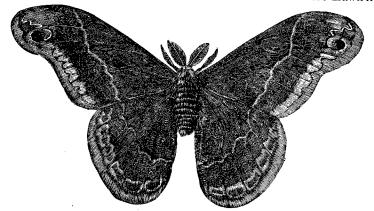
ENTOMOLOGY FOR BEGINNERS.

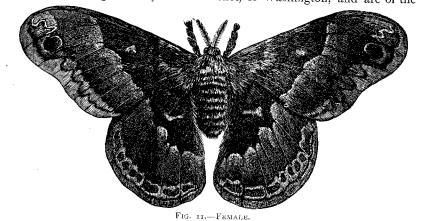
THE PROMETHEA EMPEROR-MOTH. Callosamia Promethea, DRURY.

BY THE EDITOR.

In Fig. 10 we have a faithful representation of the male of this beautiful insect, and in Fig. 11 the female is shown. Both of these were drawn from



nature, and engraved by H. H. Nichol, of Washington, and are of the



natural size. This species is found throughout most of the Northern States and in Ontario, appearing on the wing late in June or early

in July. The wings of the male are of a brownish-black color, those of the female light reddish-brown. In both sexes the wings are crossed by a wavy whitish line near the middle, and a yellowish border along the hinder edges. They both also have an eye-like black spot with a pale bluish crescent within, near the tip of the fore wings. Near the middle of each of the wings of the female there is an angular reddish-white spot, margined with black; these are also visible on the under side of the wings of the male, but are seldom seen on the upper side. The wings of the male are narrower than those of the female, and the antennæ much broader.



FIG. 12.-After Riley.

The female lays her eggs in clusters of five or six or more together. They are of a creamy-white color, with an ochreous spot on the upper side, and are about one-sixteenth of an inch in diameter. They hatch towards the end of July.

The young larva is pale green with yellow bands and faint rows of black tubercles. After passing the second moult it appears as at a in Fig. 12. During the subsequent moults the larva changes very much, and when full grown it measures two inches or more in length, and presents the appearance shown at b in the figure. It is then of a bluish-green, or sometimes of a greenish-yellow color, with a whitish bloom, and has the head, feet, and hinder segments vellow. On each segment there are about eight small warts or short horns of a deep blue color, except the two uppermost on the top of the third and fourth rings, which are of a rich coral

red, and a long yellow one on the top of the twelfth segment.

When full grown it selects a suitable spot from which to suspend its cocoon, usually a twig of cherry, sassafras, or some other tree, on which the larva feeds. The twig is first wound round with silk for about half an inch on each side of the base of a leaf; the silk is then spun down around the leaf stalk, so that the leaf is firmly fastened to the twig, and cannot be detached without using much force. The expanded leaf is then drawn together with silken threads in the form shown in Fig. 13, and within this

enclosure the cocoon is spun. These cocoons may often be seen during the winter hanging from the twigs of trees and shrubs.

In addition to the cherry and sassafras, the larva feeds on ash, poplar, azalea, button bush, and other shrubs and trees; although the ash is a very common food plant the cocoons are rarely, if ever, found upon it. The leafstalks being very long, it is perhaps too laborious a task for the caterpillar to fasten them to the twigs, and hence it leaves them in search of leaves with shorter stalks.

Birds frequently devour the contents of these cocoons during the winter, perforating them with their beaks; the insect is also liable to be attacked by Ichneumon flies, which live in the larval state within the bodies of their victims and consume them.

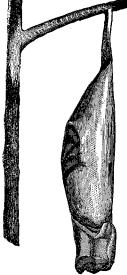


FIG. 13.-After Riley.

A DISTINGUISHED HONOR.

We are much gratified to learn that at the annual convocation of Trinity College, Toronto, held on the 15th of November, the distinguished title of D. C. L. (Doctor of Civil Laws) was conferred upon the Rev. C. J. S. Bethune, M. A., head master of Trinity College School, Port Hope, Ontario. This is the highest title Trinity College can confer, and it is the first time it has been bestowed upon one of its own Batchelors. Mr. Bethune's career as an entomologist is so well known that it is perhaps scarcely necessary to remark that he is one of the most prominent of Canadian Entomologists; was formerly editor of this Journal, has been from the outset one of the pillars of our society, and has done much to advance Entomology in this country. Many we know will rejoice with us that Mr. Bethune has been made the recipient of this well-merited honor.