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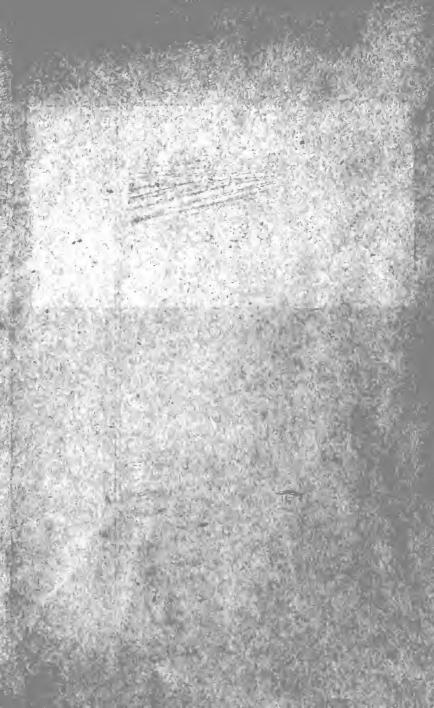
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# FIRST BOOK IN GEOGRAPHY

BY

# ALEXIS EVERETT FRYE

FIRST SUPERINTENDENT OF SCHOOLS IN CUBA

Author of "Brooks and Brook Basins," "Child and Nature,"

"Geography for the Philippines," "Geografía

Elemental," "Grammar School

Geography," etc.



GINN AND COMPANY

BOSTON · NEW YORK · CHICAGO · LONDON

**Aim.** The aim in this book has been to present such subjects as the author wishes his own little son to know.

Plan. This is a "First Book," telling the story of THE EARTH AS THE HOME OF MAN. The pictures show how fully the book deals with PEOPLE.

**Grade.** Pupils ready for a simple third reader can begin the study of this book. The text is graded with care, and leads upward by easy steps.

Scope. This work covers two years of study. One year may be given to pages 1 to 68. Teachers may enrich the course by oral lessons on nature studies.

Pictures. This is the most richly illustrated schoolbook ever sent out to young pupils. The pictures are the highest type of costly wood engraving. Nearly all subjects are photographs, with child life as the central thought. To pupils of this age, good pictures and maps often teach more than text.

Maps. This book lays much stress on the study of location of important places. With this in view the maps have been made very simple. They outline boldly the facts to be impressed on the memory and do not bury them in myriads of details.

Two simple devices, both as old as maps themselves, are used to show directions. The words "north," "south," "east" and "west" are plainly printed in the margins of the colored maps. Little compass arrows, all pointing northward, are also printed at *instructive* points on the same maps.

By turning to pages 70, 122 and 139, and finding three or four arrows on each, the reader can see how useful and impressive these devices are. May we not also think of the little child and assume that he will get a better lesson, at this age, from the arrows and the words "north," "south," "east" and "west" than from the study of degrees, parallels and meridians?

Helps. After each lesson will be found questions to aid in the study of the text. The questions direct the mind to leading thoughts.

To Teachers. Kindly read with care the notes on page viii.

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## NOTES FOR THE TEACHER

To find a general subject, see

CONTENTS. To locate a place, use INDEX. To pronounce

a name, see WORD LIST.

The relief maps on pages 75, 117, 123, 138, 147 and 153 are all on the same scale. Use these maps to give simple ideas of comparative size.

One of the chief facts to impress about a state or group of states is its position among other states. This book

holds to the United States as a unit, in a single map (pages 94–95). This is clearly the best plan of study for pupils of the age for which this book is written.

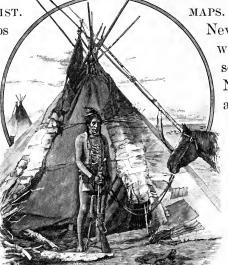
The little round or globe maps are ever at hand in this book to show relative positions of continents and oceans on the earth and in the zones. Keep up simple drill and review on these maps.

As each map is studied, give a simple drill in directions. Read

what the PREFACE says about

Never pass a picture without learning something from it. Notice that dress and homes often impress a lesson on the climate. Study, for example, the plant map on page 118, and note how many scenes from life are there located.

Teachers will welcome the



A red man before his tent

HELPS after each lesson, and the fact that the answers, except, of course, where reference is to a map, are to be found without the noisy turning of pages.

Never lose sight of the fact that the pupil must locate in some simple way—as, near a seacoast, lake, river, or in its state or country—every name given in the text of this book.



White boys who live in a cold land

# FIRST BOOK IN GEOGRAPHY

## GEOGRAPHY

We live on a ball. It is very large. We call it the earth.

The land is part of the earth. The water also is part of it. The earth has air on all sides.

This book tells about the earth. It shows us many pictures.

See the boys with warm coats. They live in a cold land. They like to slide on the snow. We shall read about the land they live in. It is far away.

The red man is an Indian. He has a gun and a pony. He shoots also with a bow.

This book tells about the people of many lands. It tells what they do. It shows their homes.

Geography is a story about the earth and its people.

## HOME GEOGRAPHY

## 1. The Air

Can you feel the air? Swing your hand in it.

Look up into the sky on a clear day. The blue sky we see is air.

We live and move in air. When we walk, we move the air as a boat moves water.

We must have air to breathe. A bit of food in the windpipe chokes us. It shuts out the air.

A person chokes under water if he cannot rise to the air. We call this drowning.

Bugs need air. They find it even in the ground. Plants also must have air.

Clouds float in the air. They show us which way the wind blows. Smoke and dust also show us how the wind blows.

The wind is moving air. It is often very



These little people live in a land where warm winds blow and warm rain falls



These people live where cold winds blow and snow falls

strong in storms. It blows down trees and houses.

Air at rest is calm.

The wind brings clouds, which often turn to rain. The wind may come from cold or from warm places. It gives us cold days or warm days.

We do not know how high the air is above us, but we know it is very high. Clouds show us that.

Far up in the sky there is only a little air and it is very cold.

It is hard to breathe on high mountains. There is not enough air.

The air has many other uses. It helps birds to fly. It moves ships. It turns windmills. It makes waves on water.

Airships sail far up in the cool air.

**Helps:** — Can you see the air? Can you feel it?

When does food choke us? Why? What is drowning? Why do not bugs choke in the ground?

How can you tell which way the wind blows, far up in the sky? How do

winds help to cause rain? How else may they affect the days?

What is wind? What is a calm?

How do we know that the air is very high? How do we know that far up there is not much air?

Name all the uses of air you can think of.

## 2. The Water

Water has many uses. We could not live without it. Part of our blood is water.

Water helps us waiting for the is to keep things clean. We bathe in it and wash things in it.

Fish breathe air, but not as we do. There is air in water, but not enough for us. Fish have gills to take air from water. They die if their gills are dry.

Listen, boys. You know that it hurts to stop the breath even for a short time. When you take a fish out of the water, its gills begin to dry. The poor little thing begins to choke. It cannot breathe. For a long time it gasps and suffers. At last it dies.

Never catch a fish except to eat.

If you catch one, kill it at once. Hit it a hard blow on the top of the head. Do not let it gasp and choke.

Some water sinks into the ground. It runs down to the roots and seeds. Do you know what work it does?

If plants cannot get water, they dry up and die. Water earries food to the roots. It goes into the roots as sap.



Waiting for the fishing boat to come in

The sap runs up to the buds. It swells and opens them. Some are leaves. Others are blossoms.

**Helps:** — What are the uses of water in the home?

Where are the gills of a fish? Find out all you can about the way fish breathe. Why can we not breathe under water?

Of what use is water to plants?

## 3. Forms of Water

We have all seen the little cloud from a hot kettle. The cloud is steam or vapor. So are the large clouds up in the sky. Vapor rises from water. It is "water dust."

Have you seen fog? It is a cloud near the earth. Most of the clouds are high in the air.



A brook is a small stream flowing over the land

When clouds are cold enough, they turn to rain. It falls in drops. Rain is fresh water.

Most of the rain on the land forms brooks and rivers. A brook is a small stream flowing over the land. A river is like a brook, but larger.

Water often stands in hollows.

<sup>1</sup> Small brooks are also called *branches*; large brooks may be called *creeks*. These names are often used in the South.

A small body of water in a hollow is a pond. A lake is like a pond, but larger. Ships sail on some lakes.

Most of the ponds are wide places in brooks. Most lakes are wide places in rivers.

Many rivers flow to the ocean. This is a great body of salt water.

It covers about three fourths of the earth. We also call it the sea.

We see water in many forms. We see it in drops of dew on cool grass. We also see it frozen in the form of ice, hail, frost or snow.

Water has a great many uses. It floats ships. It turns wheels

for mills. In the form of ice, or frozen water, we skate on it. As snow, we run sleds over it.

Can you think of any other uses of water?

**Helps:** — Where do clouds come from? What are they? What is fog?

What is rain? When does it form? Where does it go? What part of it do plants get?

What is a brook? — a river? — a lake? Where do many ponds and lakes form?

To what body of water do many rivers flow? What is the sea or ocean? How large is it?

Name some of the forms of frozen water. What are some of the uses of water?

Name some of the uses of ice;—of snow.

## 4. The Soil

We know that wood rots or

decays. Rocks also decay, but not so fast. They crumble to sand and dust.

The wind blows dust and sand about. Rain washes them here and there. Swift brooks push them along. In many ways they are broken finer and finer.

Frost cracks rocks. This helps them to decay. It lets in the air and rain. Roots pry off pieces.

Fine rock dust is soil. Plants grow in it. Often they die and decay in it.

Bugs and worms dig in it and die. In this way rich soil is formed. It is made of rock dust, with the things that die in it.

Poor soil has but little plant food. Soil that has much plant food is rich or fertile.

All rocks are not alike. They cannot form the same kind of

soil. The rock dust may be sand or clay.

Some plants grow best in sandy soil. Some like clay soil. Most plants grow best in soil that lets the rain creep in.

When plants die they give back food to the soil. They decay and mix with the soil. This makes



The top rock decays to form soil

dark loam. It is rich soil for most plants.

**Helps:** — Break up a pebble with a hammer. Look closely at the rock dust. What crumbles rocks?

What is soil? What is poor soil? What is rich soil? What helps to make soil fertile?

Why is not all soil alike? Name two kinds of soil. What is loam?

## 5. How Plants Grow

Have you seen the eyes on a potato? If not, look for them. Do they not look like real little eyes?

Cut off a thick piece of potato. Be sure there is a good eye on it. bean and get from it long pods full of beans. The seeds from one melon will raise quite a garden of melons.

Where do plants get food to make all these things grow? It comes from the soil, the water and

the air. The sun also helps plants to grow.

Helps:—Name some things that grow in gardens.

Can you think why a stone cellar is warmer in winter than a shed?

You can plant a piece of potato at home. It will teach you a great deal. What does this les-



Where tall corn grows in deep, rich soil

Put it in damp ground and a plant will grow. Sprouts push up to the light and air. Others grow into the ground and form roots.

The top sends out leaves and blossoms. But the part we eat grows on the roots.

Dig down under the plant. Here are several large potatoes. They pay us well for the work and care.

So we may plant a kernel of corn. A tall stalk will grow and bear long ears. We may plant a

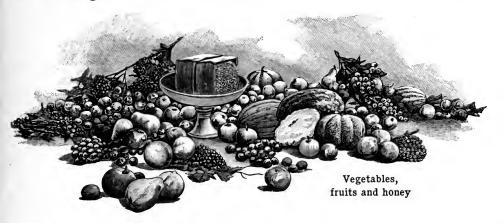
son say about the potato?

Name some of the uses of corn. When you have a chance look at an ear of corn. It is very pretty.

What do plants feed on? Where do the plants get food?

## 6. Gardens

"Sweet corn! Green peas! String beans! Vegetables!" This is a cry we often hear in the cities. Men and boys are selling truck from gardens. People in cities have very little room for gardens. Most of the There are tools, milk pails, shoes, clothes, flour, salt, sugar and toys.



gardens are in the country. But it is best to have the gardens near a city. Can you think why?

Name all the things you can that grow in gardens.

Men often gather the corn, peas and other good things late in the day. They load them on wagons. Then they start in the night for the city, so as to reach the markets early. The garden stuff arrives fresh and firm.

The wagons do not go back empty. They carry many things that do not grow in our gardens. Helps: — Why are there few gardens in cities? What kinds of vegetables do you like? What is a market garden?



Boys hauling seaweed. They put it in the gardens. It rots and makes the soil rich

Tell how to get garden stuff fresh to market. Garden stuff is "truck." What may wagons carry to the farms?

## 7. Early Vegetables

How glad we are when spring comes! We like to see the flowers bloom, and we like the fruits and vegetables.

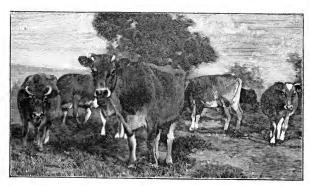
At first a few come to market. Many people wish to buy them. This makes the price high.

Early gardens pay well. This is how men start them. Early in the spring the ground is cold. Seeds will not start well in it, so the soil and seeds are put in boxes with glass covers. These are set in warm places in the sunshine.

The glass lets the sunshine in and helps to keep the heat in.

These boxes are hotbeds. They keep the soil warm. Thus the seeds get an early start in the spring.

You have seen a mousetrap. Hotbeds are heat traps. The sunshine is caught in them.



Herd of fine dairy cattle. They give rich milk

In the spring the soil of the gardens is broken up. At last there is no fear of frost. Then the tiny



An Arab and his camel. The camel gives milk to people living in a great desert

plants of the hotbeds are set in the gardens. They keep on growing, and thus we get early vegetables.

Seeds are also sown in the gardens for the later vegetables.

Helps: — Why is it hard to get fresh vegetables in the winter? Why must the price be high?

Why can men get a good price for early garden stuff? Why do they not sow seeds early in gardens?

Describe a hotbed. Why may we call it a trap? On which side of a barn or hill would you place hotbeds?

How do hotbeds help us to get early garden stuff? Why do we not need to use hotbeds to raise

late vegetables?

## 8. The Dairy Farm

A farm is larger than a garden.
Some farms are many miles long and wide.
Most farms are not so large.

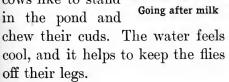
Some farms raise only corn or wheat. Some raise cotton. To-day we will visit a milk or dairy farm.

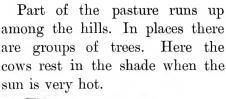
The large field is a pasture. Grass grows all over it. Here the cows feed back and forth.

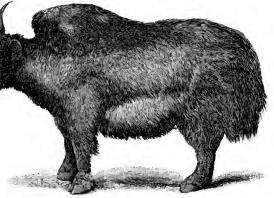
Part of the pasture is low. In it

runs a cool brook.
The cows come
here to drink.
They need clean
water just as much
as we do. And they
like to drink it.

On hot days the cows like to stand







The yak gives milk to people in parts of Asia

Over the fence is the hayfield. A long winter is coming and the cows must then be fed in the barn. The clover and tall grass will be cut to make hay.

The farm boy never makes the cows run. It might hurt them and make blood come in the milk.

**Helps:** — What does the lesson say about the size of farms?

What other name is given to milk farms? Tell all you can about the pasture. Why do we not wish the cows to drink dirty water?

Find out all you can about the cuds the cows chew.

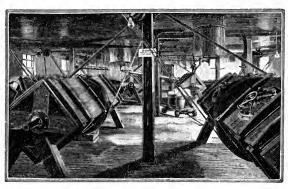
Find out why hay must be dried before it is put in the barn.

## 9. What is done with the Milk

Now the clean milk cans are set out. The men take pails and begin to milk.

The cans of warm milk are set in a long box of water to cool. This helps to keep the milk from souring.

When the night is warm, the cows are left in the big barnyard.



Round and round go the churns

Here they stay till the morning milking is over. Then they go back to the pasture.

This farm sends its milk to a city. It goes on a swift morning train. Many wagons meet the train. They take the cans and hurry away to leave the milk at homes, at hotels and other places.

Some farms send milk in glass bottles to cities. The bottles look cleaner than cans. Milk cans and pails must be kept very clean. One of the men tells us how he cleans them. He rinses them with cold water. Then he washes them with washing powder in warm water.

Next he rinses them with hot water. Then he lets hot steam blow into each can for about a minute. At last he puts them,

bottom up, on poles or wooden pins to dry.

Do you know why this man washes the cans with so much care? He loves his own boys and girls and he knows that dirty milk may kill many boys and girls in the city. He knows also that weak little babies must drink the milk.

Now we see why cows and milk need care and must be kept clean.

Helps: — Can you name some of the kinds of meat we get from cattle? — from hogs? — from sheep? What is leather?

Why is milk strained? How often are cows milked? Why are cans of new milk often put in cool water?

How is the milk sent from the farm to the city homes? How ought cans and pails to be cleaned? Why must they be cleaned with such care?

## 10. Making Butter

Many farms sell their milk to be made into butter or cheese. As butter is made of cream, the place where it is made is called a creamery. Let us look into one.

Cream is lighter than the rest of

the milk and rises to the top. We can skim off the cream. put it in a churn, shake it awhile and take out twothings: one is the butterand the other is the buttermilk.

man lets the buttermilk run out. The butter is left.

Now the man takes a paddle and works the butter. That is, he rolls it over, presses it, washes it with water, presses it again and tries to get out all the buttermilk.



These machines separate cream and skim milk

The same work is done in a creamery, but in another way. The milk is put in machines that turn swiftly. They take the cream from the heavy part of the milk. The heavy part is skim milk.

The cream stands for some time. Then it is put into great churns. They turn and turn for half an hour or more. Then a He may also mix a little salt with it or he may leave it fresh.

The butter may now be put in boxes or tubs for market. It may be cut in squares or sent in rolls.

**Helps:** — What may be made from milk? What is a creamery?

Why does cream rise to the top of milk? What is buttermilk? What is skim milk? Tell how butter is made.

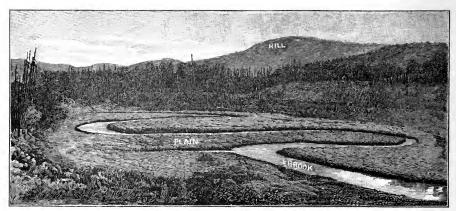
## 11. Hill, Valley and Plain

On the milk farm we saw that the land was not all alike. Some parts were high and some parts were low. There were hills, hollows and level land.

A hill is high land. Some hills are as high as houses. Others are higher than the tallest houses.

Some valleys are small. Others are wide and deep. Some plains are so wide that a swift train of cars cannot cross them in a day.

Rain and brooks wash much of the fine soil from the sides of hills. But water runs slowly on level land. Here the soil is not washed so easily. It is left for plants.



A hill, a range, a plain, a valley and a brook. The brook flows in the valley

A row of hills is a range. The picture shows a range of hills.

Did you ever climb a hill? What did you see from its top?

Water runs down the sides of hills. It runs into the low land.

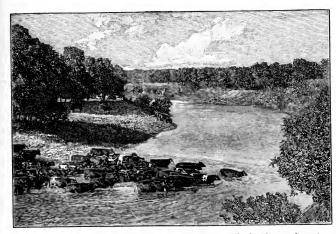
A valley is low land. Some valleys are between hills. The picture shows a valley. Its bottom is level.

Level land is a plain. A brook flows across this plain. It flows from the hills. This shows why most of the farms are on plains. Most of the people in the world live on plains. Here they find the best soil and can raise the things they need.

Helps: — What is a hill? What is a range of hills? What is a valley? Where have you seen a hill and a valley?

What is a plain? How large are some plains?

Why is there more rich soil in valleys than on the sides of hills?



A river flows in the valley. Cattle like to wade in the cool water

It helps to keep off the flies

Why are most of the farms in the world on plains? Why do most of the people in all the world live on plains?

## 12. The Wheat Farm

The snow has all left the fields. Spring has come. The farmers are at work, plowing to break up the soil.

Bring out the bags of wheat. Look at the little kernels. Each is a seed.

Scatter the seeds over the field. Let the harrow turn a little soil over them. Now the ground is seeded. Rainy days come. Then the warm sun shines. The seeds wake up and begin to grow.

Fine roots like hairs creep down in the deep soil. Green blades push their way up to the light. The stalks grow taller

and taller. The wind sways them like waves. All summer the grain grows. Heads of new grain form at the top of the stalks.

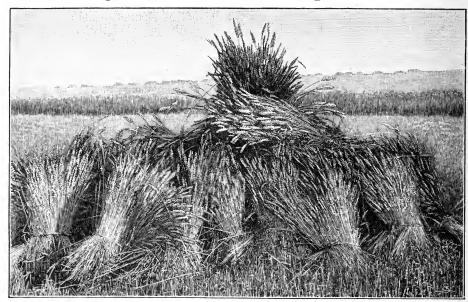


This girl is gathering wheat by hand on a great plain far over the sea (Russia)

At last the grain is ripe. Great machines cut it and tie it in bundles. Let them stand in the field and dry.

Now comes the machine to thresh the grain. "To thresh" means to whip or strike. The Winter snow may cover it like a blanket. Then the plants make an early start in the spring. As the wheat is in the ground all winter, it is called *winter wheat*.

Wheat is to us the most useful of all the grains in the world.



At last the grain is ripe. Sheaves of wheat on a wide plain in the Northwest.

Machines cut it and tie it in bundles

machine whips off the seeds very quickly.

Out goes the straw. There lies the wheat. Put it in bins or sacks. It is ready to go to the mill, to be made into flour.

Some wheat is sowed in late summer or early fall. It starts to grow if the ground is warm and moist. Helps:—How does the farmer get the land ready for sowing wheat? Do you know how a grain of wheat looks?

What is needed to make seeds grow? Where do the new seeds form?

How do men thresh wheat? How is it threshed on large farms?

What do we call the stalks after taking off the grain? What is winter wheat?

## 13. The Flour Mill

Now we will go to a flour mill. It is a large building near high

falls in a river. The river is swift.

The water turns great wheels. Water power is cheap, but rivers may run low. Then steam may be used.

Cars and boats of wheat are run close to the mill. The grain is taken into the mill and the flour making begins.

Other seeds may be mixed with the wheat in the field. These might taste bad in

flour. So the grain is put into a machine that takes them out. It also passes between brushes to clean it.



The old way of plowing. Some great farms now use steam plows

Now the seeds of wheat are clean, but they still have on tough

coats. These coats are the hulls. They must not get into the flour.

Steam softens the hulls so that

they will not crumble. Now the wheat can be run between rollers to crush it. Over and over it is rolled to make it finer. The hard parts are sifted out. The fine wheat powder is flour.

Some flour is made of the whole grain except the hull. The whitest flour is made of only the inside of the kernels.

The flour is now ready for market. It

may be sold in sacks or barrels.

Helps: — Why are mills built near falls? Why may such mills need steam?

How may other seeds become mixed with wheat? What harm might they do? Why is the wheat brushed?

What are the hulls? Why are the grains steamed? How is the wheat crushed? How are the tough parts taken out?

What is wheat flour? How is the finest flour made? How is flour put up for market?

Find out what things that you eat have flour in them. Find out how bread is made, and what is put in it.

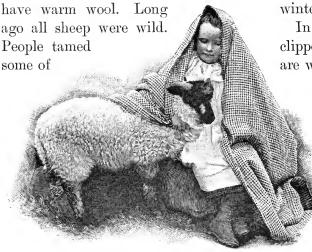


Brown people pounding rice to remove the hulls

## 14. Sheep and Wool

There are many kinds of wild sheep. They do not like woods or low lands. They like to live in high places. They even climb rough mountains.

The air far up on mountains is cold. Perhaps this is why sheep



Sharing her warm shawl with the lamb

them, to have their wool, meat and skins. Some lambs are pets.

Even the tame sheep like to feed in hilly places. They can jump quite high, like wild sheep.

Wool is oily. The oil sheds the rain from the sheep.

Wool is made of fibers. They look like hair. We use wool to make warm cloth.

Here is a picture of a little girl

and a lamb. The lamb gave its wool to help make a warm shawl. A cold day has come. The wool has grown again, but the girl thinks the lamb may be cold. So she goes out to share the shawl with her pet.

Wool grows thick and long in winter. Can you think why?

In the spring the wool is clipped. But first the sheep are washed. Then their feet

are tied and men clip off the wool. It is sold to make cloth, hats, socks, carpets and many other things.

Lambs not a year old have very fine wool. It is sold as lamb's wool and brings a high price.

There are many kinds of sheep. Some have long, fine wool.

Helps: — Where do wild sheep like to live? Why do they need warm wool? Why did people long ago tame sheep?

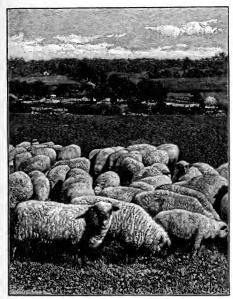
Why does wool grow oily?

What story does the picture tell? When is wool clipped? Tell about clipping it.

What is said about the wool of little lambs? What kind of wool is best? Name some things made of wool.

## 15. Making Woolen Cloth

Wool often goes to the mill dirty and oily. Steam may be



Sheep grazing

blown through it to help clean it.

The wool is then dried. If it is dried too much, it will not feel

soft and smooth.

Wool may come to the mill in lumps. It is put in a machine that has moving teeth. They pull the wool apart and leave it light and fluffy.

If the wool is stiff, a fine spray of oil is blown over it. The oil softens it.

Next the wool is carded in a machine. It has many teeth like

a comb, but finer. The wool gathers on the teeth, like hairs on a comb. In this way the fibers are made to lie one way. Brushes take them off.

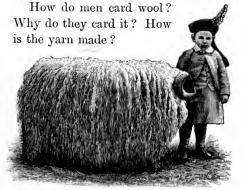
A machine twists the wool into yarn. This is wound on great spools.

Pull a piece of woolen cloth apart and see how it was made. You will find that the yarns cross one another. Follow a thread and see how it goes over, under, over, under.

Putting threads or yarn together in this way is weaving. Mills have machines that weave the cloth.

Other fibers are used to make cloth. The most useful is cotton.

Helps: — Tell how wool is cleaned in mills. How is it made soft and fluffy?



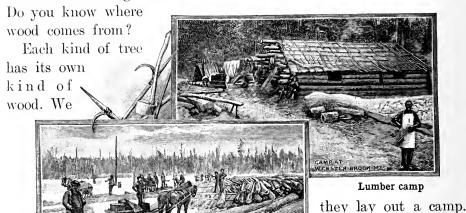
Some kinds of sheep have very long wool

What is weaving? Name a plant fiber used in making cloth.

## 16. In a Forest

Name some things made of wood.

