

and before changing to chrysalis; while in the case of *Pimpla*, it is probably attacked either while leaving the fruit or after having spun its cocoon. The larva of the Delicate Long-sting forms, for itself, within the cocoon of its victim, a sufficiently tough, thin, oblong-oval, shiny, brown cocoon from which the perfect fly issues by cutting open a lid at one end.

"As both these parasites transform within the *Carpocapsa* cocoon, it is next to impossible and quite impracticable, to separate friend from foe in removing and destroying the contents of the bandages. But where it is desired to disseminate the parasites they may be bred by enclosing large numbers of *Carpocapsa* cocoons in some tight vessel."

On the 13th of August, 1873, we took a number of chrysalides of the Codling Moth under a bandage on an apple tree and among them there was one which was infested by *Ichneumon*. The chrysalis when emptied was found to contain six of the parasitic larvæ of which the following description was taken. Length a little over one-tenth of an inch, body tapering almost to a point towards the head. Colour, dull, yellowish white with a tinge of yellow along the dorsal region, very transparent the internal organs showing plainly through. On each segment is a transverse row of short whitish spines, terminal segment encircled with stouter whitish spines. No proper feet or prolegs, but in moving, the mouth-parts attach first with a sucker-like disk and the hinder portions of the body are drawn gradually forward, different portions of the under surface bring furnished with small fleshy prominences which are attached and in turn withdrawn from the surface on which the larva is moving; the principal points of attachment, however, seem to be the first and terminal segments, under the latter when viewed sideways, there appears a fleshy projection much larger than any of those on the other segments, and this projection expands into a flattened disk which holds the larva firmly to the place of attachment.

We did not succeed in rearing these larvæ; after the chrysalis which contained them was broken open they, one after another died in spite of all our efforts towards their preservation. Whether this would have proved distinct from the species last described by Mr. Riley, and thus made a third true parasite on this pest we are unable at present to determine.

THE PEAR TREE SLUG.

Selandria Cerasi. Peck.

In the year 1790 Prof. Peck wrote a pamphlet entitled "Natural History of the Slug Worm," which was printed in Boston the same year by order of the Massachusetts Agricultural Society, and which obtained the Society's premium of fifty dollars and a gold medal. This, as far as we have been able to learn, was the first published record relating to the ravages of this insect in America. Forty-two years later (in 1841) Dr. Harris published his valuable treatise "On some of the insects injurious to vegetation in Massachusetts," in which when treating of this insect he gives the substance of Prof. Peck's remarks in a condensed form, portions of which material we shall avail ourselves of without further acknowledgement. Although seventy-five years have passed since Prof. Peck's memoir was written, but very little has been added during the interval to our common stock of knowledge in reference to this pest. In the meantime, however, it has spread over the whole country, damaging more or less seriously the foliage of our pear, cherry, quince and plum trees every year.

These insects pass the winter in the chrysalis state, the parent flies, the progenitors of the mischievous brood of slugs, appearing on the wing from about the third week in May until

Fig 40.



the middle of June. The fly (See Fig. 40) "is of a glossy black colour, excepting the first two pairs of legs, which are dirty yellow or clay coloured with blackish thighs, and the hind legs which are dull black with clay coloured knees. The wings are somewhat convex and crumpled or uneven on the upper side like the wings of the saw flies generally. They are transparent, reflecting the colours of the rainbow, and have a smoky tinge forming a cloud or broad band across the middle of the first pair; the veins are brownish. The body of the female measures more than one-fifth of an inch in length, that of the male is smaller." Early in June these flies may be found resting in the early morning, or in the cool of the evening, on the upper or under side of the leaves of pear, cherry or plum trees, some seasons they are very plentiful, while at other times but few are met with. When jarring our plum trees for curculios at this season we usually find some on the sheets after jarring, they fall to the ground very

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