

third winter, but remains in the larval state till the following spring, when it becomes a pupa. After resting three weeks in the pupa state, it becomes a beetle, with all its parts at first soft and weak. These gradually harden, and in a fortnight more it cuts its way through its sawdust-like castings and issues from the tree, through a perfectly smooth and round hole, having been in the tree only a few days less than three years.

The most effective means of protection against the attacks of this insect is to keep the base of the tree well supplied with soft soap during the months of June and July, as the female will not lay her eggs upon trees so protected. If no precautions have been taken and the grubs are already in the tree, Prof. Riley advises cutting through the bark at the upper end of the burrow, and gradually pouring hot water into the cuts so that it will soak through the castings and penetrate to the insect. The trees should be carefully examined in the fall, when any young grubs that may have hatched during the summer can be found and cut out. I do not think this beetle is common in the vicinity of Montreal, as I have only seen a single specimen, which was taken by Master Philip Pearson; but as it hides by day and flies about at night, and is thus not often seen, I may be mistaken. Mr. Couper states that it is common about Quebec (Can. Nat. vii. 278), where it has done much injury to the apple trees. It also attacks the pear, quince and mountain ash, but its natural home is in the wild crab-apple.

ORDER COLEOPTERA—FAMILY BUPRESTIDÆ—THE FLAT-
HEADED BORER—*Chrysobothris femorata*, FABR.

This species is more abundant than the round-headed borer, and more troublesome, as it does not confine itself to the base of the tree, but deposits its eggs on various points of the trunk and larger limbs. The grub may be easily known by its extremely large and flattened head and by the corresponding shape of its burrow, which is oval in shape and twice