In the North men go into the forests in the fall to work. First



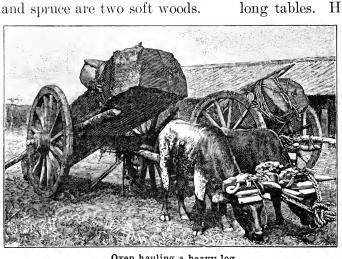
one of them. It is used Logs ready to float down to a sawmill for a cookhouse. See have hard woods and soft woods. the cook with the white apron. Oak, ash and maple are hard. Pine

Near it is a large room with long tables. Here the men eat.

The other houses are for sleeping.

The houses are made of logs. The picture shows

> Winter comes. Many trees are now cut down. Great sleds may be used to drag the logs over the snow to the rivers. Here they are piled on the banks or rolled on the river ice.



Oxen hauling a heavy log

In some places the logs are hauled on cars to rivers. In the South, where it is warm, great wheels or cars are used in place of sleds.

Spring comes. The days grow warm. The ice melts in the rivers. Rain falls and the snow melts. The streams are high and strong.

The logs float down the swift rivers.

Men go along to keep them out in the stream. The men often slip into the cold water.

At times

Loading logs on cars to haul out of the woods

the logs jam and stop. The logs behind push on and pile up. Now the men must be careful. They may be crushed when the logs start again.

At last the logs reach the sawmill. They float till the mill is ready to use them. Then they are hauled out of the water. Great saws cut them into boards. Thick boards are planks.

many shapes. There are shingles and the trimmings for houses. Much of the spruce wood is ground to a soft pulp and made

The wood may be sawed into

into paper. Paper is also made from other kinds of plants.

Men have cut down many trees to clear the land for farms. In

many hilly lands and mountains there are large forests.

Helps: - Name some of the trees you have seen. How can you tell pine wood from oak?

Tell what you can about making a logging camp. Why are roads built? Why do men float logs down rivers?

Tell about the work of getting logs to sawmills. Why do not the logs float down in winter? What swells the rivers in spring?



Mountains far south of us (Andes) with snow on their sides. The llamas carry loads to miners. High peaks are bare and rocky

## 17. Mountains

A mountain is very high land. It is higher than a hill. Some mountains have round tops. Others have sharp tops. The top of a mountain higher than the land about it is a peak.

High peaks rise far up in the frosty air. Some are buried in snow and ice.

Grass and trees grow on many low mountains. Very high peaks are bare and rocky. In some mountains the rocks are bent. Other mountains are made of level beds of rock.

Water slowly cuts away the sides of mountains. The rocks crumble to soil. Most of it is washed away. In places the rocks are left bare.

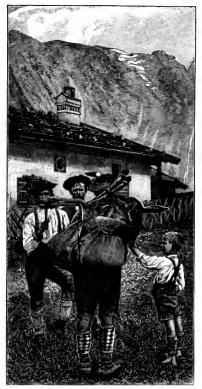
A row of mountains is a range. A low place over a range is a pass.

Few people live on mountains. The land is too rough. Roads are hard to make. Some people go to the mountains for their health. The air is pure and they like to live in the pines.

Gold, silver and iron come from rocks. They come from many mountains.

This little boy lives near high mountains. You can see them over his home. His father is a hunter. He has brought home a deer. The boy will have some of the meat to eat.

Many wild ani-



Return of the hunter with a deer (Alps)

mals live in the mountains. Here they try to hide from men who hunt them

No man with a brave and kind heart will kill for sport. He may kill for food. All the animal has is its life. We ought not to take that except in case of need.

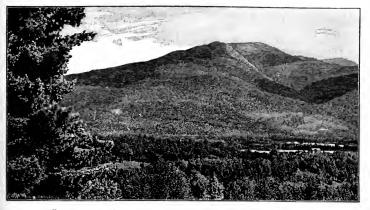
Helps: — What is a mountain? How does it differ from a hill? What is a peak?

What is said about very high peaks?—aboutlow peaks? What is a range? Why do

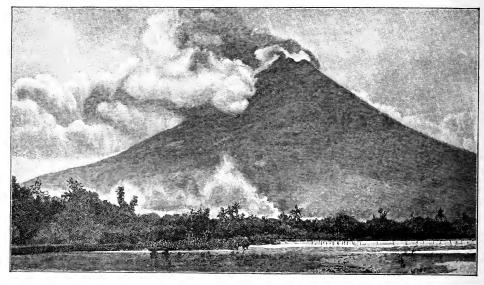
few people live on mountains? Why do sick people go to the mountains?

Name three metals that come from rocks. Name some of the uses of iron;—of gold;
— of silver.

What makes many wild animals go to the mountains?



Low mountains with rounded tops (White) mountains



A volcano sending out smoke at its top and low down on its sides. This cone is made of lava and ashes (Philippines)

## 18. Volcanoes

Smoke and steam rise from some peaks. Melted rock also flows from them. Such peaks are volcanoes.

The melted rock is lava. Very fine lava is ashes. Some peaks are made of lava and ashes. They come out of a hole or crater.

The word "crater" means *cup*. The hole is often shaped like a cup.

A volcano does not send out fire. The hot lava may shine on the clouds and make them look like fire.

Lava rock crumbles slowly, like other rock. When it is fine it

makes good soil. Some of the best farms in the world have lava soil.

Helps: — What is a volcano? What comes from volcanoes? What does "crater" mean?

## 19. How we Trade

We need many things we cannot raise or make. We do not wish to go far away to other lands to buy them. We go to a store for them.

But where do stores get things that grow far away? The goods come in ships to cities on the coast. Such cities are ports. From the ports the goods are sent to the stores.

Thus the farmer may have more milk and garden stuff than he can use. He is glad to sell part. A mill is glad to sell shoes, cloth, tools or lumber.

It is the same with people of other lands. They are glad to sell

what they do not need.

One land far away sends us tea and silk. We send back coal oil and cloth. Another sends us sugar. We send back cloth and tools.

Buying and selling is trade. When trade is large and with places far away, we call it commerce.

Let us study some of On this some the things that help trade. First come good wagon roads.

A farmer wishes to haul a load to market. He knows how strong his horses are. He thinks of the road. If it is steep or muddy, the load must be small. A rough road may break the wagon.

If the road is firm and smooth, with gentle grades, the horses can haul large loads.

A good road helps horses. They work hard for only what they get to eat and for a place in the stable. A bad road may ruin many good horses. It may hurt their feet, strain them or overwork them.

Farmers can help by putting wide tires on wheels. Wide tires do not cut a road very much.



Ox cart loaded with rice going to market in a city of Japan On this smooth road the little ox can haul a heavy load

Helps:—Why must we buy at stores? Where do the stores get tea, coffee and other goods? What is a port?

What do farmers sell? What do they buy? What do people in other lands sell? What do they buy?

What is trade? What is commerce? Tell all you can about the need for good roads. How can we pay horses for their hard work?

Who pays for roads? Why should heavy wagons have wide tires? Do wide tires pay?

## 20. Railroads

Once upon a time there was grass

all over a plain. Many cattle fed there.
Each year men drove the fat cattle far away to market. The cattle had to walk all the

The soil was rich but only grass grew in it. Wheat would grow there,

way.

sold. Golden grain soon waved in the fields. This plain is now one of the richest wheat regions in the world. The railroad helped to make it rich. Without the railroads some places could not send milk to the cities. Ship with freight on a deep canal (England) Themilk

but the market was too far away.

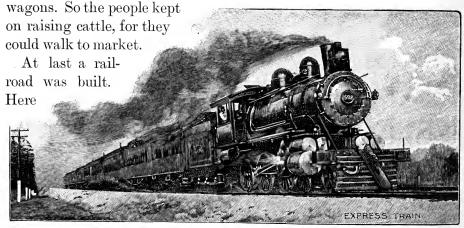
There was no railroad. It would not pay to haul wheat so far in

sour before the wagons could reach the homes of the little children.

would all

was a way to send grain far away

to cities. Most of the cattle were



Swift train that carries people from city to city

Goods are also carried on lakes, slow boats. Of course such things rivers and canals. Many cities can also go by rail.



Slow freight where labor is cheap. Hauling chests of tea in China

grow up along such water routes. Ships carry loads far across the sea.

Goods can be sent cheaper by water than by rail. The steel rails

are costly. So are long bridges over rivers. The ocean is level, but trains must often go up long grades. In some places two or three engines must be used on a single train.

Some goods must go by rail. It would not do to send milk, fresh meat and fresh vegetables very far on boats, unless they are kept cool with ice.

Coal, bricks, lumber, grain and oil can go by

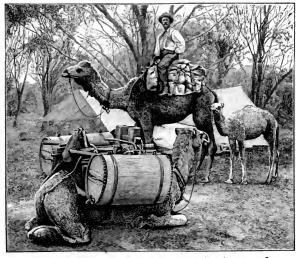
In some dry lands goods are sent on the backs

of camels.

Helps: — How may a railroad change people's work? Of what use are railroads? Can you think why cities grow up on good water routes?

Why can goods be sent cheaper by

water than by rail? Name some goods that ought not to be sent very far by water unless they are iced. Name some goods that can go by slow boat.



Camels carry goods for people traveling in some dry lands (Western Australia)

## 21. Life in the City

Now for a trip to the city. Let us go to New York. It is a very large city. The tall houses look like high walls. They are made of brick and stone. How hard the

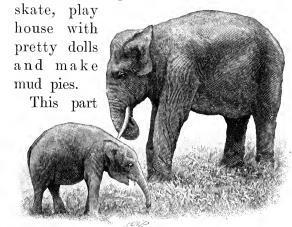


Park donkey

streets are! What a noise the cars and wagons make! There are cars on the street, cars over it, and cars under it. Do boys and

girls live here, with no big barns and green fields?

Yes; they live here and are happy. They play ball, spin tops, roll hoops, snap marbles, swim,



Elephant mother and her baby



Spotted deer in a park

of New York is called the East Side. It would take a long time to count the school children in one square mile. They could join hands and reach thirty miles.

Some days they play in the parks. They hear the bands play and they see many pretty flowers.

In the parks they also see cages

of lions, tigers, elephants, monkeys and many other wild animals. There are houses filled with pretty birds from lands far away.

A large house in one park has seals and fishes. They swim in pools or tanks. The seals scream as they splash in the water. Lazy alligators lie in other pools. Only the tips of their noses are out of water.

You should see the fishes. There are almost every form and color. Some can change color while you are looking at them.

There are pretty sponges. They grow on the bottom of the sea. And there are red and white coral. They also grow on the sea bottom.

Then there are the shop windows. Here we may see all kinds of toys. There are boats, cars, dolls, guns, engines, and toy dishes. There are so many other things we can hardly count them.

It is fun to go down to the water front. Every day great ships sail in and out. Some come from far over the ocean. They bring goods and people from the other side of the world.

The boys like to go down to the wharves and watch the ships. In school they learn what the great ships carry.

As the boys and girls grow up, some work in stores, others work

in shops or mills.

Some young men learn to care for and drive horses. Others run cars and engines.

Helps: — Do you know how to play all the games named in this lesson? Which of the animals named have you not seen?

Have you seen any toys in a shop window? What toy do you like best? Why?

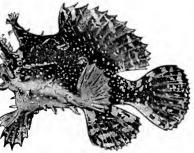
How does a steamship differ from a sailing vessel? What moves each?

What are some of the kinds of work done by people in cities? What kind of work would you like best to do?

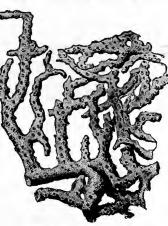
The teacher will show you on a map where the city of New York is. It is on the east side of the great land we live in. The city is close by a wide ocean on which ships sail.



Sponge from the sea bottom



A queer fish from the deep sea



Coral from the sea bottom

#### 22. Harbor and Port

Some cities grow near the coast. Let us see why.

People often wish to send goods away on ships. They also wish to

bring goods on ships from other lands. Men try to find the best places for the ships to load and unload.

The water must be deep so that the ships will not strike bottom. It must not be too deep to anchor in. It is better if the deep water reaches close to the shore. The ships can then lie beside the wharves. This makes it easy to load and unload.

High waves may sink ships. Strong winds may drive them ashore. In

some places arms of land shut out the waves. Hills help to ward off gales.

A body of water like this is a harbor. It is a safe place for ships

to anchor. It is an easy place for them to handle freight.

New York has such a harbor. It is deep and wide. Gales cannot drive strong waves into it. Ships

> can go in and out easily. The water is deep close to the wharves. The largest ships can lie beside them to load.

A city by a harbor is a port. The ocean is often called the sea. A port by the sea is a seaport. New York is the largest seaport in our country.

Helps: — Why do we need seaports? Why must the water in a harbor be deep? Can it be too deep?

Why is it better if deep water lies close to shore? Tell what else is needed for a good harbor. What is a harbor?

Tell all you can about New York harbor. What is a port?—a seaport?



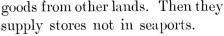
Children of other lands like to go down to the wharves where boats come in

# 23. Why Seaports Grow

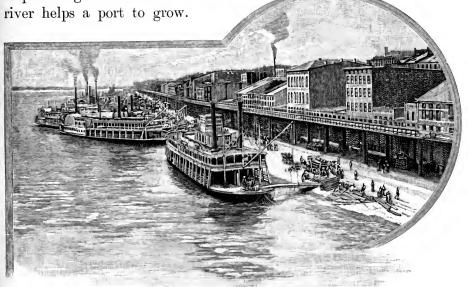
Some seaports are at the mouths of rivers. The mouth of a river is

the part that empties into the sea or other water. It is the lower end of a river.

If a river is deep and wide, ships can go far inland. Such a river helps a port to grow.



Railroads help ports to grow, just as rivers do. The cars carry



Boats that go up and down the longest river in the world

The towns and cities along the river can use the one great port at the mouth. They can send goods on boats down to the port. Boats can also bring back goods that come from other lands.

The river trade calls for more ships, wharves and men in the seaport. These men must have homes. Workmen move there to build them. Stores of all kinds are needed. The stores can easily get

freight and people to and from the ports. Many people come to trade in large ports.

If quick trains run, people can work in the port and live in the country. Thus the suburbs grow.

**Helps:** — What is the mouth of a river? How does it help a seaport to be at the mouth of a river?

Why do cities grow along deep rivers leading to large ports? How do such cities help the seaports to grow?

## 24. Why Other Cities Grow

We have read about a mill by a waterfall. Some falls turn wheels for many mills. People are needed for the mills.

They must have homes and stores. It is easy to see why cities grow near high falls in rivers.

The trade area is larger. Cities It is also easy to see also grow where rivers meet. why cities grow along Cities grow on railroads, deep rivers. They just as on can trade by boats rivers. It with one is easy to another. carry on The boats trade. The may even go down to ports by the sea. Then the cities can

This steamship uses the compass to find its way across the ocean

lands far over the sea.

trade with

Some lakes are very large. They are like great inland seas. They reach out to farms, forests and mines. Great ships gather up the products. Large ports grow by such lakes.

There are five such lakes near the northern border of our country. They are called the Great Lakes. A canal and a river connect them with the city of New York. growth is faster if many railroads meet in one city. Can you tell why?

Chicago is far inland on one of these lakes. It is the largest lake

Many cities grow where railroads

meet lakes or rivers. Goods may

then be sent by boat and by rail.

port in the world. It also has

many railroads.

Helps:—Why do cities grow near falls in rivers? Why do they grow along deep and wide rivers?

What is said about the Great Lakes? Find out what canal joins these lakes with the Hudson river. How has this canal helped New York to grow?

What is said about Chicago? How has the Erie canal helped Chicago to grow?

Why do cities grow near railroads?

Why do they grow where railroads meet lakes or rivers? — where one river flows into another?

Find out what makes your own city or town grow.

### 25. Points of the Compass

Sailors find their way far across

the sea. They must know where north, south, east and west are. We all ought to know how to find our way. Let us learn how.

The sun rises in or near the east. It sets in or near the west.

Face the east. North is now at your left hand. South is at your right. West is behind you.

At midday all shadows where we live point to the

north. Can you think why?

Sailors use the compass to show north, south, east and west. Here is a picture of a compass. You can see a round card with letters on it. What are the letters? What do they mean?

Under the card there is a little

bar or needle of steel. It is a magnet. It swings easily. Even a breath of air may move it.

The earth draws this needle and makes it point almost north and south. In some places it points just north and south. The needle

> shows sailors where north is.

The sun and stars also help sailors to find their way. They cannot see the sun on cloudy days, nor the stars on foggy nights. The little needle points out the way even when

the sun and stars are not in sight.

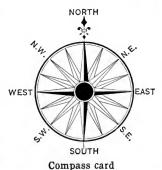
Helps:—Turn your back to the north. In what direction are you now facing? Name some objects south of you.

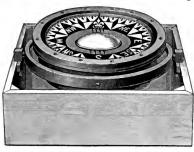
Can you name a street that runs north

and south? Can you name one that runs east and west?

Point halfway between north and east. We call this northeast. It may be written N.E. Where will you look for northwest? How else may you write it? Where is southwest? — southeast?

Try to learn how to find north by the stars. Can you find the north star?





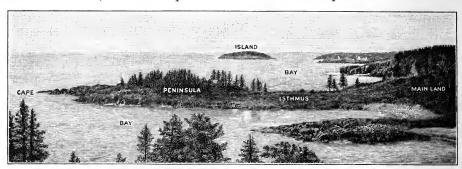
Ship's compass

#### 26. Shore Forms

We have read about a harbor. This is only one of many forms made where the land dips under the sea. The land close by the sea is the coast or shore.

Some coasts are high and rocky. Others are low and sandy. Some are nearly straight. Others are bent or broken, as in the picture. A peninsula has water on nearly all sides. One side joins the mainland. The word "peninsula" means almost an island.

A neck of land may join a peninsula with the mainland. Any neck of land that joins two bodies of land is an isthmus. This word means *neck*. Does it not look like a neck in the picture below?



Shore forms where the land dips under the sea

A cape is a point of land that juts out into the water. Some capes are high and some are low.

Arms of water reach into the land. There are long arms and short arms. Some are so large that a swift ship cannot cross in a day.

These arms of the sea are called bays, gulfs or seas. A bay is like a gulf or sea.

An island has water on all sides. A boat can sail round it. Some of the largest cities in the world are on islands.

The word "strait" means narrow. A strait is a neck of water that joins two bodies of water.

Some straits are many miles wide. But they are *narrower* than the bodies of water they connect.

Helps: — What is a coast? What other name has it? What is a cape?

What names are given to arms of the sea? What is a bay?

How does an island differ from a peninsula? What does "peninsula" mean?

What is an isthmus? — a strait? How do they differ?

#### 27. Factories

A factory is a building in which things are made. Some cities have many factories. Others have few. Let us see why.

A factory needs power to run machines. We have read about water power and steam. Steam calls for heat, and this calls for fuel. There are many kinds of fuel, such as wood, coal, gas and oil.

Machines may also be run by electricity. It may be made by any power that will turn wheels.

A city near fuel saves the cost of hauling it far. Many factories are built in cities near coal mines. There are many also near gas wells and oil wells.

Long ago most factories were built near falls. Many are still built there, as the water power

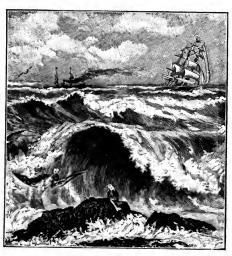


An island in a lake

helps, even if other power is also used.

A factory must have goods to work with. It may use cotton,

wood, wool, iron, milk, wheat or other things. From them are made



Ships on the ocean

cloth, carpets, wagons, plows, butter or flour.

Flour mills are built near wheat fields and where there is power or fuel. Iron mills are built within reach of iron ore and fuel.

**Helps:** — What is a factory? Why does it need power? Name two kinds of power. What are needed to make steam?

Name some kinds of fuel. Why is it best for a city to be near a supply of fuel?

Why are some factories built near falls? Why may they also need steam?

What must a factory have besides power? Name some kinds of material used in factories, and tell what may be made from each.

#### 28. Market for Goods

A factory must have a market for its goods. A lumber mill would be of little use if people did not use wood. Men build factories to make what people need.

Farms need wagons, plows and

farm tools. Cities near by are likely to make these very things.

Most of the hats, shoes and clothing are sold in cities. Here is where most of them are made.

Mills need workmen that are very skillful.

Here, then, are some things that help mills and factories to grow: water power, clay. cheap fuel, raw material and good groun markets. And we must not forget skillful workmen.

If you live in a city, try to find out what the factories make, and why. Find out where the raw goods come from. Find out where the new goods are sold. What railroads bring goods to your city? **Helps:**—Why are factories built? Why must there be a market for the goods?

Name some things likely to be made in cities near farms. Why is much clothing made in cities?

Of what use are skillful workmen? Name some things that help mills to grow.

# 29. How Bricks are Made

We know that it is unsafe to build houses of wood in large cities. If one house burns, others close to it are likely to burn also. Cities use mostly brick and stone.

A great city needs many bricks. They are made of clay. The clay is dug out of the ground.

The clay for bricks is put in mixing machines and wet. These machines turn the clay and mix it to a thick paste. This is put into molds, or rows of boxes just the size and shape of bricks. The clay is pressed hard in the molds.

The molds are lifted away and we see a row of bricks. They are too soft to use, so they are first set one side to dry. Now they are only wet clay. They will not be hard bricks till they are burned.

At last the bricks are dry enough to handle without breaking. Now

they may be piled in great masses. It would require a long time to count them all.

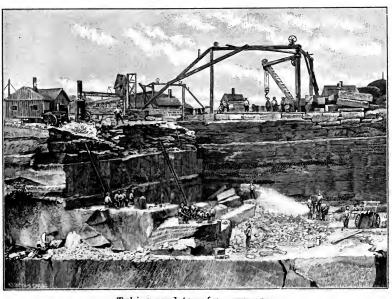
Spaces are left for the hot air to move in among them, to dry them.

If bricks are used where you live, try to find out where they are made.

**Helps:** — Tell how bricks are made. Why are they burned? Why must bricks be very strong?

## 30. Building Stone

Stone for buildings comes from the ground. The place the stone



Taking sandstone from a quarry

We may now build hot fires in the pile of bricks. The fires burn day after day till the bricks are dry and hard.

Bricks are of many colors. There are red, brown, yellow, white, green and blue. The color depends on the heat and also on the kind of clay used.

comes from is a quarry. Here is a picture of one.

The inside of the earth is rock. There is rock under all soil. There is rock under all water. Often there is soil between the rock and the water.

Dig deep enough anywhere and you will find solid rock. In some

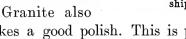
places it comes to the surface. It shows in ledges.

Stone or rock may be cut quite smooth with steel chisels. These are struck with hammers.

There are also machines that pound and smooth the rock. Some of it is also sawed into blocks and

slabs. Machines also rub on the stone and polish it.

Marble takes a fine polish. Much of it is used inside of houses. It looks clean and pretty. The outside of some houses is also made of marble. This stone is often used for statues.



takes a good polish. This is perhaps the best of all kinds of building stone.

Sandstone is not so hard as granite. The grains are looser. Sandstone is pretty. It may be red, brown, gray or blue.

There are other kinds of rock used in houses. Slate is used on

roofs. The word "slate" means *chip*. The rock chips off in thin layers.

Men open quarries as near cities as they can. Of course you know why. Cheap stone helps cities to grow.

# 31. Trade of a Seaport

A ship is coming into port. Let

us go aboard. A pilot is steering, so that it will not run aground. Sailors are scrubbing the decks. Men are tending the engines. Officers direct the work.

This ship has come far across the ocean.

Now come the men to unload. Wagons stand ready to haul

goods away. Some also go on cars and boats.

The tea goes to a grocer. The cloth and laces go to a dry-goods store. The spices go to a factory to be ground to powder. The knives and razors go to a hardware store.

Here are crates of toys for the toyshop. This gold is for a bank.



Girls in Japan picking tea that may come in a ship to our country

These wild animals are for a park. The gems are for the jeweler. And still there is more in the ship.

Now comes a ship with bales of cotton. It goes to mills that make cloth. The cotton comes

from New Orleans.

Here is a ship from far-off Cuba. It brings sacks of brown sugar. This goes to a building where men will refine it to make it white.

This ship is from South America. It brings wool, sheep-skins and hides of cattle. Mills get the wool. The skins and hides go to a tanner. He will tan them and make leather.

Here come great These may come in boats or barges with coal. The coal is for the mills, the stores and the homes.

And all the time river boats are coming down. They bring bricks and stone. They bring lumber from sawmills and wheat from farms.

Cars also are coming to the city. This early train brings milk and garden stuff. Here is a train of cattle, sheep and hogs from the West.

Cars and boats bring many people to the city. Some come to

their daily work. Others come to visit and see the sights of the city. Many come to buy goods. Others come to go on ships to far-off lands.

This is a mere glimpse. Only a visit to the city can show the many kinds of work done there.

Helps:—If you were on a ship coming into port, what kinds of work might you see men doing?

Name some goods that come into ports.

Can you tell where any of them come from? Where may they be sent from the ships?

Why do cities need much coal?

Name somethings that would be likely to reach the cities by train.

Why do morning and evening trains carry many people to and from cities?



Boys far away in Asia, putting pieces of shell in wood to look like flowers. These may come in a ship to our country

#### 32. Kinds of Work in a City

What can a seaport do with all the goods sent to it? It uses some of them. Others it sends away. A port supplies many cities and towns.

It is easy to see why people



Little Irish girls who live on an island west of Europe, but they play games as we do

build all kinds of workshops in such cities. They can get plenty of goods to work with. Ships, boats and cars often come loaded.

Now let us see what kinds of work must be done. Wagons must

have drivers. Cars cannot run without men. Ships need sailors. Stores and markets need clerks. Mills must have workmen.

There must be many people to tan hides, make shoes, refine sugar, grind spices, build houses, make dishes, make furniture and handle coal. All these people must have clothes. They must have hats, suits, socks and many other things. The making of clothing is the chief work in most of the great cities.

The people must also be fed. It takes a great army of men and women to feed a city. Wagons hurry food to the homes and the hotels. Cooks prepare it. Men and women serve it. There are many kinds of work in a great city.

**Helps:** — Can you tell why people build mills in cities?

Name as many kinds of work done in cities as you can think of. Name some goods that city people make.

Why must cities make a great deal of clothing? Tell as well as you can where cities get various kinds of food.

## 33. Why Laws are Made

We hear people talk about laws. Let us find out what a law is, and what it is for.

All games must have rules. There are rules for playing ball. The rules tell how many may play on a side, where the bases are, when a player may run and when he is put out. We could not play ball without rules.

There are rules in hide and seek, marbles, tag or catch, and puss in the corner. It is fun to play

when all obey the rules.

