how these are adapted to conditions in the animal lives, and how man adapts them to his own needs. Vaporization and condensation of water; snow.

References: (See December number.)

Number.—Continued along the same lines as last month.

Clay-modeling.—Making of placques, modeled in low relief, of scenes from colonial life or from colonial occupations.


SIXTH GRADE.

Jennie E. Curtis.

Review for November.

Geography and history.—We assumed that one-half of the children in the grade was a certain tribe of Indians living in the Mississippi valley, and that the other half was another tribe whose home was also in the same valley. The two tribes we called tribe number one and tribe number two.

Tribe number one has corn enough left over from the fall gathering, so that it does not feel the necessity of moving to new hunting-grounds for the sake of food. This gives its members leisure to improve their wigwams, make pottery, and do decorating.

The next season the tribe profits by its experience of the year before, and plants more corn, in order to have food for the winter, pitches its wigwams with larger and better posts, and covers them with more and better skins for protection from the winter's cold. Thus it is learning to improve its architecture, and is developing art through making pottery and decorations.

But the comfortable condition of tribe number one excites the jealousy of tribe number two. The latter invites a third tribe to join it, and together they sweep down on tribe number one. They drive it away, and spend the winter in its comfortable home, eating its corn and using its pottery.

What is the effect on tribe number one? Will the next wigwams it pitches be just as good as those from which it has been driven away? Will its members work just as hard the next year at planting corn? Will they have as much time to spend in decorating?

The pupils were asked to look at a map of North America and find a place where these Indians could go and live undisturbed. They chose mountainous regions, Mexico, and small river valleys as good hiding-places easily defended. The open Mississippi valley they considered a place too easily attacked. The teacher drew a relief map of Mexico on the blackboard, and the children modeled Mexico in sand as an example of a country offering "nest places" for hitherto wandering tribes. "Nest places" were
understood to be places easy of settlement, where the tribes could make their homes and be safe from capture by nomadic tribes. The pupils studied a relief map of Eurasia and Africa, and selected places suitable for tribal settlement. They chose Greece with its protected river valleys as typical of countries that would foster primitive man. The open plains of Russia they thought it would be difficult to defend, and that in them agriculture, architecture, and art, i.e., civilization, would, in consequence, develop slowly.

A large putty relief map of Greece was laid on the floor so as to correspond with the cardinal points. The children pointed in the direction in which the real Greece lay. They looked up the routes to Greece on maps and globe, modeled Greece in relief in sand, and located places. The first five stories in Guerber's *The Story of the Greeks* were read to them by the teacher. In *Ten Boys on the Road from Long Ago till Now*, by Jane Andrews, they are reading the story of the Greek boy; and they are practicing Greek games under direction in the gymnasium.

In Asia, the class selected China as a type. The children located it by giving directions on the earth and looking up routes of travel to China on globe and maps. They modeled it in sand and, at the same time, talked of its slope and drainage.

The geography of current events formed part of our work.

*Art.*—We studied many pictures of Greek statues and answered the questions: Why were the Greeks physically more beautiful than other peoples? Why did they make statues? We visited the Art Institute, and compared the work of the early Egyptians, Assyrians, and Greeks. Each child drew the statue that pleased him most, and later drew it on the blackboard at school, looked up its story in the library, and next day told it to the class.

In clay, the pupils are modeling dishes which are to be used for their luncheons.

*Literature.*—The grade read the story of Dionysus, which is the Greek Thanksgiving festival, for the purpose of dramatizing it for our Thanksgiving celebration.

*Nature study.*—The children made a weather chart, on which they keep a record of the daily temperature, the direction of the wind, and the amount of sunshine.

To discover the direction of air currents, (1) we built a large bonfire and threw in paper and dried leaves. Surface currents were found flowing from all directions toward the fire. Over the fire there were found to be rising currents, which flowed outward and gradually settled toward the earth again. (2) We soaked paper in a strong solution of saltpeter, dried it, touched a lighted match to it, and held it near the radiator to see the direction of the smoke. After other similar experiments, we reached the generalization that near all bodies of heat there is the same circulation of air as around the bonfire.
Next month we shall take the equator as the region of the greatest heat and study the winds of the earth, especially those of Eurasia.

Note.—The outline for the sixth grade for December will be completed in January. The usual outline for this grade is, therefore, omitted from this number.

SEVENTH GRADE.

NOTT WILLIAM FLINT.

REVIEW FOR NOVEMBER.

NATURE STUDY.

The outline for this work—how animals spend the winter—appeared in the December number of the ELEMENTARY SCHOOL TEACHER AND COURSE OF STUDY. This review for November covers also part of December:

We approached the subject from the point of view of the season—a class discussion of the restrictions winter lays upon all life. Each child was asked to write a paper overnight on how some animals, or some one animal, he knew about, prepares for and spends the winter. Out of the class of fourteen, two forgot to write at all, one wrote about the human animal, and eleven about wild animals. Of these latter, the bear and the squirrel were favorites. Not a word, however, was said about insects, birds, batrachians, and fishes. From these papers, read aloud in class, we drew out and noted these facts: Some animals change their clothing and heat their houses; some store up food and lie close; and some sleep through all or a part of the winter. When questioned about the birds, the children objected that they had not thought of birds as animals; further, they said, that birds always go south. About the insects they kept silence, apparently because, owing to the winter habits of these creatures, they knew nothing of them.

To find out about insects, the class took a field trip into near-by vacant lots, and found and brought back larvae and insects of various kinds. These they had discovered in the interstices and between the bark and the boles of trees; on the under side of stones, bricks, turf, and bits of wood; in the branches of trees and beneath the matted grasses. Being now satisfied as to how, in general, "bugs" get through the cold weather, each child wrote up his account in a short paper, and painted a picture showing the winter home of some particular insect.

As to the birds, however, the method of direct observation could not be used; the class must get its experience at second-hand. So the teacher got from the library fourteen different books about birds. Then, in a class discussion, he drew out seven questions which the children thought must be answered if they were to know about the winter habits of birds: (1) What is