

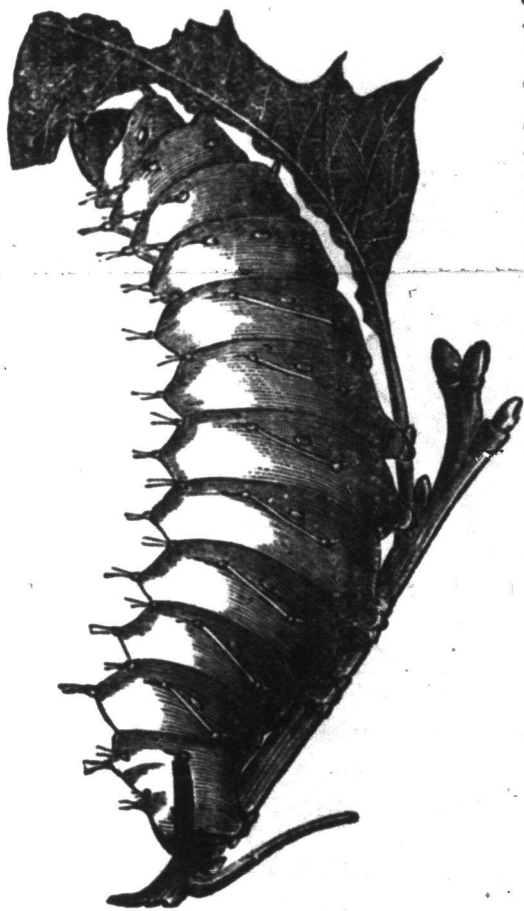
## FERNDALE SCHOOL.

NO. IV. A CANADIAN SILKWORM MOTH.  
(*Telea Polyphemus*. Linn.)

TEACHER. See this large September caterpillar eating a leaf. Do any of you recognize it?

SCHOLARS. Yes, larva of the Cecropia Emperor-Moth.—No, it's different—quite different, except in size.

T. You are correct now. We have not examined this caterpillar before. It is called the "Ameri-



THE LARVA.

can Silk Worm," because it is the only native American caterpillar which has been extensively reared on account of the silk it produces.

S. Was it found in this country?

T. Yes; Jack, tell us where you found it.

JACK. On a plum tree, and I saw one eating the leaves of a rose bush once.

T. They are often found on oak trees and sometimes on the maple and elm. But now let us describe it. How long is it?

S. About three inches. It eats very fast and its jaws move sideways instead of up and down.

T. Very good. They all eat in that manner. This great caterpillar was hatched probably in June from a small roundish egg about the tenth of an inch in diameter. When hatched it would take about six thousand of them to weigh one ounce. It eat, and in ten days grew ten times as heavy; in twenty days, sixty times; in thirty days, six hundred and twenty times; in forty days, one thousand eight hundred times; in fifty-six days, four thousand one hundred and forty times its original weight, very probably. At least such is the history of one of them. It eat three-quarters of a pound of leaves to grow to that size, and changed its skin five times.

S. Do they lay many eggs?

T. The female moth lays between two hundred and three hundred, probably.

S. It should be easy for us to raise silk, then, in Nova Scotia,

T. Not so easy. An ichneumon fly and some other flies are its deadly enemies. A Mr. Trouvelot had a million of them growing on bushes in a five acre field in the United States, but there was a net over every bush.

S. How long do they keep on growing?

T. In less than a fortnight the eggs are hatched, and in a little over two months after it will be like the specimen before us, ready to spin its cocoon. But tell me what you see yourselves now. How many rings or segments, as they are called, in its body?

S. Thirteen.

T. How many legs has it?

S. Three small pairs in front, four broad pairs in the middle, and a pair at the end, like those of the Cecropia caterpillar.

T. The color of its head—

S. Is brownish.

T. Of its body—

S. A light, yellow green.

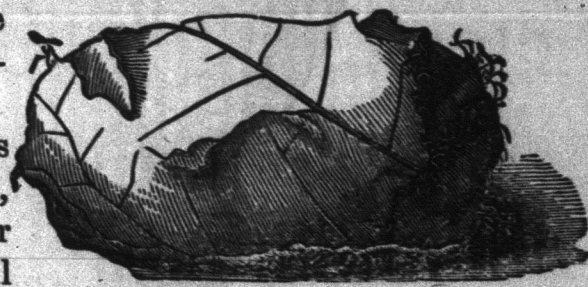
T. On each segment there are several reddish tubercles with hairs—how many on each?

S. Six.

T. Find the spiracles, or breathing pores, one on each side of each segment. They are of a pale, orange color. What else do you see?

S. Seven slanting lines of a yellowish color on each side, and a brown V at the end.

T. We shall put it into this large jar with fresh oak and plum twigs, when we shall see it collect some leaves into its cocoon for an outer covering—drawing the leaves together with its silken fibres, which it forms like the Cecropia caterpillar. This is what the cocoon may be like when finished.



THE COCOON.

In a few hours it can hide itself, and in four or five days it will have finished its inner case. These silk fibres by proper treatment can be unwound from the cocoon in one long unbroken fibre, only a little coarser than that of the more common silk worm of commerce. Three or four days after the completion of its cocoon it sheds its old skin, and becomes a chrysalis or pupa within its well constructed, silken, double-walled chamber, in which it passes the winter. Here it is.



THE CHRYSALIS OR PUPA.

About the first of June, next year, the perfect insect will find its way out as did our Cecropia moth,