Every family has rules. There is an hour for dinner. You know when you are to go to bed and when you must get up. You know that rough games must not be played in the house.

Every school has rules. One rule tells when school shall begin. Another tells at what hour it closes. Rules tell what you shall

study each year. Is there a rule telling to which school you must go, and how many months each year?

We can make rules for our games. Parents make rules for the family. The teacher and school trustees make some of the rules for schools. In cities boards of education make rules for the schools.

Good rules help us to play, work and live in the best way. They tell us what our rights are, and also what rights others have.

People vote to make rules or laws that all must obey. They make laws to punish for stealing or setting fire to a house.

We obey a law when we pay taxes. We obey a law when we



Boys on an island far across the Pacific ocean. They are playing ankle ball. They kick the ball with their ankles and keep it going, as we play ball with our hands

keep to the right in driving or when we put a stamp on a letter.

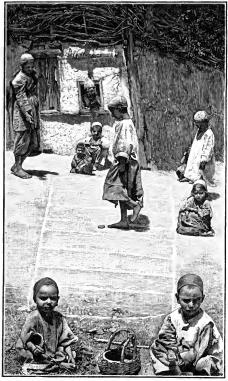
Helps: — What game do you like best? What are some of its rules? Can any game be played without rules?

Of what use are rules in the home? Would you be glad to have no dinner hour? If there were no rules, when would school begin? When would you have a vacation?

What is a law? Who make it? Who must obey it? Without laws, who would build roads?

#### 34. Taxes and their Uses

All the people wish to have good schools. All wish to have good roads. They need police to keep order in the city. They need firemen to protect their homes from fire.



These little folks live far away in the highest part of Asia, but they play hopscotch with about the same rules we have here

The people also need judges. There must be jails or prisons for men who commit crimes.

Cities make homes for very poor people and take care of them. They look after the blind and the deaf and dumb.

There are hospitals for the sick and wounded. People who are too poor to pay can receive just as good care and food as the rich.

We must not forget that the city makes parks where we can go to play games and breathe fresh air.

It takes a great deal of money to pay the bills for a city. People vote to pay taxes to raise the money for paying such bills. A person who owns very little pays a small tax. A person who owns more pays a larger tax. This is fair.

**Helps:** — What bills must be paid for schools?

What bills must the city pay to protect the homes against fires? If a man's house does not catch fire, ought he to pay part of these bills?

Why are all people glad to pay taxes for the poor, the blind and the feeble-minded? Why do the deaf and dumb need schools of their own?

Find out all you can about the work of officers that serve in the city or town you live in. Do the people elect them? What pay do they receive? How long do they serve? What are their duties?

Who have to pay taxes? Find out how often taxes must be paid? To whom are taxes paid?

# EARTH AS A WHOLE

#### 35. Form and Size

Far to the west, across the ocean, the yellow people raise tea for us. Far to the east, across another part of the ocean, people send us

sweet dates. Far to the south we buy coffee,

and ships bring it to us. Far to the north ships hunt for whales.

North, south, east and west of us we find the deep sea. But the land we live on is very large. It takes over four days for a swift

train to cross it from east to west. This is one of the six great lands.

We know that the earth is round like a ball, for many people have gone around it.

It takes a long time to go round the earth. It is very large. If we cross the lands, it takes days and nights in swift cars. Then it takes many days for swift ships to carry us over the oceans. They lie between the lands.

The round map on this page shows one side of the earth. It is the side we live on. The dark

parts are land. The rest is water.

is water.

A line round the thickest part of a ball is its circumference.

This line on the earth is about 25,000 miles long.

A line through the center of a ball is its diameter. This line in the earth is about 8000 miles long.

Do you know a boy seven years old? If he had walked ten miles every day of his life, he would have gone about 25,000 miles.

**Helps:** — How long does it take a swift train to cross the land we live on? What lies on every side of this land?

What is the form of the earth? How do we know the earth is a ball? How far is it round the earth? How far is it through the earth?

#### 36. The Continents

These maps show the two sides of the earth. They show the large lands called continents.

Find on the map the name Asia. This is the largest continent.

Write the names of the continents in the order of size. What is a hemisphere? Which continents are in the eastern hemisphere? — in the western? Which are north of the equator? Which three are nearest the north pole? Which is wholly south of the equator?

Africa is next in size. 37. The Oceans North America is the continent on Salt water covers which we live. three fourths of It is north of all the earth. MERIC It spreads the equator and is third round all in size. A the lands. This vast neck of land C.E A connects it water area with South is the sea America, the or ocean. next in size. The surface lies of the sea near Europejust west of Asia. the poles is cold Australia is southand icy. Near the South Pole east of Asia and south equator the surface is Western hemisphere of the equator. This warmer. The water is the smallest of the continents.

The earth is a globe or sphere. Half a sphere is a hemisphere. "Hemi" means half. America is in the western hemisphere. America is also called the New World. The Old World is in the eastern hemisphere. Only one fourth of the earth's surface is land.

Helps: — What name is given to the large lands of the earth? What spreads round them?

warms or cools the air over it.

Some parts of the sea are five miles deep. The light of the sun does not go far down into water. Below a fourth of a mile all the water is dark. All the deep parts of the sea are dark and cold. The oceans are in wide valleys.

The sea is very useful to man. It supplies water for the rain clouds. Ships sail on it from port to port. Many fish for food are taken from the sea. In summer cool winds often blow from over the sea.

Names are given to parts of the One part is the Atlantic

ocean. It is east of our of Asia? What three oceans touch the shores of North country. Another America? part is the Pacific What ocean surocean. This is rounds the north west of our pole? What country. The cold sea is frozen sea around the south pole? round the Which of north pole INDIAN the oceans is the Arc-OCEAN is largest? tic ocean. CAPRICORN | What ocean The cold sea ranks next in around the size? How much of the surface of south pole is the the earth does the Antarctic ocean. Pacific ocean cover? The part south of South Pole Asia is the *Indian ocean*. Eastern hemisphere

There are five oceans.

The Pacific is the largest. It covers over one third of the earth. The Atlantic ocean is next in size. It is about one half as large as the Pacific.

Helps: - How much of the earth's surface is salt water? Where is the surface of the sea warm? Where is it cold? How deep are some parts of the sea? How deep can sunlight go in water?

What ocean is east of North America? What other continents border on the Atlantic ocean?

What ocean is west of North America? What other continents border on the Pacific ocean?

What three oceans touch the shores

38. How Maps are Made 1

A picture may show mountains over three miles high. A drawing may show a land thousands of miles long.

Look at the plan of a schoolroom on the next page. It is less than three inches long, but the room is three hundred inches long.

<sup>1</sup> TEACHER: - Read and explain this lesson and the next to the pupils.

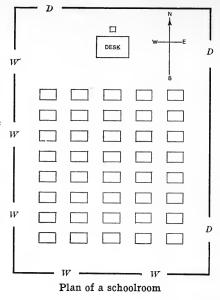
The floor plan of the schoolhouse shows four rooms. Which is the room shown on the plan? Little marks now show us where the desks stand.

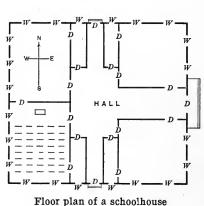
Now look at the plan of the school yard. The house is here shown by a small square. Do you see where the boys play ball? How are the trees shown on the plan? Two rings show beds of flowers.

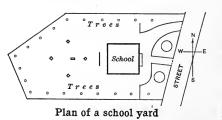
Now look at the map of the school district? Here we see brooks and ponds. The school is on a hill. The sides are steep. They are shown by fine lines. The brooks are in the valleys.

A plan of any part of the earth is a *map*.

Try to make a







plan of your own schoolroom. Put in the desks, doors and windows.

Will you try to make a floor plan of the school you are in? Can you also make a plan of the school yard?

It will be a little harder to draw a good plan of the school district, but you can try it.

If you live near a park, you can try to make a plan of all or a part of it. Put in the walks, ponds and flower beds.

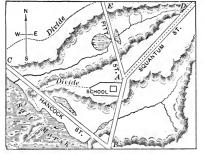
# 39. Reading Maps

Look at the four maps on the next page. The first shows part of the city of New York. Find the city hall and post office. Only a few streets are drawn on this map.

Мар п shows more of the same city. Find the city hall in this map. Why is it drawn so small?

See how narrow the streets are made. This map shows the rivers

on two sides of the city. See the wharves along the water front.



Map of a school district

Find New York on map iv. Find the city of Albany. These cities are nearly one hundred and fifty miles apart.

What river flows from Albany to New York? On

which bank of the river are the Catskill mountains? Find Brooklyn, a

part of New York.

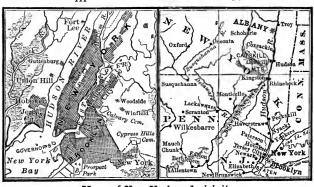
Why are not the streets of New York shown on map iv? These maps show how large maps are made.

Many of the little maps are made round like the earth. We call them globe maps.

A globe is a ball.

New York Bay

Map III shows New York and several other cities and towns. In this map the streets are fine lines. We cannot see the buildings and wharves. They are too small. The map shows the Hudson river flowing into New York bay.



Maps of New York and vicinity

Some maps are printed in colors to show which lands belong to each nation or group of people.

When one inch on a map shows a hundred miles, we say the scale is 1 inch to 100 miles.

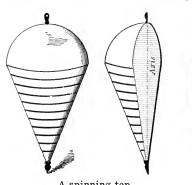
On the maps in colors you will find a scale line. It shows how long a line equals 100, 200 or more miles. Thus you can find out how far it is between places.

## 40. Poles and Equator

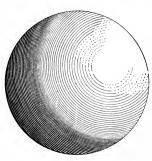
See the dotted line in the top. The top spins or turns round this line. It runs from the head to the peg. We call this line the axis of the top.

We may also think of an axis in the earth. The half ball shows the axis.

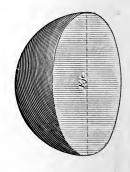
The earth spins like a huge top, but it does not rest on anything.







A ball or sphere



A half ball

Most maps are set on pages so that north is at the top of the page. Where will south be? east? — west?

Some maps that are long from east to west are turned on the pages. On such maps in this book you will find east at the top. Where, then, will you look for north? On the maps in colors you will find north, south, east, west, printed at the top and sides.

It turns round only once in a day and night.

The two ends of the axis are called poles. One is the north pole and the other the south pole.

Can you find the north star? The axis of the earth points almost to the north star. The end of the axis under this star is the north pole.

At the north pole you could see the north star over your head. It is often called the pole star. The poles are in very cold parts of the earth.

Lines are drawn on maps to show north and south. North is towards the north pole. South is towards the south pole. As the earth is a ball, all lines on it curve.

We may think of a line round the earth halfway between the poles. It runs east and west. It is the *equator*. It divides the surface of the earth into two equal parts. The lands near the equator are very warm. This is the hot belt.

Other lines are drawn east and west on maps. If you turn any map so that north is at the top, east will be to the right and west to the left.

The sun lights one side of the earth at a time. As the earth turns



This black man lives near the equator

on its axis, one side is light and the other side is dark. One side has day when the other side has night.

The earth turns from west to east on its axis. This makes the sun rise in the east and set in the west. As the earth turns, it makes the sun seem to go

higher in the sky all the forenoon. At noon we pass the sun. In the afternoon the earth turns us a way from it.



Helps:— What is the axis of a

Eskimos, — people living nearest the north pole

top? Where is it? What is the axis of the earth? How often does the earth turn on its axis?

What are the poles of the earth? What are their names? Which pole is under the north star?

How can you tell north and south on maps?

Where is the equator? Why is it called the equator? How can you tell east and west on maps? If you turn a map so that north is at the top, where will east be?

What lights the earth? Which side of the earth is light? When will that side be dark?

What causes day and night? Why does the sun rise in the east? When is noon? Where is the sun at night, when we are asleep?

#### 41. The Seasons

Near the equator the sun shines high in the sky every day. The air is hot or warm.

Far from the equator the sun is not so high. The rays slant and

the air is cooler.

Near the poles the rays are very slanting. Even in summer they cannot melt all the snow and ice. These are cold parts of the earth, and the sun is never high in the sky.

Once a year the earth moves round the sun. The path is almost a circle.

Half the year the sun is north of the equator. Then we have spring and summer. The other half

the year it is south of the equator. Then we have fall and winter.

When it is winter on one side of the equator it is summer on the other.

Spring is the cool season before summer. Autumn is the cool season after summer.

Near the equator there is no winter. The year has a rainy

season and a dry season. The high lands are cold.

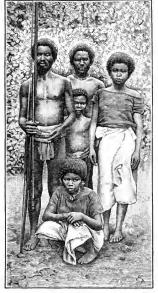
**Helps:** — Why is the air near the equator so warm? Why is it so cold in the polar regions?

How long does it take the earth to

move round the sun? What is the shape of its path?

Where is the sun during our summer? Why are the days so warm? Why does winter come? Why is it cold on one side of the equator while it is hot on the other?

When does our spring come? — autumn? Name our four seasons. What are the seasons near the equator?



Black people near the equator (Negritos)

#### 42. The Zones

The warm belt of land and water near the equator is the *tor*-

rid zone. It is a wide belt having hot or warm days all the year.

The word "zone" means belt. The word "torrid" means hot.

The torrid zone reaches from the equator about one fourth of the way to each pole. It is the widest zone.

Nearly all parts of this zone have plenty of rain. Most of the winds blow from east to west. On both sides of the torrid zone are the *temperate zones*. They have hot summers and cold winters. We know what the seasons of the north temperate zone are, for we live in this zone.

Most of the winds of the temperate zones blow from west to east. They bring rain from the



oceans. These zones have the best grain fields in the world.

Near the poles the sun shines low in the sky. The air is very cold most of the year. The winter is long. The summer is very short. Part of the sea is always frozen.

The zones round the poles are the frigid zones. The word "frigid" means cold.

The tops of high peaks are far up in the cold air. Snow often falls on them. Even in the torrid zone some have snow all the year.

Helps: — Which part of the earth is hot or warm all the year? What name is given to the hot belt? What does "torrid" mean? What does "zone" mean?

What is said about the width of the torrid zone? What about its rain and winds? Would you like to live there?



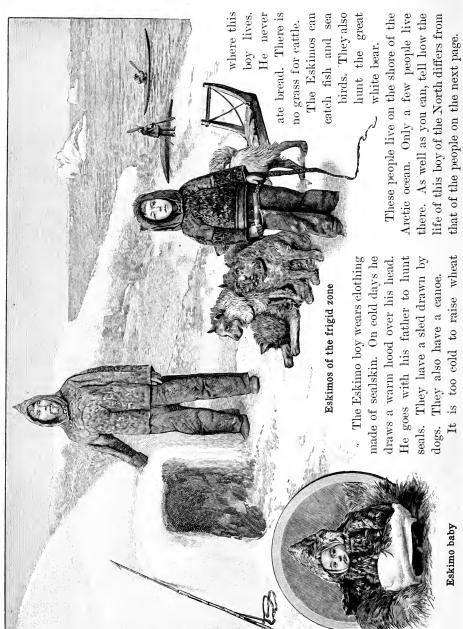
Where are the temperate zones? What is said of their summer and winter? In what zone do you live?

What is said about the wind and rain of the temperate zones? In what product do the temperate zones lead the world?

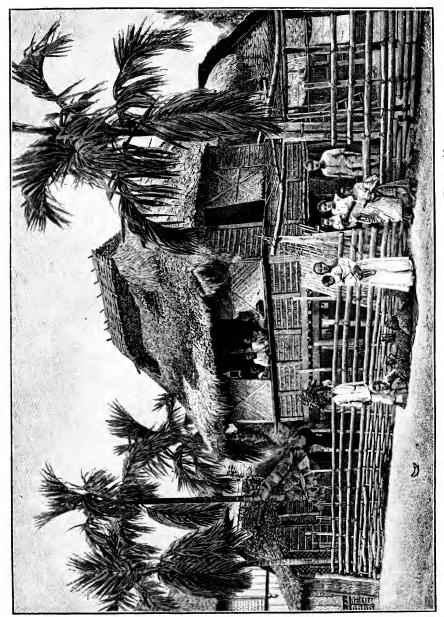
Where are the frigid zones? Why are they cold? What is said of their seasons? What does "frigid" mean?

What is said about high peaks?

Which continents are partly in the north temperate zone? — in the south temperate zone? — in the torrid zone? — in the north frigid zone?



is too cold to raise wheat



A home in a hot land near the equator (Philippine islands). The torrid zone

#### 43. North and South America

Let us compare North America and South America.

Both are parts of America. One is nearly north of the other. We live in North America. It is larger than South America.

The coasts of both have the shape of the letter V. The sea gives them this shape. The Atlantic ocean is east of both. The Pacific ocean is west.

Both have high mountains in the west. Both have low ranges in the east. Both have central plains. The longest rivers flow to the east coast of each.

These continents are unlike in some ways. South America has

few large bays. North America has many. The latter has a broken coast.



South America has few small islands. North America has many large ones, in the far north.

Most of South America is in the hot zone near the equator. Part runs south into the cool zone.

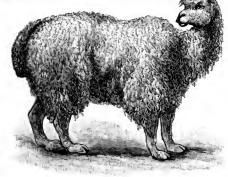
Most of North America is in the cool belt of the north. Its north coast reaches into the frozen Arctic ocean.



Scene in the Western highland of North America

The isthmus of Panama joins the two Americas. No other land

is near to South America. Away to the east is Africa. Very far over the Pacific is



Australia. The alpaca lives in the high western part
North of South America

America reaches almost to Asia. Bering strait cuts them apart.

Europe is far east of North America.

Helps: — Why is one part of America called North America? What gives a continent its shape? What is the shape of each of the Americas?

What ocean is west of both? What ocean is east? What ocean is north of South America? What ocean is north of North America?

On which side of both are the highest mountains? On which side are the lowest mountains?

What lies between? To which ocean do the longest rivers of both flow?

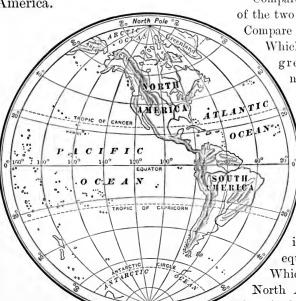
Compare the coasts of the two continents. Compare the islands.

Which of these great continents is the warmer?
Why do you think so?

 $\begin{array}{ccc} W\,h\,i\,c\,h & \text{Negro boy who} \\ part & of \\ N\,o\,r\,t\,h & \text{part of America} \end{array}$ 

America is warmest?
Which part of South America? On which side of the equator is North America?

Which continent almost touches North America in the northwest? Where is the island of Greenland?



### 44. Asia and Europe

America is in the New World. Asia and Europe are part of the

Old World.

In America the great ranges of mountains run north and south. In Asia and Europe they run east and west.

Amer-

America runs far over the equator, on both sides.



White girl of Europe

Europe are north of the equator.

America is almost cut in two by the ocean. Asia and Europe join in a wide plain.

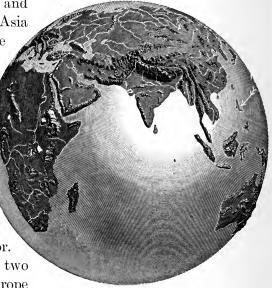
Asia is larger than all America. Europe is not quite half so large as North America.

Asia and Europe have broken coasts. Europe has some large islands. Asia has many.

Europe faces the sea on the north, south and west. Asia faces the sea on the north, south and east.

Europe faces the east coast of our continent. Asia faces the west coast of our continent.

Europe, Asia and North America lie around the cold Arctic ocean. Asia reaches almost to the equator. No part of Europe is in the hot zone.



Africa lies close to both Asia and Europe, with seas between.

Helps: — How do the great mountains in America run? — in Europe and Asia? On which side of the equator are Asia and Europe?

What joins the two parts of America? What joins Asia and Europe? On which side of Asia is Europe?

How large is Asia? — Europe?

What is said about the coasts of Asia and Europe?—about the islands?

On which sides does Europe face the sea? On which sides does Asia face the sea? What oceans border on each?

Which side of our continent is nearest Europe?—nearest Asia?

What part of Asia is warmest? Why do you think so?

What part of Asia is near Africa? What land is south of Europe? — far west of Europe.

The highest mountains in both are not far from the east side. Large parts of both are dry lands or *deserts*.

Africa has many long rivers. Australia has but one.

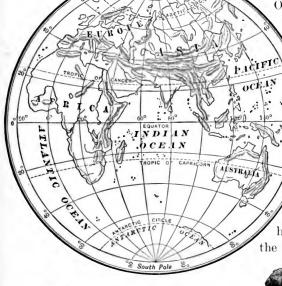
Australia is south of the equator. Over half of Africa is north of the equator.

Helps: — Name four continents in the Old World. Which border on the Indian ocean?

Which three continents have the fewest bays? Which three have broken coasts? Which three have the fewest islands?

On which side of Africa and Australia are the highest mountains? What is said about their rivers?

Which continent is south of the equator? Which are north of it? Which are crossed by it? Which reaches nearest to the south pole?



#### 45. Africa and Australia

These lands are in the Old World. The Indian ocean is between them. Australia is far southeast of Asia.

Africa is about two thirds as large as Asia.

Africa and Australia have few large bays and few islands.



Poor black people live among the hills on some islands between Asia and Australia

#### 46. Where Plants Grow

A Reading Lesson

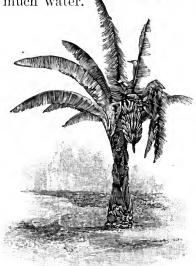
Some plants need much water. Others need little.

Rice grows best under water. Many lilies grow in ponds. They would die if set out in dry soil.

Coffee plants grow best on hilly land. The willow likes low wet lands.

Each plant grows best where it has the soil it needs.

Thistles grow in sandy soil. Many vegetables need rich soil.



Banana plant with fruit

such soil may be very rich for other kinds of plants.

Each zone has its own plants.

But many plants that grow in cool zones will also grow in warm zones.

The banana needs all the year to ripen its fruit. Frost kills this plant. Could it grow where the water freezes half the year?

The tobacco plant grows in a few months. It can grow where the summers are long. Its leaves are cut before winter comes.

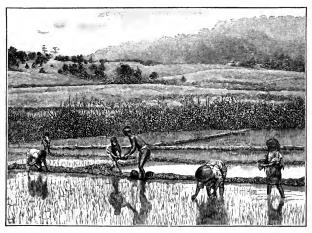
Oranges need all the year to grow and

ripen. Apples will grow in a few months. Which fruit must grow in the warmer

zone?

Some plants ripen their seed in a few weeks. They can grow along the shores of the Arctic ocean. The summer lasts only a few weeks there.

Now you know why plants are not alike in the five zones. They must find the soil, water and heat that they need, just like the plants where we live.



Soil that has long been used for onions

may be very poor for more onions. But

Brown people setting out rice plants in wet land

# 47. Fruits and Spices of the Torrid Zone

Many kinds of fruit grow in the torrid zone. Among these are the orange and banana. There are also many kinds that we never see.

The banana plant often grows twenty feet high. The cut on page 56 shows how it looks. The fruit hangs in large clusters.

In hot lands the banana is widely used as food. On some of the islands of the Pacific it is the chief food of the natives.

Many spices grow in the torrid zone.

Pepper berries grow in long clusters on climbing plants or vines. The berries are dried in the sun. Before we use them on the table they are ground to powder.

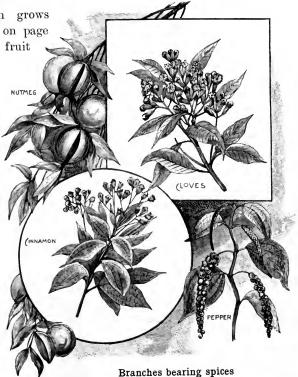
Cloves are dried buds that grow on trees. The buds are picked when they turn red. They are then dried and sent to market.

Cloves have a very hot, biting taste. Cinnamon is the bark of a small tree.

The bark is dried and sent to market.

Nutmegs come from a little fruit that grows on a large tree. The seed of this fruit is taken out and dried. Then it is cracked open and out comes a hard kernel, which is the nutmeg.

Many boys and girls of our age gather spices. Some of the little folks are brown. Some of them belong to the white family but have dark skin. They live where the sun shines very hot. They never see snow except far away on the tops of high mountains.



Helps: — What are the seasons of the torrid zone? Name some fruits of the torrid zone. Tell what you can about the banana.

What can you tell about pepper?—cloves?—cinnamon?—nutmegs?

In what zone do many spices grow? What kinds of pepper have you seen?



Working with water buffaloes, to clean rice fields in southeast Asia

#### 48. Other Plants of the Torrid Zone

Sugar cane, coffee and rice grow best in this hot zone. Cotton and tobacco also grow here and in lands that are not so hot.

Sugar cane looks like cornstalks. The cane is crushed and the juice is

boiled till brown sugar forms in it. The liquid in which the sugar forms is molasses.

White sugar is a pure kind made from brown sugar. Later we shall learn how sugar is also made from beets.

Coffee comes from little berries that grow on bushes or small trees. The seeds of the berries are the coffee.

Rice is like a grass. Some of it grows in fields under water. Mil-

lions of people use rice for food. The white rice we use is the little seed of the plant.

The picture above shows a rice field. The grass you see is rice straw. The animals are buffaloes. They like to work in water and are called water buffaloes.

The hot zone has great forests. Some of the trees have pretty wood. It is used in furniture.

> From the wood of other trees we get dyes to color cloth.

> Rubber is a gum from trees growing in the hot belt.

> This hot belt has so many palms, it is often called the zone of palms.

Helps: — Name as many plants of the hot zone as you can.

What does the lesson tell about sugar?

— about coffee? — about rice? — about trees? What is rubber?



Date palm

#### 49. Plants of the Warm Belts

The warm parts of the temperate zones we call the warm They have many useful belts.

> plants. There are rice,

Look closely at a piece of cotton cloth. Pull the threads apart. Then untwist a thread and see the cotton fiber. What else is thread made of?

About one half of the people of the earth wear clothing made wholly of cotton. Most of the others use some cotton clothing.

> Tea grows in the warm parts of the temperate zones. Some of it also grows in the hot zone.

> > This picture shows us a tea farm. It is in Asia. far across the sea.

In the circle we see people at work. They are yellow people. They are picking the leaves from the low bushes. These bushes are tea plants.

The branch around the picture is from a tea plant.

Tea is made of the dried leaves of the tea plant. Most of it grows in southeast Asia. After the leaves are dried they are packed in boxes and sent to many parts of the earth.

Helps: Name some fruits of the warm parts of the temperate zones. What may we call these warm parts?

Name a useful fiber plant. What is said about cotton?

