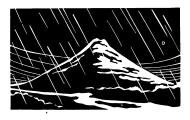
#### August, 1927

## **ELEMENTARY SCIENCE SECTION**

### THIS EARTH OF OURS



### HOW THE EARTH CHANGES

Have you ever wondered how old the earth is? Perhaps even before you went to school you had asked your parents at home how this earth you live in was formed. There are some peopfe whose special business it is to study the earth: they are constantly observing the heavens, the rocks, and the oceans in their attempts to learn the age of the earth and the ways in which it was developed. These scientists will tell you that the earth is very old, that it is probably not less than two billion years old. They will also tell, you that the earth is changing in many ways. Let us see what these changes are:

When it rains you can see soil find its way into small streams or rivers and may be carried into bays or seas. When a volcano erupts it may cover the surrounding region or a portion of it with ashes or molten rock.

Wind, running water or moving ice carries soil from one part of the earth to another, from the highest land to the oceans. The air is nearly always in motion and whenever it blows over a surface on which there is dust, some of the dust is picked up and blown to some other place.

There are two processes of changing the earth's surface known as weathering and erosion. Weathering is the process of changing rock into soil with the help of freezing water, growing (Please tern to page 223)

# HOMES IN THE ANIMAL KINGDOM



### THE BEAVER'S HOUSE

What is the biggest rat that you ever saw? Try to picture it again and see if you can imagine it to be much taller and heavier than the one you saw. Then you will have a clear idea of what a beaver is. For the beaver is a big relative of mice and rats. These animals (and some others) are called rodents. Rodents have strong front teeth that are very sharp and can cut even pieces of wood.

The beaver is an industrious, strong animal that can cut down a tree and build a house strong enough to stand in the water. Even if we do not find it in our country, it will repay us greatly to know everything about it for it is one of nature's most skillful animals. It is found along streams and ponds.

Beavers like to eat bark; and since they cannot climb trees to get it, they chop down the trees. They do this by slicing little pieces one at a time, making some upward cuts and some downward cuts, so that the gnawed part slopes both ways to a slender middle. When the beaver has taken out chips enough from all sides of the trunk, the tree breaks at the slender part, and comes crashing down.

The beavers then cut with their teeth the branches of the tree into smaller pieces: and part of them they use in building dams which keep the water around their houses from getting too low.

Part of the logs and sticks they use in building their houses. These are rounded at the top.

and the branches are piled criss-cross. Then the beavers pack their walls thick with mud and water plants.

Inside the house is a tidy smooth-walled room above water. This is a snug and comfortable living room. There is a cellar under the floor of the living room. This cellar is full of water nearly to the top. There is a hole on the floor of the living room through which the beavers pass when they go down cellar. From the cellar there is a passageway that leads into the water of the pond.

Of course an animal that builds dams and houses in the water and cuts down trees must have a special sort of body. Its front teeth as you already know are sharp and strong. He has a flat, wide, hairless paddle-shaped tail that is a help in swimming. The soft thick fur next his body is water-proof. His hind feet are shaped for swimming. His front paws are used as hands in working. His mouth and ears and nostrils are fitted with flaps that can be drawn so as to keep the water out.

These are some of the things about his body that make it possible for a beaver to be an expert builder of dams. some of which are strong enough to last a hundred years and more. As for his house it is suited to his needs and this wonderful rodent can be as comfortable in his home as you can be in yours.

## Mother Earth Awakens

As from a profound slumber, Mother Earth has awaken: She was asleep all summer, In fields, meadows, and garden.

She was parched all summer through.
The tropic sun made her so.
Foliage green had turned its hue
And Mother Earth seemed blue.

Down the rain has fallen.

The scorched grass turned green.

Verdant the fields and garden

For Mother Earth has awaken.

By Miss Elisa Marquez San Miguel Elementary School

### **PLANTS ABOUT US**

OUR FOREST WEALTH

A great poet wrote that the forests were God's first temples. In the Philippines we are very fortunate in having vast areas of forests covering more than half of our land. As we also have churches we do not go to the forests to worship as the poet tries to teach us to do. Instead men seek wealth from these forests. If all the wood of our forest were sawn into lumber its value would easily reach twelve billion pesos.

But it is not this known product of our forests that we shall take up this month. Instead we shall try to see what other minor products come from our forests. And there are plenty of them. The most important is rubber and this we shall discuss today. Other minor forest products that we shall take up later on are: rattan, fuel, beeswax, guttapercha, lumbang, pili. drywoods and orchids, which are flowers. Rubber: Look about you in the classroom and note your personal use of rubber. Your erasers, your rubber shoes, your rubber bands, your raincoats are all made of this article. Outside of the school you meet with a thousand and one use of rubber. Try to name as many as you can. Now you must realize how important it could be for us if the rubber we import from outside (Please turn to page 231)

