

FERNDALE SCHOOL.

No. I. A COCOON.

TEACHER. (*Stroke of bell*). Books aside. Position first. Lesson on Nature. What day of the month is it? Any one?

CHORUS. First of June.

TEACHER. Of the number of specimens you have brought me to-day, I select these for our lesson. Now, who brought them?

SCHOLARS. (*Two hands up*).

T. Where did you find this, Johnnie?

JOHNNIE. I found it on the limb of an apple tree.

T. Where did you find yours, Tommy?

TOMMY. I found it on the limb of an apple-tree, too, when I was looking to see if the blossom buds were opening.

T. Well, we are lucky to have two of the same kind. I shall put one in this glass jar on the window-sill, where we can watch what may become of it in the warm sun-light, without any danger of its getting away from us. The other, which I show you here, we shall take to pieces and examine. What is this stick which you see in it? Any one?

CHORUS. The twig of the apple-tree on which it grew.

T. What is it, Johnnie?

JOHNNIE. A sort of a nest, I suppose.

T. Well, it is not exactly a nest. We may as well give it the correct name. It is a *cocoon*. I write the name on the board. Now, I blot it off, and shall see if every one can spell and pronounce it properly. Together.

CHORUS. C-o-c-o-o-n, co-coon.

T. The French call it *cocon*, which means, in their language, a little shell. Now, with this sharp penknife, I shall cut open the little shell to see what is inside; but, first tell me what you can observe on the outside? How long is it?

S. Over three inches, I think.

T. How broad?

S. Over one inch, I would say, in the thickest part.

T. What is the color—you?

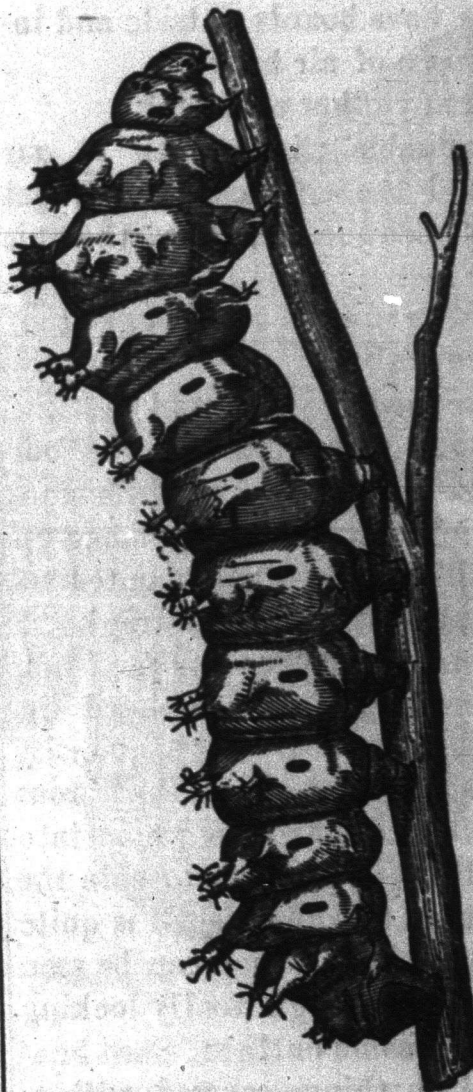
S. Grey. Another—brown—greyish brown—brownish grey.

T. Yes; all of you are partly right. It is a greyish brown. Take it in your hand and tell me what its substance looks and feels like.

S. It is like a thin, stiff and tough kind of paper; but it is as hairy as some kinds of cloth—more hair in some places than in others.

T. Correct. These hairs are really fibres of a kind of silk. A very large green caterpillar, like this, three or four inches long, and thicker than your stoutest finger, spun this cocoon last fall. Sometime

next September or October you may see this huge caterpillar sluggishly creeping along the limb of some tree or bush, looking for a proper place to commence the construction of its cocoon. You will, of course, capture it, and put it in one of our glass jars, with a piece of twig, if you like. In a short time afterward you may have the pleasure of seeing it at its work. The silk is stored in a liquid condition in two large glands in each side of the caterpillar. These glands have a common opening near its mouth. You will simply see the insect raise its body and touch its mouth to one point



THE LARVA.

of the jar, and as it draws it away a fibre of silk is drawn out, which is attached to another point, and so on. By looking carefully at this figure you will see that it has three pairs of small feet on three front segments, and four pairs of broad sucker feet on middle segments. The large warts on the third and fourth segments are coral-red, the others on the back are yellow, except those on the two last segments, which are blue, like the small warts on the sides. We must be on the lookout for this caterpillar in the fall. That is why I now tell you what it is like.

Let us proceed with the examination of our cocoon.



THE COCOON.