. .. { East.  
West.

MOTIONS OF THE EARTH. { Rotation. .... { On what.  
In what time.  
Result.  
Revolution. .. { Around what.  
In what time.  
Result.

CLIMATIC CIRCLES AND ZONES { Climatic circles. { Tropics.  
Polar circles.  
ZONES. .... { Torrid.  
Temperate.  
Frigid.

TABLE II.

DIVISIONS OF THE EARTH'S SURFACE.

LAND. ...	Extent.	{ Old World. { Continents New World. { Islands.
	Contour forms.	{ Peninsulas. Capes. Isthmuses.
	Relief forms.	{ Plains. Valleys. Plateaus. Mountains. Hills.
	Oceans. ....	{ Seas. Bays. Straits.
WATER. ....		{ Inland waters. { Rivers. Lakes.

**TABLE III.**  
**LIFE.**

PLANTS.....	{	Food plants.
		Garden vegetables.
		Spices.
		Beverages.
		Medicines.
		Fruits.
ANIMALS.....	{	Clothing.
		Building materials.
		Mammals.
		Birds.
		Reptiles.
		Fishes.
MAN .....	{	Insects.
		Negro.
		Malay.
		Mongol.
		Red Indian.
		Caucasian.

**TABLE IV.**  
**WANTS OF MAN.**

Food.....	{	Animal...	{	Beasts.	{ Domestic.
					{ Wild.
			{	Birds.	{ Domestic.
		Fishes.		{ Wild.	
		Vegetable	{	Roots.	
				Stalks and leaves.	
Grains.					
Fruits.					
Mineral.					
CLOTHING....	{	Animal.			
		Vegetable.			
SHELTER....	{	Animal.			
		Vegetable.			
		Mineral.			

Questions for Review of Part I.

1. Distinguish between Physical and Political Geography? State the principal topics of physical Geography. What division of Geography tells us about the latitude of a place?

2. Who first circumnavigated the globe? What is meant by circumference? What is the circumference of the Earth in miles? What is its diameter? When you face the sun at noon, in what direction are you looking? On what does the earth rotate? Where is the North Pole? What is the use of latitude and

longitude? Where is the Northern Hemisphere? What is meant by the latitude of a place? What is the latitude of the North Pole? How many degrees of latitude are there between the two Poles? What is the latitude of a place midway between the Equator and the North Pole? What is meant by the longitude of a place? What first meridian is generally used? How many degrees of East Longitude are there? In what direction does the Earth turn on its axis? Through how many degrees of longitude does the Earth turn in one hour?

3. What is meant by vertical rays of light?—by oblique rays? Which are the hotter? Why is it cooler in the morning than at noon? Why is it colder in Winter than in Summer? On what part of the Earth do the sun's rays fall vertically? What is the Torrid Zone? Between what circles is the North Temperate Zone? Where is the South Frigid Zone?

4. What are the proportions of land and water on the surface of the globe? Name the continents of the Old World. What is the difference between a plain and a plateau?—Between a bay and a peninsula? What part of land corresponds to a lake? What part of water corresponds to an isthmus?

5. In what zone is plant life most luxuriant and why? What else besides heat is necessary to the growth of plants? Name some characteristic plants of the Torrid Zone. Which zone is most prolific in animals? If there were no plants on the surface of the earth, why would it be impossible for man to live? On what kind of food do the people of the Frigid Zone live.

6. What are the five races of mankind? To which type do most of the people of India belong? To what race do the Chinese belong? What are the three physical wants of man? What three classes of food do we use? State the class to which the following foods belong:—mutton, turkey, salmon, wheat, tea, salt, water. What are the principal building materials used in this country? Define agriculture;—mining;—manufacturing. What is meant by an absolute government? Are the people of India civilized? In what points do a republic and a constitutional monarchy agree.



## PART II.

## DESCRIPTIVE GEOGRAPHY.

## LESSON XXII.

## THE WORLD.

1. What is the area of the land surface of the earth?

(Ans. 52 millions of square miles.)

Into what six parts is the land on the earth's surface divided?

**Asia, Europe, Africa, North America, South America, and Oceania.**

What does Oceania consist of?

Oceania consists of the islands of the Pacific ocean.

2. What is the size of the water surface of the earth?

(Ans. 145 millions of square miles.)

Into what five oceans is the water on the earth's surface divided?

The Pacific, the Atlantic, the Indian, the Arctic, and the Antarctic.

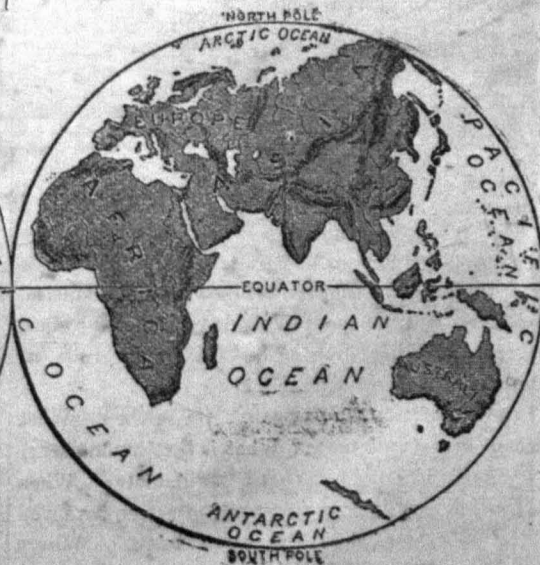
3. MAP STUDY. Through which continents does

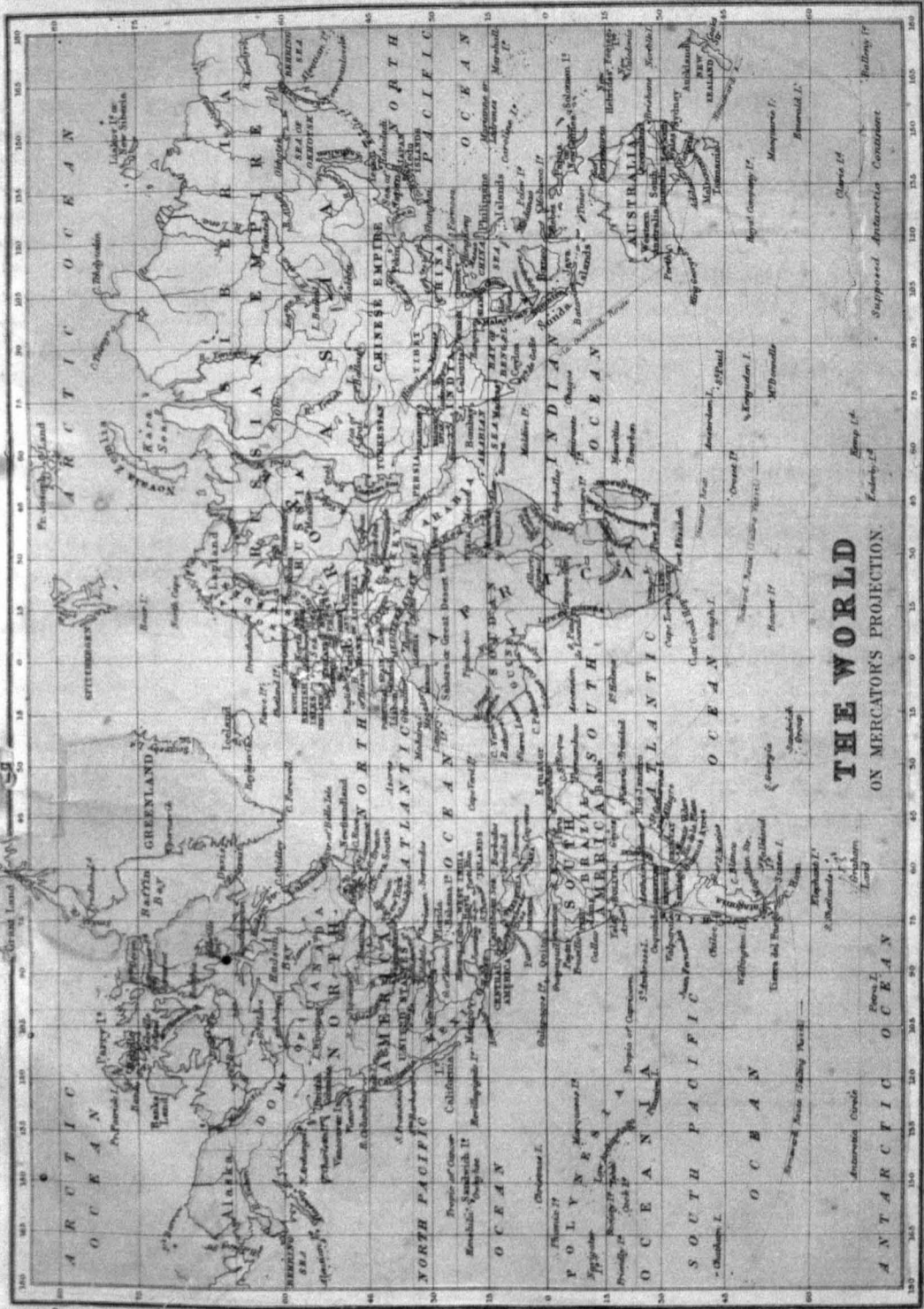
the Equator pass? What continents are crossed by the tropic of Cancer? Does Asia lie in the Northern or Southern Hemisphere? In which of these hemispheres does the greater part of Africa lie? Which continent has its larger portion in the Southern Hemisphere? What ocean is south of Asia? Through what two large islands does the Equator pass?

Through what two large islands does the 20th parallel of south latitude pass? Through what large island does the 40th south parallel pass? What is the name of the group of islands between North and South America? What is the name of the isles situated west of Europe? What is the most western point of the Old World? What is the cape to the south of Africa? What strait is between Asia and North America? What cape is south of South America? What sea is between Europe and Africa? —between Asia and Africa?—west of India?—south of China?—north of South America? What gulf is south of North America? What bay is east of India? What large river is near the Equator in South America? What large river runs north through Africa?

4. What is the highest mountain in the world.

Mount Everest, in the Himalaya Moun-





# THE WORLD

ON MERCATOR'S PROJECTION

Scale in Miles



tains, height 29,002 feet.

What is the longest river in the world?

The Mississippi, length 4300 miles.

What is the largest salt-water lake in the world?

The Caspian sea, area 180,000 square miles.

What is the largest fresh-water lake in the world?

Lake Superior, area 23,000 square miles.

What is the greatest known depth of the sea?

26,850 feet in the Pacific ocean east of Japan.

What is the largest city in the world?  
London, population nearly 4 millions.

5. Which of the continents has the greatest length of coast line in proportion to its size? (Ans. Europe; it has 1 mile of coast to 143 square miles of surface.)

Which continent has the smallest proportion of coast line? (Ans. Africa; it has only 1 mile of coast to 895 square miles of surface.) Name the continents in order of their proportion of coast line. (Ans. Europe, North America, South America, Asia, Africa.) Which is the most suited for commerce?

6. How does the general line of the mountains of the Old World run? (From East to West.) How does it run in the New World? (From North to South.) In the Old World, in what directions does the land slope? (North and South.) On which side is the longer slope? (On the north.) In the New World how does the land slope? (East and West.) Which side has a very long slope? (Towards the East.) On which side is the larger ocean in the New World?—in the Old World? Does the short or the long slope descend to the larger ocean?

7. In what sea is a ship when the latitude is 18° north and longitude 62° east?—when the latitude is 18° north, and longitude 62° west?—when the latitude is 40° north, and longitude 5° east?

Where are the places in the following latitudes and longitudes:—Lat. 20° N., Long. 80° E.?—Lat. 20° S., Long. 60° W.?—Lat. 55° N., Long. 0°?—Lat. 0°, Long. 20° E.?

8. How many people are there in the world? (Ans. About 1300 millions.) How many of these in the Old World? (Ans. About 1200 millions.) How many are Caucasians? (Ans. About 550 millions.) How many are Mongolians? (Ans. About 500 millions.) How many are Negroes? (Ans. About 150 millions.) How many are Malays? (Ans. About 90 millions.) How many are Red Indians? (Ans. About 10 millions.)

## LESSON XXIII.

### ASIA.

1. Give a general description of Asia.

Asia is the largest of the continents, containing one-third of the land surface and more than half the population of the globe.

2. Describe the natural features of Asia?

All its natural features are on a large scale.

The great mass of Central Asia, comprising four-fifths of the whole continent, consists of high table-lands, crossed by lofty mountain ranges, some of whose peaks rise to a height of 5 miles. From the central plateau, the country slopes down to the vast plain of Siberia on the north, the plains of China on the east, and the three great peninsulas on the south. The rivers of Asia rank among the longest and largest on the globe; they are divided into three systems, (1) flowing north into the Arctic ocean, (2) flowing east into the Pacific, and (3) flowing south into the Indian ocean. As Asia extends through

three Zones, it has every variety of climate from the torrid to the frigid. The southern zone comprises the southern peninsulas and part of China; it has a tropical climate and luxuriant vegetation. The central zone comprising the vast plateau region, Turkestan, Afghanistan, Persia, and Turkey, has a continental climate, with great extremes of heat and cold, and the ordinary vegetation of the temperate zone. The northern zone comprising Siberia and Kamchatka has the long cold winters and short summers and scanty vegetation of the frigid zone. The coast is penetrated by arms of the sea on every side, but not to the same extent as in Europe.

### 3. What are the advantages of Asia?

Asia is very rich in natural resources. The fertile soil and moist climate of the southern zone produce rice, coffee, cotton, drugs, spices and valuable woods. In the central zone flourish the tea plant, and the mulberry on which the silk worm feeds, and the vast grass lands nourish vast herds of camels, sheep, and cattle. The northern zone abounds in fur-bearing animals. Asia has always been famous for its pearls, diamonds and other precious stones.

### 4. Describe the races of Asia.

The *Mongolians* are found mainly in the Northern and Eastern parts. They comprise the Chinese, Japanese, Tibetans, Tartars, and Turks, and number about 500 millions. The *Malay* race found in the Malay Peninsula and the adjacent islands number about 20 millions.

The *Caucasian* race are about 180 millions in number and are found in southwestern Asia. They comprise Arabs, Jews, Armenians, Afghans, Persians, and Hindoos.

