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of July, and the eggs are then laid in the upper surface of the leaves, the larvæ, when hatched, emerging on the under surface, where they rest coiled up out of sight. During the earlier stages the larva is covered with a white bloom, or efflorescence, which is very easily removed. The head is black, and the feet and under portions yellow. When the last moult takes place the appearance of the larva is greatly changed; it becomes of a bright yellow with rows of black spots along the back and sides, and is no longer covered by the white powdery excretion. Pupation takes place in burrows bored in dead branches, pithy stems, decaying wood, etc., a habit which in some localities is evidently a preservative one, as the land may be flooded for a considerable time in the spring, and if pupation took place in the ground many of the insects would probably perish. The native species of Cornell upon which I have observed them is *Cornus stolonifera*, but at the Experimental Farm they have this year been abundant enough upon *C. sibirica* to be quite injurious. Mr. Fletcher, who has been rearing a number of larvæ from these shrubs informs me that two species seem to be indicated, one being much larger and somewhat different in markings from the other, but until the flies emerge next season this cannot be decided. Under date of 7th Aug., Miss Rye, of Niagara, writes to Mr. Fletcher that the previous week these larvæ had appeared upon her ornamental dogwood trees in immense numbers and had greatly injured them. Upon ornamental plants, however, the depredations of this insect may be easily checked by spraying with the usual Paris green solution.

THE FALL CANKER WORM, (*Anisopteryx pometaria*, Harris).

The next insect which I desire to mention is by no means a recent intruder, but one which has been frequently brought to the notice of our members and the public at large. I refer to that very destructive insect the Canker Worm, (*Anisopteryx pometaria*). This species, and the very similar *Paleacrita vernata*, Peck, were clearly described for us many years ago by the then President of the Society, Prof. Saunders. (Ann. Rept. VI., p. 26, 1875), and were illustrated by the beautiful figures of Prof. Riley.

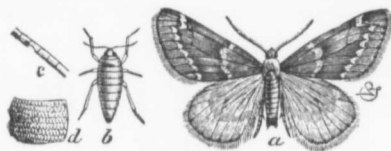


FIG. 11.

Fig. 11, represents the Fall Canker Worm *A. pometaria*; a, the winged male; b, the wingless female; c, a portion of an antenna magnified; d, segment of larva, magnified.



FIG. 12.

Fig 12, the Spring Canker Worm (*P. vernata*); a, the winged male; b, the wingless female; c, a portion of an antenna magnified; d, segment of larva, highly magnified.

It is nearly a century since Prof. Peck, one of the earliest of American entomologists, penned his "Natural History of the Canker Worm," which even then was making itself known as a depredator in the New England orchards. Our two species of moths resemble each other so very closely, both in the larval and adult stages, that the trained entomologist alone can readily distinguish them. This, however, is not a matter of very great importance from the economic standpoint, as the habits of both species are identically the same, and the same course of treatment will destroy the one or the other.

The species are generally distinguished as the spring and autumn Canker Worms, but the larvæ of both species appear in early summer and have the same pernicious habits of reaping where they have not sowed. These larvæ are pale greenish "loopers" when young, becoming more striped and darker with successive moults. Voracious eaters, they rapidly defoliate the trees upon which they feed, and when fully grown they drop, by silken threads, to the ground, to burrow a few inches below the surface and construct a cell in which to pupate, the moths appearing partly in the autumn and partly in the spring.

In his address last year Dr. Bethune made mention of the abundance of Canker Worms at several places in Canada, one of these being Ottawa. Having watched the