Where does tea grow? What is tea?



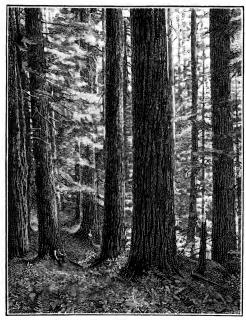
ons, figs and grapes in the warm belts, as in the hot belt.

There is also the plant on which cotton grows.

Cotton is a fiber. It grows round the seeds of a plant. This fiber is pulled from the seeds by a machine. Then it is twisted into thread and woven into cloth.

# 50. Plants of the Cool and Cold Belts

The cool parts of the temperate zones are the *cool belts*. They have hot days about half the year. The hot season is long enough for grains to ripen.



A forest in the cool belt, near the Pacific coast of our country

Here are found wheat, corn, rye, oats and barley. Wheat and corn are the most useful.

Here also are flax and tobacco.

The little stalks of flax have fibers that we use. We weave them into cloth. This we call *linen*.

The best grazing lands are in the cool belts. Most of the cattle, horses and sheep feed here. These are the farming zones, where horses are most useful.

These zones have great forests. There are soft woods, such as pine, fir and spruce. There are also hard woods, such as oak, maple, ash, chestnut and poplar.

Only a few useful plants grow in the north frigid zone. They are food for deer and other animals.

Mosses grow in the wet lands. There are also a few stunted trees and bushes.

In the short summer the snow melts in some parts of the north frigid zone. Then poppies and other bright flowers spring up. In a few weeks they drop their seeds. The snow soon covers them once more.

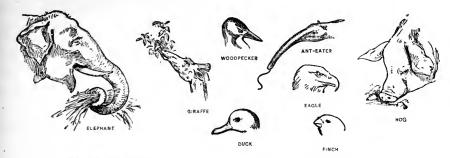
**Helps**: — Where are the cool belts? What other names have they?

Name some grains of the temperate zones. Name some other products. What is said about linen? Name some things made of linen. What fruits have you seen growing?

What is said about grass in the temperate zones?

Name some soft-wood trees of the zone you live in; name some hard-wood trees.

What is said about plant life in the north frigid zone?



#### 51. Animals

A Reading Lesson

Animals have many kinds of feet, legs, bills and teeth. Each kind

has its own uses. It helps the animal in some way.

The eagle has sharp claws and a beak. It can hold and tear the flesh it feeds on.

The ox has wide hoofs. It can work on soft land.

The hog has a strong nose. It can dig roots. The duck has webs between its toes. It can swim fast. Many birds that feed on shores have long legs for wading.

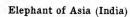
The turtle draws itself into its hard shell. The bee stings. The horse kicks. The dog bites.

Animals cannot go all over the earth. They must live near their food.

> The horse feeds in the grassland. Birds that feed on fish live

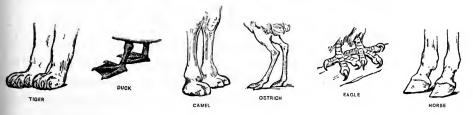
> > near water. Animals that live on fruits are seen near fruit trees.

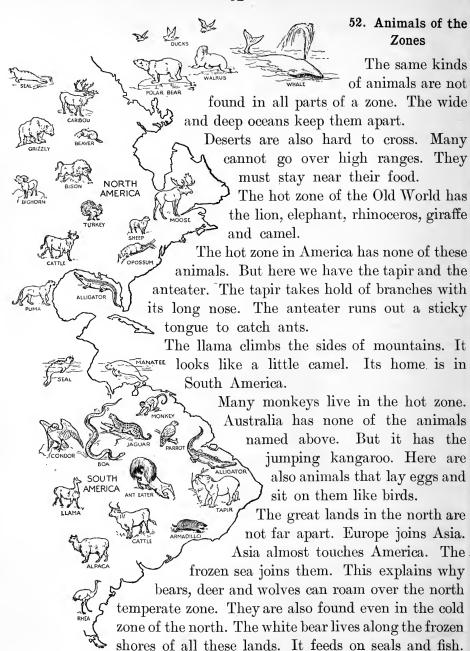
> > Some animals are very useful to man. He takes them to new homes. Among these are the horse. cow, sheep and hog. Animals that feed

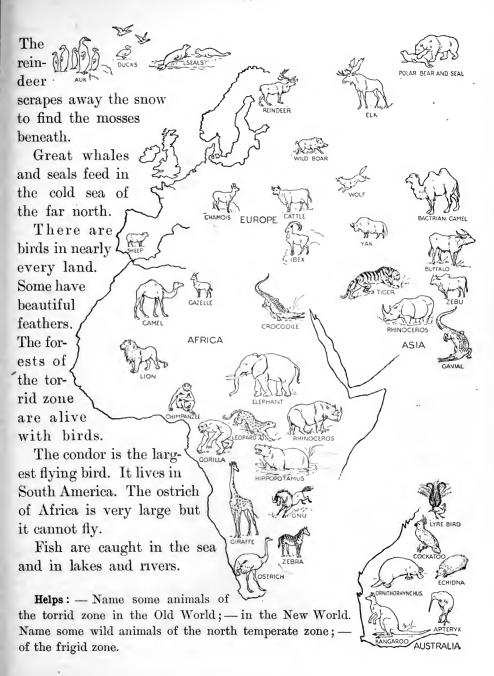


defend itself or get out of danger.

Every animal has some way to on grass can live in many lands. Can you think why?







#### 53. The Black Race

There are five great groups of people or races of men.

They differ in color and in many other ways.

We may name the races by their colors. There are black, red, yellow, brown, white.

Nearly all the black people live in the torrid zone. They are the *Ne-groes*. Many of

them have broad flat noses and thick lips. Their hair is black and frizzly.

Many black people live in groups or tribes in middle Africa. The air there is hot and moist. Fruits

grow wild all the year, and the people do very little work.

These people wear but little clothing. They make huts of grass or branches of trees. They use bows and arrows, clubs and darts. They make blowguns out of hollow stems. They catch fish on hooks made of bone.



Black man of Australia

The black people of middle Africa know but little of what white people do.

But the black people fish and hunt, cook their food and make simple clothing. Some know how to raise grain. They never see any books. People living in this way are savages.

Many Negroes have been carried to lands where white

people live. Some live as the white people do. There are many in our country.

Helps:—How many races of men are there? Name them by color.

Where do most of the black people

live? What other name have they? What is said of their faces and hair?

In what zone is the middle part of Africa? What are the seasons of this zone? Why do the black people there use but little clothing?

> Name some of the weapons of the black people. What work do they do? What name do we give to people living in this simple way?



#### 54. The Red Race

The home of the red race is

America. The red men were here long before the white men came to settle. We call the red people Indians.

Most of the people of the red race live in the torrid zone, but some are found in the temperate zones.



Indian girl of North America

The pictures show how Indians look. Their hair is black and straight. They have large cheek bones.

In South America many of the red men are savages. They live like the black people of middle Africa. They fish in the rivers



Red men, or Indians

and hunt in the forests. They use bows and arrows, clubs and darts.

Some of the Indians of South America live as the poor white men do.

Many of the Indians in our country raise cattle, grain and cotton. They live in houses and have good schools. We shall learn more about them later.

The red men were the first to give corn and tobacco to the people of Europe. They also taught the white man how to make canoes of birch bark.

Helps: -In what zone do most of the people of the red race live? In what part of the world do they live?

How do the Indidiffer ans in looks from the Negroes?

What is said about the Indians

Indian boys of South America

of South America?

How do many of the Indians of our country differ from savages?



#### 55. The Yellow Race

The people of eastern Asia belong mostly to the yellow race. Their hair is black and straight. Their eyes are set aslant.



Yellow people of Japan

Most of the yellow people live in China and Japan. They have many large cities. They make silk cloth and fine dishes. They raise tea, rice and many other useful plants.

The boys and girls of the yellow race play many games. They spin tops, fly kites and walk on stilts. Most of the people of China live on low land near the sea and near great rivers. They have long canals to carry water to their gardens. Tea plants grow in the hilly parts of China.

Some of the people of China live on boats in the rivers. There are houses and gardens on the boats.

Helps: — Where is the home of the yellow race? How do the yellow people differ in looks from the black people?

Name two countries where yellow people live. The teacher will tell you where China and Japan are.

Name some kinds of work that the yellow people do.

Name some games of the boys and girls of the yellow race.

Where do most of the people of China live?

## 56. The Brown Race

The islands southeast of Asia are the home of the brown race. Among these are the Philippine islands. They are now under the care of our country.

Some of the brown people have cities and towns. The cities are ports for trading. Some of the people have good schools.

On some of the islands the people are savages.

The soil of most of the islands is very rich. The brown people raise rice, sugar cane, coffee and many spices.

Fruits grow on all these islands.

Helps: — Where is the home of the brown race? Name one of the groups of islands where brown

people live. Where are these islands?

What proves that some of these people are not savages? Name some products raised by the brown people.

Why do white people send ships to

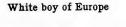
trade with the brown people?

57. The White Race

The white race is now found in many lands.

We shall study these lands in other lessons.

You do not need to be told



how some of the white people look and dress. Just look around you.



Brown girls who live on islands southeast of Asia

The hair is straight or wavy, and may be light or dark. As a rule the lips are thin and the cheek bones are not very large. But the skin may vary from white to dark tan. Some of the people are almost black.

Most of the white

people live in the temperate zones. They have large fields of wheat, corn and cotton. They raise millions of sheep and cattle. They build great cities and have work-

shops of all kinds. They send ships to all the large seaports.

Helps:—To what race do most of the people in your town or city belong? Have you seen people that belong to any other race?

How do most white people differ in looks from the other races?

In what zones



Savage brown man

do most of the white people live? Name some of the kinds of work they do.

#### 58. Government

Savage people live in groups called *tribes*. A *chief* rules each tribe. He makes rules or laws, and he forces the people to obey him.

Most of the red people and the black people live in tribes and have chiefs.

A nation is a group of people

higher than savages, but under one ruler. He may claim the right to rule because his father or mother was the ruler before him. Or the people may choose or elect him to rule for a few years.

One who rules by claim of birth is a *king* or a *queen*. We call the nation

a kingdom. Several kingdoms may unite to form a great *empire*. The ruler is then called an *emperor*.

A nation like our own, that elects its own ruler, is a *republic*. The ruler is a *president*.

Nearly all the white people and the yellow people live in nations.

The land in which a nation lives is a *country*. The city in

which the laws are made is the capital. This word means the "head city."

The people of our nation are Americans. Our country is the United States. Its capital is the city of Washington.

**Helps:** — Who rules over a tribe? What kind of people live in tribes?

What power has a chief? What races live mostly in tribes?

How does a nation differ from a tribe? What races live mostly in nations? What is a nation?

How do men become rulers of nations?

What is a king? What is a queen? What do we call a nation having a king?

What is an empire? Who rules over an empire?

What is a republic?

Name one. What do we call the officer at the head of a republic? Who is now President of the United States?

What is a country? Where are its laws made? What does *capital* mean?

What is the capital of your own state? Who is now the governor?

What do we call the people of our nation? To what race do most of them belong? In what country do we live? Name the capital of the United States.



Dark-skinned women of the white race (Egypt)

# THE CONTINENTS

# NORTH AMERICA

NORTH TEMPERA

#### 59. Position

All of this continent is north of the equator. The southern part is in the torrid zone. There all the days are hot or warm.

The northern part is in the

frigid zone. It forms the shore of the cold Arc-

tic ocean.

The best part of the continent is in the temperate zone. This part is also the largest. Our home is here. We have hot summers and cold winters.

This continent has oceans on all sides except at the isthmus of Panama. This neck of land crosses to South America.

The east coast looks out upon the wide Atlantic ocean. It faces Europe and part of Africa. They lie far to the east.

The west coast fronts on the vast Pacific ocean. Far to the west lies Asia.

North America is one of three continents that form the shore of the cold Arctic ocean.

Helps: — What continents are in the New World? In which hemisphere are they? See page 42.

On which side of the equator is North America? Which part is in the torrid zone?

Which zone holds part of its cold north coast?

In which zone is the best part of North America? In which zone do we live?

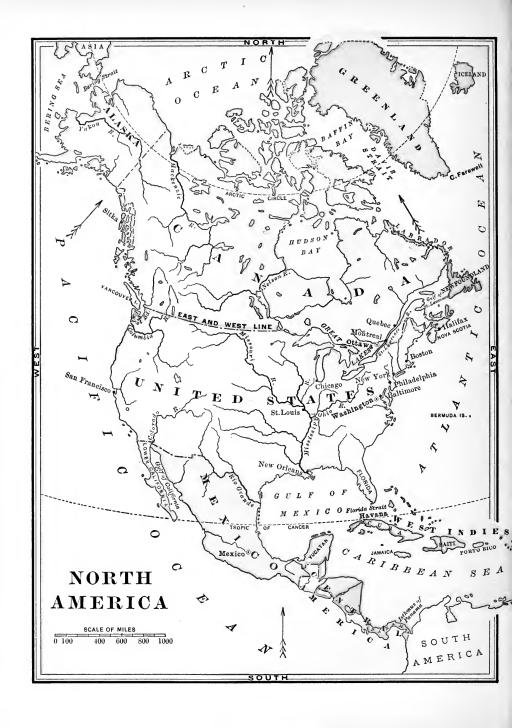
On which side of us is Europe? What ocean lies between Europe and North America? What continent is southeast of North America?

What ocean is west of us? Which continent is west of us? What does the isthmus of Panama join?

Which three continents partly circle round the Arctic?

### 60. Form and Seacoast

This continent has the form of a triangle or wide wedge. The top of the wedge is in the north. The cutting edge is in the south.



The coast is broken by large bays. Hudson bay bends far into the north coast. Baffin bay and Davis strait are two of many arms of the sea that cut off great islands. The largest is Greenland.

The gulf of St. Lawrence breaks the northeast coast. Nova Scotia

is south of this gulf.
The island of New-

foundland is in the mouth of

the gulf.

A wide arm of the sea reaches into the southeast coast. It is the gulf of Mexico. Florida and Yucatan partly inclose it.

Cuba and other is-

lands stretch far east from this gulf. These islands are the West Indies.

South of Cuba is the Caribbean sea. It reaches to South America.

The west coast of North America is not so broken. Here is the peninsula of Lower California. It partly shuts in the gulf of California.

In the far northwest is a vast peninsula. It is Alaska. The Arctic

ocean is on the north. The Pacific is on the south.

Bering sea and Bering strait lie between Alaska and Asia.

Bering sea is partly cut off from the Pacific ocean by the Aleutian islands. They are like steppingstones to Asia.

Helps: — What is the form of this continent? Which coast has the most islands?

Where is Hudson bay? Name a bay and a strait west of Greenland. Where is Iceland? Where is cape Farewell?

— Labrador? Where is the gulf of St. Lawrence?

What peninsula is

south of this gulf?
What island is in the mouth of the gulf?

Where is the gulf of Mexico? What two peninsulas partly inclose it? What islands are east of it?

What bounds the Caribbean sea on the north? — on the south?

Name a long peninsula on the west coast. What gulf is east of it?

Where is Alaska? What waters partly bound it?

Where is cape Prince of Wales? Where are the Aleutian islands? See page 94. Where is Vancouver island?

#### 61. Relief or Surface

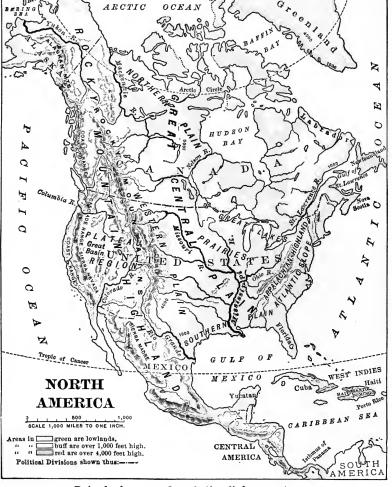
The western side of North America is high. A wide plateau,

This high and rough region is the Rocky Mountain highland. We may also call it the Western

highland. It has rich mines of gold, silver and copper.

Rugged mountains rise near the Pacific coast line. They are along the west side of the plateau. On the eastern side stand the Rocky mountains.

Some of the peaks in Alaska are very high. Here tower Mt. McKinley and Mt. St. Elias. The former



Raise leaf 73-74 and see both relief maps at once

or high plain, reaches far in from the west coast. Lofty mountains rise above it.

is the highest peak. Its top is nearly four miles up in the frosty air. See map on page 94.

Pikes peak is a noted peak in the Rocky mountains in our country. Farther west is Mt. Whitney. It is in the Sierra Nevada.

West of this highland a short slope runs to the sea. This is the Pacific slope.

East of the highland lies a great plain. It is the Great Central

plain. Often we speak of it as the Central plain. It reaches from the gulf of Mexico to the Arctic coast.

In the far north the bare plain is cold. Very little can grow there. The middle part of this plain has the best grain land in the world.

The part of the plain near the gulf is noted for cotton. This is the Southern plain. It is often called the Gulf coast plain.

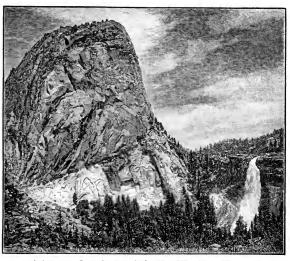
East of this great plain rise low ranges. They form the Eastern highland. The peaks are mostly low and rounded. They are not sharp and bare, like the Rocky mountains. This highland has rich mines of iron ore and coal.

The Eastern highland is also called the Appalachian highland. East of it is the Atlantic slope.

Helps: — Which side of North America is highest? In what direction do most of the ranges run? See the map. Name one great range.

What other name is given to the Western highland? What come from its mines?

Name two peaks in Alaska. In what range is Pikes peak? Where is Mt. Whitney? What short slope is west of

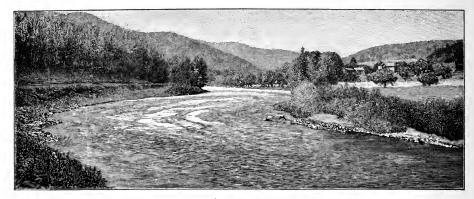


A bare and rocky peak in the Western highland

the Western highland? What lies east of the highland? What is said about the northern part of this plain?—about the middle part?—about the southern part? What is this part called?

What lies east of the Central plain? What other name has the Eastern highland? What is said about this highland?

Name some products of the Eastern highland. Where is the Atlantic slope?



A river flowing from the Eastern highland

#### 62. Size of the Continent

Two continents are larger than ours. Asia is more than twice as large. Europe is not quite half as large.

It takes swift trains four days and nights to go from New York to the Pacific coast.

The isthmus of Panama is not very far from the equator. The Arctic islands run far up towards the pole. This shows how long the continent is. It is partly in three zones. It reaches from the torrid zone into the north frigid.

Helps: — Name two continents larger than ours. How much larger is Asia? How much smaller is Europe?

How long does it take a swift train to go from east to west across North America? What shows how long our continent is? What wide zone does it cross?

#### 63. Rivers

A river is a large stream flowing over the land.

The land on which water lies is its *bed*. A river bed is under a river. A lake bed is under a lake.

Swift parts of rivers are rapids.

Water falling over a very steep place forms a waterfall.

The land along the sides of a river we call its *banks*. We must face down stream to name them. On the right is the right bank.

All rivers flow down slopes. The upper end of a river is its head or source. The lower end is its mouth.

Rivers have branches. A branch is also called a tributary. Every branch has a source. It may be a spring, a pond or a lake. A spring is water coming out of the ground.



Relief Map of North America. Scale 1 inch to 1000 miles

**Helps:** — What is a river? What is a river bed? — a lake bed? — an ocean bed?

Why are some rivers swift and others slow? What are rapids? What is a waterfall?

What is a river bank? Which is the left bank of a river? — the right bank?

What is the source or head of a river? Where is its mouth?

What is a branch? Name some of the sources of rivers. What is a spring?



## 64. River Basins

Often many small streams meet in a valley. Large ones also meet.

All the streams that meet in one valley form a *system*. A river

system has a main stream and branches. Here is a picture of a few of the rivers in one large system.

This is the Mississippi system. We shall study about it in the next lesson.

All the land that sends water to a river forms the basin of the river. A basin is made of slopes. The land slopes to the streams.

A river system

Every river system is in a basin.



The streams drain or carry the water away from the basin.

The next lesson is on *drainage*. We shall study how the rivers drain North America.

This continent has many large river basins. They are made , of the slopes.

The upper edges of the slopes are divides. They divide or part the rain for the basins.

Helps: — What is a river system? What is the basin of a river? What drains a river basin? What is a divide? Why do we give it this name?

<sup>1</sup> A divide may be called a watershed. A basin is also called a watershed.

## 65. Drainage

Find the Mississippi river on page 72. It has many branches. They are in the warm half of the Central plain. This is the southern half. The Mississippi drains this half of the plain.

This river flows to the south, into the gulf of Mexico. Its longest branch is the Missouri river. It

flows from the Rocky mountains.

Near the middle of the Central plain are many large lakes. They hold half the fresh water upon the earth. Five of them are called the Great Lakes. See map on page 72.

These lakes flow

into the St. Lawrence river. It runs to the gulf of St. Lawrence.

Part of the Central plain drains to Hudson bay. Farther north the rivers flow to the Arctic coast.

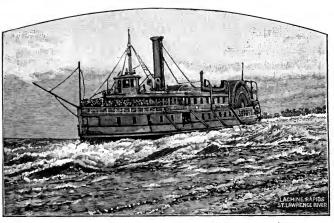
The rivers of the Atlantic slope are not very long, but they are of great value. Some turn mill wheels. Others form good harbors.

The Western highland sends a few large rivers to the Pacific

ocean. The Yukon is in the far north. It crosses Alaska.

The Columbia and Colorado rise in the Rocky mountains. They flow across the highland to the west coast. One flows to a gulf. The other flows to the ocean.

**Helps:** — Tell what you can about the Mississippi river. Which part of the Central plain does it drain?



Steamer going down rapids in the St. Lawrence river

Where does the Missouri river rise? Into what does it flow?

Where are the Great Lakes? What is said about them? To what gulf does the outlet of these lakes flow? Name the five Great Lakes.

What is said of the rivers in the northern half of the Central plain?

What is said about the rivers of the Atlantic slope? Where is the Yukon river? Name two other rivers that flow to the west coast. To what gulf does the Colorado river flow?

#### 66. Countries

This continent has three large countries. There are also a few small ones. See page 70.



Little village far north in Greenland

The largest is the country in which we live. We call it the United States. It has many states united in one country. Its capital is Washington.

The main part of this country is in the warm half of the temperate zone. Alaska, in the far north, also belongs to it. So also does Porto Rico, an island of the West Indies. This island is in the torrid zone.

The island of Cuba is a country. We shall read about other countries in the West Indies.

We shall also read of other islands far out in the Pacific ocean, that belong to our country. They are not in North America.

Canada is a large country north of us. Most of it is in the cold

half of the temperate zone. Part of it is in the frigid zone. Like our country, it reaches from the Atlantic ocean to the Pacific.

Greenland and Iceland belong to Denmark, a country of Europe. They may be called Danish America.

Mexico is south of our country. It is west of the

gulf of Mexico. The southern half of it is in the torrid zone.

Southeast of Mexico are six

small countries. They are in the torrid zone. This part of the continent is Central America.

Helps: — Name three large countries in North America. Which is the largest? In what zone is the main part of our country?

In what part of North America is the great city of



Water carrier, Mexico

New York?—Chicago?—Philadelphia?—St. Louis?—Boston?—Baltimore?
See page 70.

Where is Alaska? To what country does it belong? What is Danish Amer-

ica? Where is the great island of Greenland? — Iceland?

Name an island of the West Indies that belongs to our country. Name a country in the West Indies.

What country is north of us? In what zones is Canada? What oceans border on it?

Where is Mexico? In what zones is it? What is said about Central America?

### 67. People

The first white people in America came from Europe. They found here many red men, or Indians.

More than half the people of Mexico and the lands south of it are Indians.

Some red men live in the United States. Nearly all are west of the Mississippi river.

Many Indians live in tents. Some have houses made of wood or brick. Some Indians plant grain and tend cattle.

Indian boys run races, swim, play ball, hunt and fish in the streams.

Indian girls cook and work in the gardens. But they also find some time for play. They are very fond of dolls. Some Indians can use the rifle. Millions in South America use the bow and arrow or the blowgun. Helps: — What people first lived in America? Where did the white people



Indian mother and baby

come from? In what parts of North America do red men now live? Tell what you can about the Indians. What does this picture show about Indians?

Many Negroes were once slaves in North America. They were brought



Negro boy

from Africa. They are now free. Many of them live in the warm parts of the continent.

Nearly all the people of North America are white.

Girls of Mexico

They have great cities with tall houses. They have built many railroads. Their ships sail on all the oceans. Some raise wheat, corn,

cotton or other crops.
Others tend herds of cattle. We live in a land of busy people. More than has of

them live east of the Mississippi river.

Tribes of yellow people live in the far north. They are Eskimos. They hunt seals and catch fish in the cold ocean.

The girls in the picture below live in Mexico. They are sorting coffee berries, to put the best ones together. Their home is in a warm land. They need only light cotton cloth for clothing.

**Helps:** — Where did the black people of America come from? Why were they brought here?

To what race do most of the people of North America belong? Name some of the kinds of work done by white people.

Tell all you can about the Eskimos. See page 50. What does the Mexican picture below show?

## 68. Climate and Plants

Parts of North America are in three zones. The northern part is in the frigid zone. It is too cold for

fruits and grain. A few stunted trees grow there.

During the few warm weeks of summer the topsoil thaws. The wild flowers spring up quickly, but most of

the year all the ground is buried under snow.

In the far south the air is hot or warm all

the year.
This part
is in the torrid zone. It
has plenty of
rainfall, and
plants grow
almost everywhere.

Bananas, coffee and many other products are raised in the torrid zone.

Some of the trees yield pretty wood. It is used for making furniture.

Between the hot

zone and the cold zone lies the best zone of all. It is the temperate zone. It has the most people, the largest cities, the best farms, the most cattle. It is the zone we live in. It has hot summers and cold winters. It includes most of North America.

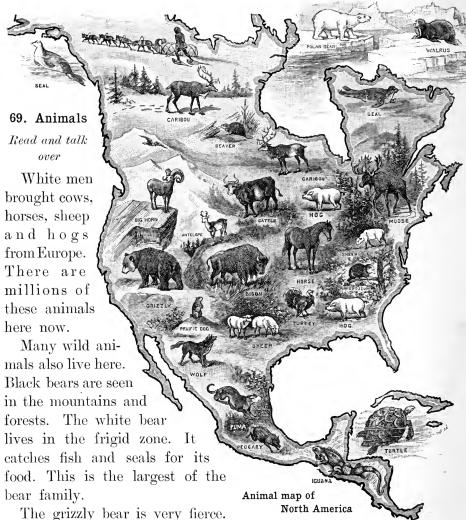
Helps:—In what zone is the northern part of this continent? Why cannot fruits or grain grow there? What can grow in parts of the frigid zone?