## LESSON XXIV.

### MAP STUDY OF ASIA.

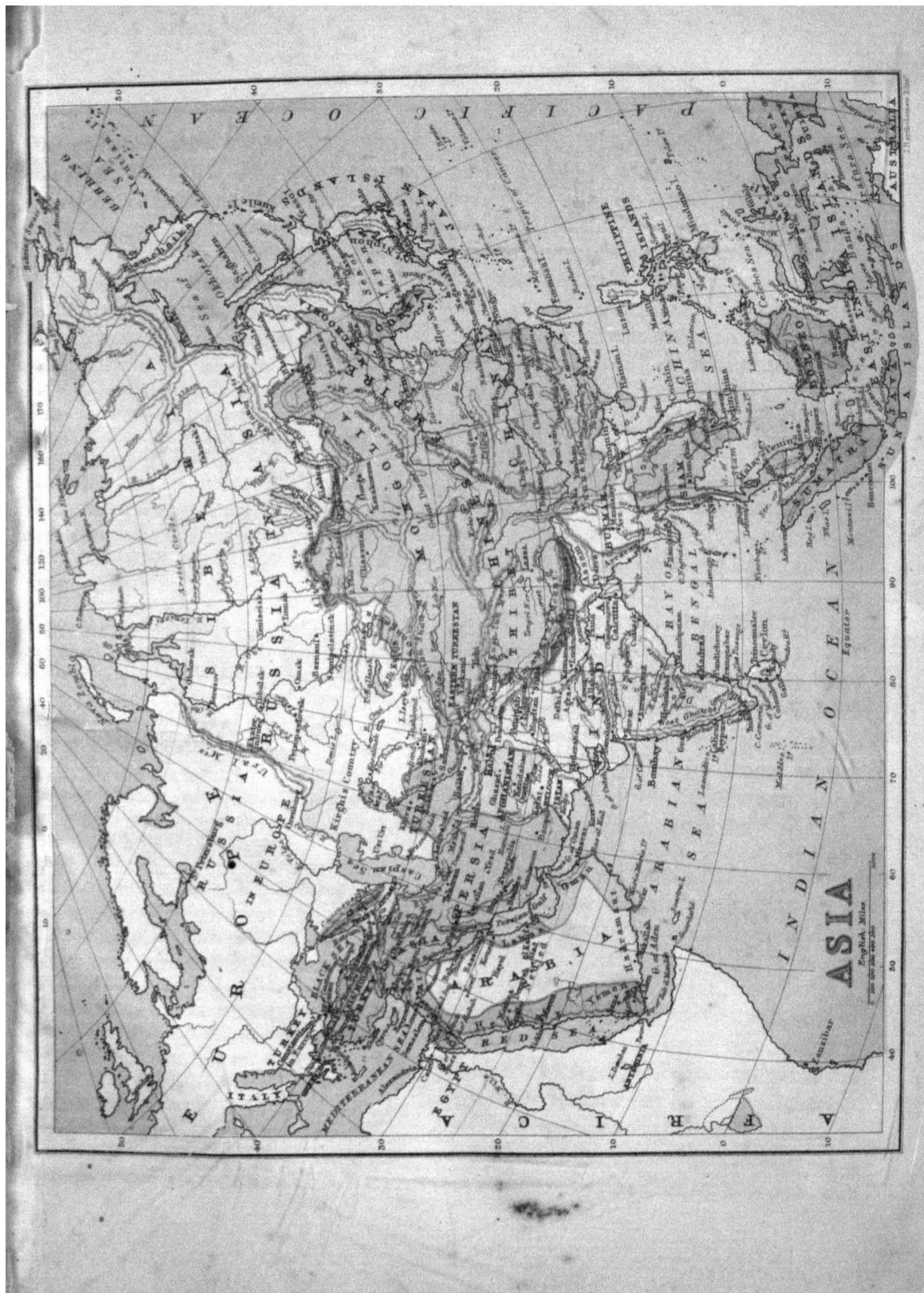
1. *Boundaries.* What ocean is north of Asia? east?—south? What continents are west of Asia? What sea is between Asia and Africa? What isthmus? What seas are west of Asia? What mountains west of Asia? Between what two parallels of latitude is Asia situated? Between what two meridians? What is the extreme length of Asia in miles? (Ans. 6,900 miles.) What is the breadth of Asia from north to south in miles? (Ans. 5,400 miles.)

2. *Countries.* What country occupies the whole of Northern Asia? What extensive country is in the east-central part of Asia? What countries are included in the Chinese Empire? What country is formed by the islands east of the Chinese Empire? What are the three small countries to the south of China? Where is India? What two countries are between India and Persia? What country is north of Persia?—what west?—what south?

3. *Coast line.* Name in order, beginning from the north, the five seas on the east of Asia. What two gulfs are in the China sea? What bay is east of India? What gulf is to the east of this bay? What gulf is south of India? What sea is west of India? Name the four gulfs on the north of this sea? Where is the Red Sea? What two gulfs are to the north of it? What four seas are to the west of Asia?

What three peninsulas are to the south of Asia? Which is the middle one? What isthmus connects the Malay peninsula with the mainland? What peninsula is between the Yellow Sea and the Sea of Japan? Where is the peninsula of Kamchatka?

What cape is the most northern point of Asia? (Ans. Northeast Cape or Tchelyuskin.) Where is the East Cape? What Cape is south of Kamchatka? Where is Cape Cambodia?—Cape Romania?—Cape





Negrais? What cape is south of India? Where is Cape Ras-al-Had?—Cape Baba? What strait is between Asia and America? Where is the Strait of Malacca?—Palk's Passage? What strait forms the entrance of the Persian gulf?—of the Red Sea? What two straits are between Turkey in Asia and Europe?

What island is south of India? What four large islands are between Australia and Asia? What group of islands is east of the China sea? Where is the island of Hainan?—the island of Formosa? Where are the Japan islands? Which is the largest? What island is north of Japan? What group of islands shuts in the sea of Okhotsk? What chain of islands connects Asia and North America? Name two groups of islands in the Bay of Bengal;—in the Arabian Sea.

4. *Inland Features.* What part of Asia is the most mountainous? What mountains are between India and Thibet? Where are the Altai mountains? What is their eastern extension called? What desert is south of the Altai mountains? What mountains are to the west of this?—to the south?—to the east? What mountains are north of Afghanistan? north of Persia? What mountains are east of the Black Sea? What mountains are on the west and east coast of India? Where are the Vindhya mountains?

What three rivers run north into the Arctic ocean? Describe the course of the Amoor. What are the two principal rivers of China? Where is the Mekong?—the Irrawady? Where does the Ganges rise? What is the river on the west of India? What two rivers unite and flow into the Persian gulf? What large lake is north of Persia?—north of Turkestan? What two large lakes are South of Siberia.

*Cities.* Of what country is each of these cities the capital?—Pekin, Bangkok, Teheran, Kabul, Mandalay, Calcutta. In what countries are the following cities?—Canton, Mecca, Smyrna, Tobolsk, Kandahar, Shiraz, Mecca, Yarkund, Lassa, Bokhara, Kelat. Where are the following seaports? Nikolaevsk, Yokohama, Shanghai, Hongkong, Rangoon, Bombay, Karachi, Manilla, Singapore, Madras, Bassorah, Muscat.

## LESSON XXV.

### EUROPE.

1. Give a general description of Europe.

Europe is the smallest continent, having less than one-fourth the area of Asia; but, being situated in the temperate zone, with great natural resources and facilities for commerce, and being peopled mainly by the progressive Caucasian race, it contains the greatest number of civilized nations and is therefore the most important part of the surface of the globe.

2. Describe generally the physical features of Europe.

Europe has a coast-line deeply indented by seas, gulfs, and bays, and hence longer in proportion to its area than that of any other continent. Of the surface of Europe the north-east portion is a great plain, and the south-western part is a mountainous region. It is well watered by numerous rivers, many of which are navigable for long distances inland. The greater portion of Europe lies in the temperate zone and produces useful plants in abundance. The remaining portion in the frigid zone has a small population and scanty vegetation.

3. Describe the races of Europe.

The great majority of the people of Europe are Caucasians. Of these there are four principal stocks: (1) The Keltic, (2) The Germanic or Teutonic, (3) The Romaic, (4) The Slavic. To the Mongolian race belong the Turks, Hungarians, and the people of Lapland and Finland.

4. Give an account of the religions of Europe.

Of the 310 millions of people in Europe, over 290 millions profess the Christian religion: of these half are Roman Catholics; and the Protestants and Greek Church in almost equal numbers make up the remainder. Mahomedans and Jews number about 10 millions each.

5. Describe the power of Europe.

The whole world only reckons six nations which deserve to be called *the Great Powers*. Of these *five* are in Europe, viz: Great Britain, Russia, Germany, France, and Austria. The second rate powers in Europe are Italy, Spain, Sweden, and Turkey. No other nation in the world, except the United States of America, is equal in power to even a second rate European nation.

## LESSON XXVI.

### MAP STUDY OF EUROPE.

1. *Position and size.* What ocean is north of Europe?—west of Europe? What sea is south of Europe? What three small seas are on the south-east of Europe? What range of mountains forms the south-east boundary of Europe? What mountain range, river, and sea form the eastern boundary? Between what meridians does Europe lie? What is its length from east to west in miles? (Ans. 3,500.) Between what parallels of latitude is Europe? What is its breadth in miles? (Ans. 2,500.) What countries in Europe are partly in the Frigid Zone? What continent is east of Europe?—south of Europe?

2. *Countries.* What large country forms the east of Europe? South-west of Russia are four small states; name these. What country do they separate from Russia? What country is south of Turkey? Where is Austria?—Italy? What small country is north of Italy? What two countries form the Western peninsula of southern Europe? What country is to

the north of these? Name two small countries north of France? What large country separates France from Russia? What countries form the north-western peninsula of Europe? Name the small country south of these. What country is formed by the British Isles?

3. *Coast line.* Describe the position of each of the following inland seas:—White Sea, Baltic, Mediterranean, Sea of Marmora, Black Sea, Sea of Azov. What sea is between the British Isles and Denmark? What sea is east of Italy?—east of Greece? Name the three gulfs that are arms of the Baltic sea. What two channels connect the Baltic with the North sea? What channel is between England and France? What large bay is west of France? What two gulfs are in the north of the Mediterranean between Spain and Italy? What gulf is south of Italy?

What waters are connected by the following straits:—Sound, Gibraltar, Otranto, Dardanelles, Bosphorus, Kertch? What lands are separated by the following straits:—Dover, Bonifacio, Messina?

Tell the position of the following capes:—North Cape, The Naze, The Skaw, Cape Wrath, Cape Clear, Cape la Hogue, Land's End, Finisterre, St. Vincent Passaro, Spartivento, Matapan.

What three peninsulas are on the south of Europe? What peninsula is south of Russia? What peninsula is between the Baltic and the North sea? Name the large peninsula on the north-west of Europe. In what direction do most of the peninsulas of Europe point? Where is the Morea? What isthmus joins the Morea with the rest of Greece? What isthmus joins the Crimea to Russia?

4. *Islands.* What large island is north of Russia? In what zone does this island lie? What large island is situated just south of the Arctic circle?

What small group of islands is off the north-west coast of Norway? Name three groups of islands to the north of Scotland. What three Swedish islands are in the Baltic? What two islands are at the mouth of the gulf of Riga? What group of islands is near Cape la Hogue? Where are the Balearic isles? Name the two largest. What islands are west of Greece? Where is Candia? What island is in the extreme east of the Mediterranean? To whom does it belong? Where is Malta?





## LESSON XXVII.

## MAPSTUDY OF EUROPE.—(CONTINUED.)

5. *Inland.* What part of Europe is mountainous? What mountains are north of Italy? Are the three southern peninsulas flat or mountainous? What is the general direction of the mountains in Spain? What mountains separate Spain from France? What mountain-chain forms the backbone of Italy? What two volcanoes are in Italy? What chain of mountains runs east through Turkey? Where are the Carpathian mountains? What mountains run through Scandinavia? What volcano is in Iceland?

The largest river of Europe flows into the Caspian sea, what is its name? Name the second largest, which flows east into the Black sea? What other three rivers enter the Black sea? What river is north of Italy? What two rivers rise in the Alps, one flowing north into the North sea, and the other south into the Mediterranean? What river flows east through Spain? What four rivers flow west into the Atlantic through Spain? What two rivers flow west into the bay of Biscay? What river flows through France into the English channel? How does the Elbe flow? The Oder?—The Vistula? What two rivers flow through Russia into the Baltic?

What three lakes are in Sweden? What four large lakes are in Russia near the gulf of Finland? Name two lakes in the Alps. (Ans. Constance and Geneva.)

What is the highest mountain in Europe? (Ans. Mount Blanc, 15,781 feet high.) Where is it? What is the longest river in Europe? (Ans. The Volga, 2,130 miles long.) Describe its course.

What is the largest lake in Europe? (Ans. Ladoga, 8,780 square miles.) Where is it? What is the most northerly point of Europe? What is the most westerly point of the mainland?

## LESSON XXVIII.

## COUNTRIES OF EUROPE. THE UNITED KINGDOM.

1. **THE BRITISH EMPIRE.** The united Kingdom of Great Britain and Ireland is the most important portion of the *British Empire*, the largest and most powerful in the World.

This Empire comprises, The British Isles, Malta, Gibraltar, and Cyprus in Europe; The Indian Empire, Singapore, and Hong Kong in Asia; Cape Colony, Natal, and Sierra Leone in Africa; Canada, Newfoundland, British Guiana and many of the West India islands in America; Australia, New Zealand, and Tasmania in Oceania. So numerous and so far extended are its possessions that the proverbial expression "The sun never sets on the British Empire" is literally true. Taking all its parts together, it has an area of 9 millions of square miles, or over one-sixth of the total land surface of the globe, and a population of 300 millions, *i. e.*, more than one-fifth of the inhabitants of the world. The British Empire is the greatest in the world's history.

2. **UNITED KINGDOM.** The United kingdom consists of the two large islands of Great Britain and Ireland and numerous smaller islands. The island of Great Britain is politically divided into the two kingdoms of England and Scotland and the principality of Wales. For geographical purposes Wales is usually considered a part of England.

3. *The population* of the United Kingdom amounts to 32 millions, distributed as follows:—England and Wales 23 millions, Ireland  $5\frac{1}{2}$  millions, and Scotland  $3\frac{1}{2}$  millions.

4. *Government.* The government of the United Kingdom is a limited monarchy. The *executive* power is vested in a sovereign; the *legislative* power in two Houses of Parliament, the House of Lords and the House of Commons. The *House of Lords* is composed of princes of the royal blood and hereditary nobles, certain bishops of the established church, sixteen representative peers from Scotland and twenty-eight from Ireland. The *House of Commons* consists of periodically elected representatives of the people. A new measure must pass both Houses and receive the assent of the Sovereign before it becomes a law.

The *Laws* of the three countries of England, Scotland, and Ireland are not necessarily the

same though their Government is one. Scotland retains its own laws and its own peculiar method of administering them, while Ireland has always required a special legislation for itself. The Government of Scotland was united to that of England in 1707, and the Irish Parliament was only absorbed in 1801.

