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these thoracic markings are mistaken for the elater's eyes, and the loose articulation of the thorax for the neck, I may just mention that a friend of mine brought me, one day this summer, a fine large *myops*, which he had just found on his window-sill, remarking that he was afraid it was dead, because "its neck seemed broken." I told him to lay it on its back upon my table, and the sudden snap with which it nearly sprang into his face quite startled him. The Indian name for an elater (according to Dr. Fitch) is "neck-breaker," or "the insect that breaks its neck," which gives a very good idea of its chief characteristic.

Perhaps the most abundant of our elaters is a dark brown one, about half an inch long, named *Melanotus communis*. The larvæ feed in wood, transform in the autumn, and the beetles winter under bark or in crevices, and are very common in spring. *Limonium plebejus* is also a brownish beetle, which is even more numerous in this vicinity.

Occasionally large glossy black elaters are found under stones in damp localities. These belong to the genus *Melanactes* and are remarkable for having luminous larvæ. Several species of *Corymbites* are numerous on pine-trees in summer, as *C. eripennis*, *C. hieroglyphicus* and *C. triundulatus*; the latter is also said to feed on the flower of the rhubarb. *C. vernalis*, a pretty beetle with a black thorax, and yellow elytra marked by five black spots, may be found sometimes in large numbers on blossoms of the choke-cherry.

In the fourth volume of the *Canadian Entomologist*, an interesting account of the wheat wire-worm, *Agriotes mancus*, is given by Mr. J. Pettit, of Grimsby, Ont., a very careful observer. Mr. Pettit says:

"For many years an insect, familiarly known among farmers as the 'wire-worm,' has committed ravages from time to time among the wheat crops in different parts of the Province. As the history of this insect has not hitherto been traced out, I am happy to be able to make public through the pages of the *Canadian Entomologist*, the following description of its larval and pupal states.

"In the fall of the year 1870, so unusual an amount of damage was inflicted upon the wheat crops in this vicinity by this wire-worm that I was led to try and breed it to the perfect state with a view to ascertaining what species it was the larva of. By digging

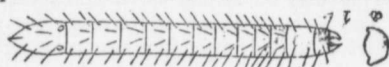


Fig. 53.

about the roots of the wheat plants, I obtained about a dozen specimens (Fig. 53) which were placed with a few wheat plants in a large flower-pot, where they were kept supplied with food by planting occasionally a small quantity of wheat. With the first cold weather they ceased to eat, and were then placed in a sheltered situation until the return of warm weather in spring, when they were restored to the breeding-cage. They soon gave evidence of being alive, and possessing unimpaired appetites; their rapid consumption of the wheat plants rendered it necessary to renew the supply quite as often as before. They were fed in this way until the month of July, when my absence from home caused them to be neglected; on my return there was not a vestige of food left. Thinking that the worms had probably died of starvation, I paid no further attention to them until the 26th of August, when, on removing a part of the earth from the pot, a pupa (Fig. 54) was disclosed, and on the 3rd of September the first imago appeared, which proved to be a specimen of *Agriotes mancus* (Say).

As only two more specimens came out during the remainder of September, I turned the earth out of the pot and carefully examined it. The inspection revealed seven specimens of the imago in the little cells in which they had transformed, and one larva.

"Among the larvæ collected, I had noticed one less than half the size of the others and evidently much younger, which would account for the one still in the larval state. It had attained, however, a size fully equal to that of the others when first brought in during the previous autumn; and hence I have formed the opinion that the larval state does not last longer than three years. This opinion has since been strengthened by the observation of a large number of larva which appeared readily separable into two sizes, corresponding

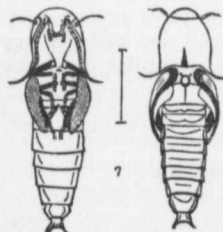


Fig. 54.