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Fig. 6.

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grows, until it

reaches about two inches in length. The tents were so abundant this autumn in some places that the maple trees about Knowlton and other places round Brome Lake in the Eastern Townships were much disfigured. It is also very abundant at Ottawa. I have never seen the moth yet, but have several of the larvæ and pupæ in my breeding cages, from which I hope to get the moths next spring.

Of fruit insects, some of the well known pests have called for attention, as the Eye-spotted Bud moth (*Tmetocera ocellana*, Schif.), on the apple and plum, the Oyster-shell Bark-louse (*Mytilaspis pomorum*, Bouché), the Beautiful Wood Nymph (*Eudryas grata*, Fab.). Fig. 4 represents the moth and Fig. 5 the caterpillar. The Codling Moth (*Carpocapsa pomonella*, L.) and the Plum Curculio (*Conotrachelus nenuphar*, Hbst.). For these the well-known remedies have been recommended.

Injuries of less frequent occurrence have been reported by the following: Click beetles, which have injured the flowers of apples at Ottawa and of pears in Nova Scotia. The Shot-borer or Pin-borer (Fig. 6) (*Xyleborus dispar*, Fab.) has increased and is doing much injury to the apple-growing districts of Nova Scotia. Washing the trees in June with a soap or lime wash, to which a little Paris green has been added, will probably be found to be the best remedy. In the Niagara district I found last spring that the peach trees were much infested by the Peach-bark beetle (*Phæotribus liminaris*, Harr.). This is a very small Scolytid and can be easily recognized by its laminate antennæ.

A new pest of the apple in Canada has been sent to me by Mr. R. Z. Rogers, of Grafton, Ont., and Mr. F. J. Watson, of Okanagan Mission, B.C., namely, the Otiorhynchid beetle *Anametis grisea*, Horn. The beetle gnaws the bark from the twigs and also eats out the buds. I have not yet worked out its life-history.

As mentioned above, the insects which have attracted most attention during the season of 1893 by their injuries are the Horn-fly (*Hemutobia serrata*, Rob.-Desv.) shown much enlarged at Fig. 7, and the three common locusts, which occur all through

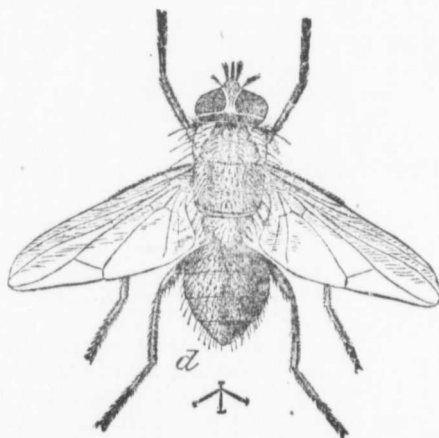


Fig. 7.

Ontario. As was anticipated, the Horn-fly, since first noticed last year, has spread far and wide over the Province, and although there has been a great hue and cry amongst farmers, very few of them have systematically treated their cattle to protect them from the attacks of their tormentors. The loss consequently has been very great, owing to the falling off in the quantity of milk produced at the season of the year when it should have been most plentiful. It is not probable that the Horn-fly will continue to be as serious a pest after a year or two as it is at present in Ontario, nevertheless it is an important matter that dairymen and farmers should adopt some one of the simple and effective remedies which have been discovered and practise them regularly if they wish to keep their stock in a state of comfort and prevent an unnecessary shortage in their bank accounts. In the first place