5. *Differences between the three kingdoms.* In Great Britain  $\frac{3}{4}$  of the population is engaged in *manufactures and trade*, in Ireland  $\frac{3}{4}$  of the population is *agricultural*. Great Britain has a large and influential *middle-class*, while this class is wanting in Ireland; England, however, having the largest proportion both of the *extremely rich* and of the *extremely poor*. Great Britain is Protestant in *religion*, England being Episcopalian and Scotland Presbyterian; whereas Ireland is Roman Catholic. The staple *food* of the masses in England is wheat, in Scotland *oats*, and in Ireland *potatoes*. England is the largest, wealthiest, and most populous of the three kingdoms, and contains the capital.

## LESSON XXIX.

### ENGLAND AND WALES.

1. *Position and Extent.* England and Wales forms the southern portion of the island of Great Britain, and is situated to the west of continental Europe.

It lies between the parallels of 50° and 55½° North Latitude, and the meridians of 6° West and 2° East Longitude. The greatest length is 430 miles; the greatest breadth 360 miles; the area is 58,320 square miles.

2. *Outline.* In figure, England and Wales resembles a triangle with its vertex to the north. The outline is irregular; the length of coast being over 2000 miles, or one mile of coast to every 29 square miles of surface.

The principal *capes* beginning on the north-west are, Flamborough Head, Spurn Head, The Naze, Portland Point, Start Point, The Lizard, Land's End, St. David's Head, and St. Bees Head.

The principal *openings* into the land are,—Mouth of the Humber, the Wash, Mouth of the Thames, Mounts Bay, Bristol Channel, Cardigan Bay, and Morecambe Bay.

The adjacent *islands* are Holy Island, Isle of Wight, Channel Islands (Jersey, Guernsey, Alderney, and Sark), Scilly Islands, Anglesey, and the Isle of Man.

England is celebrated for its fine *harbours*. The chief of these are London, Liverpool, Plymouth, Portsmouth, Newcastle, Bristol, Hull, Sunderland, and Southampton.

3. The surface is extremely varied. In the north and west the country is *mountainous*, in the centre and south-west it is *hilly*, while in the east and south it is *level* or slightly *undulating*.

As the highest peak, (Snowdon in Wales) is only 3,600 feet high, the mountains of England are not of great magnitude. The three chief systems are the Northern, Cambrian, and Devonian Ranges. The Northern Range comprises the Cheviot Hills, the Pennine chain in Yorkshire, and the Cambrian mountains in Cumberland. The Cambrian Range includes the mountains in Wales, while the Devonian Range is in the south-west corner of England.

The country presents three *slopes*; a long slope to the east, and two short slopes to the south and west.

Although on a comparatively small scale, the mountains of Cumberland, Westmoreland, and North Wales are noted for their beautiful *scenery*.

4. The *rivers* of England, though short, are wide and deep, and have fine *harbours* at their mouths.

On the eastern slope are the *Ouse* and *Trent* forming the *Humber*, the Great *Ouse*, and the *Thames*. Draining the western slope are the *Mersey*, and the *Severn*. There are no important rivers on the southern slope. The longest river is the *Severn* with a length of 240 miles, but the *Thames* is by far the most important.

The *lakes* of Cumberland and Westmoreland are small in size but world-renowned for their beauty.

*Windermere, Derwentwater, and Ullswater* are the chief.

5. The *climate* is mild, moist, and very healthy.

Two causes contribute chiefly to this result; (1) its position in the midst of the sea, (2) the warm ocean current called the Gulf stream which washes its western and southern shores.

6. The *natural advantages* of England are;—(1) its vast deposits of coal, iron, and other minerals; (2) its productive soil; (3) its extent of sea-coast affording a great number of good harbours, navigable bays, and river mouths; and (4) its central situation for the commerce of the world.

London lies at the centre of that hemisphere of the world which contains the greatest amount of land.

7. The *people* of England belong mainly to the Teutonic race. In Wales and the south-western corner of England the people are almost entirely Keltic.

### LESSON XXX.

ENGLAND AND WALES. (CONTINUED.)

1. *Industries.* If a line be drawn from Portland Bill to Flamborough Head it will divide England into two industrial sections. In the north-west section, *Manufactures* and *Mining* are the great industries; while in the south-east section *Agriculture* is the leading pursuit.

As a *manufacturing* country, England ranks first in the world. As the most important manufactures are now carried on by means of steam-driven machinery the great manufacturing centres lie in the principal coal-fields. These are, (1) the Newcastle coal-field in Northumberland and Durham with manufactures of iron machinery, glass, pottery, paper, and sail-cloth; (2) the Lancashire and Yorkshire coal-field containing the cotton manufacturing towns Manchester, Pres-

ton, Bolton, and Wigan; the woollen manufacturing towns Leeds, Bradford, Halifax, and Huddersfield; and Sheffield with its manufactures of cutlery and plated goods; (3) the Staffordshire coal-field containing Birmingham, and Wolverhampton, the chief seats of the hardware manufacture, as well as the potteries of Stoke-upon-Trent; (4) the South Wales coal-field with its great iron-works at Merthyr Tydvil and Swansea.

The *mining* centres in addition to those named are Cornwall with mines of copper and tin, and Cumberland with mines of lead and plumbago.

2. The *Agricultural* industry is carried to the highest point of scientific perfection. The *soil* is generally fertile, and it is further enriched by manures brought from all parts of the world.

Though every available portion of the soil is cultivated, and though nothing is grown but food plants England cannot grow enough for her people and has to draw large food supplies from other countries.

3. As a *Commercial* country England ranks first in the world.

In addition to conveying its own exports and imports, the countless vessels which issue from its numerous ports are engaged in the commerce of other countries, so that England has by far the largest share of the carrying trade of the world.

The *Imports* are chiefly of two kinds—*food* for its inhabitants, and *raw material* for its manufactures.

The *Exports* are manufactured goods of all kinds:—cotton, woollen, silk, linen, machinery, hardware, and earthenware.

The *Domestic Commerce* is carried on by a network of railways connecting all the important cities. There is also considerable water communication by numerous canals and rivers.

4. *Education* is in a very advanced state. There is a system of national schools, and parents are required by law to send their children to school



when between the ages of five and thirteen. The ancient universities of Oxford and Cambridge are well known. The university of London is fast rising in importance, and there is also a university at Durham. There are great public schools at Eton, Harrow, Rugby, and Winchester.

The established *religion* is that form of Protestantism called "The Church of England" or "Episcopalian." Dissenters are very numerous, as all religious sects are tolerated.

### LESSON XXXI.

#### ENGLAND AND WALES.-(CONTINUED.)

1. England contains 40 counties. These may be divided into 6 Northern, 5 Eastern, 9 Southern, 6 Western, 6 North-midland, and 8 South-midland. Each county contains a county-town where the courts for the administration of justice and local government are held. Wales contains 12 counties.

#### TABLE OF COUNTIES AND COUNTY-TOWNS.

	County.	County-towns.
NORTHERN,	Northumberland. . .	Newcastle,
	Durham. . .	Durham,
	York. . .	York,
	Cumberland. . . . .	Carlisle,
	Westmoreland. . .	Appleby,
	Lancashire. . .	Lancaster.
EASTERN,	Lincoln. . . . .	Lincoln,
	Cambridge. . . . .	Cambridge,
	Norfolk. . . . .	Norwich,
	Suffolk. . . . .	Ipswich,
	Essex. . . . .	Chelmsford.
SOUTHERN,	Kent. . . . .	Maidstone,
	Surrey. . . . .	Guildford,
	Sussex. . . . .	Chichester
	Berkshire. . . . .	Reading,
	Hampshire. . . . .	Winchester,
	Wiltshire. . . . .	Salisbury,
	Dorsetshire. . . . .	Dorchester,
	Devonshire. . . . .	Exeter,
	Cornwall. . . . .	Bodmin,

WESTERN, ...	Somerset. . .	Bath,
	Gloucester. . .	Gloucester,
	Monmouth. . .	Monmouth,
	Hereford. . .	Hereford,
	Shropshire. . .	Shrewsbury,
	Cheshire. . .	Chester.

NORTH ...	Stafford. . .	Stafford,
	Derby. . .	Derby,
MIDLAND, ...	Nottingham. . .	Nottingham,
	Leicester. . .	Leicester,
	Warwick. . .	Warwick,
	Worcester. . .	Worcester.

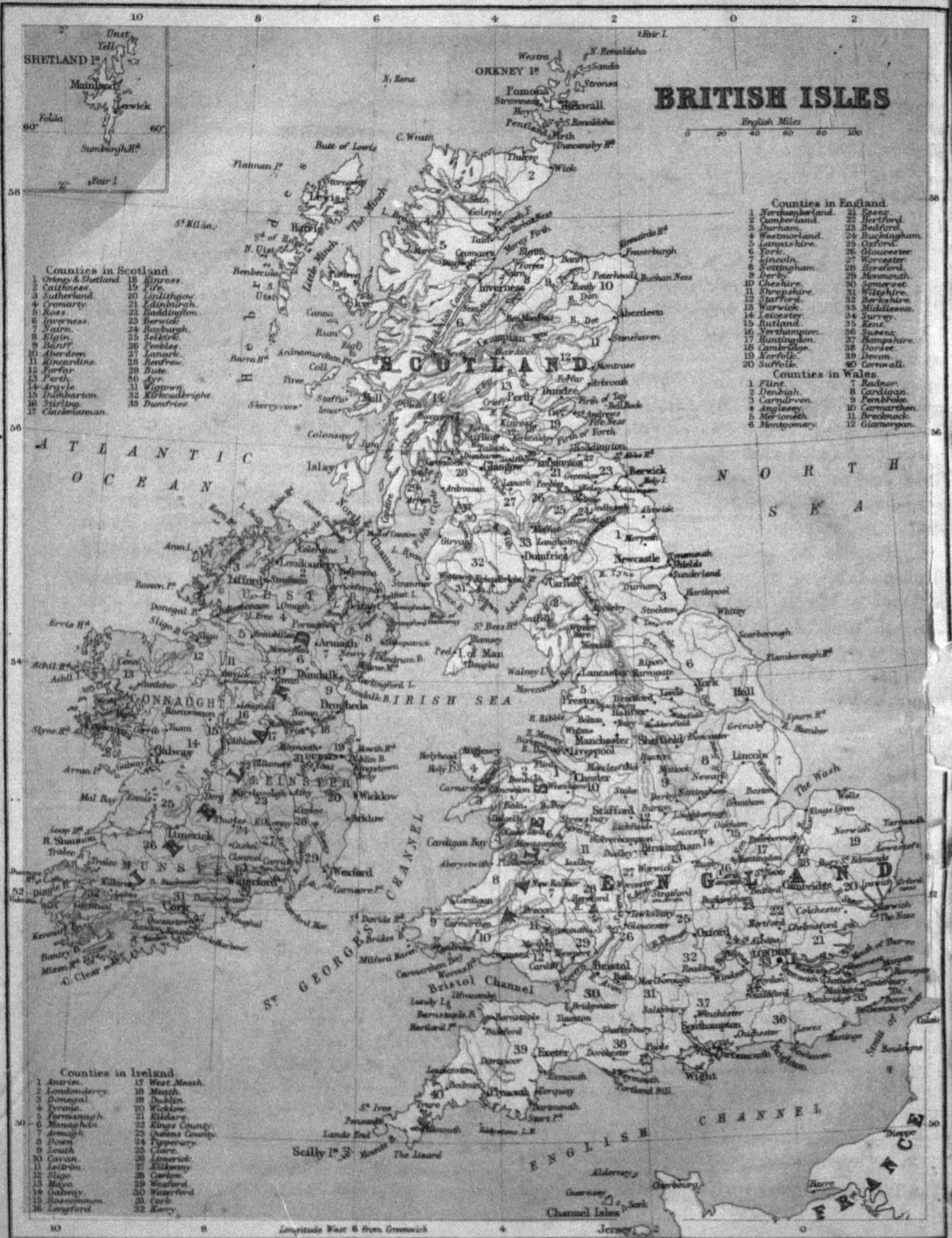
SOUTH ...	Oxford. . .	Oxford,
	Buckingham. . .	Aylesbury,
	Middlesex. . .	LONDON,
	Hertford. . .	Hertford,
	Bedford. . .	Bedford,
MIDLAND, ...	Huntingdon. . .	Huntingdon,
	Northampton. . .	Northampton,
	Rutland. . .	Oakham.

NORTH ...	Flint. . .	Mold,
	Denbigh. . .	Denbigh,
	Carnarvon. . .	Carnarvon,
WALES, ...	Anglesey. . .	Beaumaris,
	Merioneth. . .	Dolgelly,
	Montgomery. . .	Montgomery.

SOUTH ...	Cardigan. . .	Cardigan,
	Pembroke. . .	Pembroke,
	Carmarthen. . .	Carmarthen,
WALES, ...	Glamorgan. . .	Cardiff,
	Brecknock. . .	Brecon,
	Radnor. . .	Presteign.

2. The chief *cities* are:—*London*, the largest, wealthiest and most populous city in the world. It contains manufactures of almost every kind of goods, it is the most important seaport, the great centre of all commercial business, and the seat of the government of the whole British Empire. It has a population of over four millions.