Which part of North America is in the torrid zone?

What seasons has this hot zone?

Why do many plants grow best in the torrid zone? Name some plants of the torrid zone in North America.

In which zone do we live? What seasons have we? Name some products that grow in our part of the country.



The grizzly bear is very fierce. It has long curved claws. Its home is in the Western highland.

There are many deer. They feed on grass and tender branches.

Years ago there were many bisons. Nearly all have been

killed. The bison is often called the buffalo.

Among the smaller animals are the wolf, fox, rabbit and squirrel.

Many fur animals live in the cold parts of the world.

# UNITED STATES

The

#### 70. Position and Size

Our country reaches east and west across the continent. Atlantic ocean is on the east. The broad Pacific is on the

The main part of our country is south of Canada. It reaches to Mexico and the gulf of Mexico.

west.

We trade with Europe and Africa by way of the Atlantic ocean. By way of Europe

come also some goods from Asia. Other goods come from Asia to our west shore.

Start from New York. Walk westward three miles an hour. Walk ten hours every day. Walk



White House, the home of the President of our country, in Washington

all summer. You would also need some of the days of autumn to reach the west coast.

It would take about half as long

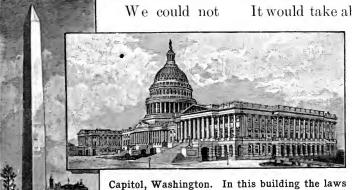
to walk north and south across our country.

Helps: - What ocean is east of this country? - west of it? What gulf is on the south? What lakes are on the north? pages 70 and 72.

What country is north of us? What country forms part

In what direction from this country is Europe?—northern Africa?—Asia? How far is it across our country?

of the south border?



of our nation are made. At the left is the Washington monument, the tallest stone monument in the world

think of the width of this great land. It is three thousand miles Let us think of a trip wide. across it.

#### 71. Form and Seacoast

Our country is four-sided. The north side is broken by the Great Lakes. The gulf of Mexico breaks the south side. See pages 94–95.

The west coast is not very broken. Near the middle of this coast is San Francisco bay.

The east coast is more broken. Cape Cod is a peninsula held out like a long arm. Southward many bays enter the coast. Among them are New York bay, Delaware bay, Chesapeake bay.

**Helps:** — What is the general form of this country? What breaks the coast?

Locate San Francisco bay; — cape Flattery; — cape Mendocino.

Where is Cape Cod peninsula? Where is Florida? Name three bays between them.

Where is Mobile bay? — Galveston bay? Cities of the same name are on these bays.

Where is cape May? — cape Hatteras? — cape Fear? — cape Canaveral? — cape Sable?

# 72. Western Highland and Pacific Slope

The Western highland is high and wide. It covers one third of this country. Many of its long ranges run nearly north and south.

The Rocky mountains are on the east side. The lofty peaks of this

range rise from a high plateau. Parts of this high plain are a mile or more above sea level.

The Western highland has rich mines. Here are some of the best gold, silver and copper mines in the world.

Two high ranges rise near the west coast. They are the Sierra Nevada and the Cascade range. The region west of them is the Pacific slope.

"Sierra" means a range looking like saw teeth. "Nevada" means snowy. A "eascade" is a little waterfall.

On the Pacific slope are many fertile valleys. Some are quite large.

The long valley of California is west of the Sierra Nevada. It is noted for wheat. It is drained by the Sacramento and San Joaquin rivers. They flow to San Francisco bay.

Low Coast ranges rise near the Pacific shore. They help to form the rich valleys.

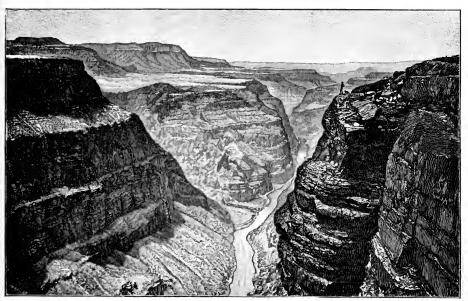
Two large rivers flow to the west coast. They are the Columbia and the Colorado. Both rise in the Rocky mountains.

The Columbia has a long branch from the east. It is called the Snake river. The two unite and reach the coast far in the northwest. The Colorado river flows to the gulf of California.

This river has cut a deep valley or canyon in rock. It is the *Colorado canyon*.

Some parts of the rocky wall rise over a mile above the river. The rocks have many colors. There are gray, brown, red, yellow, blue. A large part of this basin sends no river to the ocean. The small streams flow into salt lakes. We shall study more about them.

Helps: — Where is the Western highland? What is said about the Rocky mountains? What comes from mines in this highland?



Canyon made by the Colorado river. It is a mile deep. Find the man in the picture

West of the Rocky mountains is a wide dry region. It is the Great Basin. It is high and rough. It reaches to the Sierra Nevada.

Mountains on the west keep most of the rain from the Great Basin. Some rain falls. In places water is led from streams over the land. The soil is fertile and this water helps to make rich garden spots. What two high ranges are not far from the west coast? What does "Sierra Nevada" mean? What is a cascade? Can you think why the ranges took these names?

What is said about the valley of California?—about the Coast ranges?—the Columbia river?—the Colorado river?—the Colorado canyon?—the Great Basin?

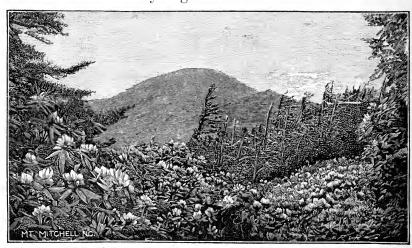
Where is Great Salt lake?

# 73. Eastern Highland and Atlantic Slope

The Eastern highland is also called the Appalachian highland. See map on page 72. It is long and narrow but not very high.

The northern part of this slope is narrow.

The coast has many great ports. They are on deep harbors. One of these is **New York**, at the mouth of the Hudson river.



Mt. Mitchell, the highest peak in the Eastern highland

The picture shows how parts of it look. It has low plateaus and rounded peaks.

This highland has plenty of rain. It is green with trees. Its rocks yield coal and iron.

The slope east of this highland is the Atlantic slope. Many short rivers flow down to the sea. Some are deep enough to float large vessels.

In the south this slope is part of the Southern plain. It has great fields of cotton. Some rocks are made of lime. Water may dissolve away the rock and make caves. Part of the roof of a cave may fall and part may stand like a rock bridge.

There are many such bridges in the world. One of the most noted is the Natural Bridge in Virginia. It is over two hundred feet high.

Helps: — Where is the Eastern highland? What coast is east of it? Which is the wider, the Eastern or the Western highland? Which is the higher? Name two useful minerals taken from the Eastern highland.

Where is the Atlantic slope? What is said about the rivers of this slope?

Name a product of the southern part of this slope.

What is said about the northern part of this slope? Where is New York? Tell about the Natural Bridge.

#### 74. Central Plain

The Central plain lies between the highlands. About half of it is in the United States. The other half is in Canada.

The part near the Arctic shore is very cold. Its soil is frozen nearly all the year. Plants spring up only during the few warm weeks of summer.

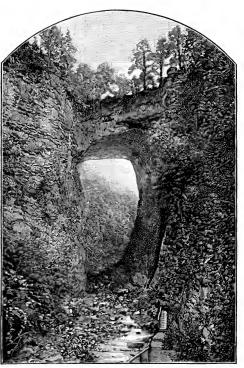
The part of the plain near the gulf of Mexico is the Southern plain. It is in the warm part of the temperate zone. It has plenty of rain.

This part of the plain is very fertile. It has the best cotton lands in the world. It also yields rice and sugar cane.

The Western plain is east of the Rocky mountains. It receives little rain. Some of the land is watered from streams. Good grass for cattle grows there.

The prairies are the richest grain lands in the world. They are south and west of the Great Lakes. The soil is rich and there is plenty of rain. Chicago is the largest city of the prairies. It is a great grain port.

**Helps:** — Where is the Central plain? In what two countries is it? Why do not many plants grow in the far north?



Natural Bridge in Virginia

Where is the Southern plain? In what zone is it? Name some of its products.

Where is the Western plain? What is said of its water supply? What grows there?

Where are the prairies? What is said of the rain and soil in the prairies?

Relief map of the United States

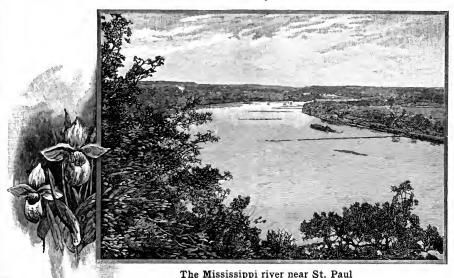
See the picture on page 14. It shows wheat cut on the prairies. The word "prairie" means meadow.

The Mississippi is the largest river of the Central plain. It has many long branches. From the west flow the Missouri, Arkansas

What is said about the Missouri-Mississippi river?

#### 75. Great Lakes

Five great bodies of fresh water are known as the Great Lakes. They are in a chain of valleys. Only small rivers flow into them.



The Mississippi river near St. Paul

and Red rivers to join it. Ohio river joins it from the east.

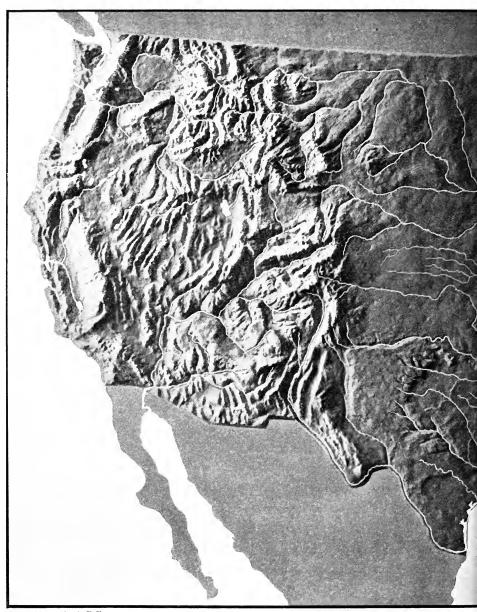
The river from the source of the Missouri to the gulf is often called the Missouri-Mississippi. It is the longest river in the world.

Helps: - What great river flows in the Central plain? In what mountains do the Missouri and Arkansas rivers rise? From what highland does the Ohio river flow?

The St. Lawrence river flows out of one of them. The map gives their names.

These lakes are in one of the richest regions of the earth. It has fields of wheat and corn. It has forests of hard and soft wood. It has grass lands and iron mines.

**Helps:** — Where are the Great Lakes? Name them. Name some of the products of the lands round the Great Lakes.



Copyright, 1895, by A. E. Frye



THE UNITED STATES

Steamers go from port to port on the lakes. They carry these products. Large cities have grown up near the lakes. **Chicago** is the lake to the lower. It is too swift for ships to sail on. Great canals have been built past the rapids in this river. One is known as the "Soo" canal. Steamers can now go from lake to lake.

The Niagara river flows from lake
Erie to lake Ontario. In one place
the river leaps over a cliff that

it has worn in the rock. The water falls into a deep gorge. The falls of Niagara are noted for their beauty.

The Welland canal takes ships from lake Erie to lake Ontario. This canal is not near the falls of Niagara.

The St. Lawrence river is the outlet of the five Great Lakes. Steamers can go down this river to the sea.

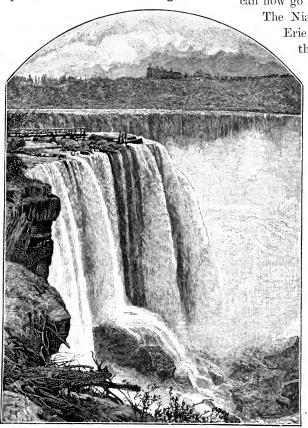
Helps: — Why are so many steamers needed on these lakes? Why have titles been built near lakes?

What is said about lake Superior? Of what use is the "Soo" canal?

Name a city on lake Michigan.

Where is the Niagara river? For what is it noted? How can ships go from lake Erie to lake Ontario?

Name the outlet of the Great Lakes. In what lake does it have its source? To what ocean do the Great Lakes send water?

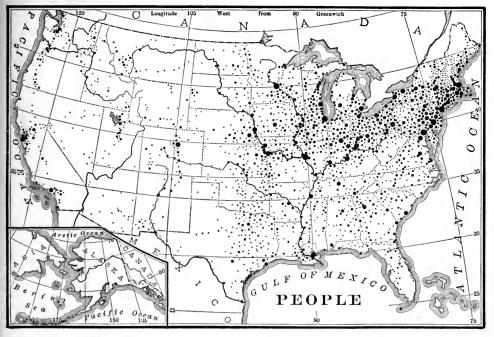


Falls of Niagara, in the Niagara river flowing out of lake Erie

largest lake port of the world. It is on the south shore of Michigan.

The Great Lakes are in wide and deep valleys. Lake Superior is the largest. It is higher than lake Huron.

A swift river flows from the upper



76. Climate

A Reading Lesson

By the word "climate" we mean the heat, rain and winds in any place.

The United States is in the temperate zone. The southern half has cool winters and hot summers.

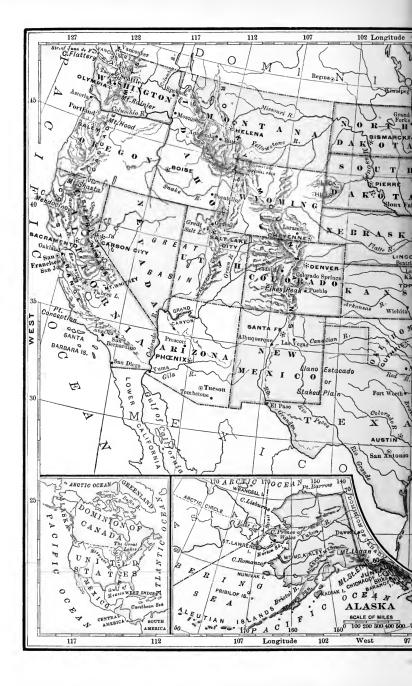
The northern half has four or five months of cold. Snow covers the ground in winter. Many of the rivers and small lakes freeze. The rest of the year is warm or hot. The eastern half of the country has plenty of rain. The Western plain and highland need more rain. The most rain falls near the shore of the gulf of Mexico. This is the Southern plain.

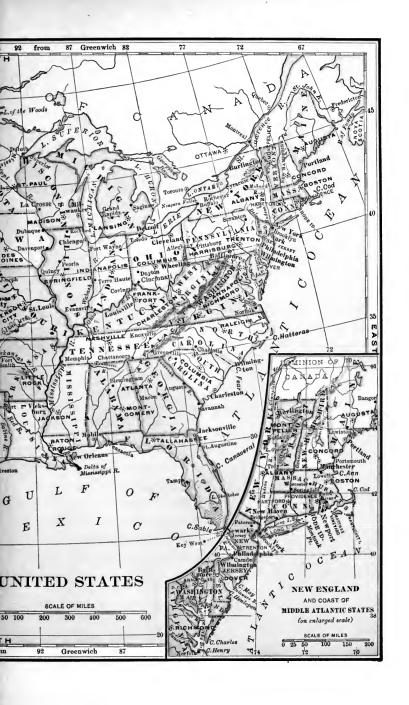
The dots on this map show cities and towns. The largest cities are shown by the largest dots.

We see that most of the great cities are in the northeast quarter of our country. The southeast quarter also has many.

The western half of the country has but few large cities.

Most of the people live where there is plenty of rain for farming. The rain also fills rivers that give water power.





# GROUPS OF STATES

# 77. How States Began

A Reading Lesson

When white people first came to our land they settled in groups or colonies. Many towns grew up. The people found it better for the colonies to be banded together. They could protect themselves from the Indians. They could build roads from town to town. They could make laws for trading. Thus many small colonies joined to make a few large ones.

The large colonies were later called *states*. At first there were thirteen. Now there are many more.

They call themselves the *United* States of America.

# 78. Five Groups of States

Some states side by side may have the same kind of surface. They may have mills on swift rivers. They may have the same kind of farms. They may raise cattle, or they may have mines.

This has led us to think of states in *groups*.

In the northeast corner of our country there is a group of six states. The first white settlers

were from England. They called the region New England. Group I on the map.

Our Atlantic coast is long. One group of states lies along the middle of this coast. They are the *Middle Atlantic states*. This group reaches from New York to Virginia. *Group II*.

West of this group lies a rich part of the Central plain. It includes the prairies. The states here are called the *Central states*. *Group III*.

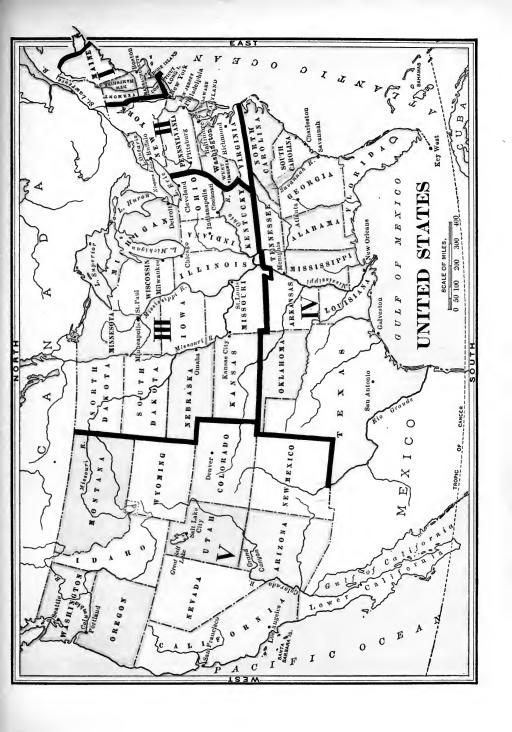
South of the Middle and Central groups are the *Southern states*. Some are on the Atlantic coast, but most of them slope to the gulf of Mexico. *Group IV*.

There is one more large group of states. They are in the Western highland. We may call them the Western states. Group V.

Alaska is far away by itself. So also are Porto Rico, Hawaii and the Philippine islands.

**Helps:** — Where is New England? Where are the Middle Atlantic states? Where are the Central states?

Locate the Southern states. What highland crosses the Western states? In which group of states do we live?



#### 79. Middle Atlantic States

The Eastern highland runs across this group of states. Its ranges are not very high. Long valleys lie between them. Most of these valleys are fertile.

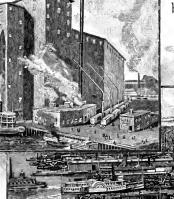
The Atlantic slope reaches from

The people raise grain and tobacco. Fruits and vegetables grow almost everywhere.

There are many cattle on the farms. Some of the people make butter and cheese. There are also many sheep.

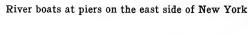
The mountains supply coal and some iron. Iron is also brought from other places.

There are many oil and gas wells. The iron and the fuel have led people to



Grain Elevator, Buffalo

the highland to the sea. The lowland lying along the coast is a plain. It is



narrow near New York, but wider in the south. West of the highland the land slopes to the prairies and the Great Lakes. This is shown by the rivers on the map.

These states have plenty of rain. The winters are cold and the summers are hot. build great mills and factories.

Fine clay is found in parts of the Atlantic slope. Some of it is made into dishes and fine pottery. The clay works at **Trenton** are well known.

The prairies are west of this group of states. Many of their

products are sent east to Europe. The handling of all the goods gives work to many people in the seaports.

It is now easy to see what kind of work the people do. They dig coal. They sink deep wells for oil and gas. They build great factories. They toil in the iron mills. They plant wheat and tobacco. They tend cattle and sheep. They raise fruits and vegetables. They work on railroads and canals. They help to ship goods to and from ports.

Helps:—What waters nearly separate New York state from Canada?

Which of the Middle Atlantic states border on the ocean? Which do not touch the ocean? See group II on page 97.

Which of the Great Lakes border on New York state? In what state is the Erie canal? What large island belongs to New York state? What sound or long shallow bay is north of it?

Name some farm products of these states. Name some of the animals. What are taken from the mines? What come from wells? Name three kinds of fuel in these states. Of what use are iron and fuel to a state? What is said about clay?

Tell all you can about the kinds of work the people in these states do.

# 80. Cities of the Middle Atlantic States

New York is the largest city in America. It is next in size to

London, the largest city in the world. See lessons 21 and 22.

**Buffalo** is at the eastern end of lake Erie. This city handles products of all the states round the Great Lakes.

Some of these products go east by water. Canal boats go from lake Erie to the Hudson river and down to the city of **New York**.



Boats on the Erie canal

Railroads also follow the canal and river to the same port.

It is easy to see why New York has grown. It is on the best route of trade. The largest ships can enter its deep harbor. **Brooklyn** is now a part of New York.

Helps: — Name the largest city in America. Tell all you can about it.

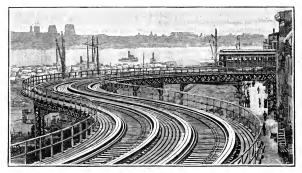
What is said about Buffalo? How are products sent east from Buffalo?

Why has New York grown to be such a large port? Review lessons 23, 31, and 32. What is said about Brooklyn?

This large port is at the mouth of the Hudson river. Steamboats go up this river to **Albany**.

Many steamship lines run from the Jersey City side of the harbor. Trains run in tunnels under the harbor to New York and Brooklyn.

Rochester and Syracuse are cities on the Erie canal route. Both cities are also railroad centers.



Where the cars run overhead

Falls in a river supply water power for flour mills in Rochester. Syracuse is well known for its salt works.

The mills and workshops of **Philadelphia** turn out almost every kind of iron and steel goods. This city ships coal to other places.

This is the third city in size in the country. It is on the Delaware river. Iron ships are built on the banks of this river. It flows into Delaware bay. Many sheep are raised in this group of states. Wool is sent to Philadelphia. There it is made into yarn and cloth. This city leads the world in making woolen carpets.

Pittsburg has the largest iron mills in the country. This city is near oil and gas wells and is within easy reach of coal mines. Thus it

has plenty of fuel.

In and near this city live many men who know how to work and shape iron goods.

Baltimore is a large port near the head of Chesapeake bay.

Railroads from the prairies carry grain to Baltimore. Some of it is

here ground to flour. Both grain and flour are shipped to Europe.

Chesapeake bay has the best oyster beds in the world. The oysters grow on the bottom of the bay. Men in boats gather them. Baltimore is a noted oyster market.

Washington is the capital of the United States. It is in the District of Columbia. This District belongs to the nation. It is not a state.

The President lives in Washington. The laws of the nation are



made here. The highest court in the land meets in this city.

Washington is noted for fine buildings. The largest is the Capitol. Here the nation's laws are made. See page 83.

This city is on the Potomac river, which flows into Chesapeake bay. Farther south the James river enters the same bay. The city of Richmond is on this river. Into what bay do the Potomac and James rivers flow? Name a city on each.

## 81. New England States

The New England states are east of New York state. They are in the northeast corner of the country.

The Eastern highland reaches into these states. Part of it is here called the White mountains.



Pretty home built of stone from a New England quarry

See page 95.
These mountains have many summer resorts.
The highest peak is Mt.
Washington,
These six states: have

Helps: — What states border on New York harbor? Where is Jersey City? What is said about it? Where is Albany? — Rochester? — Syracuse?

What states border on Delaware bay? Where is Philadelphia? Tell all you can about this city.

Where is Pittsburg? Give one reason for the growth of iron mills in this city. What states border on Chesapeake bay? What is said about Baltimore? Where are the best oyster beds in the world?

What is the capital of the United States? Where is it? Tell all you can about it.

plenty of rain. The summers are hot and the winters cold.

Helps: — Where are the New England states? See group I on page 97

Which of the New England states border on the Atlantic ocean? Which has no seacoast? Which border on the state of New York? Between what states is lake Champlain? See corner map on page 95.

What highland enters New England? Where are the White mountains? Name the highest peak in these states. What kind of climate has New England? New England is hilly land. Most of its soil is poor. Its rivers are swift and turn wheels for many mills. Years ago the wheels were turned wholly by water, but now steam is used also.

These states lead in making cotton and woolen cloth. They are also first in making boots and farms? Name four products in which these states take the lead.

What is said about paper and paper mills? Name two kinds of building stone found in New England.

## 82. Cities of New England

Boston is the largest city in New England. Its harbor is wide and deep. This city is one of the chief

> ports of the country. Many products from the West pass through this port to Europe. This great city



This ship is being built of wood; many ships are made of plates of iron

to ship away the many kinds of goods made in New England.

goods made in New England.

Boston buys more wool than
any other city in the country. It

is also a boot and shoe market.

Providence is noted for jewelry. Steamboats can go up the Connecticut river as far as Hartford.

Helps: — Where is Boston? What is said of its size? — its harbor? Name some goods that pass through this port.

What is said about Providence?— Hartford?—Portland?—New Haven?

shoes. The many workshops produce nearly all kinds of tools.

There are soft-wood forests in the northern row of states. Some of the wood is ground to pulp and made into paper. The largest paper mills in the country are here.

Quarries in these states yield marble and granite. Many fishing vessels sail from ports of New England.

**Helps:** — Can you tell why more New England people work in shops than on

#### 83. Central States

The Central states include most of the prairie regions. See group III on page 97. Most parts, except the far West, have plenty of rain. The summers are hot and the winters cold.

The eastern section of these states is south and west of the Great Lakes. It is east of the

Mississippi river, and the western section is west of the great river.

In the prairies is found some of the best grain land

in the world. Corn and wheat are the chief grains. Here are also rich grass lands, upon which millions of cattle and sheep feed. This is the best farm region on the earth.

Corn is the best food to fatten hogs. The corn lands are in the eastern half of the country. Most of the hogs are raised there.

The meat of hogs is pork. Find out what bacon and ham are. This country sends meat and grain to Europe.

The richest iron mines in the world are near lake Superior. Here also are very rich copper mines.

Helps: — What group of states is east of the Central states? Which of the Great Lakes are on the north?

Which states border on lake Michigan? Which border on the Ohio river? Which lie along the Mississippi river? Which states of this group are wholly or partly west of the Missouri river?



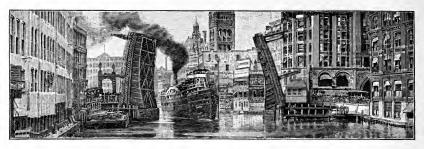
Cornfield in the Central plain

Through what river do the Great Lakes send their waters to the sea? To what gulf do the largest rivers of these states flow?

