# The Canadian Entomologist.

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#### TO OUR READERS.

With the present issue THE CANADIAN ENTOMOLOGIST enters upon the fifteenth year of its existence. During that long period it has had many friends, but these were never more numerous than at present, for the good work it has done and is still doing is recognized by all. While thanking those who have so kindly aided us in the past, we solicit a continuance of their support, and at the same time would request any of our younger Entomologists who may have observed any facts worth recording in reference to the habits or life history of any of our insects, to send them for publication, and thus aid us in our endeavors to make the fifteenth volume at least equal to any of its predecessors in usefulness.

We also take this opportunity of reminding our subscribers that subscriptions for the current year are now due. Remittances should be sent to the Secretary, E. Baynes Reed, London, Ontario.

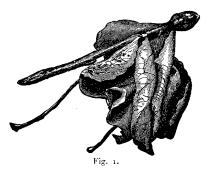
#### ENTOMOLOGY FOR BEGINNERS.

BY THE EDITOR.

### THE APPLE LEAF-CRUMPLER—Phycita nebulo.

During the winter there will often be found on apple trees clusters of

curious little cases, partly and sometimes wholly hidden by portions of crumpled and withered leaves, as shown in figure 1. The withered leaves are firmly fastened to the cases by silken threads, and the cases to the bark of the twig on which they are placed. Each case resembles a long miniature horn, wide at one end, tapering almost to a point at the other, and twisted in

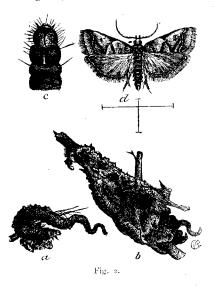


a very odd manner, as shown at a and b, figure 2. It is curiously con-

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structed of silk interwoven with the castings of the artificer, is lined internally with smooth, whitish silk, externally it is rougher and of a yellowish brown color.

Within this curious structure there dwells a small caterpillar, which during the winter months remains torpid, awakening to activity with the



warmth of spring. As the leaves of the apple tree begin to expand, the larva draws those that are nearest to it towards the case, and feeds on them, retreating quickly within its case when danger threatens. When full grown it is about sixtenths of an inch long, its body tapering slightly towards the hinder extremity. The head is dark reddish brown and the body dull greenish brown; the next segment to the head has a dark horny plate above and a flattened blackish prominence on each side. The head and anterior segments are shown at c in the figure. On each of the other segments there are several small

black dots, from each of which arises a single pale brown hair. When mature, which is usually during the early part of June, it closes the end of its case, and changes to a chrysalis within, about four-tenths of an inch long and of a reddish brown color, and in about a fortnight the moth appears.

When its wings are spread, the moth (d, figure 2) measures about seven-tenths of an inch across. Its fore wings are pale brown, with streaks and patches of silvery white, the hind wings plain brownish white; the under side of both wings paler. There is only one brood in a year. The moths deposit their eggs in the summer, and the larvæ construct their cases and attain about one-third of their growth before winter sets in.

Where these insects are abundant they become very injurious, consuming the young growth as it expands and materially affecting the vigor of the tree. To subdue them, pick the crumpled leaves with the cases from the trees and destroy them,

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