*Manchester*, including its suburb *Salford*, has a population of 500,000. It is the centre of the cotton manufacture, the second city in England, and the greatest manufacturing city in the world. *Liverpool* is the second seaport and third largest city. Its docks are very extensive. *Birmingham*, the chief seat of the hardware manufacture, is called "the toyshop of



# BRITISH ISLES

English Miles  
0 20 40 60 80 100

## Counties in Scotland

- 1. Orkney & Shetland
- 2. Caithness
- 3. Sutherland
- 4. Cromarty
- 5. Ross
- 6. Inverness
- 7. Yairn
- 8. Elgin
- 9. Banff
- 10. Aberdeen
- 11. Kincardine
- 12. Forfar
- 13. Perth
- 14. Argyll
- 15. Dunbarton
- 16. Stirling
- 17. Clackmannan
- 18. Angus
- 19. Forfar
- 20. Dundee
- 21. Perth
- 22. Dundee
- 23. Dundee
- 24. Dundee
- 25. Dundee
- 26. Dundee
- 27. Dundee
- 28. Dundee
- 29. Dundee
- 30. Dundee
- 31. Dundee
- 32. Dundee
- 33. Dundee

## Counties in England

- 1. Northumberland
- 2. Cumberland
- 3. Durham
- 4. Westmorland
- 5. Lancashire
- 6. York
- 7. Lincoln
- 8. Nottingham
- 9. Derby
- 10. Cheshire
- 11. Shropshire
- 12. Stafford
- 13. Warwick
- 14. Leicestershire
- 15. Rutland
- 16. Northampton
- 17. Huntingdon
- 18. Cambridgeshire
- 19. Norfolk
- 20. Suffolk
- 21. Essex
- 22. Hertford
- 23. Bedford
- 24. Buckingham
- 25. Oxford
- 26. Gloucester
- 27. Worcester
- 28. Hereford
- 29. Monmouth
- 30. Somerset
- 31. Wiltshire
- 32. Bath
- 33. Middlesex
- 34. Surrey
- 35. Kent
- 36. Sussex
- 37. Hampshire
- 38. Dorset
- 39. Devon
- 40. Cornwall

## Counties in Wales

- 1. Flint
- 2. Denbigh
- 3. Carnarvon
- 4. Anglesey
- 5. Merioneth
- 6. Montgomery
- 7. Radnor
- 8. Cardigan
- 9. Pembroke
- 10. Carmarthen
- 11. Brecknock
- 12. Glamorgan

## Counties in Ireland

- 1. Antrim
- 2. Londonderry
- 3. Down
- 4. Fermanagh
- 5. Monaghan
- 6. Wicklow
- 7. Wexford
- 8. Dublin
- 9. Louth
- 10. Cavan
- 11. Leitrim
- 12. Sligo
- 13. Mayo
- 14. Galway
- 15. Clare
- 16. Kerry
- 17. West Meath
- 18. East Meath
- 19. Wicklow
- 20. Dublin
- 21. Wicklow
- 22. Wicklow
- 23. Wicklow
- 24. Wicklow
- 25. Wicklow
- 26. Wicklow
- 27. Wicklow
- 28. Wicklow
- 29. Wicklow
- 30. Wicklow
- 31. Wicklow
- 32. Wicklow

Longitude East & from Greenwich

Europe," and may be called "the armoury of the world." *Leeds* is the centre of the woollen trade. *Sheffield* is famous for cutlery and plated goods.

Each of the above cities has a population over a quarter of a million.

## LESSON XXXII.

### MAP STUDY OF ENGLAND AND WALES.

1. What country lies north of England? What sea lies east? What channel lies south? What strait separates England from France? How many miles across? (Ans. 21 miles.) What channel is between Wales and Ireland? What sea is between England and Ireland? Between what parallels of latitude is England? Between what parallels of longitude? What is the difference in time between Lowestoft and Lands End?

2. Describe the position of The Wash—Bristol Channel—Cardigan Bay—Solway Firth. What arm of the sea is between York and Lincoln?—between Kent and Essex? What waters are joined by the straits of Dover? Which is the most southern cape in England? Which is the most western cape? What river flows into the Bristol Channel? What rivers join to form the Humber?

3. Where are the following mountains:—Scafell, Snowdon, Cader Idris, Plinlimmon?

On what river is London?—Liverpool?—York? Where is the Menai Strait?

4. If a line be drawn from Portland Bill to Flamborough Head through what counties will it pass? Name the counties lying to the north of this line? Are the following counties agricultural or manufacturing:—Essex?—Lancashire?—Sussex?—Staffordshire? Name all the towns in England lying near the first meridian. Through what counties does the first meridian pass? What is the latitude of London?—of Liverpool?—of Newcastle?

## LESSON XXXIII.

### SCOTLAND.

1. *Position and Extent.* Scotland forms the northern part of the island of Great

Britain. The greatest length is 288 miles; the greatest breadth is 175 miles.

The area, including the islands, is 30,500 square miles.

2. *Outline.* The outline is very irregular, the breadth varying from 26 to 175 miles.

The coast line, not including the islands, measures 2,500 miles; giving one mile of coast to 12 square miles of surface.

There is one *peninsula*, Cantire. There are numerous *capes*: Duncansbay Head, Buchan Ness, St. Abb's Head, on the east, and Mull of Galloway, Mull of Cantire, Ardnamurchan Point, and Cape Wrath on the west.

The openings into the land are very numerous, especially on the west coast. The Moray Firth, Firth of Forth, and Firth of Clyde are the largest.

The adjacent islands number several thousands. The most important are, Orkney Islands, Shetland Islands, Lewis, Skye, Mull, Islay, Jura, Arran, and Bute.

With so many inlets there are numerous harbours. Glasgow, Leith, Dundee, Greenock, and Aberdeen are the chief ports.

3. *Surface.* Owing to the character of the surface, Scotland is divided into two sections:—the *Highlands* in the north-west, and the *Lowlands* in the south-east. A line drawn from Greenock to Aberdeen would mark off these two sections.

The Highlands are in general rugged and mountainous, and the Lowlands are diversified;—the basins of the Forth and Clyde forming a plain, and the southern section a hill country.

There are three *mountain* systems:—The Northern, north of the Caledonian Canal, the Grampian Mountains in the centre, and the Southern system, south of the Forth and Clyde.

The mountains in the Northern system and the Grampian mountains have a sterile and desolate aspect, green herbage being found only at the base. The mountains of the Southern system have generally



sloping ascents, flat grass-grown summits, and afford good pasture for sheep. Ben Nevis, 4,406 feet high, is the highest in Great Britain.

4. Owing to the irregular surface of the country the *rivers* of Scotland are neither long nor wide.

Only the Clyde, Forth, Tweed, and Tay are navigable and these but for a short distance; the others are mountain torrents.

The *lakes* of Scotland are numerous, comparatively large, and celebrated for their picturesque beauty. Loch Lomond is the largest and most beautiful.

5. The *climate* is colder than that of England, and in the west it is excessively moist. But owing to the mountainous nature of the country the air is pure and bracing.

The *natural advantages* are, (1) the numerous and important mineral productions, (2) its extensive and productive fisheries, and (3) its large extent of sea coast affording facilities for home and foreign commerce.

The *people* of the Highlands belong to the Keltic race and many of them still speak the *Gaelic* language, though English is universally understood. In the Lowlands the people are of mixed race, the Teutonic element being most prevalent. The Scotch are hardy, frugal, and enterprising.

6. The chief *industrial pursuits* are, *Agriculture, Fishing, Manufactures, and Commerce.*

*Agriculture* is in a very advanced state in the more fertile districts, i. e. the south-eastern part of the country. *Oats* and *barley* are the grains chiefly cultivated, and in the south *wheat* is also produced. The greater portion of the Highlands is grass-land, on which large herds of sheep and cattle are raised.

The *fisheries* of Scotland are highly important and afford occupation to a large number of people.

In the rivers *salmon* are caught, and round the coast *herring, cod, and haddocks* are taken in vast quantities.

The *manufactures* depend on the existence of a valuable coal-field which extends across the country between the Forth and Clyde.

The most important are *cotton* goods at Glasgow, *linen* at Dundee and Dunfermline, *shawls* and *silks* at Paisley, and *woollen* goods at Galashiels, Aberdeen, and Hawick. *Ship building* is carried on at the principal seaports, and the Clyde sends out the finest ships in the world.

The *Commerce* is considerable and increasing. The *imports* consist of raw materials, and the *Exports* of manufactured goods.

The southern part of the country is well supplied with *railways*, which are being gradually extended into the Highlands. The Caledonian, and the "Forth and Clyde" are the principal canals.

## LESSON XXXIV.

### SCOTLAND.—(CONTINUED.)

1. *Education* in Scotland is widely diffused.

For several hundred years, there have been schools established by law in every parish, i. e., at intervals of a few miles. The English law as regards compulsory education has recently been extended to Scotland. There are four universities,—Edinburgh, Glasgow, Aberdeen and St. Andrews.

The established religion is *Presbyterianism*, but all forms of religion are tolerated.

2. There are 33 counties, 2 of which are entirely insular.

TABLE OF COUNTIES AND COUNTY-TOWNS.

Counties.	County-towns.
<b>NORTHERN,</b> { Orkney and Shetland, ...	Kirkwall.
{ Caithness, ...	Wick.
{ Sutherland, ...	Dornoch.
{ Cromarty, ...	Cromarty.
{ Ross, ...	Dingwall.
{ Inverness, ...	Inverness.
{ Nairn, ...	Nairn.
{ Elgin, ...	Elgin.
{ Banff, ...	Banff.
{ Aberdeen, ...	Aberdeen.
<b>CENTRAL,</b> { Kincardine, ...	Stonehaven.
{ Forfar, ...	Forfar.
{ Perth, ...	Perth.
{ Fife, ...	Cupar.
{ Kinross, ...	Kinross.
{ Clackmannan, ...	Clackmannan.
{ Stirling, ...	Stirling.
{ Dumbarton, ...	Dumbarton.
{ Argyll, ...	Inverary.
{ Bute and Arran, ...	Rothsay.
<b>SOUTHERN,</b> { Edinburgh, ...	Edinburgh.
{ Haddington, ...	Haddington.
{ Linlithgow, ...	Linlithgow.
{ Lanark, ...	Lanark.
{ Renfrew, ...	Renfrew.
{ Ayr, ...	Ayr.
{ Peebles, ...	Peebles.
{ Selkirk, ...	Selkirk.
{ Berwick, ...	Greenlaw.
{ Roxburgh, ...	Jedburgh.
{ Dumfries, ...	Dumfries.
{ Kirkcudbright, ...	Kirkcudbright.
{ Wigtown, ...	Wigtown.

Orkney and Shetland, Bute and Arran are entirely insular. Cromarty consists of a number of small portions interspersed through Rosshire. Edinburgh, Haddington, and Linlithgow are generally called The *thians*.

3. The chief cities are:—*Edinburgh* near the Firth of Forth, is the capital. It has a university, courts of law, and manufactures of paper and machinery. On account of its beautiful situation, fine buildings, and seats of learning, it has been called. "The Modern Athens."

*Glasgow*, on the Clyde, is the largest city in Scotland, and the commercial capital of the country

Its chief industries are cotton and iron manufactures and ship-building. It has a university and a cathedral. *Dundee*, on the Tay, is the centre of the linen and jute trade. *Aberdeen*, at the mouth of the Dee, is the seat of a university, and has manufactures of cotton, woolen, and linen goods. These are the only towns which have a population of 100,000 and upwards.

4. *Map Study.* What ocean bounds Scotland on the west and north? What sea bounds it on the east? What country is to the south? What hills separate England and Scotland? Between what parallels of latitude does Scotland extend? Between what meridians? Name two large cities lying near the 56th parallel. If a line be drawn from Greenock to Aberdeen, through what counties will it pass? Name the counties in the Highlands. What group of islands are furthest north? Name a town in these islands. What small island is furthest west? What is the most easterly point of Scotland? Name 6 capes on the east of Scotland. Name 3 inlets in the south. Name 5 rivers between the Caledonian canal and the Tay. On what river is Greenock?—Perth?—Lanark?—Banff?—Dumfries?

## LESSON XXXV.

### IRELAND.

1. *Position and Extent.* Ireland is an island lying to the west of Great Britain.

Its greatest length from north to south is 306 miles, and its greatest breadth about 200 miles. Its area is 32,500 square miles.

2. *Outline.* On the north, west, and south the coast is much indented.

The total coastline is 2,300 miles or one mile of coast to 16 miles of surface. No point is more than 55 miles from the sea.

The principal *Capes* are,—Malin Head, and Fair Head on the north, Howth Head and Carnsore Point on the east, Cape Clear in the south, and Dunmore Head, Slyne Head, Achil Head, and Erris Head, on the west.

The *openings* into the land are numerous and important. *Lough Swilly*, *Lough Foyle*, *Belfast Lough*,

*Strangford Lough, Dundrum Bay, Dundalk Bay, Dublin Bay, Wexford Harbour, Waterford Harbour, Cork Harbour, Bantry Bay, Dingle Bay, Tralee Bay, Mouth of the Shannon, Galway Bay, Clew Bay, Sligo Bay, and Donegal Bay* are the most important.

The adjoining islands are unimportant. *Achil* (=eagle) island is the largest. *Valentia*, in Dingle Bay, is the eastern end of the telegraph cable between the old and new worlds.

The harbours are among the finest in the world. *Bantry Bay* and *Cork Harbour* are large enough to accommodate the whole British navy.

3. *Surface.* The greater part of the surface is a plain, containing extensive bogs from which *peat* is dug for fuel.

In the southern and western districts and generally along the coast are mountains and cliffs of some elevation. *Carn Ual* (3,414 feet) is the highest mountain. The natural pier of basaltic columns called the *Giant's Causeway* is on the north of Ireland.

The rivers though short are owing to the flatness of the country, useful for inland navigation.

The *Shannon* (254 miles) is the longest river and is navigable almost from its source to its mouth.

The lakes are the chief water feature of Ireland. *Lough Neagh* (164 square miles) is the largest lake in the United Kingdom, and is noted besides for the petrifying quality of its waters. The lakes of *Killarney* are unrivalled for their romantic scenery.

4. *Climate and Soil.* The *Climate* is more moist than that of Britain on account of, (1) its insular position, (2) its numerous lakes and great extent of marshy surface, and (3) the prevalence of westerly winds.

Owing to this moisture the vegetation is so flourishing that Ireland is usually called The Green or The Emerald Isle. The soil is generally rich and fertile.

5. The people of Ireland belong to the Celtic race, and many of them still speak *Erse* or *Irish*, a Celtic dialect.

Three-fourths of the population are of the Roman Catholic religion. The remainder are Episcopalians and Presbyterians.

*Education* is now in a very advanced state. There are National Schools aided by Government for children of all creeds, in addition to a large number of endowed schools. There are now three universities, (1) that of Dublin or Trinity College, (2) Queen's University with colleges at Belfast, Cork, and Galway, and (3) the Catholic University, with colleges at Maynooth, and Carlow.

In *character* the Irish people are sprightly and impulsive, but revengeful and deficient in perseverance. Owing to the fact that the greater portion of the land is owned by non-resident landlords differing in religion from the bulk of the people, the social condition of Ireland has for a long time been very disturbed. This is the only part of the British dominions in which the population is on the decrease. Since 1841 it has fallen from over 8 millions to less than 5½ millions. Emigration, principally to America, has been the main cause of the decrease.

## LESSON XXXVI.

### IRELAND-(CONTINUED).

1. The *natural advantages* of Ireland are, (1) a fertile soil and climate favourable to agriculture, (2) valuable fisheries capable of considerable development, (3) splendid harbours for purposes of commerce, and (4) numerous rivers capable of supplying water-power for manufactures as well as affording facilities for internal communication.

Owing to various causes, the people of Ireland have not made full use of these advantages, and at present day Ireland is far behind Great Britain not only in manufactures, and agriculture, but also in those social institutions which make a people happy and prosperous.

2. *Industries.* Four-fifths of the population are engaged in *agriculture*.

The chief products are *oats* and *potatoes*, the excessive humidity not being favourable to wheat and barley. Pasture being abundant, cattle and dairy produce are exported in large quantities.