What rich farming region is mostly in the Central states? What is said about the rain and the seasons here?

Tell about the products of the Central states. What are the chief grains? Find out all you can about the uses of corn; — of wheat. Why are there so many hogs in the corn states? Of what use are the grass lands?

Where are the richest iron mines? What other mines are near by?



Lifting a bridge in Milwaukee, for a lake steamer to pass

There is soft coal under parts of the prairies. The states along the Ohio river have natural gas. The fuel and iron have led to the building of many mills.

Round the lakes are soft-wood forests. Hard-wood forests are found a little farther south. This country leads in making furniture. It is also noted for wagons and farm tools.

The Central states have good waterways. The Great Lakes form one of the best in the world. The map shows which states and cities can ship freight on the lakes.

The Mississippi and Ohio rivers are deep enough for large steamboats. Long lines of railroad also run over these states.

We have read about caves in rock made of lime. One of the most noted is Mammoth Cave. It is in Kentucky.

This cave is very large. It has many branches. If put in a line, they would

reach farther than you could walk in a week. The branches reach many miles.

Helps: — Where can these states get fuel? Why are there many iron mills in the cities?

What is said about forests? Can you think why wagons and farm tools are made in these states? Name some soft-wood trees; — hard-wood trees.

Of what use are the lakes and rivers in these states? Which of these states have ports on the Great Lakes? Name two rivers that are good waterways. How can products be sent where there are no lakes nor rivers? Of what use are railroads that run to ports?

Tell about Mammoth Cave.

## 84. Cities of the Central States

Chicago is near the southern end of lake Michigan. It is the second city in size in America.

Chicago is the chief lake port of the prairies. Here are brought all sorts of goods from farms, forests and mines. Such a city must grow very fast. Chicago leads all the cities of the world in many ways. It is the largest lake port. It is the greatest meat market. It ships the most wheat and corn. It makes the most steel rails. It has the most railroads.

This rich region has other lake ports. Their trade is not so large as that of Chicago. Among the largest are Cleveland, Milwaukee and Detroit.

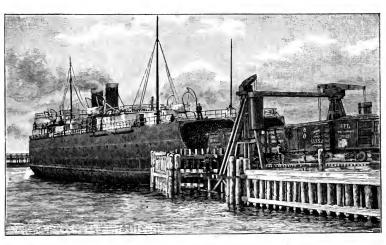
The latter is on a river that joins two of the lakes.

There are

also large river ports in the prairies. The largest is St. Louis. It is on the Mississippi to reach them. Kansas City and Indianapolis are good examples.

Minneapolis is within easy reach of wheat fields. It has fine water power. Streams from large forests flow to it. This city is a great flour and lumber market.

Close by is the city of St. Paul. Rail and water routes make it a trade center. Steamboats can go from this city to the gulf of Mexico.



Great boat to carry trains of cars across lake Michigan

river. Boats trade up and down the river. Trains from St. Louis reach far and wide.

**Cincinnati** is a river port and railroad center.

Railroads run from some cities like spokes from a hub. Such cities are good trade centers. It is easy Helps: — Where is Chicago? Tell all you can about it. On what lakes would a vessel sail in going from Chicago to Buffalo? What freight might it carry?

What is said about St. Louis? Name a port on the Ohio river.

What helps to make Kansas City and Indianapolis grow? Tell what you can about Minneapolis;—St. Paul.

#### 85. Southern States

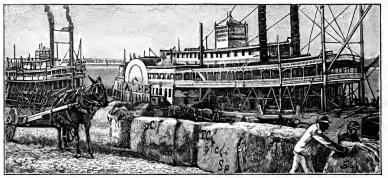
These states are mostly in the Southern plain. See group IV on page 97. They reach east to the ocean and west to the mountains.

The Southern states have plenty of rain. The winters are short and cool. The summers are long and hot.

Cotton is the leading crop in these states. Part is made into Peaches, pears and other fruits thrive in parts of these states. Sweet oranges grow well in Florida. Many early vegetables are raised for northern cities.

Rice grows in the wet lands near many of the rivers. The rich lands near the lower Mississippi are noted for rice. Sugar cane thrives in the same region and in other river valleys farther west.

Corn and wheat are raised in many parts of all these states. Forests of long-leaf pine grow on the Southern plain. Lumber and the



Loading cotton at Memphis. Steamboats on the Mississippi river

cloth in cities near the cotton fields. Much more is sent to northern cities and to Europe.

Cotton grows in warm lands. It needs plenty of rain. The best cotton lands in the world are in the Southern states.

We have read about making cotton cloth. The cotton seeds yield a useful oil. The part left after taking out the oil is used to fatten cattle. It is called "oil cake." gum rosin are leading products.

There are iron and coal mines in the southern part of the Eastern highland. Iron mills have been built near the mines.

This long list of products shows what the people of the South do. They work in the cotton fields. They weave cotton cloth. They press oil from cotton seed. They take care of fruit trees. They plant the rice fields. They raise

sugar cane and make sugar. They raise corn and wheat. They feed cattle. They cut down trees and saw lumber. They make tar and rosin out of the sap of pine trees. They dig iron ore and coal. They work in iron mills. They work on railroads and ships.

Helps:—Name the Southern states along the Atlantic ocean. What strait

is between Florida and Cuba? Name the states along the gulf of Mexico. See page 95.

Which of the Southern states are on the banks of the Mississippi? Which have no seacoast? What river is between Texas and Mexico?

How does the climate of these states differ from that of the Northern states?

What is the leading crop in the South? Tell all you can about cotton. Where is the cotton used? Name two kinds of fruit that grow here. Name a product of the wet lands. What products grow near the Mississippi river?

Rice is a grain. Name two other grains that grow in these states. Tell what you can about the long-leaf pine.

What are mined in the Eastern highland? Tell all you can about the work the people in these states do.

## 86. Cities of the Southern States

New Orleans is the chief city of the South. It is on the Mississippi river. This city is the leading market for cotton. Its trade in rice and sugar also is large. Railroads run to New Orleans. Steamers from the ocean reach its wharves.

Galveston is the chief port on the gulf of Mexico. It ships cotton and grain.

**Memphis** is a cotton market. It is on the eastern bluffs of the



Picking cotton on the warm Southern plain

Mississippi river. Its river trade is very large. Much of the cotton is sent by rail to eastern cities.

Atlanta is a railroad center. It is a market for products of the South. Large cotton mills have been built in this busy city.

Savannah is a port at the mouth of the river of the same name. It takes high rank in the export of rosin, cotton and rice.

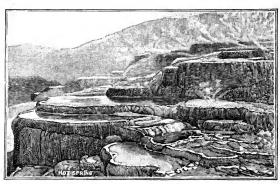
Helps: — What and where is the largest city? Tell all you can about New Orleans. What is said about Galveston? — about Memphis? Why has Atlanta become a great market? What is said about Savannah?

#### 87. Western States

These states are mostly in the Western highland. See group V on page 97.

This group has very rich mines of gold, silver and copper.

The plains east of the mountains support many cattle. Sheep and cattle are also found in parts of the highland.



Hot springs in Yellowstone park

The valleys west of the Sierra Nevada and Cascade ranges raise wheat and fruits. Fine oranges grow in California.

The west slope of these ranges yields lumber. There are many great sawmills near Puget sound.

There is a wide plateau between the Rocky mountains and the Sierra Nevada. This region is known as the *Great Basin*.

The Great Basin is not thickly settled. Very little rain falls there.

A large part of the basin sends no river to the ocean.

There is salt in nearly all soil. Rain water washes it out and carries some of it to rivers. There is not enough to make the river water taste salt.

Some rivers flow into lakes and carry the salt with them. If rivers flow out of the lakes, they earry the salt with them. If no river flows out, the salt is left there. After many years such lakes

become salt.

Find Great Salt lake on the map. No river flows out of this lake and its water is very salt.

Salt Lake City is not far from this lake. The fields near it are watered by streams from the mountains and are fertile.

The scenery in parts of the Western highland is grand. There are deep gorges or canyons worn by water in solid rock. There are high cliffs, waterfalls

and many rugged peaks.

Each year many people go to California to see the Yosemite valley. It is on the west slope of the Sierra Nevada. It looks as if the rocks had split in two and let the bottom drop down. In one place a stream leaps far down into the valley. See page 110.

This same state has many of the largest trees in the world. Some are so large that fifteen boys joining hands can hardly reach round one of them. These are the "big trees" of California.

Find the Yellowstone park on the map. See page 94. This great park is

in the Rocky mountains. It has deep canyons and high falls.

In places hot water spouts high into the air. Such hot spouting springs are geysers. If hot water does not spout, but only rises in a basin, it forms a hot spring.

Helps: — Where are the Western states? Which states are crossed by the Rocky mountains? Which border on the Pacific ocean? Which are next to Canada? Which lie along the border on Mexico?

Name two states in the Great Basin. In which is Great Salt lake? Name a city near it.

Name three mining products of these states. What is said about cattle and sheep? — wheat and fruits? — lumber?

Tell what you can about the Great Basin;—about salt lakes. Where is Salt Lake City?

What is said about the Yosemite valley?—the "big trees" of California?—Yellowstone park?

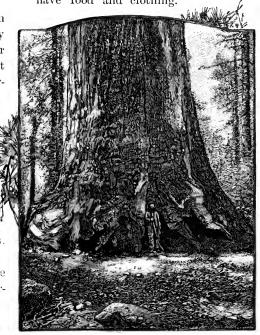
## 88. Cities of the Western States

Denver is east of the Rocky mountains. It sells supplies to mining towns. This city has also a large trade with cattle ranches on the plains.

Pikes peak is not far from Denver. A railway goes to the top of this peak.

This high point can be seen from far away in the plain on the east. Round it rise many other peaks, but not so high. Miners need picks and shovels. They must have also drills and hammers. Some of the mines use engines for pumping water or for hoisting.

The miners need houses and all that goes to fit them for homes. They must have food and clothing.



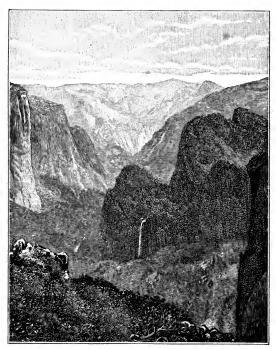
A "big tree" of California. Find the man

They use powder for blasting hard rocks. Denver sells many such articles.

The long valley of the Pacific slope yields much wheat. This region has good grazing lands. The mountains supply lumber.

Helps: — Tell what supplies miners need. What is said about Denver? — about Pikes peak? Name some products of the Pacific slope.

San Francisco is the largest city on the Pacific coast. It has one of the best harbors in the world. A large foreign trade, as well as coast trade, goes through this port.



Yosemite valley, in the Sierra Nevada

Los Angeles is growing rapidly. It is the largest city in southern California. Seattle is the chief port on Puget sound. See page 70.

**Portland** is a large port on a branch of the Columbia river.

Helps: — Where is San Francisco? What is said about it? What is said about Portland? Where is Seattle?

#### 89. Alaska

Alaska belongs to the United States. This land is in the far northwest end of North America. Part of it is in the frigid zone.

The winters are very long and cold. The southern coast is the warmest part.

The river Yukon flows to the southwest, across Alaska. This is a very large river. Alaska has forests, but is too cold for grains.

Many seals are killed on islands in Bering sea. Furs are made from their skins. The waters of Alaska have many fish.

Gold is found in some parts of Alaska.

Alaska has about as many white people as Indians and Eskimos. The whole number is small.

Helps: — Where is Alaska?

See map on page 70. To what country does it belong? Where is Bering sea?

— Bering strait?

In what two zones is Alaska? See map on page 49. What is said about the seasons? What great river flows across Alaska?

Name some products of waters near Alaska. Why will grain not grow there? What is said about the people?

#### 90. Hawaii 1

Hawaii is the name of a group of islands. They are far out in the Pacific ocean, in the torrid zone. They have a wet season and a dry season. These islands belong to the United States. See page 42.

Sugar and rice are two leading products. There are also bananas,

oranges and other kinds of fruit.

Honolulu is the chief city. It is on a deep harbor. Steamers carry sugar and other products to San

Francisco.

The natives belong to the brown

race, but there are more yellow people than brown people in the islands. The yellow people are from Japan and China. The number of white people is not large.

Helps: — Where is
Hawaii? In what zone?
To what country do these
islands belong? Name the chief products of Hawaii.



Inside an Eskimo hut. What toy does the boy wish?

What is said about Honolulu? Tell what you can about the people.

## 91. Philippine Islands

The Philippine Islands are under the care of the United States.  $\,$ 

They are far across the Pacific ocean, near Asia.

See page 139.

These islands are in the torrid zone. There is no winter, but there is a dry season and a rainy season.

Helps: — Where are the Philippine islands? Under the care of what

country are they? In which zone are these islands? What is said about the seasons in the Philippines?

Native brown girls of Hawaii

<sup>&</sup>lt;sup>1</sup> Also known as the Sandwich islands.

Tobacco, sugar and hemp are leading products. The hemp is a fiber from leaves of a kind of



People of the Philippines

plant like a banana. The fiber is used in ropes.

Most of the people belong to the brown race. In most of the cities

and towns there are some white people and Chinese. Little black people live in the mountains. Manila is the largest city. It is on a large and deep harbor.

Helps:— Name two leading products. For what is the hemp used?

Tell what you can about the people on these islands. See the picture of the Filipino homes on page 51. The pictures on this page show people of two of the many groups or tribes.



Mother and child in the Philippines

Name the largest Philippine seaport.

## WEST INDIES, CANADA, MEXICO

## 92. West Indies

WEST INDIES is the name of a group of islands. They are southeast of the United States.

Nearly all these islands are in the torrid zone. Summer is the rainy season. They produce sugar cane, tobacco and fruits.

Cuba, Haiti, Porto Rico and Jamaica are the chief islands. Porto Rico belongs to the United States.

Most of the people in Cuba and Porto Rico are white, but there are many negroes. Havana is the chief port of Cuba. It is noted for cigars and tobacco. It is also a great sugar market.

San Juan is the largest city of Porto Rico.

Helps: — Where are the West Indies? In what zone are they? Name some products. Name four of the islands. Which island belongs to our country?

What is said about the people of Cuba and Porto Rico?

Tell what you can about Havana. Where is San Juan?

#### 93. Canada

Canada is almost as large as the United States. The Western highland and Central plain cross both. Each has a low Eastern highland and Atlantic slope.

Canada is in the cold half of the temperate zone. The United States is in the warm half.

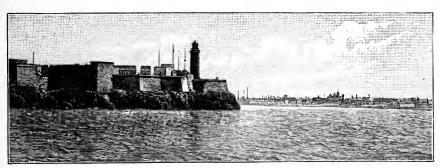
Most of the rivers of the Central

Nearly all the useful products of Canada come from the southern part.

Montreal is on the St. Lawrence. This is the largest port in Canada.

**Helps:** — Tell in what ways Canada and the United States are alike. In what do they differ?

Which of these two countries has the colder seasons? Which part of Canada



Old fort and lighthouse at the mouth of Havana harbor

plain of Canada flow into cold seas of the far north.

A large part of the Central plain in our country is fertile. A smaller part of the plain in Canada is rich wheat land. The rest is too cold for grain.

Both countries have gold mines in the Western highland. Both have iron mines near lake Superior. Both raise many cattle. Both have large forests near the Great Lakes. is very cold? Name some of the products of Canada. From which part of Canada do nearly all the products come?

Name a port on the St. Lawrence river. See map on page 70.

## 94. Mexico and Central America

Mexico is mostly in the Western highland. Part of it is in the torrid zone. The other part is in the temperate zone. The summers on the plateau are not very hot. The coast lands are hot and damp.

On the plateau there is good land. The people raise coffee, cotton and sugar cane. Many cattle feed on the grass lands. Mexico has rich mines of silver.

Millions of Indians and white people live in Mexico. Many of the Indians live just as the white people do. Most of the people are on the plateau.

Mexico is the chief city. Railroads connect it with cities in the United States.

Southeast of Mexico are six small countries. They form Central America. These countries are in the torrid zone. Most of the people are Indians, but there are some white people.

The United States is digging a canal across the Isthmus of Panama. Ships will pass through it from ocean to ocean.

Helps: — What country is north of Mexico? In what zones is Mexico? What is said of its seasons? — its products?

To what two races do nearly all the people of Mexico belong?

Tell what you can about the city of Mexico. Where is Central America? How many countries are there in it? In what zone are they? What is said of their people?

Where is the isthmus of Panama? Of what use will the Panama canal be?



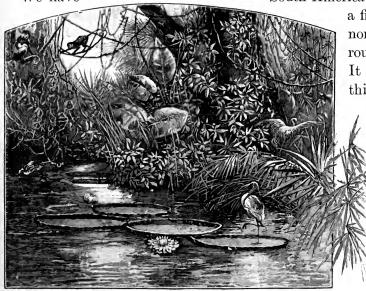
One of the poorer families of Mexico, and their outdoor oven

### SOUTH AMERICA

#### 95. The Continent

A line due south from New York city crosses many peaks in the western part of South America.

We have



Scene on the Amazon. Storks and lily pads

learned that the two Americas are alike in many ways. Their highest land is near the west side. They have low eastern highlands and wide central plains.

North America is the larger and its coast is the more broken by bays. It also has many more islands than South America.

South America lies between the Atlantic and Pacific oceans. Far to the east lies Africa. These lands are partly in the hot zone.

South America reaches nearly

a fifth of the way north and south round the earth. It is about two thirds as wide as

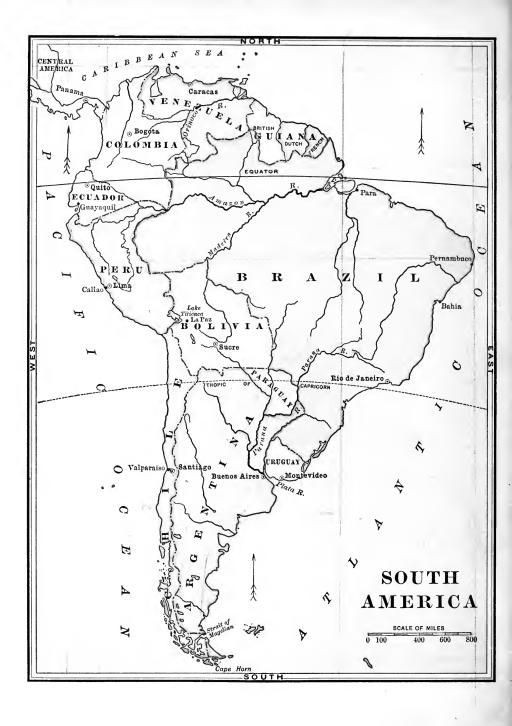
it is long.

The great highland all along the west side of South America is the Andes highland. It has many lofty snow-capped ranges.

The great Amazon river rises in this highland. It flows east.

Helps: — Review lesson 43 on page 52. Tell how North and South America are alike. In what ways are they not alike? Which is the larger? Which has the more bays? — the more islands? What zone is partly in both continents?

How long is South America? What shows that the Andes are very high?





Relief map of South America. Scale 1 inch to 1000 miles

Helps: — What ocean is east and north of this continent? What other continents border upon this ocean? — on the Pacific ocean?

What does the isthmus of Panama unite? Between what bodies of water does this isthmus rise?

Where is the Andes highland? What does the map show about it?—about the highland of Brazil?

What do the maps show you about the Amazon river and its valley or basin? — the Plata river and basin? — the Orinoco river and basin? The Amazon carries more water than any other river. It flows in

the largest valley on the earth.

Forests cover a large part of this valley. They are the *selvas*, and the name means *forests*.

Southeast of this valley rises the highland of Brazil. It is wide but not very high. It reaches far inland from the east coast.

Large rivers flow south in this central plain. They join the wide Plata river. Parts of the valley of this river are grassy plains.

Find the Orinoco river on the map. This river flows in a long valley. There are large grassy plains along this river. Millions of cattle feed in the grass lands of South America.

The relief map shows a low highland near the northeast coast. It is the highland of Guiana. Helps: — Tell what you can about the Amazon river. What are the selvas?

What is said about the highland of

Brazil?

Where is the Plata river? What is said about the valley

of this river? Where is the Orinoco river?
What is said about

the valley of

this

river?
Where
is the
highland
of Guiana? By
which seacoast is

96. Plants and Animals

this highland?

Most of this continent is in the hot zone. Part runs far south into the cool zone.

Rubber trees grow in the valley of the Amazon. The rubber is the dried sap of the trees. It is used in making many things, such as shoes, coats and tires.

Cacao beans grow in South America. Chocolate is made from the beans. Coffee, sugar cane and pepper grow in the hot parts of this continent. See the plant map. In all the grass lands are millions of cattle, sheep and horses.

Helps:—In what zones is this

continent? Tell what you can

The fertile lands of the Plata valley are like the prairies. Both have rich soil. Both are in the cool zone. Both yield wheat and corn. Both have many cattle and sheep.

The condor, llama and alpaca live in the high Andes. The condor is the largest bird that flies.

The llama carries loads of goods on its back. The wool of the alpaca is made into cloth.

This land has many parrots and monkeys. Great snakes also are found here. Can you find in the picture an animal that looks like a large cat? It belongs to the cat family.

Look at the feet of the anteater. The long claws tear open the nests of ants. The sticky tongue licks them up. The tapir feeds on buds and leaves.

ANTENTED

ADMADILLS

ADMADILLS

ADMADILLS

ADMADILLS

ADMADILLS

ADMADILLS

Continent.

In what

ways are the

Plata valley and
the prairies in our
country alike? Name
some products that grow
in both. What useful ani-

Name the largest bird that flies. Find a large bird on page 149. The ostrich runs fast but it cannot fly. The rhea in this picture looks like an ostrich and is very large, but it can only run.

America?

mals are raised in South

Name some animals that live in the Andes. Of what use are they?

In what family is the jaguar? Tell what you can about the anteater; — the tapir. Of what use are the grass lands?

Indian of South America

## 97. People

People of three races live in South America. They are the red, the white and the black.

Black people were carried there as slaves. Now they are all free. They live in the towns and cities.

The white people first went to this land after Columbus found America. Now the white people live in all the countries. They have built large cities. Most of them are near the coast, where they

can trade with other lands.

The white men found millions of red men in this continent. Nearly all of them are in the hot zone.

Most of the Indi-

ans of the low Amazon valley are savages. They fish in the rivers and hunt in the forests. Can you tell what wild animals they see?

The red men of the high Andes had cities before the white men came. Some of the houses and bridges were made of stone. Many of the Indians now work in the rich silver mines of the Andes.

**Helps:** — What three races of people are found in South America? Why were black men carried there?

What is said about white people in this land? Why have they built cities near the coast?

What people were in South America before the white men? What is said about the red men of the Amazon valley? What is said about the red men of the high Andes?

### 98. Countries and Cities

COLOMBIA is at the north end of the Andes. Bogota is its leading city.

> The chief city of each country in the Andes is built in the

> > mountains. The low coast lands have fevers.

ECHADOR means equator. It is so named because this

little country is under the equator.

The city of Quito is in a high valley in sight of many large and smoking volcanoes.

Peru and Bolivia are in the middle Andes. Lake Titicaca is between them. It is over two miles high. In lesson 97 we read about the red men who built cities. They lived near this lake.

Lima is the chief city of Peru. port is Rio de Janeiro. This city La Paz is the largest city of Bohas a large and deep harbor.

livia. Both cities are far up in the highland.

CHILI is a long country west of the Andes. Santiago is its main city. It is in the highland. Val-



A grass boat on lake Titicaca

Guiana consists of three little countries along the north coast. They ship sugar, pepper and other spices.

Venezuela is on the north

coast. Its chief city is Caracas.

paraiso is its seaport on the Pacific.

Argentina is east of Chili. It
is the country of the Plata valley,

is the country of the Plata valley, with soil and products like our prairies. Its great port is **Buenos** Aires. This is the largest city in

South America, but it is only one fourth as large as the city of New York. Buenos Aires ships grain, meat and wool.

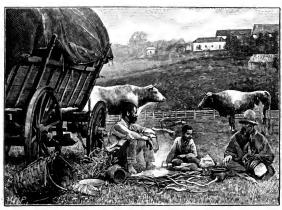
URUGUAY and PARAGUAY are small countries.

Montevideo is a port by the mouth of the Platariver. This city is the chief port of Uruguay.

Brazil is the largest country of South America.

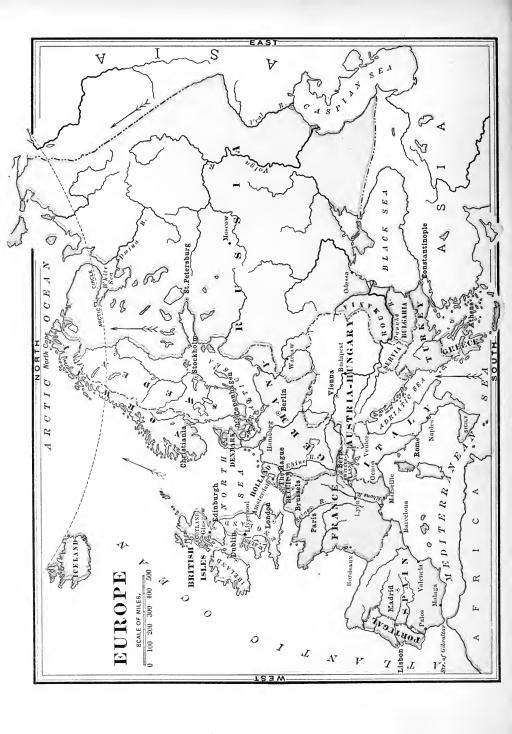
It contains most of the Amazon valley. Para, near the mouth of the Amazon, ships rubber. Brazil is noted for coffee. Its leading

Helps:—Locate these countries and tell what you can about each: Colombia; Ecuador; Peru; Bolivia; Chili; Argentina; Uruguay; Paraguay; Brazil; the three Guianas (page 116); Venezuela.



Scene in southern Brazil

Locate these cities and tell what you can about each: Bogota; Quito; Lima; La Paz; Santiago; Valparaiso; Buenos Aires; Montevideo; Rio de Janeiro; Para; Caracas.





Relief map of Europe (extra size). The scale map is on the next page

#### EUROPE

#### 99. The Continent

Europe is west of Asia. It is not one fourth as large as Asia.

In many ways the two lands

In many ways the two lands are alike. Both border on the Arctic ocean. Great bays enter

The larger part of both these lands is in the temperate zone. It is between the hot and the cold zones.

