

HISTORY SECTION**MAKING BRICKS***An Ancient Egyptian Brickmaker at Work*

THE STORY of bricks carries us back to the dawn of civilization, for almost as soon as men began to erect temples and palaces, they learned that a cheap and durable building material could be obtained by moulding clay into rectangular shapes and allowing them to harden, either in the sun or in artificial heat. Bricks made by the Babylonians 6,000 years ago still exist.

The ancient Egyptians had an inexhaustible supply of brick-making material in the clay which forms the bed of the river Nile, and brick making was always one of their chief industries. Because this clay lacked tenacity, the Egyptians used to add chopped straw or reeds, which served to bind the bricks together. The Hebrews, during their bondage in Egypt, were required to make bricks.

In the picture on page 65 is shown an Egyptian slave of ancient time mixing

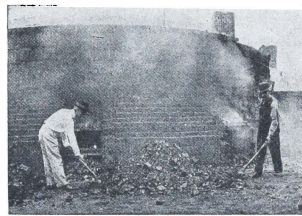
the Nile clay with chopped straw to make the building material for some great temple. He is using a primitive type of hoe, while a slave-driver stands over him with a whip.

Today brick making is one of the world's great industries. Bricks can be made of almost any kind of clay mixed with sand. If sand is not already present in the clay, it must be added. If there is too much sand, the bricks will crumble; if there is too little, the bricks will crack easily.

Clay for bricks is dug by shovels, crushed by hammer or rollers, and sifted to remove rocks or other bulky materials. Then the screened clay is mixed with water and made into columns which are cut into bricks. These are dried. The next step is the all-important burning.

The dried bricks are piled inside of kilns to be burnt. The fire, which is built in the center of the kiln, strikes the rounded roof and passes down through the spaces between the bricks to a flue beneath the floor, which leads out underground and up into a tall chimney. In

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*A Brick Kiln*

MAKING BRICKS

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the picture on page 65 workmen are shown firing one of the kilns.

Bricks have been made and used in the Philippines ever since Spanish days. If you will examine the old wall around Manila (built more than 300 years ago) you will find that bricks were used in making some parts of the wall. In some of the churches and other buildings of the Philippines, bricks were used to some extent. The use of cement is now rapidly replacing the use of bricks.

MAKING USE OF THIS ARTICLE

1. Read the article about *Making Bricks* very carefully two times.
2. Prepare a talk from what you have read.
3. Make this talk to your parents or to your class at school.
4. If you live in or near Manila, or can go there, go and inspect some of the bricks in the old wall. Where do you think they were made? Why were they used?
5. Are there any brick houses in the town in which you live? If so, where were the bricks made? What was the source of the material?

HELPING IN AN ACCIDENT

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be stopped at once; and in all cases the patient must be placed in such a position that he will suffer as little pain as possible.

If we remember these instructions accurately, we may be of assistance in case of an accident.

REVIEW

Study this information. Then write it in your own words.

OBSERVING ANTS

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holes in it for air. I left the jar undisturbed in the light, and soon the ants began tunneling, particularly along the sides of the jar.

Occasionally I dropped into the jar a little sugar, small pieces of meat, and dead flies, and sprinkled a few drops of water on the earth.

A week later I drew off the paper cylinder from the jar, and was amazed to see the ants scurrying about in the network of tunnels they had made. I watched them a little while, and then covered them up again so that they would not disappear into the center of the jar.

COLLECTING TOY DOGS

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United States and different countries. I wrote to each of these boys, told about my dog collecting hobby, and offered to trade a toy dog for another "breed" of toy dog. Almost always I was able to make a trade and secure another valuable specimen.

And so my collection has grown and grown; it has now become large and interesting. I have toy dogs of all sizes, materials, colors, and knids. Collecting toy dogs is, I find, a most interesting hobby. Try it.

A GEOGRAPHY BOOKLET

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drew the Philippine coat-of-arms and on the front wrote the words "Philippines, My Philippines."

We all liked our booklets very much.

After our booklets were all finished, our teacher placed a long table in the hall near our room. On this table she put all of the geography booklets which were well made. Then we invited parents as well as teachers and pupils from other rooms to come and inspect our booklets. Everyone praised them very highly. My father was so pleased with mine that he gave me five pesos.