The *fisheries* are in an undeveloped state although the seas abound with *herring* and *cod*, and the rivers with *salmon* and *trout*.

The principal *manufacture* is linen, and its chief seats are Belfast and Armagh.

*Commerce* is almost entirely confined to Great Britain, from which colonial produce and manufactured goods are *imported* and to which agricultural produce and linen are exported.

3. Ireland is divided into the four provinces of Ulster, Leinster, Munster, and Connaught, and into 32 counties.

Counties.	County-Towns.
ULSTER,.....	Antrim, ... .. Antrim.
	Down, ... .. Downpatrick.
	Armagh, ... .. Armagh.
	Monaghan, ... .. Monaghan.
	Cavan, ... .. Cavan.
	Fermanagh, ... .. Enniskillen.
	Tyrone, ... .. Omagh.
LEINSTER,...	Donegal, ... .. Lifford.
	Londonderry, ... .. Londonderry.
	Louth, ... .. Dundalk.
	East Meath, ... .. Trim.
	West Meath, ... .. Mullingar.
	Longford, ... .. Longford.
	King's County, ... .. Tullamore.
	Queen's County, ... .. Maryborough.
	Kilkenny, ... .. Kilkenny.
	Wexford, ... .. Wexford.
MUNSTER, ...	Carlow, ... .. Carlow.
	Kildare, ... .. Naas.
	Wicklow, ... .. Wicklow.
	Dublin, ... .. Dublin.
	Tipperary, ... .. Clonmel.
CONNAUGHT, {	Waterford, ... .. Waterford.
	Cork, ... .. Cork.
	Kerry, ... .. Tralee.
	Limerick, ... .. Limerick.
	Clare, ... .. Ennis.
CONNAUGHT, {	Galway, ... .. Galway.
	Roscommon, ... .. Roscommon [non.
	Leitrim, ... .. Carrick-on-Shan-
	Sligo, ... .. Sligo.
CONNAUGHT, {	Mayo, ... .. Castlebar.

4. *Cities.* There are only three towns in Ireland with more than 50,000 inhabitants, and they are all on the coast.

*Dublin*, the capital, has the largest *import* trade, a university and manufactures of *poplin*—a mixture of silk and worsted.

BELFAST is the chief seat of the linen manufacture. CORK has the largest exports of butter and live-stock; and establishments for preserving provisions; its port is called *Queenstown*.

5. *Map Study.* Name the most northerly point in Ireland?—the most southerly? What ocean bounds Ireland on three sides? How is Ireland separated from Wales?—from England?—from Scotland? Between what parallels of latitude does Ireland lie? Between what meridians? What river runs into Belfast lough? On what river is Dublin? What river runs into Waterford Harbour? On what river is Cork? Name two lakes through which the Shannon runs. Name three lakes in Connaught. Name a town on the river Boyne. On what lake is Enniskillen? On what river is Londonderry? On what river is Limerick? Does Ireland or England stretch farthest north? What city in Ireland is directly west of Holyhead? What is the distance between these? (64 miles.) What o'clock is it at Dublin when it is noon at London? What is the latitude of Cork? How many miles is Cork from the Equator? What is the longitude of Valentia? What is the longitude of St. John's Newfoundland? Through how many degrees of longitude does the Atlantic telegraph cable extend? If a message be despatched from Valentia at noon, at what o'clock will it reach St. John's Newfoundland?

## LESSON XXXVII.

### FRANCE.

1. *General Features.* France is one of the oldest, most powerful and most highly civilised nations of Europe. Its area is 204,000 square miles and its population 37 millions. The east and south is hilly and mountainous, the western part consists of the valleys of the three western rivers.

2. *Climate.* The *climate* is temperate throughout but is warmer along the Mediterranean than on the west coast.

3. *Natural Advantages.* Its *natural advantages* are ; (1) a generally fertile soil, (2) extensive forests, (3) great mineral wealth especially of coal and iron, and (4) a situation on the Mediterranean and Atlantic favourable to commerce.

4. *Industries.* The leading *industries* are agriculture, manufacturing and commerce. *Agriculture* is the occupation of three-fifths of the people, and about one-half of the country is cultivated land. The leading productions of the soil are wheat, barley, oats, rye, beet-root for making sugar, hemp, flax, and fruits in the north ; and in the centre and south, the vine, maize, olive, and mulberry. The chief *manufactures* are wine, silks, broad-cloths, and articles of taste and fashion, such as watches and jewellery. The *commerce* consists in importing raw material and tropical productions and in exporting manufactured

articles and the produce of the vineyards.

5. *Education.* The *education* is now under government, and is noted for the number of establishments for instruction in special branches of knowledge.

6. *Government.* The *Government* has changed very often in the last century ; it is now a republic.

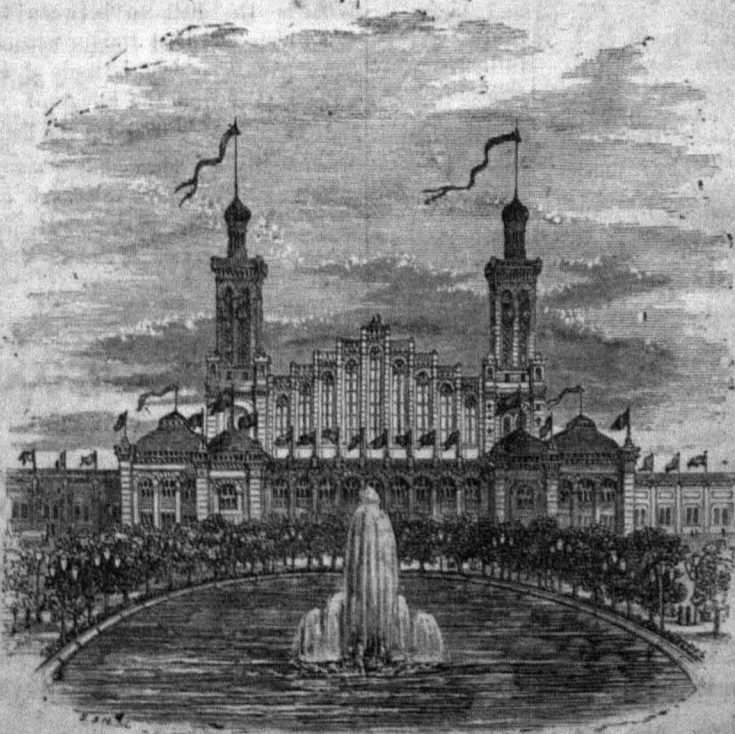
7. *Religion.* The Roman Catholic is the prevalent *religion*.

8. *People.* The *people* belong mainly to the Keltic branch of the Caucasian race, and are noted for their gaiety, politeness, and fondness for display.

9. *Cities.* The chief cities are, (1) *Paris*, the capital, with a population of 2 millions, the most beautiful and attractive of cities, and the world's centre of modern

art, fashion, and pleasure ; (2) *Lyons*, the seat of the silk manufacture ; (3) *Marseilles*, the greatest seaport, (4) *Bordeaux*, the centre of the wine trade ; and (5) *Lille*, noted for its manufactures of cloth and sugar.

10. *Map Study* —What are the boundaries of France ? What



mountains separate it from Germany? What mountains are west of the Rhone? On what rivers are these cities;—Paris? Lyons? Bordeaux?

## LESSON XXXVII.

### GERMANY.

1. *General Description.* GERMANY OF the German Empire is really a political union of 26 different states, the chief of which are Prussia, Bavaria, and Saxony. It is the strongest military power in Europe. It has an area of 208,000 square miles and a population of 43 millions. The northern portion is a part of the great plain of north-east Europe, in the south it is mountainous. The rivers are numerous, the most famous being "the Castled Rhine."

2. *Advantages.* The natural advantages of Germany are, (1) its productive soil in the plains and valleys, (2) its great forests in the mountainous regions, (3) its mineral wealth.

3. *Industries.* *Agriculture* is the occupation of three-fourths of the people, the principal crops being rye, wheat, oats, potatoes, flax, hemp, and beet-root. The vine is largely grown near the Rhine. The principal *manufactures* are linen, cotton, and woollen cloths, leather and metal work, brewing and the making of wine. *Mining* is an important industry,—iron, copper, lead, salt, and coal being the chief productions. Its *commerce* is increasing; the *exports* being wheat, wines, wool, linen, and hardware; and the *imports* consisting of coffee, tea, cotton and other colonial produce.

4. *Education.* In *education* Germany is the foremost country in Europe, the whole system being under government management and compulsory. There are 21 universities in the Empire.

5. *Government.* The *government* is a confederation of limited monarchies under the presidentship of the German Emperor.

6. *Religion.* About two-thirds of the people are Protestants in *religion*; the remaining third being mostly Roman Catholics.

7. *People.* The *people* belong to the *Teutonic* branch of the Caucasian race.

8. *Cities.* *Berlin*, population one million the capital of the Empire, is noted for its literary institutions. The other noted cities are Hamburg (chief seaport), Dresden (glass and porcelain manufactures), Munich (art-galleries), and Cologne (manufactures and finest cathedral in the world).

9. *Map study.* What are the boundaries of the Germany Empire? In what direction do the rivers of Germany flow? Where is Berlin? On what river is Hamburg? On what river is Cologne? Where is Munich? What river rises in the South of Germany and flows eastward?

## LESSON XXXIX.

### AUSTRIA.

1. *General Features.* AUSTRIA, or the Austro-Hungarian Empire is, next to Russia, the largest state in Europe. Its area is 241,000 square miles with a population of 38 millions. The surface of the country consists of the three plains of Hungary, Galicia, and Bohemia, and the mountains enclosing these. The river Danube is



of great importance to Austria being the chief highway of its inland trade.

2. *Industries.* *Agriculture* is almost the sole occupation of the eastern parts; where the soil produces grain of all kinds, potatoes, beet-root, and the vine, while great herds of horses, cattle and sheep are raised on the grass lands. As a wine-producing country Austria is second only to France. All metals abound in Austria, and hence *mining* is largely carried on. The most noted mines are those of rock-salt in Galicia. The western provinces have recently been making rapid progress in the *manufactures* of cloth, iron, and glass-ware. *Trieste* being the only good seaport, the *commerce* of Austria is not important.

3. *People.* The *people* of the various parts of the empire differ widely in race, language, manners, and religion. No less than 20 different dialects are spoken, and the races found there include not only the Teutonic, Romaic, and Slavonic branches of the Caucasian race, but the Mongolian race has about 6 million representatives called *Magyars* found chiefly in Hungary.

4. *Government.* The *Government* is a union of two limited monarchies, the Austrian State and the Hungarian state, each having its own Parliament, Ministry and Administration.

5. *Cities.* *Vienna*, population 1,020,000 is the capital; it is the finest city of central Europe and an important manufacturing and commercial centre. The other cities are Buda-Pesth (the capital of Hungary consisting of two towns connected by a bridge across the Danube), Prague (com-

mercial city in Bohemia), Trieste (manufacturing and commercial city and the only good seaport), Lemberg (trading centre of Galicia), Cracow (a famous old city of Poland, noted for its salt-mines.)

6. *Map study.* What are the boundaries of Austria? What are the principal mountain ranges? Describe the course of the Danube. What river flows through Bohemia?—through Galicia? On what river is Vienna? On what sea is Trieste?

## LESSON XL.

### RUSSIA IN EUROPE.

1. *General Description.* Next to the British Empire, Russia is the most extensive in the world and comprises one-seventh of the surface of the globe. Russia in Europe has an area of more than 2 millions of square miles, with a population of 73 millions. Its surface is one vast plain broken only by one small range of Hills. The rivers are the largest in Europe. Northern Russia consists mainly of great moss-covered plains, called *tundras*, marshy in summer and frozen in winter; Finland is covered with lakes interspersed with rocks and sand-hills; and in the south round the head of the Caspian sea is an immense sandy treeless desert called *steppes*. These portions are almost totally unfit for cultivation. But Central Russia, or the part between the Baltic and the Black seas is extremely fertile. The *climate* is continental, having a short but very hot summer with a long and intensely cold winter.

2. *Advantages.* The *advantages* of Russia are, (1) the great extent of grain-

growing soil, (2) the facilities for cattle raising presented by the grassy plains, (3) the vast forests, and (4) the valuable mines.

3. *Industries.* *Agriculture* is the leading industry. The grain most cultivated is rye which is the staple food of the people. Wheat is grown to a large extent in the basin of the Dnieper. Hemp and flax, being peculiarly adapted to the Russian soil and climate, are grown in large quantities all over the country. *Commerce* is another important industry, and is carried on by sea with the other countries of Europe and the United States, and also overland with Central Asia and China. The chief *exports* are grain, timber, hides, flax, hemp, tallow, and wool. The *imports* are sugar, coffee, tea (overland from China), cloths, wine, fruits, and machines. The inland trade is helped by great annual fairs, that at *Nijni Novgorod* being the largest in the world. The Ural Mountains contain gold, platinum, copper, and iron, and are the chief seat of the *mining* industry. *Manufactures* have hitherto been unimportant, but are likely to improve rapidly through the discovery of immense beds of coal near *Kharkov*. Leather, soap, sail-cloth, cordage, and tar are the chief manufactures.

4. *People.* The people belong to the Slavic branch of the Caucasian race. On the north are Lapps and Finns who are Mongolians.

5. *Government.* The Government is an absolute despotism under a sovereign

called the Czar, who is head both of church and state.

6. *Religion.* Four-fifths of the people are Christians of the Greek Church in religion. Russia is behind the other nations of Europe, except Turkey, in *civilization*; but since the abolition of slavery by the late Czar, education and culture have been making rapid progress.

7. *Cities.* The chief cities are St. Petersburg (Population, 670,000), the capital and chief commercial city; *Moscow*, formerly the capital and a great trading centre; *Warsaw*, formerly the capital of Poland; *Odessa*, chief seaport on the Black sea with great export trade in grain.

8. *Map Study.* What are the boundaries of Russia? Between what parallels and what meridians is it included? Name the principal rivers which enter the Black sea,—the Caspian,—the Baltic,—the White sea. Where is Moscow? On what river is St. Petersburg?—Kharkov?—Nijni Novgorod?—Warsaw?