The south of Europe has many mountains, but they are not as

high as those in Asia.

The Alps are high. Some of the peaks are buried in snow. There are many pretty lakes and falls among the ranges.

More than one half of Europe is a plain. This is part of the same plain that crosses Asia.



Relief map of Europe. Scale 1 inch to 1000 miles

their coasts. Each has three large peninsulas on the south coast.

The islands of Japan are east of Asia. The British Isles (or Islands) are west of Europe.

A great plain crosses the northern part of both these continents. The mountains are nearer the south coast than the north.

Noted rivers flow from the Alps. The Danube river runs to the Black sea. The Rhine runs to the North sea. The Rhone flows to the long Mediterranean sea.

There are long rivers in the plain. The longest is the Volga. It flows to the Caspian sea. This sea has no outlet and is salt.

**Helps:**—Where is Europe? What is said of its size?

Review lesson 44 on page 54. Name six ways in which Europe is like Asia.

Which part of each has a large plain? Which part has mountains? Where are the Alps? What is said about them?

Name three rivers that flow from the Alps. To what sea does the Danube flow? — the Rhine? — the Rhone?

Name the longest river in the plain of Europe. To what sea does it run?

# 100. Heat, Rain and Plants

Only a small part of Europe is in the cold zone. No part is in the hot zone.

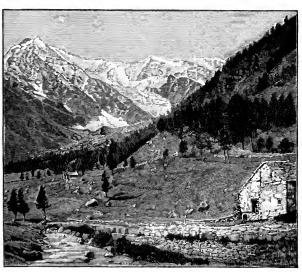
Most of it is between the two.

The north coast is very cold.

As we come south the land grows warmer. Most of the plain has

hot days half the year. The other half of the year is very cold.

The shores of the Mediterranean



Snow-capped peaks of the Alps

sea are warm. Most parts of Europe have plenty of rain, and there are many trees. In the plain are large fields of grain. Grass for cattle and sheep grows here.



Scene on the plain in Holland, a noted dairy country

Helps: — Which part of Europe is in the cold zone? In what zone is all the rest of Europe?

Which part of the plain is warmest? Where is the warmest part of Europe?

What is said about rain? Name some products of the plain of Europe. Europe makes sugar from the juice of beets. The mulberry grows in the warm lands of the south coast. The people make silk cloth.

them. People unwind the cocoons. The fibers are made into silk thread and cloth.

Grapes, oranges and other fruits also grow in the warm lands.
Raisins are dried grapes.

Look for the silkworm in the The juice of grapes is picture. It is in the warm part of Europe. It feeds on the leaves of the mulberry tree. Do you see the moth? The moth lays eggs. A tiny silk worm comes from each egg. The worms grow large, as they feed. Plant map of Europe made into wine in the warm parts of Europe.

After a time the worms roll soft silk round their bodies. The rolls of silk are cocoons. See page 136.

A long time passes. The worms in the silk change to moths. Wings grow on Helps: — From what is sugar made? Of what use is the mulberry tree? Tell all you can about the silkworm and silk.

Name two fruits of Europe. Of what use are grapes?

#### 101. Animals

The white bear is found along the Arctic coast. It feeds on seals and fish. This bear can swim. drags sleds over the frozen ground. It runs very fast. The people eat its flesh and drink its milk.

The chamois and ibex live in



Many sea birds build nests on the cold Arctic shore. As winter comes on they fly south.

The reindeer is the most useful animal near the cold shore. It

the mountains. The skin of the chamois makes soft leather.

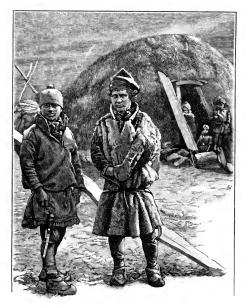
Helps: — What is said about the white bear? — Arctic birds? — reindeer? — ibex and chamois?

## 102. People

Yellow people live in the parts of Europe near Asia. Most of them are near the Volga and Danube rivers. Long ago the yellow people came from Asia.

A few yellow people live in the north of Europe. They live in a cold land. The picture below shows one of their huts. It is made of earth to shut out the cold air. These people keep many reindeer.

The picture on page 1 shows two white boys of Norway.



These yellow people live in the far north of Europe where it is very cold. See their heavy clothing

The earliest white people to settle in the United States came long ago from Europe. The people of the two lands have the same kinds of mills. They make the same kinds of things.



Nearly all the Spanish boy people of Europe are white. They have large cities. They build great houses.

These people have many ships on the ocean. Some of them go to America for goods.

Helps:—Near what two rivers of Europe do many yellow people live? In what other part of Europe are yellow people found? What is said about them?

Where did the first white people in the United States go from?

What is said about the white people of Europe?

### 103. British Isles

THE BRITISH ISLES are west of Europe. There are two large islands and some small ones. The largest is Great Britain. Ireland is next in size.

Great Britain consists of England, Scotland and Wales. The people are English, Scotch and Welsh. Ireland is the home of

the Irish people. We speak of all as the British nation. They belong to the white race.

The British people rule in many foreign lands. They rule in Canada,

India and far-off Australia.

The British people have the largest cloth mills in the world. They have also iron and coal mines. The people build many iron ships.

The British also make many kinds of iron goods.

London is in England. Find it on the map. It is the largest city in all the world. New York ranks second.

Liverpool is a great port near the



Highlander

west coast of England. A large part of its trade is with our country.

> Edinburgh and Glasgow are large cities of Scotland. Glasgow makes more iron ships than any other

city in the world.

Dublin is the chief city of Ireland.

Helps: — Where are the British Isles?

Name the four groups of people in the British Isles. Which do you think live in England? - in

Scotland? — in Ireland? — in Wales?

Name some lands that the British rule. Where is Canada?— India? — Australia?

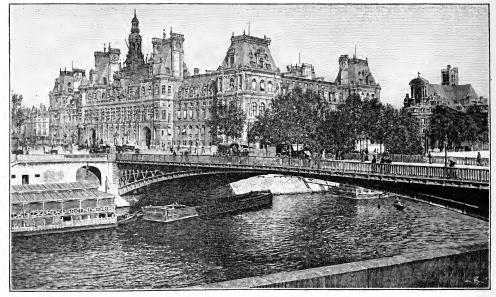
What is said about the British mills? about ships?

Name the largest city in the world. Where is it? Where is Liverpool? What is said about it?

Name two cities of Scotland. For what is Glasgow noted? Where is Dublin?



Westminster Abbev



The Seine river in Paris. Many beautiful bridges are built across this river

## 104. Middle Europe

HOLLAND, BELGIUM and DENMARK are small countries east of the British Isles. The people of Denmark are the Danes. Their chief city is Copenhagen.

Holland people are called Dutch. Their largest city is Amsterdam. The Dutch own Java and Sumatra. These are islands southeast of Asia.

Holland is also called Netherlands. The word means low lands.

These are the lands of dikes and windmills. See page 125.

Brussels, noted for carpets, is the chief city of Belgium. France is south of England. The French people make silks, laces and many other pretty things.

Paris is the chief city of France. It is next to New York in size.

Paris is noted for its beautiful buildings. Some of them are filled with paintings and marble statues.

Lyon, by the Rhone river, makes more silks than any other city.

Germany is the home of the Germans. It is northeast of France.

Germany is one of the greatest nations of the world. It is noted for its schools and work-shops.

The Germans and the French make very many kinds of cloth and iron goods. They raise grapes and make wine. They make sugar out of sugar beets.



A Norwegian

Berlin is the chief city of Germany. It is about half as large as the great city of New York.

Hamburg is the largest port on the mainland of Europe. It has most of the ocean trade of Germany.

SWITZERLAND is a small coun-

try in the Alps. It is a country of mountains. Many people go there to see the peaks, lakes and falls.

The Danube river flows east through Austria-Hungary. This country has the same products as Germany. The great city of Vienna

is on the Danube river. It is about as large as Berlin.

Helps: — Name three small countries east of the British Isles. Where is Denmark? Name its chief city.

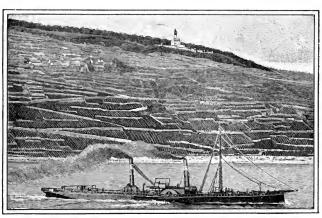
Who are the Dutch? Name their largest city. Name two islands they own.

What other name is given to Holland?
Where is Belgium?
For what is its chief city noted?

Where is France? What is the chief city of France? For what is it noted? What is said of Lyon?

Where is Germany? Name some things the German and French people make. Name the chief city of Germany. How large is it? Where is Hamburg?

What is said about Switzerland? — Austria-Hungary? — Vienna?



A German

Vineyards on the high bank of the Rhine

## 105. Southern Europe

SPAIN and PORTUGAL are in southwest Europe. They are in a peninsula.

The fertile lands are near the

coasts and rivers. Oranges, grapes and olives grow there.

Madrid is the largest city of Spain. This city is in the central part of the country.

Barcelona is the largest seaport of Spain. It ships fruit, wines and olive oil. Lisbon is the chief city of Portugal.

Italy is a peninsula in the south of Europe. It has the same kinds of products as Spain.

ITALY has large cities. One is Rome. It is a very old city. Many people go there to see the ruins of its old buildings.

Naples is a port on the west coast of Italy. Vesuvius, a famous volcano, is near the bay of Naples.

Turkey is in a peninsula east

of Italy. Constantinople is the largest city of Turkey.

Greece is in the same peninsula. Athens is a noted city of Greece. It is very old and has

ruins of famous temples.

Helps:—Name two countries of southwest Europe. What lands in them are fertile? Name some of the products.

Where is Madrid? What is said of it? Name a port of Spain. Name a port of Portugal.

Where is Italy? What is said of its products? Where is Rome? — Naples? Where is the volcano Vesuvius?

Where is Turkey? What country is south of it? Name a city of Turkey. For what is Athens noted?

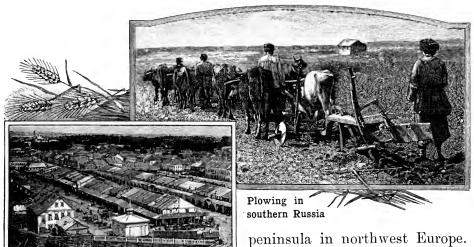


Italian children in Rome

## 106. Russia, Norway, Sweden

Russia covers the east half of Europe. Most of it is a plain.

The northern part is very cold. The other parts have forests and wheat lands. Cattle, sheep and horses feed on the plain.



Town near St. Petersburg

Russia is a long and wide country. Siberia belongs to it. St. Petersburg is the chief city. Many ships sail from this port.

Moscow is a large city far inland. Many railroads meet here.

Odessa is a port on the Black sea. It ships wheat from the great plains of Russia.

NORWAY and Sweden are in a



White people of Sweden

peninsula in northwest Europe. The people of Norway catch many

fish. The largest city of Norway is Christiania.

Sweden is noted for its iron mines. The chief city is **Stockholm**. It is on the Baltic sea.

Helps: — Where is Russia? Name some of its products. What part of Asia belongs to Russia?

Name three cities of Russia. Where is St. Petersburg? — Moscow? — Odessa? What is said of each?

Where are Norway and Sweden? Name the chief city of each.

## ASIA

#### 107. The Continent

One third of all the dry land is in Asia. The highest peaks in the world are in Tibet. They are far up where snow and ice lie all the year.

Tibet is the western part of China. Most of the rivers in China run east to the Pacific.



Wide plains lie north of Tibet. They reach to the Arctic shore. They are the plains of Siberia.

South of Tibet is India. It slopes to the Indian ocean.

The land west of Tibet is high. It is in southwest Asia.

The Caspian sea is salt. No river flows from it to the ocean.

The coast of Asia has many large bays or seas.

**Helps:** — How large is Asia? Where is the highest land?

Where is Tibet? To what ocean does most of China slope?

Where are the plains of Siberia? Are they warm or cold?

Where is India? What ocean is south of it? Where is the Caspian sea?

— Arabian sea? — bay of Bengal? — China sea? — Japan sea? — Red sea?

# 108. Heat, Rain and Plants

Southern Asia has three large peninsulas. They are portions of Indo-China, India and Arabia.

The three peninsulas are in the hot zone. Among the plants are



Western Asia

rice, tea, coffee and spices.

Most of Asia is in the cool zone. China and Japan are in this zone.

A cocoon may have two miles of silk fiber. One picture on page 136 shows a

The lands near the shore of Asia have plenty of rain. But the land far from the ocean is dry.

it. See the two

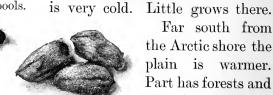
They came out of cocoons.

flying.

moths

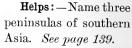
woman taking the fibers from the cocoons. She has the cocoons in a pan China and Japan have rice, tea of very hot water to kill and silk. Silk is a soft fiber. We the silkworms. have learned that it is made by See page 126. worms. The upper picture on page 136 shows tiny eggs. These are eggs of the silkworm moth. After a time, little worms come from the Plant map of Asia The picture shows three cocoons. Each has a moth in

She unrolls the long fibers from cocoons, and then winds the fibers on spools.

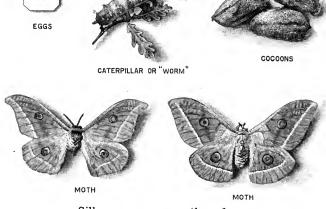


Far south from the Arctic shore the plain is warmer. Part has forests and part has fields of wheat.

The plain near the Arctic ocean



Name some plants of southern Asia. Name four spices, and tell what you can about each. See page 57.



Silkworm, cocoons, moths and eggs

We have read that silkworms feed on leaves of the mulberry tree. It grows in the warm parts of Europe and Asia.

Which part of Asia has plenty of rain? Which part has little? In what zone is most of Asia?

Name some of the products of China and Japan.

Tell all you can about silk.

Which part of Siberia is verv cold? Which part has wheat?



109. Animals

The pictures show animals of all parts of Asia.



Girl of Japan, unwinding silk cocoons

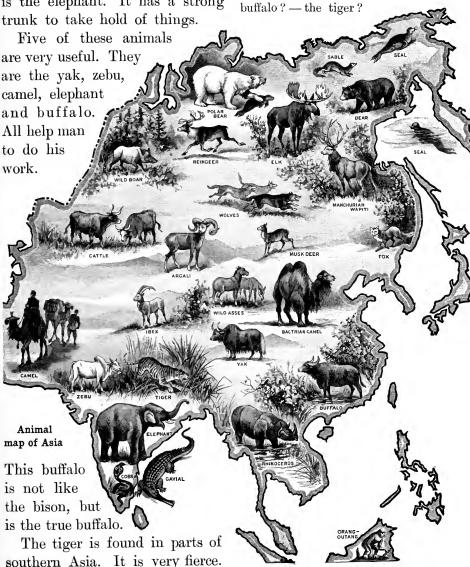
**Helps:** — Name two Arctic animals. Tell what you can about the elephant;

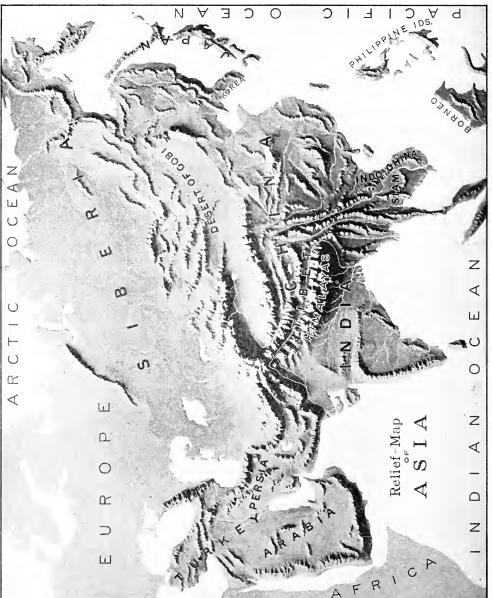
— the camel. Name five animals that

help man. What is said about the

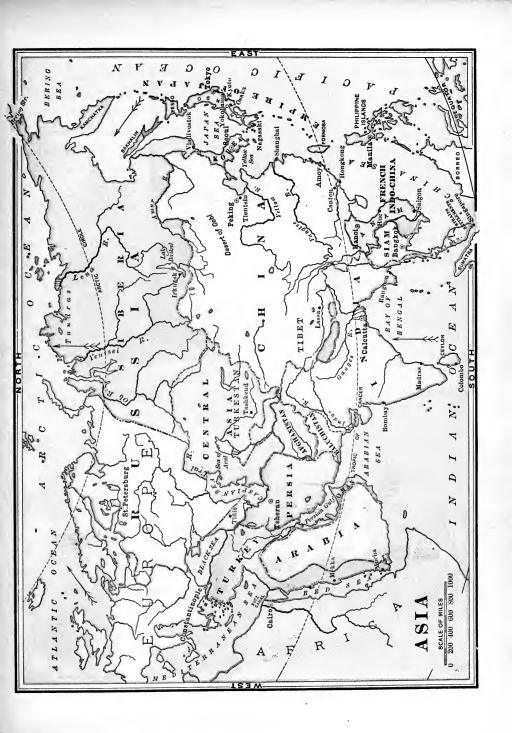
The Arctic shores have seals and white bears.

The largest of all land animals is the elephant. It has a strong trunk to take hold of things.





Relief map of Asia. Scale I inch to 1000 miles



# 110. People

One half of the people in the world live in Asia. Most of them live in China and India.

On the islands southeast of Asia are homes of the brown people.

A few tribes of black people are found in some of the islands.

China and Japan are lands of the yellow race.

A few yellow people live on the plain of Siberia. Others live in Indo-China.

India is the home of a large



Brown people on islands southeast of Asia



Chinese woman and child

dark group of the white family. The people have dark skin, but the form of their faces and hair shows us that they are of the white race.

White people live in southwest Asia. Nearly all these people also have dark skin.

Thus, Asia is the home of three races of people. They include the

brown, the yellow and the white.

Helps: — How many people live in

Asia? What lands have the most?

Where are brown people found?

What two countries are the home of the yellow people? Where else are yellow people found?

What people live in India? What is said about them?

How many great races have their homes in Asia?

Which are they?



Dark-skinned white girl of India

#### 111. China

China is in eastern Asia.

Two long rivers cross China. Both flow from high Tibet. One



Street scene in China

is the Yellow river. The other is the Yangtze river. The richest soil of China is near the coast and along the rivers.

Rice grows on the low lands. Tea grows on the sides of hills.

Silkworms feed in many parts of China. This country sells tea and silk. The Chinese make fine silk cloth and pretty dishes.

China has large cities. The ruler lives in **Peking**. It is about one fourth as large as New York.

Find Hongkong on the map. It is a small island, but many ships go there. It has half the trade of China. Ships carry tea and silk from Hongkong. This island belongs to the British people.

Canton is a very large city of China. It is on a small river not far from Hongkong.

Nearly one fourth of all the people in the world live in China.

**Helps:** — Where is China? Name two of its rivers. Where are the best parts of China?

Name some products of China. Name two things that the Chinese make.

Where does the ruler of China live? How large is Peking?

Where is Hongkong? What people own it? What is said about its trade?

Name another city of China. What is said about the number of Chinese?



Cart in a street of China

# 112. Japan

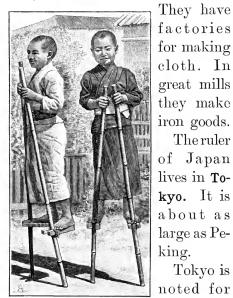
Japan is a group of islands east of Asia.

Japan has no long rivers, but it has many short ones. Rice grows in the low lands near the rivers.

Japan has many tea farms. It also has mulberry trees. Silkworms feed on the leaves of

these trees, as we have learned.

The people of Japan are yellow. They are quick to learn. make many things out of paper. They also carve ivory and wood.



Boys of Japan on stilts



White children of India

The ruler

Tokyo is

its temples

and vines. Yokohama is its port.

Nagasaki has a large and deep harbor. Many ships go there from other lands.

Korea is ruled by Japan. The people of Korea are yellow.

**Helps:** — Where is Japan? Name some products of Japan. What is said

about its people? How large is Tokyo?

Name two ports of Japan.

What is said about Korea?

## 113. India

India lies south of high Tibet.

The Ganges river flows east in India. Tt. flows in a very fertile plain.



Child of Korea (yellow)

Part of India is in the hot zone. The rest of it is also very warm.

The chief products of India are cotton, rice, wheat and tea. Most of the tea grows in Ceylon.

India has three fourths as many people as China, but they are white people.

The British nation rules over the millions of people of India.

The city of Calcutta is near the mouth of the Ganges. It is one fourth as large as New York.

Bombay is not so large a port



Woman of high caste, India

Temples, in India on the Ganges river

mountains over India?

Himalaya

What people live in India?

Name two great cities of

as Calcutta. These two cities ship India. Where is Calcutta? How large is it? Where is Bombay? away many kinds of goods.



Woman of India

Helps:-Where is India? Name a river of India.

What is said about heat in India? Name some

> of its products.

Where is the island of Ceylon? What grows on it? What people rule



A family of yellow people of Asia.

## 114. Other Parts of Asia

There are many large islands southeast of Asia. They are the East Indies. Java is the richest.



White girl of Persia

Its chief crops are coffee and spices.

Other large islands are Sumatra and Borneo.

Indo-China is in south-east Asia.

Southwest Asia is dry. It has several large countries. Persia is famous for its dates, rugs and carpets.

ARABIA is noted for coffee and fine horses. The country is dry.

Coffee grows near the Red sea. **Mocha** is a coffee port.

 $\begin{array}{c} \textbf{Helps:--} \, \text{Where} \\ \text{are the hot East} \end{array}$ 



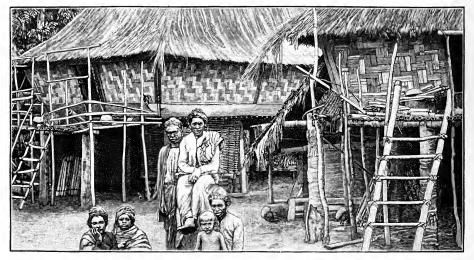
White boys of Turkey

Indies? Name three of the islands.

Where is Indo-China?

For what is Persia famous? — Arabia?

Name a coffee port on the Red sea.



Homes on a large island southeast of Asia (Borneo)

### AFRICA

#### 115. The Continent

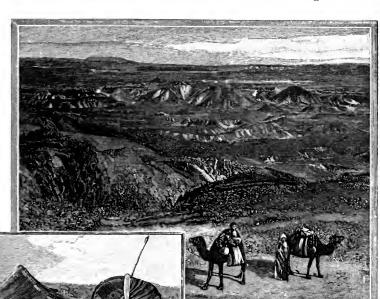
Africa is south of Europe. It is next in size to Asia. Nearly all Africa is high. Most of the low

land is near the seacoast. There are high ranges on the east, north and south sides.

There is a great desert in the north of Africa, known as the

stony. Other parts are level. In places the sand blows into hills.

South of the desert are grassy lands and forests. Large rivers



Rough part of the desert

flow to the sea. The largest is the Kongo. It flows near the equator.

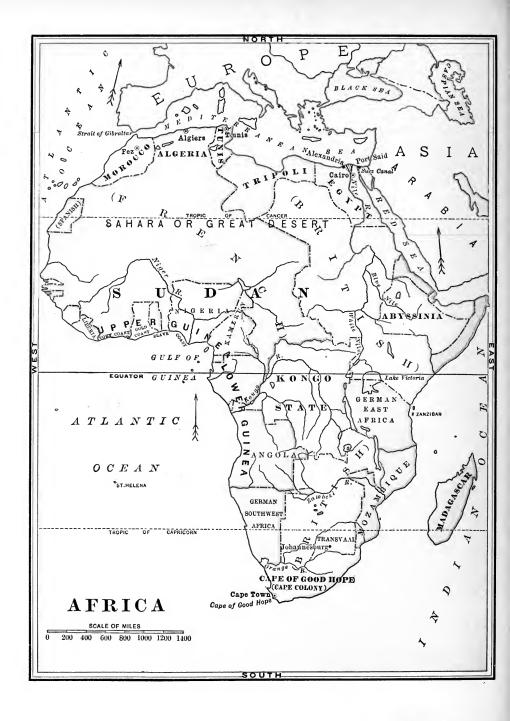
Camp in the sandy Sahara

Sahara. This dry region is half as large as Europe.

The desert looks like these pictures. Parts of it are rough and

Helps: — Where is Africa? How does it rank in size? What is said about high land and low land in Africa?

Tell what you can about the Sahara. What are south of the desert? To what ocean does the Kongo flow?





Relief map of Africa. Scale 1 inch to 1000 miles

# 116. Heat, Rain and Plants

A large part of Africa is in the hot zone. The land reaches into the cooler zone on each side. No part is in

the cold

zone.

Wheat grows in the south of Africa. Wheat, cotton and sugar grow near some parts of the Nile river.

Helps: — In what zone is the larger part of Africa? What river valley does the equator cross?

Where is Sudan? Name two of its animals.
What part of Africa is very dry?

Plant map of Africa

The equator crosses the high valley in which the Kongo river flows. The rains are heavy. They feed the great rivers. Large forests grow here.

Sudan has rain enough for grass. Many camels and horses feed there.

We know that the great desert is very dry. A long river rises near the equator and flows north across the desert. It is the Nile.

Many palms grow in Africa. Some give sweet dates. Others yield oil.

What stream flows across the east side of the great desert? To what sea does

Name some of the plants of Africa.

Look at the plant map and tell all you

it flow?

can see in the pictures.

#### 117. Animals

Africa has many large animals. Some are strong and savage.

elephant

feeds on

grass

and

The lion is seen near the great desert. The huge

Long hairs hang over the eyes to keep out the hot sand. The camel can also close its nostrils.

The gorilla is stronger than a man. Its arms are very long.

The giraffe has a long neck.

The picture shows many other animals of Africa.

Helps: — Name some animals of Africa.
Can you tell anything about any of the

Animal map of Africa

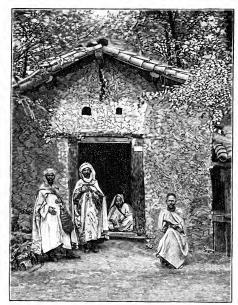
branches in the wet lands. The hippopotamus likes to wade in the water.

The camel shows clearly how animals grow to fit their homes. The camel lives in the hot desert. It can go three or four days without drinking. It carries water in little cells in the wall of its stomach.

Some camels have one hump. Others in Asia have two. The humps are fat. The camel can go a long time without food. The body uses this fat.

animals
in this
picture?
Which
of these
animals
are like
animals
of Asia?

What does the lesson tell about the lion? — the elephant? — hippopotamus? — camel? — gorilla? — giraffe? Find a bird in the picture.