## LESSON XLI.

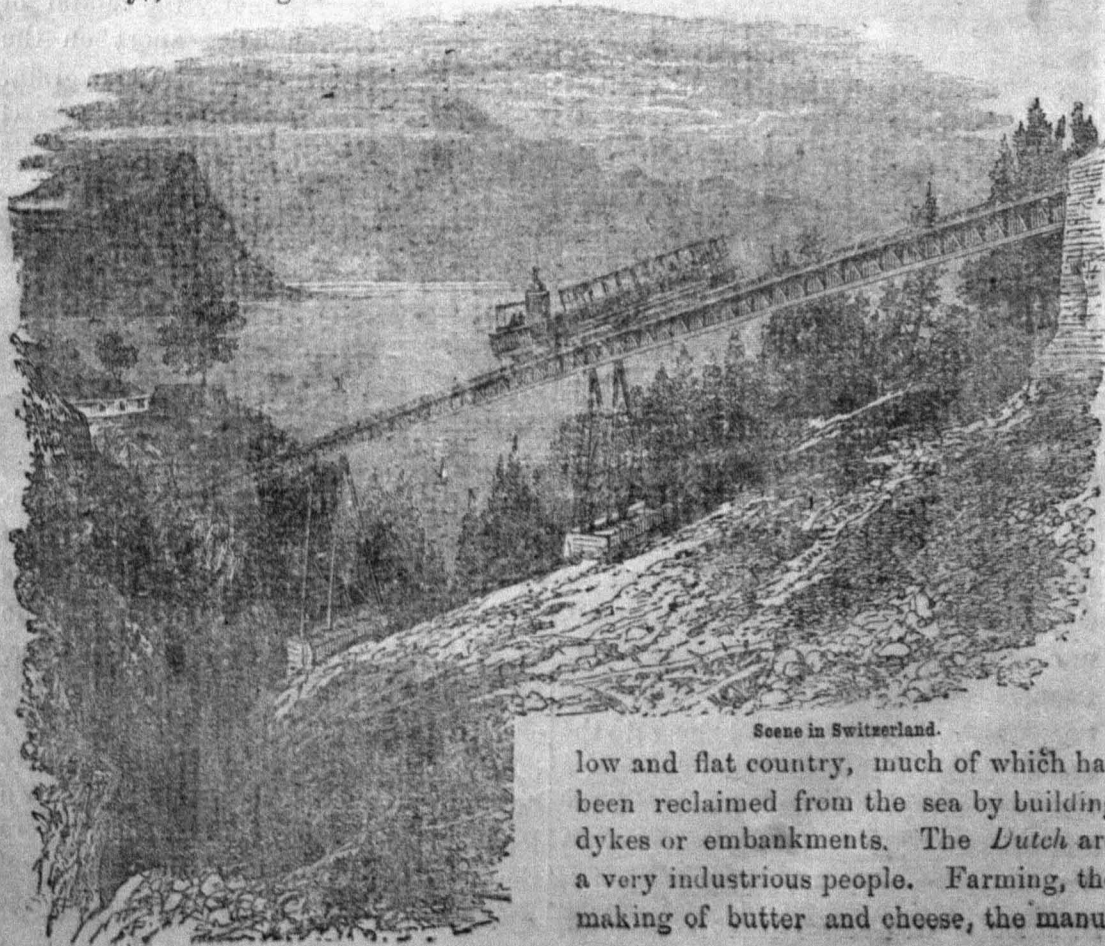
### SMALLER COUNTRIES.— NORTH EUROPE.

1. **Sweden and Norway** forming a united government occupy the peninsula of Scandinavia. The coast-line of Norway is much indented by *fjords* or arms of the sea, and the surface is very mountainous. Sweden is mostly flat, with numerous lakes and rivers. *Agriculture* flourishes only in the south of Sweden, while Norway does not produce enough grain for its own food supply. *Mining* in Sweden, where the iron is the best in the world, and *Fishing* in Norway, are the leading in-

dustries. Extensive forests in the mountains supply the materials for ship-building. So many of the people are trained to a sea-faring life that Norwegian and Swedish sailors are to be found on board the ships of all nations. The *government* is a limited monarchy, and the *religion* is Protestant. The *people* are Teutonic and are hardy, thrifty, and intelligent. *Stockholm* (Population, 166,000) is the capital of the United Kingdoms. The chief sea-ports are *Göteborg*, *Christiana* (capital of Norway), and *Bergen*.

2. **Denmark** is a small country, the population being under 2 millions. Being situated between two seas, the air is moist and the grass is fresh and sweet. Hence cattle raising and the manufacture of butter and cheese are the most important occupations. The Danes are fond of the sea, and Danish ships are employed in carrying on the commerce of other nations. *Copenhagen* (Population, 205,000), on the island of Zealand, the capital, is noted for its fine palace, university, and museum.

3. **Holland** or the Netherlands is a



Scene in Switzerland.

low and flat country, much of which has been reclaimed from the sea by building dykes or embankments. The *Dutch* are a very industrious people. Farming, the making of butter and cheese, the manu-



facture of linen and woollen cloths, and commerce, are all carried on. The *government* is a limited monarchy, the people are Protestant in *religion*, and education is universal. *Amsterdam* (Population, 303,000) is the chief city, but *The Hague* is the seat of Government.

4. **Belgium** is a small but wealthy country. The surface is generally flat. The soil is so fertile that it is called "The garden of Europe." Coal and iron are abundant. Hence *manufacturing* is the leading industry, the principal articles being machinery, glass-ware, woollens, linens, laces, and carpets. There is no country in the world in which *Agriculture* has attained a higher state of perfection, no less than seven-eighths of the land being under cultivation. The *government* is a limited monarchy, and the prevailing religion Roman Catholic. *Brussels*, (Population 380,000), the capital, is noted for the manufacture of laces and carpets. ✓

5. **Switzerland** is the most mountainous country in Europe. It is noted for its magnificent scenery made up of majestic snow-clad mountains, beautiful water-falls, picturesque lakes, and extensive glaciers. *Agriculture* can be carried on only in the valleys, so that it does not produce food enough for home consumption. Hence it is mainly a *pastoral* country and dairy farming is carried to great perfection. The numerous and rapid streams afford cheap and abundant water-power for *manufactures*; silks, cotton and linen cloths, and clocks and watches being the principal outturn

Being an inland country there is no commerce. The *government* is a federal republic comprising 22 small states called cantons. *Berne* is the capital. *Geneva* is noted for its clock and watch-making industry.

6. *Map Study.* Give the boundaries of Sweden and Norway,—of Denmark,—of Holland,—of Belgium,—of Switzerland. On what lake is Stockholm? What river runs into the Sea through Holland? What mountains are in Switzerland?

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## LESSON XLII.

### THE SOUTHERN PENINSULAS.

1. **Spain and Portugal** occupy the south-western peninsula of Europe. This peninsula consists of a central table-land crossed from east to west by ranges of mountains and sloping down to the Atlantic on the west and to the Mediterranean on the south and east. The *climate* is warm and pleasant and not subject to extremes. The *advantages* are: (1) a fertile soil suitable to the cultivation of all the grains and heat-loving fruits, (2), splendid pasture lands on the table-lands and mountain slopes, (3) great mineral wealth in iron, copper, and lead, (4) a splendid situation for commerce and good natural harbours. Owing to the proud and indolent character of the *people* combined with a long course of bad government these advantages have not been utilised, and at the present day Spain is a second-rate while Portugal is only a third-rate power in Europe. The leading *industries* are: (1) the culture of the

vine and the making of sherry wine in Spain and port wine in Portugal, (2) raising herds of sheep from which the fine merino wool is obtained, (3) the growing of fruits, (4) a limited commerce carried on with France and England. The *government* of both countries is now a limited monarchy, and the religion is Roman Catholic. *Madrid* (370,000) is the capital of Spain, and *Lisbon* (260,000) is the capital of Portugal. Other towns are *Barcelona* (chief seat of manufacture and commerce), *Cordova* (noted for its fine goat-skin leather), *Seville* (noted for its fine oranges), *Oporto* (which gives its name to port wine).

2. **Italy.** This kingdom consists of three parts: (1) the plain of the river Po south of the Alps, (2) the long, narrow, and mountainous peninsula, and (3) several islands in the Mediterranean, of which the largest are Sicily and Sardinia. It has the *natural advantages* of: (1) a fertile soil and fine climate producing wine, olive oil, silk, cotton and the most exquisite fruits, (2) extensive fisheries especially of sardines and anchovies, (3) valuable minerals together with marble and sulphur, and (4) a commanding situation for commerce. The *people* are the purest representatives of the Romaic branch of the Caucasian race which also includes the majority of the population in Spain, Portugal, the south of France, and Greece. The *government*, which was only extended over the whole country in 1870, is a limited monarchy. Before that time the Pope of Rome held temporal sway over part of the

country, and claimed the right of spiritual sovereignty over the whole. The *religion* is Roman Catholic. The *people* are industrious, frugal, and temperate, but excitable and passionate. The Italians have long been noted for their culture of the fine arts, music, painting, and sculpture. Under the new government Italy is fast rising in the scale of nations and will soon rank among the first class powers of the world. *Rome* (245,000), the capital of Italy, is often called the "Eternal City." It was founded 2,500 years ago, and for 1,000 years was the capital of the Roman Empire and "Mistress of the World." St. Peter's Church at Rome is the most beautiful building in the world, and the remains of ancient Rome attract visitors from all parts of the earth. Other important cities are *Naples* (the largest city in Italy, noted for the beauty of its bay, and its nearness to the volcano of Vesuvius), *Milan* (noted for its silk manufactures and fine marble cathedral), *Turin* (famous for its museums and works of art), and *Venice* (built on a hundred small islands with canals instead of streets.)

3. **Greece** consists of, (1) a continental part, (2) the peninsula of the Morea, and (3) a large number of islands in the Archipelago. The *surface* is nearly all mountainous; there are no navigable rivers; the *climate* is mild and sunny. *Agriculture* is in a very backward state, *manufactures* are few and unimportant; and the leading *industries* are the raising of herds of sheep and goats on the mainland, and the carrying on of *commerce*

in the islands. The *exports* consist of dried fruits, wine, olive oil, honey, wax and sponge. The *government* is a limited monarchy, the *religion*, Christianity of the Greek Church, and the *people* Romaic. *Athens* (49,000) the capital, is noted for its ruins which still show traces of the times when it was the centre of civilization and refinement.

4. **Turkey** in Europe now forms only a small part of the Ottoman Empire, or "The Sublime Porte." By the Treaty of Berlin in 1878, it has been reduced to the country lying between the Balkan range and Greece. Owing to a long course of misgovernment, this country, once so large, and possessing the *advantages* of a fertile soil, a fine climate, great mineral wealth, and magnificent harbours for commerce, has sunk so low that its existence in Europe is dependent on the sufferance of the great powers. Distracted by civil contests between its Christian and Mahomedan *people*, and ground down by a rapacious and irresponsible *despotism*, Turkey in Europe, has become a scorn and a reproach to the world. The rest of its territory has been divided into four small states:—Roumania, Bulgaria, Serbia, and Montenegro. *Constantinople* (1,075,000,) the capital, has a beautiful situation, and its position is highly important both for commercial and political purposes. *Bucharest* (230,000,) is the capital of Roumania.

## LESSON XLIII.

### AFRICA.

#### 1. Give a general description of Africa.

Africa is next to Asia in size, but owing to the backward state of its civilization it is the least important of all the continents.

#### 2. Describe generally the physical features of Africa.

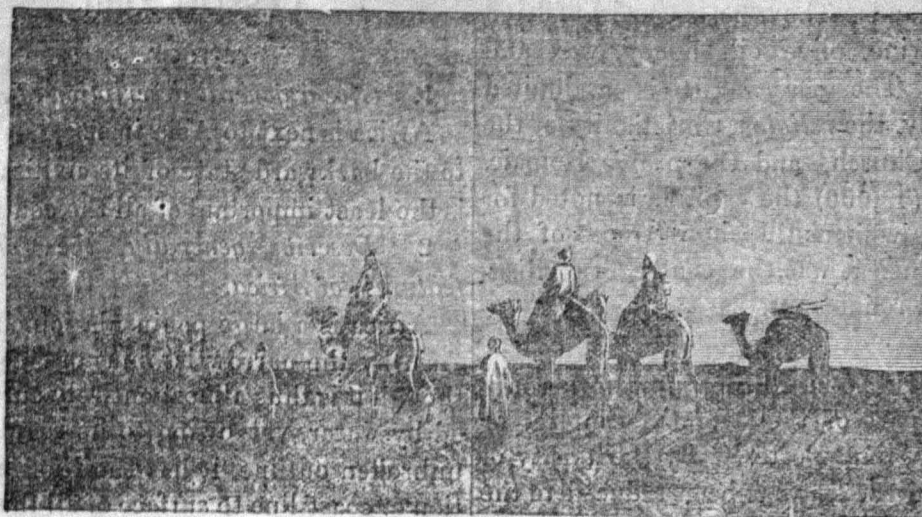
Africa is a large peninsula joined on to Asia by the narrow isthmus of Suez. Although it is thus almost entirely surrounded by water, yet owing to its regular and unbroken outline, it has the least proportion of coast-line to surface of all the continents. The figure of its surface consists of, (1) extensive table-lands crossed by mountain ranges in the centre and south, and (2) great lower lands and plains in the north.

The *general nature* of its surface consists of, (1) a broad belt of equatorial forests in the centre, (2) next to that northern and southern belts of pastoral lands, (3) then northern and southern belts of desert land, and (4) lastly, northern and southern extremities of pastoral and agricultural land. The northern desert called the *Sahara* is of great extent; the southern or *Kalahari* desert though much smaller, bears a close resemblance to the Sahara. Lying mostly in the Torrid Zone, Africa is as regards *climate* the hottest of all the continents. The hottest part of Africa is the eastern desert portion or Nubia, where "the soil is fire and the wind is flame."

#### 3. Describe the plants, animals, and people of Africa.

The plants of Africa arrange themselves in four different Zones; (1) in the





Scene in the Desert.

north are found the useful grains, fruit and forest trees, (2) in the desert the Date palm flourishes in solitary glory, (3) in the equatorial region are dense forests in which are found the *baobab* or monkey bread tree, huge cotton trees, oil and sago palms, and papyrus, together with the cassava, yam, and ground nut as substitutes for grain, (4) in the south grow peculiar forms of succulent plants and heaths. Africa is noted for the number and size of its wild animals, such as the elephant, rhinoceros, hippopotamus, giraffe, lion, gorilla, zebra, and ostrich. The *people* of Africa mostly belong to the Negro race, a few Caucasians only living along the northern and southern coasts. The population is estimated at about 190 millions, most of whom are in a barbarous condition.

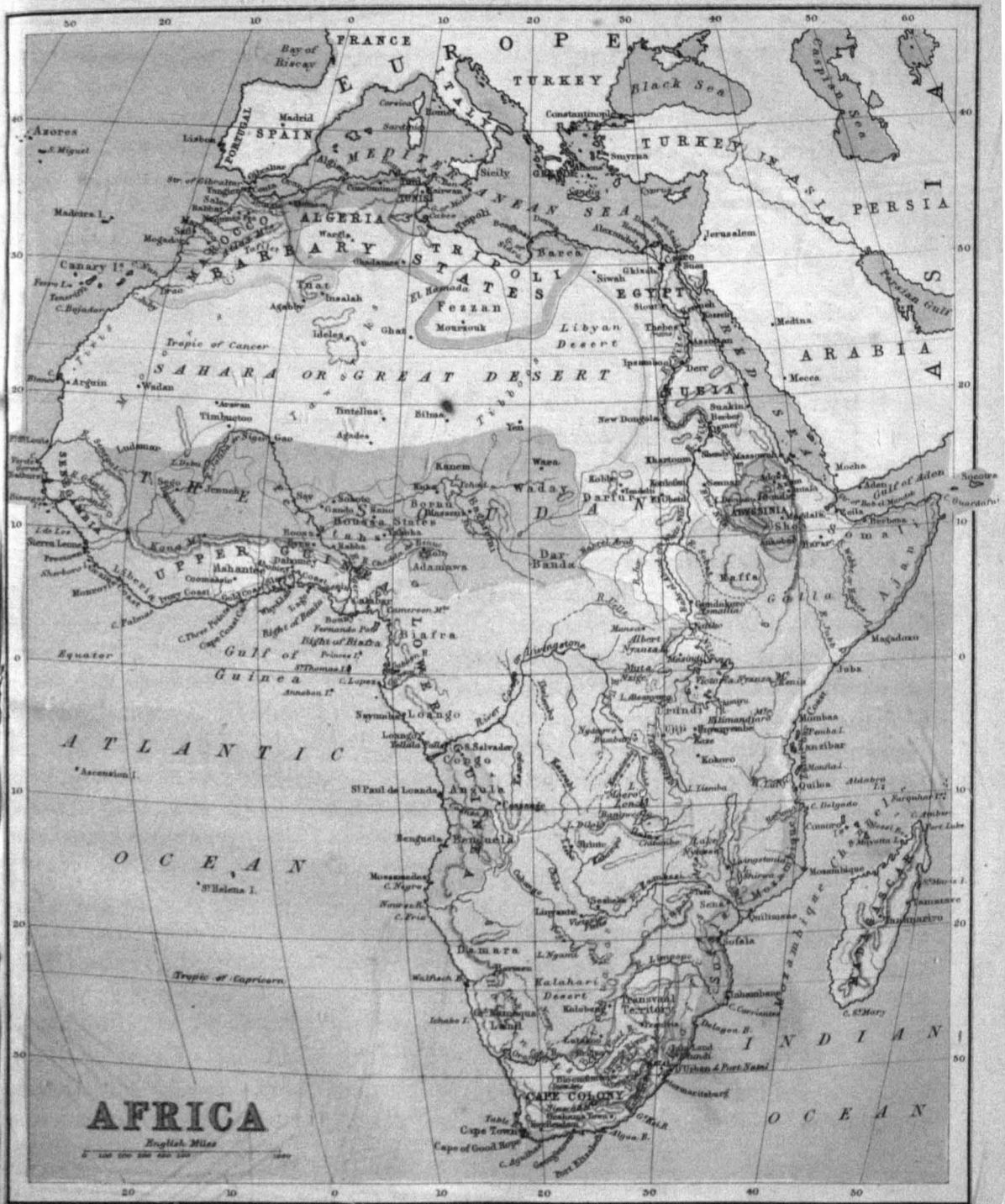
## LESSON XLIV.

### MAP STUDY OF AFRICA.

1. *Situation.* What sea is north of Africa?—east? What ocean is west?—east? Where is the isthmus of Suez? Between what parallels does Africa lie? Between what meridians? What is its length in miles? (Ans. 5000 miles). What is its breadth from east to west? (Ans. Nearly the same as the length). What is its general shape? (Ans. An irregular triangle). What part of Africa is crossed by the equator?—by the Tropic of Cancer?—by the Tropic of Capricorn? In what zone does the greater part of Africa lie?

2. *Outline.* What two gulfs are on the north of Africa? What large opening of the sea is on the west of Africa? The two bays at the head of this are called *bights*, name them. What gulf is between Africa and Arabia?

What strait separates Africa from Spain? What strait is at the entrance to the Red Sea? Where is the Mozambique channel? What cape is the most northerly point of Africa—the most westerly?—the most southerly?—the most easterly? Where is Cape



Blanco?—Cape Negro?—Cape of Good Hope?—Cape Corrientes?—Cape St. Mary?—Cape Amber?

3. *Surface*.—Where are the Atlas Mountains? What mountains run through Upper Guinea? Is Abyssinia a mountainous country? What two peaks are near the Equator? What is the highest mountain in Africa? (Ans. *Mt. Kilimandjaro*, 18,700 feet.) What mountains are between the 10th and 20th parallels of south latitude? What three ranges of mountains are in Cape Colony?

Where is the Sahara? What desert lies on the Tropic of Capricorn?

What is the longest river in Africa? (Ans. The Nile, about 4000 miles). Describe the course of the Niger?—of the Congo? What river is on the north of Cape Colony? What two rivers are in the extreme west of Africa? Where is the Zambesi river? Where is lake Tchad? What river runs into it? In what two large lakes does the Nile rise? Where is lake Nyassa?—lake Tanganyika?

## LESSON XLV.

### COUNTRIES OF AFRICA.

1. **THE Barbary States**, so called from the *Berbers* a Caucasian race which forms the majority of the population, comprise the empire of Morocco, the French colony of ALGERIA, the dominion of the Bey of TUNIS, (now belonging also to the French), and the Vilayet of TRIPOLI. The northern portion of these countries is mountainous, and the southern portion is desert. Agriculture and the raising of sheep and goats are the leading *occupations*. The chief *exports* are grain, cattle, ivory, ostrich feathers, and esparto grass which is used in the manufacture of paper. *Tunis* has manufactures of silk and woollen stuffs, carpets, fez caps, and otto of roses. The *people* are (1) *Berbers*

who live in the mountains, (2) *Moors* who live in the city and engage in trade, and (3) *Arabs* who lead a wandering pastoral life.

2. **Egypt** extends up the valley of the Nile as far as the Equator. This river, rising every summer and overflowing its banks for two or three months, leaves on the surface of the land a layer of very fertile soil. On this annual inundation the prosperity of the country is so dependent that Egypt has in all ages been called the "Gift of the Nile." *Agriculture* is the chief industry; wheat, barley, maize, and rice being produced in great plenty. Cotton, sugar, indigo, and beans are also grown. The *Commerce* of Egypt is important more on account of its position than its products. The cutting of the Suez Canal has made Egypt the highway for nearly all the traffic between the east and the west. Egypt exports gold-dust, ivory, ostrich feathers, gum-arabic, and hides which are brought by caravans from the deserts of the interior. The *ruler* is called the *Khedive*; nominally he is subject to the Sultan of Turkey, but he is practically independent. The *population* is made up of Copts, Arabs, Jews, Armenians, Greeks and other neighbouring races. *Cairo* (328,000), the capital, is situated near the Pyramids. The chief seaports are, *Alexandria*, *Port Said*, and *Suez*.

3. **Abyssinia** is a mountainous country with a temperate and healthy climate and a fertile soil. The *coffee plant* is a native of this country. Ivory, gold-dust and



musk are exported. It consists of numerous petty states. The people are semi-barbarous though most of them profess a corrupt form of Christianity.

4. **THE Sahara** is a dry, sandy, and desolate waste, the only habitable parts of which are its *oases* or fertile spots near springs of water. The surface is not level but consists of a succession of table-lands with *wadys*, or depressions resembling the dried up channels of vast rivers, between. Some of these depressions are below the level of the sea. This desert is ranged over by plundering Mahomedan tribes called *Moors* in the west, and *Tawareks* in the centre, and by the pastoral pagan tribe of *Tibbus* in the east. Both vegetable and animal life is scanty. The date-palm, which is said to "keep its feet in water and its head in fire" flourishes in the oases. Ostriches are very numerous. Numerous caravans, consisting of thousands of camels—"the ship of the desert"—cross the country for the purposes of commerce. These bring gold, ostrich feathers, slaves, ivory, and salt from central Africa to the sea coast where they are exchanged mainly for manufactured goods.

5. **Western Africa** comprises the countries along the west coast from the Sahara to the Nourse river. It is usually divided into *Senegambia*, *Upper Guinea*, and *Lower Guinea*. Along the coast the land is low and swampy, further inland it rises to table-lands covered with dense vegetation. There are two seasons in the year, the rainy, lasting from March to

October, and the dry for the other months. The inhabitants are negroes of different tribes who are ignorant, cruel, and superstitious, constantly warring upon each other and selling their prisoners as slaves. Although the *climate* is exceedingly fatal to European life, English, French, and Portuguese colonies have been planted at different points along the coast for the purposes of trade. These supply the natives with gun-powder, arms, cutlery, and beads, receiving in exchange palm-oil, wax, gum, feathers, ivory, and gold-dust. The infamous slave trade which formerly flourished all along this coast, has been now almost totally suppressed. The different parts of the Guinea coast are *Sierra Leone* (British), *The Grain Coast*, *Liberia* (a republic of emancipated negroes), *The Ivory Coast*, *The Gold Coast* (British), *The Slave Coast* (British), *Calabar*, *Loango*, *Congo*, *Angola*, and *Benguela*. In the last four the Portuguese have many settlements. The *Ashantee* and *Dahomey* are the most powerful negro kingdoms.

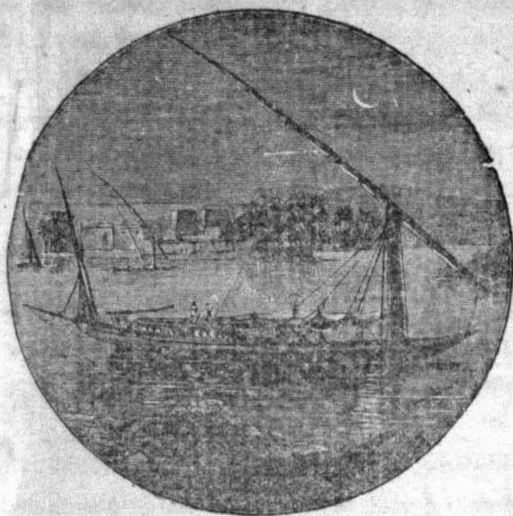
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## LESSON XLVI.

### COUNTRIES OF AFRICA (CONTINUED)

1. **Central Africa.** The *Soudan* comprises that portion of the continent between the Sahara and the Equator. The greater portion is a land of dense tropical forest, densely peopled with numerous negro tribes, and possessing great natural resources. The tribes in the west, called *Fellatahs* or *Foulahs*, are Mahome-

dans ; the remainder are barbarous fetish-worshippers. The commercial productions are gold-dust, ivory, and ostrich feathers;



The river Nile.

and the slave trade is still carried on by Moors and Arabs. The country has not yet been thoroughly explored.

South of The Soudan is an almost unknown country, well watered by the Congo and the great lakes, consisting of dense forests, inhabited by fierce negro tribes. Many of these tribes are cannibals; they are at constant war with each other; and all are sunk in the lowest depths of barbarism. This country is only known to us by the reports of adventurous travellers such as Livingstone, Stanley, and Cameron; but it has as yet no settled geography.

2. **South Africa** comprises two British colonies,—*Cape Colony* and *Natal*,—and two Dutch republics,—*Orange River State* and *The Transvaal*. The country consists of table lands crossed by mountain ranges and deep cut vallies. The table-lands are deserts during the summer heats, but the rains convert them into noble grass lands filled with flowers of gorgeous hues. The leading industry is *agriculture* and *sheep farming*. Great quantities of *wine* are now manufactured. *Mines* of copper, gold, and diamonds, are worked in the basin of the Orange river. The climate is exceedingly fine and healthy. *Natal* is well adapted for the growth of most semi-tropical products, and it now exports large quantities of sugar and cotton,

3. **East Africa** extends from Natal to the Red Sea. Little is known of it beyond the immediate vicinity of the coast. It comprises *Sofala*, *Mozambique*, *Zanzibar*,



Pyramids of Africa.

and the *Somali* country. The Portuguese have settlements in *Sofala* and *Mozam-*

bique; and Zanzibar is ruled over by an Arab Sultan. The Somali country is famous for its gums, spices, and perfumes.

4. *Map Study*.—On what river is Cairo? What town is opposite Gibraltar? What is the chief town of Algeria?—of Marocco?—of Tunis?—of Tripoli? Name two towns in Abyssinia. Where is Timbuctoo?—Sokoto? What town is at the mouth of the river Senegal? On what river is Bathurst? Where is Freetown? What is the Capital of Liberia? Where is Cape Coast Castle?—Coomassie? What is the chief town of Cape Colony?—of Natal? of Orange River State?—of the Transvaal? Where is the Portuguese town of Quillimane?



Natives of Madagascar.

#### 5. ISLANDS OF AFRICA.

Where are the Madeira islands? To what country do they belong? (Ans. To Portugal.) What do you know about these islands? (Ans. They are famed for their beauty and the fineness of their climate, for which reason they are much resorted to by invalids. Madeira *wine* is the chief product.) Where are the Canary islands? To whom do they belong? (Ans. To Spain.) What high mountain is there? (Ans. The Peak of Teneriffe, 12,000 feet high.) What

group of islands belonging to Portugal are near Cape Verde? What island is in the Bight of Biafra? Where is Ascension?—St. Helena? Who died a prisoner at St. Helena? (Ans. Napoleon Buonaparte.)

6. *Madagascar* is the largest island of Africa, and one of the largest in the world. The interior is high and very fertile, with magnificent forests and fine grasslands watered by numerous rivers. The coast is low, hot, and swampy, with a deadly climate. The people are principally of the Malay race, but there are also some negro and Arab tribes. The chief town is *Tananarivo*. Where are the Comoro islands? Where is the island of Socotra?

### LESSON XLVII.

#### NORTH AMERICA.

1. Of which world does North America form a part? By whom was America discovered, and when? (Ans. America was discovered by Christopher Columbus in 1492.) What parts did he discover? (Ans. The West India Islands). What inhabitants of the old world first settled in America? (Ans. The Spaniards). Where did they settle? (Ans. In Mexico, Central America, and in the northern part of South America.) Where were the first English Settlements? (Ans. Virginia and Massachusetts in the United States). What other nations colonised North America? Ans. The Dutch and the French.)

2. What advantages does the New World have compared with the old?

I. It is free from vast deserts, which are useless for agriculture, obstructive to commerce, and make the climate hurtful to man.