Home in northern Africa (Algeria)

## 118. Northern Africa

The Sahara is between the lands of the white and the black people. The white people are north and the black people south of the desert.

Egypt is in northeast Africa. The Nile flows across it.

The white people of Egypt are Arabs. They have gardens near the Nile. No rain falls, but at times the river flows over its banks and wets the land.

The Arabs raise cotton, wheat and sugar cane.

The Suez canal is in Egypt. Ships can go from the Red sea to the Mediterranean. This canal is used by ships going from Europe to Asia and the East Indies.

Cairo is the largest city in Africa. It is on the river Nile.

Alexandria is the port of Egypt. White people live along the north coast of Africa. At the left is a picture of some of them.

**Helps:** — What race of people is found south of the great desert? What race is north of it?

Where is Egypt? What river flows across it? What people live in Egypt? To what race do the Arabs belong?

How do the Arabs get water for their gardens? What do they raise?

What is a canal? Where is the Suez canal? What seas does it connect? Of what use is this canal?

On what river is Cairo? What is said about the size of this city? What is said about the city of Alexandria?



Dark-skinned white boys (Arabs) at school

## 119. Middle and South Africa

The home of the black race is in Sudan and south Africa. These

> black people are Negroes.

> The black people of Sudan are not all

> > savages. Some live in towns. They have many camels and horses.





Black girl of Liberia

the Kongo valley are savages. They hunt and fish. Many of them have gardens.

White people go to the Kongo valley to buy palm oil and ivory. The ivory comes from the tusks of elephants. The oil comes from palm trees.

The British people rule CAPE OF Good Hope, in south Africa, but the natives are black. This picture shows some of the black people. They are Kaffirs. Many white people also live here.

South Africa has rich gold mines. It has also the richest diamond mines in the world. The Kaffirs help in the mines.

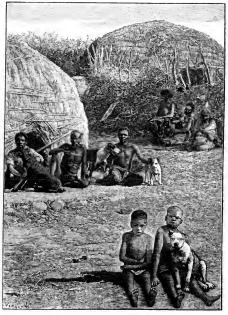
Cape Town is the largest port in south Africa.

Helps: — Where is the home of the black people? What is said about the Negroes of Sudan?

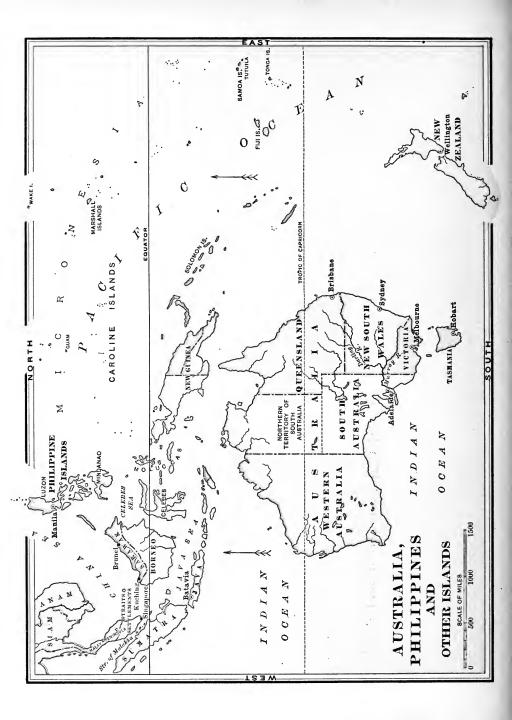
Tell what you can about the people of the Kongo valley. Why do white people go to the Kongo valley?

What is the color of the natives of south Africa? What people rule in the country called Cape of Good Hope?

Name two products of south Africa. Name the largest port near the southern end of the continent. What cape is near it? Where is Madagascar?



Black people (Kaffirs) of southern Africa



# AUSTRALIA

#### 120. The Continent

Australia is the smallest of the continents. It is southeast of Asia. It lies south of the equator.

The Alps are a high range near the southeast coast. The other ranges are mostly hills.

The inland parts of Australia are dry. There are wide deserts.

The lands east of the mountains are fertile.

There is good land also

in the valley of the Murray river. The Darling is a branch of this river. Wheat is raised here.

Part of this continent is in the

hot zone. Few people live in this part. It has not rain enough, but grass for sheep grows in many places.

The rest of the land is in the temperate zone. Most of the people live near the



Australia. Scale 1 inch to 1000 miles

southeast coast. Here they have built cities of good size.

**Helps:** — Where is Australia? On which side of the equator is it?

What is said of the inland region of Australia?

What parts of this land are fertile? Name a large river.

In which zone is the northern part of Australia? What is said about this hot part? In which zone is the rest of the land? Where do the people live?



#### 121. Plants and Animals

The southeast parts of the continent raise wheat and corn. Many

sheep graze there.

Large parts
of the hot
and

SHECKHALING

Plant map
of Australia

region have thorny bushes.

It is hard to travel there.

Many of the trees keep their leaves all the year, but the outer bark falls off. Some turn the edges



New Zealand woman

of their leaves up to the sun. Then the heat cannot wither them so quickly. This land has a great many strange animals. They are not found in other parts of the earth.

The kangaroo has strong hind legs. It runs by leaping.

Men hunt the kangaroo for its skin. It makes good leather.

The duck mole has a bill like a duck. It swims in water and catches bugs. This animal lays eggs.

The echidna also lays eggs like a bird. It catches ants with its sticky tongue.

This land has many birds. The largest is the emu. It runs but cannot fly. It looks a little like the ostrich.

Helps: — Name two products of the farms. What animal of this land supplies wool? What is said about trees in

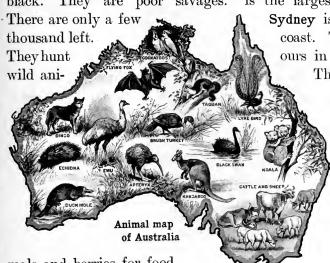


Hut of savage head-hunters in Borneo

this land? What is said about the kangaroo? — the duck mole? — the echidna? What large running bird lives here?

# 122. People and Cities

The natives of Australia are black. They are poor savages.



mals and berries for food.

These savages use long spears. They also use sticks called boomerangs. They throw them with great force. When the boomerang

strikes the ground it bounds back to the person who threw it, if it does not hit its mark.

The first white people in Australia went from the British Isles. They raise wheat, corn and sheep. Many people work in gold mines.

Melbourne is on the southeast coast. It has a deep harbor. This is the largest port of Australia.

> Sydney is a port on the east coast. These cities are like ours in America.

> > The city of New York

has about as many people as all Australia.

Helps: - What is the color of the natives of Australia? What do they eat? Tell about the boomerang.

Where did the white people of Australia come from? Tell what

kind of work they do. Name the largest port of Australia. On which coast is it?

Name another port on the east coast. What is said about the number of people in Australia?



Scene in the torrid zone, Marshall islands

#### 123. Pacific Islands

New Zealand is southeast of Australia. It consists of two large islands and a few small ones.

New Zealand has high mountains. Snow lies on some of them all the year. This land has rich gold mines.

Many sheep and cattle graze in these islands.

New Guinea is island. It has few people for so large an island. Most of them are cruel black savages.

Borneo is the largest island in the world. The people are brown.

There are many groups of islands far out in the Pacific. Brown people live on most of them. Some of the people are black. There are a few white people on some islands.



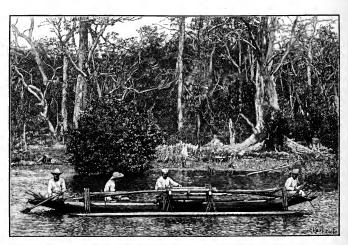
Bamboo hut and natives in the Solomon islands

Look at the map far east of Australia. Can you find the Fiji islands. Most of these islands are made of lava and ashes from volcanoes. The people are savages.

This picture shows how the men on some Pacific islands look and dress.

The Tonga and Samoa islands form two other groups.

Helps: — Tell what you can about New Zealand; — New Guinea; — Borneo; — Fiji islands; — Samoa islands.



Canoe in the Caroline islands



## WORD LIST

**Key:** āle, ăt, câre, ärm, final, all; ēve, ĕnd, her, recent; īce, ĭll, admiral; ōld, fôr, ŏn, anchor; ūse, ŭp, fûr, awful; food, foot; ch as in chop; g as in go; ng as in sing;  $\underline{n}$  as in ink;  $\tilde{n}$  as in banyan; oi as in oil; ow as in cow.

Abyssinia, ăb-ĭs-sĭu'ī-a Adriatic, ăd-rē-ăt'ĭk Afghanistan, äf-găn-ĭs-tän' Africa, ăf'rĭ-ka Alabama, ăl-a-bä'ma Alaska, ā-lǎs′ka Aleutian, ā-lū'shĭ-an Alexandria, ăl-ĕgs-ăn'drĭ-a Algeria, ăl-jē′rĭ-ä Algiers, ăl-jērz' Allegheny, ăl'e-gā-nĭ Altai, äl-tī′ Amazon, ăm'a-zŏn Amsterdam, ăm'ster-dăm Amur, ä-m<del>oo</del>r′ Anam, ā-năm' Andes, ăn'dēz Annapolis, ăn-năp'ō-lĭs Antarctic, ăn-tärk'tĭk Antwerp, ant'werp Apennines, ăp'en-ninz Appalachian, ăp-pa-lā'chī-an Apteryx, ăp'tē-rix Arabia, ă-rā'bĭ-a Aral, ăr'al Archipelago, är-kĭ-pĕl'ă-gō Arctic, ärk'tĭk Argentina, är-jěn-tē'na Arizona, ăr-ĭ-zō′na Arkansas, är'kan-sa Armadillo, är-mä-ďil′lō Asia, ā'shǐ-a Atacama, ä-tä-kä/mä Athens, ath'enz Atlanta, ăt-lăn'ta Auckland, ak'land Augusta, a-gŭs'ta Aurochs, ô'rox Au Sable, a sä'bl Australia, as-trā'lĭ-a

Bahama, ba-hā'ma Bahia, bä-ē'ä Baku, bä-kōō' Balkan, bäl-kān' Baltic, bal'tĭk Baltimore, bal'tĭ-mor or -mōr Baluchistan, bä-loō-chĭs-tän' Barcelona, bär-se-lō'nä Batavia, bä-tä'vi-ä Baton Rouge, băt-ŭn roōzh' Bedouin, bĕd'ōō-ēn Belgium, bĕl'jī-ŭm Belize, bā-lēz' Benares, bĕn-ä'rĕz

Austria, as′trĭ-a

Bengal, běn-gal' Bering, be'ring Berlin, bēr'lĭn *or Ger.* bĕr-lēn' Bermuda, ber-mū'da Bern, bern Binghamton, bĭng'am-ton Birmingham, ber'ming-um Biscay, bĭs'kā Bogota, bō-gō-tä' Boise, boi-zā' Bokhara, bŏk-ä'rä Bolivia, bō-lĭv'ĭ-a Bombay, bŏm-bā' Bordeaux, bôr-dō' Borneo, bôr'nē-ō Bosnia, bŏz'nĭ-ä Bosphorus, bŏs'fō-rŭs Bothnia, bŏth'nĭ-a Brazil, bra-zĭl' Brooklyn, brook'lĭn Brunswick, brunz'wik Brussels, brŭs'selz Budapest, boo'da-pest Buenos Aires, bō'nŭs ā'rĭz or Sp. bwā'nōs ī'rĕs Bulgaria, bŏol-gā'rĭ-a Burma, bûr'mä Butte, būt

Cacao, cā-cā'ō Cairo, kī'rō (Egypt) Calcutta, kăl-kŭt'ta California, kăl-ĭ-fôr'ııĭ-a Callao, käl-yä'ō Cambridge, kām'brij Canada, kăn′a-da Canton kăn-tŏn' (China) Caracas, kä-rä'käs Cardiff, kär'dĭf Caribbean, kăr-ĭb-bē'an Caribou, căr´ĭ-b<del>oo</del> Carolina, kăr-ō-lī'na Caroline, kăr'ō-līn Caspian, kăs'pĭ-an Cassiquiari, kä-sē-kē-ä'rē Caucasian, ka-kā'shan Caucasus, ka'ka-sŭs Celebes, sěl'e-běz Ceylon, sē-lŏn' Champlain, shăm-plān' Chamois, shăm'i Chattanooga, chăt-tă-nōō'ga Chautauqua, cha-ta'kwa Chesapeake, chěs'a-pēk Cheyenne, shī-ĕn' Chicago, she-ka'gō

Chile, chē'lā Chimpanzee, chim-păn'zi Christiania, krĭs-tē-ä'nē-ä Cincinnati, sĭn-sĭn-nä'tĭ Cobra, cō'bra Cochin China, kō'chĭn chī'na Colombia, kō-lŏm'bē-a Colon, kō-lōn' Colorado, kŏl-o-rä'dō Connecticut, kon-nět 7-kut Constantinople, kŏn-stăn'tĭnō′pl Copenhagen, kö'pen-hä'gen Corinth, kör'inth Cuba, kū'ba Cuzco, koos'ko

Dakota, da-kō'ta Dallas, dăl'as Danube, dăn'ūb Dardanelles, där-da-nělz' Davenport, dăv'en-port Delaware, děľ a-wâr Delhi, India, děl'lē Des Moines, de-moin' Des Plaines, dā-plān' Detroit, de-troit Dnieper, nē'per Dniester, nēs'ter Dresden, drěz'den Dubuque, doo-būk' Duluth, dū-looth' Dwina, dwē'na

Eau Claire, ō klâr'
Echidna, ē-kīd'na
Ecuador, ĕk-wä-dōr'
Edinburgh, ĕd'in-bŭr-ō
Egypt, ē'jīpt
Eider, I'der
El Paso, ĕl pă'sō
Emu, ē'mū
Euphrates, ū -frā'tēz
Evansville, ĕv'anz-vĭl
Everest, ĕv'er-ēst

Fiji, fe'jē Finland, fĭn'land Fiord, fyôrd Florida, flŏr'ī-da Fujiyama, fōō-jī-ä'mä

Galapagos, gă-lăp'ā-gōs Galveston, găl'ves-ton Ganges, găn'jēz Gavial, gā'vĭ-al Genesee, jěn-e-sē'
Geneva, je-nē'va
Genoa, jěn'o-a
Georgia, jôr'jī-a
Gibraltar, jī-bral'tar
Gila, hē'lä
Glasgow, glăs'gō
Gloucester, glŏs'ter
Gobi, gō'bē
Greenwich, grĕn'īj
Guayaquil, gwī-ā-kēl'
Guiana, gē-ā'nä
Guinea, gĭn'ē
Guthrie, gŭth're

Haiti, hā'tī
Halifax, hāl'e-fāks
Hatteras, hāt'ter-as
Havana, ha-vān'a
Havre, hä'ver
Hawaii, hä-wi'e
Helena, hĕl'e-na
Himalaya, him-ā'la-ya
Hoangho, ho-āng-hō'
Honduras, hŏn-dōō'ras
Hongkong, hŏng-kŏng'
Honolulu, hō-nō-lōō'loō
Houston, hūs'ton
Hungary, hūn'ga-rĭ
Huron, hū'ron

Ibex, i'bėx
Idaho, i'da-hō
Iguana, i-gwā'na
Illinois, il-li-noi' or -noiz'
India, in'di-a
Indiana, in-di-ăn'a
Indianapolis, in-di-ăn-ăp'o-lis
Indes, in'dēz
Indus, in'dix
Iowa, i'ō-wa
Irkutsk, Ir-kootsk'
Italian, i-tāl'yan
Itasca, i-tās'ka

Jaguar, jă-gwär'
Jamaica, ja-mā'ka
Japan, ja-pān'
Java, jä'va
Jersey, jër'zĭ
Joliet, jō'le-ĕt
Juneau, jū-nō'

Kaffir, kāf'fĕr Kalahari, kā-lā-hā'rĭ Kamchatka, kām-chāt'ka Kansas, kăn'sas Kentucky, kĕn-tŭk'ī Khartum, kär-tōom' Kilauea, kē-low-ā'ā Klondike, klŏn'dīk Knoxville, nŏks'vīl Koala, kō-ä'la Kongo, kŏn'gō Korea, kō-rē'a Krakow, krā'kō Kyoto, kē-ō'tō

Labrador, lăb-ra-dôr' Ladoga, lăd'ō-ga Ladrones, la-dronz' Lafayette, lä-fā-ĕt' Lansing, lăn'sing La Paz, lä päs' Lapland, lăp'land La Plata, lä plä'tä Laporte, la-port' Laramie, lăr'a-mē Las Vegas, läs-vā'gäs Leadville, lěďvil Leavenworth, lev'en-worth Liberia, lī-bē'rĭ-a Lima, lē'mä (Peru) Lisbon, lĭz'bon Liverpool, liver-pool Llama, lä'ma Llanos, lä'nōs Los Angeles, los än'gěl-ĕs Louisiana, lōō-ē-zē-ä'na Louisville, loo'is- or loo'i-vil Luzon, lōō-zōn'

Mackenzie, mą-kěn'zĭ Madagascar, măd-a-găs'kar Madras, ma-drăs' Madrid, ma-drĭd' (Spain) Magellan, ma-jěl'an Maine, mān Malay, ma-lāy' Manchester, măn'ches-ter Manchuria, măn-chōo're-a Manila, ma-nĭl'a Manitoba, măn-ĭ-tō'ba Marmora, mär'mo-ra Marseille, mär-sāl' Massachusetts, măs-a-chū'sets Mauna Kea, mow'nä kā'ä Mauna Loa, lō'ä Mediterranean, měďí-ter-rā'ne-an Mekong, mā-kŏng' Melbourne, měl'bûrn Memphis, měm'fĭs Mendocino, měn-dō-sē'nō Merrimac, měr'ĭ-mak Messina, měs-sē'nä Mexico, měks'í-kō Michigan, mish'i-gan

Milan, mĭl'an or mĭ-lăn' Milwaukee, mĭl-wa'kē Minneapolis, mĭn-ę-ặp'o-lĭs Minnesota, mĭn-ę-sō'ta Mississippi, mĭs-ĭs-ĭp'ĭ Missouri, mis-oo'ri Mobile, mō-bēl' Mohawk, mō'hak Mongolia, mŏn-gō'lĭ-a Monrovia, mŏn-rō'vĭ-a Montana, mŏn-tä'na Mont Blanc, mŏnt blănk Montenegro, mŏn-tā-nā'grō Montevideo, mon-te-vid'e-o Montgomery, mont-gum'er-I Montpelier, mönt-pē'lĭ-er Montreal, mont-re-al' Morocco, mō-rŏk′ō Moscow, mŏs'kō Mount St. Elias, sānt g-lī'as Mozambique, mō-zam-bēk' Munich, mū'nĭk Murray, mŭr'rā

Naples, nā'plz
Nebraska, ne-brăs'ka
Netherlands, ne-brăs'ka
Netherlands, něth'er-landz
Nevada, ne-vä'da
Newfoundland, nū'fond-land
New Guinea, nū gĭn'ē
New Hampshire, hāmp'shir
New Orleans, ôr'le-anz
New Zealand, zē'land
Niagara, nī-āg'a-ra
Nicaragua, nē-kā-rā'gwä
Niger, nî'jer
Nordok, nôr'fok
Nova Scotia, nô'va skô'shĭ-a
Nyanza, nī-ān'za

Oakland, ōk'land Oasis, ō'ā-sĭs Odessa, ō-dĕs'sa Oklahoma, ōk-lä-hō'ma Olympus, ō-lǐm'pŭs Omaha, ō'ma-ha Ontario, ŏn-tā'rĭ-ō Opossum, ō-pŏs'ŭm Orang-outang,ō-răng' ow-tăng Oregon, ŏr'e-gŏn Orinoco, ō-rĭ-nō'kō Ornithorhynchus, ôr-nĭ-thōrĭn'kŭs Oswego, ŏs-wē'gō Ottawa, ŏt'ta-wa

Pacific, pa-sif'īk Palermo, pa-lēr'mō Palestine, păl'es-tin Pampas, păm'pas Panama, păn-a-mä' Papua, păp′ōō-a Para, pä-rä′ Paraguay, pä-rä-gwī' Parana, pä-rä-nä' Patagonia, păt-a-gō'nĭ-a Peccary, pěc'a-rì Peking, pē-king Pennsylvania, pěn-sil-vā'nĭ-a Pensacola, pĕn-sa-kō'la Pernambuco, pěr-näm-bōō'kō Persia, pēr'shĭ-a Peru, pe-roo' Phœnix, fē'nĭks Philadelphia, fĭl-a-dĕl'fĭ-a Philippine, fĭl'īp-ĭn Pittsburg, pĭts'bûrg Plata, plä'ta Porto Rico, porto reko Port Said, sä-ēd' Portugal, pōr'tū-gal Portuguese, pōr'tū-gēz Potomac, pō-tō'mak Poughkeepsie, po-křp'sř Pretoria, prē-tôr'ē-a Pribilof, prē-bē-lŏf' Providence, prŏv'ĭ-dens Prussia, prŭsh'ya Puget, pū'jet Puma, pū'ma Pyrenees, pĭr'e-nēz

Quebec, kwę-běk' Quito, kē'tō

Racine, ra-sēn'
Rainier, rā'nēr
Raleigh, ra'le
Rhea, rē'a
Rhine, rīn
Rhone, rōn
Rio de Janeiro, rē'ō de jā-nā'rō
Rio Grande, grān'dā
Rio Negro, nā'grō
Rochester, rŏch'es-ter
Rotterdam, rŏc'-dām
Roumelia, rōō-mē'le-a
Roumania, rōō-mā'ni-a
Russia, rŭsh'a

Sacramento, săk-ra-měn'tō Sahara, sä-hä'ra Saint Augustine, sānt a'gŭstēn Saint Helena, he-lē'na Saint Lawrence, la'rens Saint Louis, loo'is or loo'i Saint Petersburg, pē'terz-bûrg Salvador, säl-vä-dōr' Samoa, sä-mō'ä San Antonio, săn än-tō'nĭ-ō San Diego, dē-ā'gō San Francisco, fran-sis'kō San Joaquin, hō-ä-kēn' San Jose, hō-sā' San Juan, hōō-än' Santa Fe, săn'ta fā Santiago, sän-tē-ä'gō Santo Domingo, sän'tō dōmēn'gō Sardinia, sär-dĭn'ĭ-a Savannah, sa-văn'a Scandinavia, skăn-dĭ-nā'vĭ-a Scotland, skŏt'land Seattle, sē-ăt'l Seine, sān Selvas, sĕl'vas Shanghai, shăng-hä'ī Shoshone, shō-shō'nē Shreveport, shrev'port Siam, sī-ām Siberia, sī-bē′rĭ-a Sicily, sĭs'ĭ-lĭ Sierra Madre, sē-ĕr'a mä'drā Singapore, sĭn-ga-pōr' Sioux, soo Sitka, sĭt′ka Smyrna, směr'na Spokane, Spō-kăn' Steppes, stěps Stockholm, stŏk'hōlm Strassburg, străz'bûrg Sucre, s<del>oo</del>′krg Sudan, soo-dän' Suez, soo-ĕz′ Sumatra, soo-mä'trä Sweden, swē'den Switzerland, swit'zer-land Sydney, sĭd'nĭ Syracuse, sĭr'a-kūs

Tacoma, tä-kō'mä
Taguan, tăg'wan
Tahoe, tä-hō'
Tahlequah, tä'lē-kwä
Tampa, tăm'pa
Tanganyika, tän-gän-yē'kä
Tapir, tā'per
Tashkend, täsh-kěnd'
Tasmania, tāz'mā'nĭ-a

Tchad, chäd Teheran, te-hrän' Tennessee, těn-nes-se' Terre Haute, těr'e hōt' Thames, těmz Tiber, tī'ber Tibet, tĭ-bĕt' or tĭb'ĕt Tierra del Fuego, tē-ĕr'rā dĕl f wā′gō Tiflis, tĭf-lēs' Tigris, tī'grīs Titicaca, tĭt-ē-kä′kä Tokyo, tō'kē-ō Topeka, tō-pē'ka Toronto, tō-rŏn'tō Transvaal, trăns-väl' Tripoli, trĭp´q-lĭ Tucson, too-sŏn' Tulare, too-lä'rē Tunis, tū'nĭs Turkestan, töör-kĭs-tän'

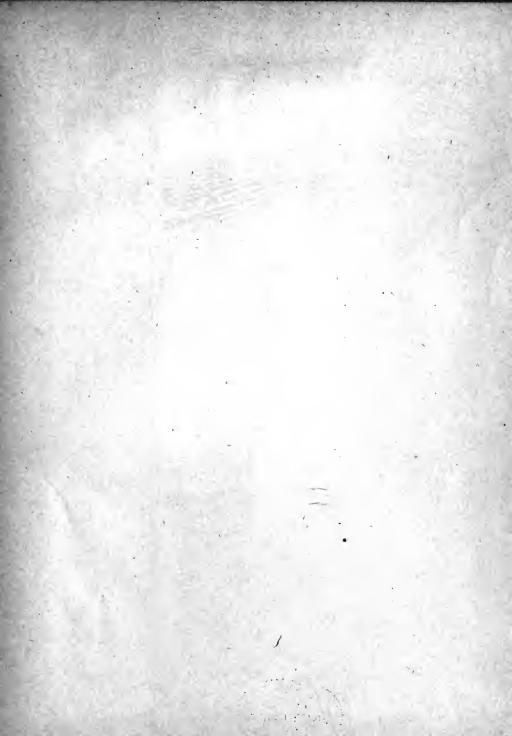
**Ural**, ū'rāl Uruguay, ōō-rōō-gwī' Utah, ū'tä *or* ū'ta

Valdai, väl'dī Valencia, va-lĕn'shĭ-a Valparaiso, väl-pä-rī'sō Vancouver, văn-koō'ver Venezuela, vĕn-e-zwē'la Venice, vĕn'īs Vera Cruz, vā'rā kroōs' Vermont, ver-mŏnt' Vesuvius, vĕ-sū'vĭ-ūš Virginia, vē-ĕn'a Volga, vŏl'ga

Wabash, wa'bash Wapiti, wŏp'ī-tĭ Warsaw, war'sa Welland, wĕl'and Wellington, wĕl'īng-ton Winnipeg, wĭn'ī-pĕg Wisconsin, wĭs-kŏn'sĭn Worcester, woos'ter Wyoming, wī-ō'ming

Yangtze, yăng'tzē Yak, yăk Yarkand, yär-känd' Yokohama, yō-kō-hä'mä Yosemite, yō-sĕm'ī-te Yucutan, yōō'kö-tä-tän' Yukon, yōō'kön

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