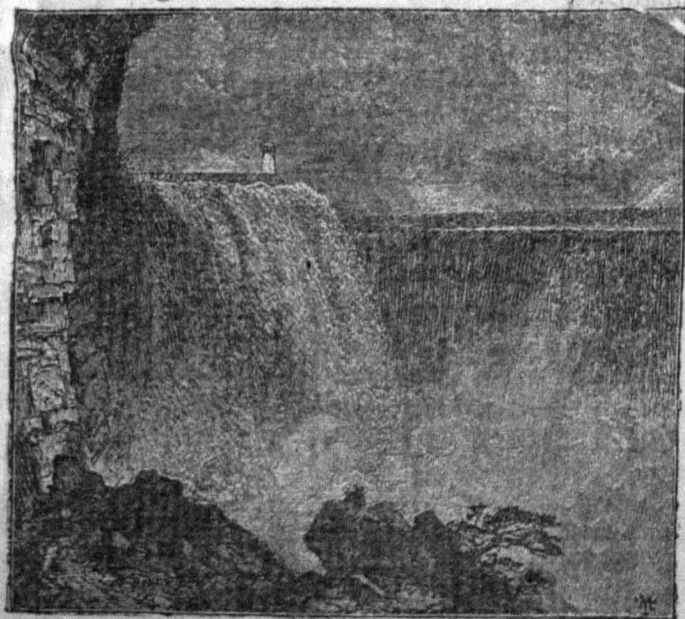
II. No part of its soil is so far away from the sea as the central regions of Asia and Africa.



III. The interior of America is penetrated by the largest rivers in the world, which fertilise the soil and afford means of communication.

3. Describe the character of the surface of North America.

North America naturally divides itself into five regions: (1) The table land of Mexico, (2) the table-land between the Rocky Mountains and the Pacific, (3) The great central valley of the Mississippi, rich and well-wooded on the east, bare but fertile in the centre, dry and almost desert in the west, (4) the eastern slope of the Alleghany Mountains, a region of natural forests and mixed soil, and (5) the great Arctic plain north of the 50th parallel, the greater part of which is a cold, barren, and desolate region.



The Falls of Niagara.

4. Describe the river systems of North America.

There are five river systems: (1) the Arctic system draining the Arctic plain of which the Mackenzie river is the longest, (2) The St. Lawrence system, consisting of the St. Lawrence and its tributaries which connect the great lakes with the Atlantic, and on which is Niagara the largest waterfall in the world, (3) the Atlantic system, consisting of the Hudson and other streams which drain the eastern slope of the Alleghany mountains, (4) the Gulf system, comprising the Mississippi and its tributaries draining the central plain, and the Rio Grande from the Mexican table-land, and (5) the Pacific system, comprising the Yukon, Columbia, and Colorado flowing through gorges cut in the western plateau.

5. Describe the climate of North America.

North America has generally a *continental* climate, being very hot in summer and very cold in winter.

There are 5 distinct zones of climate:—

(1) The cold zone of the Arctic plain with long cold winters and short hot summers; (2) The temperate zone comprising Canada and the eastern part of the United States; (3) The dry zone of the Rocky Mountain plateau with little rain in summer and little snow in winter; (4) The zone of the central Pacific coast belt where the temperature is nearly the same all the year round; and (5) the semi-tropical zone of Mexico and Central America.

6. What minerals are found in North America?

The mineral products of North America are of unequalled richness and variety. They comprise gold, silver, copper, lead, iron, quick-silver, coal, and petroleum. The gold and silver mines of the Western United States and Mexico are the most productive in the world. The coal fields of the United States are twenty times the size of those in Europe.

7. What can you say of the animals of North America?

The animals of North America are inferior in size and of less utility to man than those of the old world.

Many are valuable for their furs, such as the beaver, marten, and ermine. Peculiar to this country are the bison, musk-ox, moose-deer, and racoon.

8. Describe the vegetation of North America.

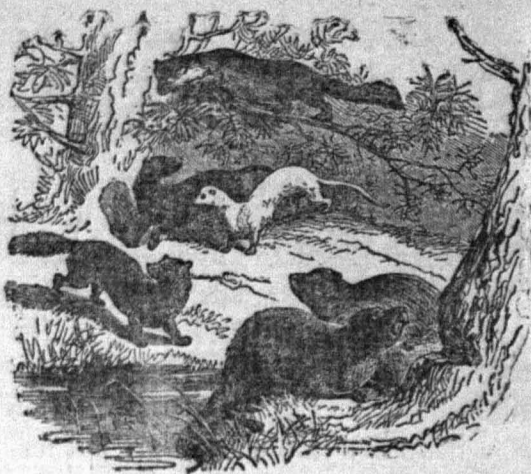
The vegetable products are distinguished for variety and great luxuriance.

Among forest trees the oak, pine, ash, beech, hickory, maple, and walnut give valuable timber. In California are found the largest trees in the world, called *Sequoia*. North America is the native country of the potato, the tobacco plant, and maize.

### LESSON XLVIII.

#### MAP STUDY OF NORTH AMERICA.

1. *Boundaries and extent.* What three oceans surround North America? By what is it connected with South America?—separated from Asia? Where is Point Barrow? What is its latitude? In what latitude is the isthmus of Panama? Through how many degrees of latitude does North America extend? What is its length in miles from North to South? (Ans. 4,800 miles.) What is the longitude of Cape Race in Newfoundland? What is the longitude of Cape Mendocino? Through how many degrees of longitude does North America extend? What is the breadth of North America? (Ans. 3,000 miles.)



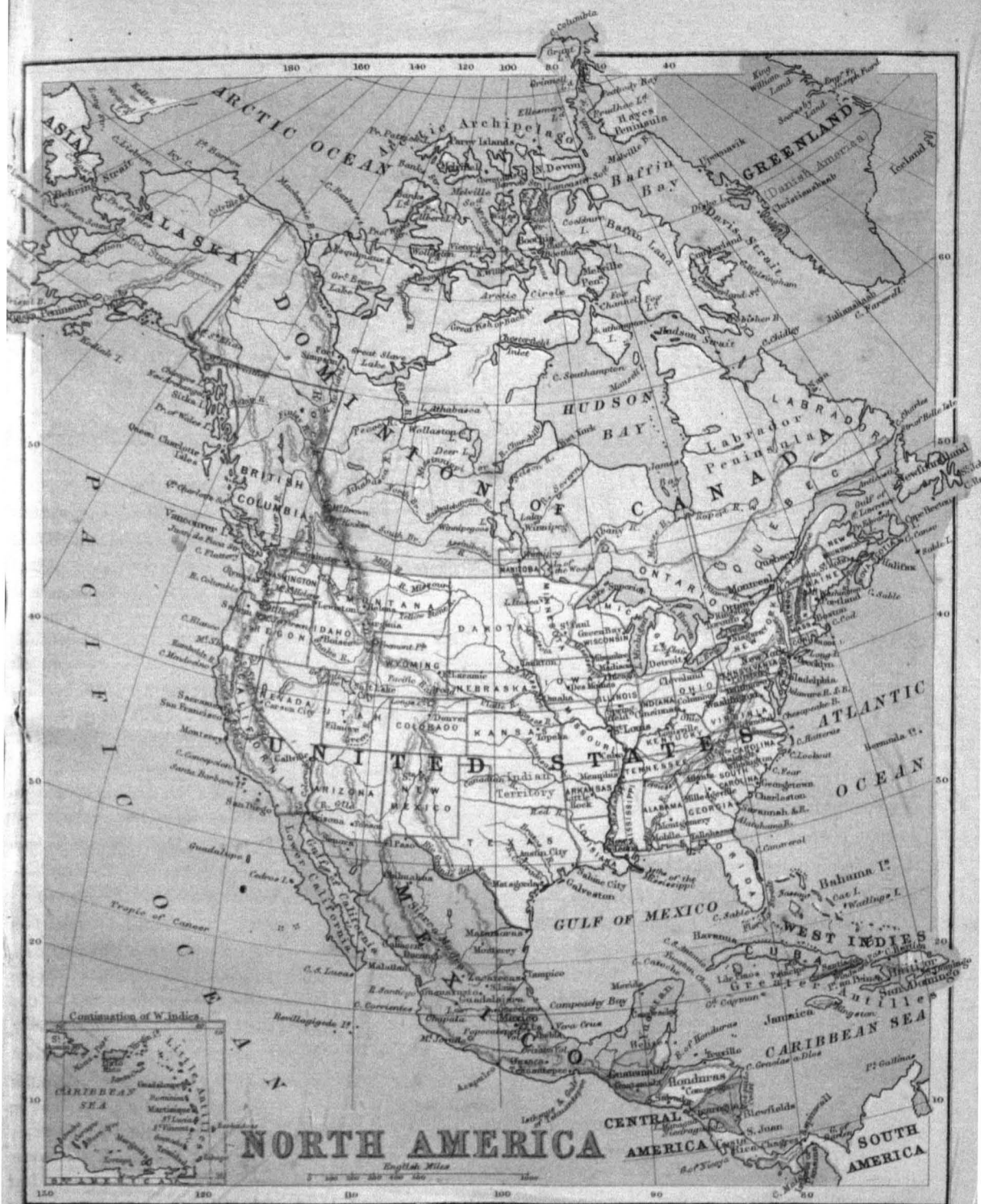
Fur-bearing Animals of North America.

2. *Outline.* What large bay is to the west of Greenland? What strait leads into this bay? What large bay is on the north of North America? What strait leads into it? What gulf is at the mouth of the St. Lawrence? Where is the bay of Fundy? Where is Chesapeake Bay? What gulf is south of North America? What sea is south of the gulf of Mexico? What bay is in the south of the gulf of Mexico? Where is the bay of Honduras?—The Gulf of California? Where is Florida Strait?—Windward Passage?—Queen Charlotte Sound?

What peninsula is between Hudson's bay and the gulf of St. Lawrence?—between the gulf of St. Lawrence and the bay of Fundy? Where is the peninsula of Florida?—Yucatan?—California?—Alaska? Which peninsulas point south?—north?

What cape is south of Greenland?—north of Labrador?—south of Nova Scotia?—south of Florida?—north of Yucatan?—south of California? Where is Cape Race?—Cape Cod?—Cape Hatteras?—Cape Mendocino?—Cape Prince of Wales?—Cape Barrow?

3. *Surface.* What range of mountains runs parallel to the Atlantic coast? What range of mountains traverses America from north to south? What are the Rocky mountains called in Mexico? Where is the Sierra Nevada? What is the highest mountain in North America? (Ans. Mt. St. Elias, 17,900 feet). Where is it? What is the highest volcano? (Ans. Popocatepetl, 17,884 feet). Where is it? Where is





the volcano Orizaba? Where is Mt. Brown?—Fremont Peak?—Mt. Hood?

Describe the course of the Mackenzie river,—of the river St. Lawrence. Into what does the Mississippi flow? What three large tributaries has it on the west? What two on the east? What river runs into the gulf of California? Where is the Yukon?—Fraser river?—Columbia river?—Rio Grande?

Name the five large lakes on the St. Lawrence. Between what two are the Niagara Falls? What three large lakes are drained by the Mackenzie River?

Where is lake Winnipeg?—lake Nicaragua?

4. *Islands.*—What is the largest island on the north? Name four other islands in the Arctic ocean? Where is Southampton island? What large island shuts in the gulf of St. Lawrence? Name three other islands in this gulf, What group of islands is east of Cape Hatteras? Which are the three largest of the West Indian islands? Where is Vancouver Island? What isles are north of Vancouver Island? Where are the Aleutian Islands?

### LESSON XLIX. THE UNITED STATES.



The Capitol at Washington.

1. *Rank.*—The United States is the largest and most important country in North America. It ranks as one of the six Great Powers and is the most populous, powerful, wealthy, and progressive Republic in the world.

The history of this country when compared with that of Spanish America shows in a striking light

how much more the prosperity of a nation depends on *moral* than on *physical* advantages. The North American colonists had no gold mines, and their territory was of only indifferent fertility and covered with almost impenetrable forests. But the

that their country has indeed become "The envy of nations."

2. *Extent and Divisions.* The area is about equal to that of Europe, and its



Trestle Bridge on a United States Railway.

colonists had intelligence, industry, a love of freedom, habits of order, and a pure and severe morality. Armed with these gifts of the soul, they have converted the wilderness into a land teeming with life and smiling with plenty; and they have built up a social system so well calculated to promote the happiness and moral improvement of mankind,

population is now over 50 millions. It is a union of 38 partially independent states, 10 organised Territories, and one District.

Both naturally and politically the United States has four great divisions: I. The Atlantic highland and

plain, II. The central plain or Mississippi valley, III. The Western Plain and Rocky Mountain Region, and IV. The Pacific plateau and slope. There is besides the large but comparatively worthless territory of Alaska in the north-west corner of the continent.

3. I.—*The Atlantic Highland and Plain* extend from the St. Lawrence river to the state of Alabama, and from the basin of the Mississippi to the Atlantic. The states composing it are divided into three groups, (1) the New England States (Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut), (2) the Middle Atlantic States (New York, New Jersey, Pennsylvania, Maryland, Delaware), (3) the South Atlantic States (Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida.) The *climate* is cool-temperate in the north, and warm-temperate in the south. The *resources* of this division are, (1) the mines of iron, coal, copper, zinc, and quarries of slate, marble, and granite, (2) its forests yielding abundance of timber for house and ship building, (3) the water-power supplied by its numerous rivers, (4) its advantageous situation for commerce. To these may be added, (5) the fertile soil of the southern section. The leading *industries* are, (1) *manufacturing, ship-building* and commerce in the New England states; (2) mining, manufacturing, and commerce in the middle states, and (3) agriculture in the South Atlantic states, where cotton, tobacco, and rice are largely produced.

The chief cities of this division are: *New York, Boston, Philadelphia, and Baltimore.*

4. II.—The central or Mississippi valley states are divided into two sections—(1) The North Central states (Kentucky, Ohio, Indiana, Michigan, Illinois, Wisconsin, Minnesota, Iowa, Missouri); and (2) The South Central states (Alabama, Mississippi, Louisiana, Arkansas, Tennessee). The southern section has a semi-tropical *climate* with mild winters, while the Northern section has hot and sultry summers with cold winters and heavy snows.

The natural advantages of the Mississippi valley are: (1) it is the finest agricultural region in the world; (2) it is rich in valuable minerals, coal, iron, copper, and lead; (3) its forests supply abundant timber; (4) its numerous navigable rivers and lakes and the level nature of the surface give fine facilities for carrying on internal trade.

The leading industry is *Agriculture*. In the northern section vast quantities of wheat and Indian corn are grown; the southern section produces cotton, tobacco, and sugar. *Manufacturing* is becoming an important industry in the northern section, where also *mining* is an important occupation. The chief cities are *Cincinnati, St. Louis, Chicago, and New Orleans.*

## LESSON L.

THE UNITED STATES—(CONTINUED).

5. III. (1). The Plains states are *Texas, The Indian Territory, Kansas,*