

AFFECTING THE STEMS.

No. 10. THE IMPORTED CURRANT BORER. (*Egeria tipuliformis*, Linn.)

This insect has for many years been a great impediment in the way of successful currant culture. In the larva state it burrows up and down the centre of the stems of the bushes making them so hollow and weak that they often break off with the weight of the foliage or by the action of the wind.

FIG. 39.



The parent of this destructive grub is a pretty little wasp-like moth, see figure 39, which when its wings are expanded measures about three quarters of an inch across. The body is of a bluish black colour, the abdomen being crossed by three narrow golden bands; while on the thorax, at the base of the wings are streaks of a similar colour. The wings are transparent, but veined and bordered with brownish black, with more or less of a coppery lustre. The bordering is much the widest on the front wings, which are also crossed with a band of the same colour beyond the middle. The antennæ or horns are brownish black, and the legs are of the same colour, streaked and dotted with golden yellow. The under surface of the wings is paler than the upper,

This currant borer is not a native insect, but has been introduced from Europe, where it has long proved troublesome. The exact period of its importation into this country is unknown, but it must have occurred many years since as it is now very generally disseminated. The moth makes its appearance about the middle of June, when it may be found in the hot sunshine, darting about with a rapid flight, gathering the nectar of flowers or basking on the leaves, alternately expanding and closing its fan-like tail or sporting actively about in search of suitable places for the deposit of its eggs. In the cooler portions of the day, it is quite sluggish and may then be often found resting on the under side of the leaves of the currant bushes, and so torpid as to be caught and destroyed with but little difficulty.

The female deposits her eggs singly, near the buds where in a few days they hatch into small larvæ which eat their way through the outer portions to the centre of the stem, and here all through the summer they burrow up and down, enlarging the channel as they grow older, and thus forming a hollow several inches in length, which so weakens the affected stems that they are very easily broken. When full grown this is a whitish fleshy grub, of a cylindrical form, with brown head and legs. Before entering the chrysalis state a passage is made nearly through the stem, leaving merely the thin outer skin unbroken, thus preparing the way for the escape of the moth. Within the cavity which has afforded secure shelter to the larva, the change to chrysalis is effected, and here it sleeps peacefully while the bleak wintery winds howl among the branches. Early in June the chrysalis wriggles itself forward, and pushing against the thin skin covering its place of retreat finally ruptures it, and then thrusts itself partly out of the opening. By carefully examining the bushes about this period they may often be found in this half protruded position, and after remaining but a comparatively short time in this state, the moth bursts the chrysalis and effects its escape.

Were it not that the larva has the instinct thus to prepare the way for the escape of the chrysalis, the insect would be a perpetual prisoner within the hollow of the stem; for the chrysalis has neither mouth nor limbs, and the moth no teeth or jaws, with which to work a passage through a hard substance, the mouth of the moth being simply a hollow, flexible tube, which it uses to thrust into flowers to extract their sweets; under the sure guidance of the Great Architect of the Universe, no such mishap is ever likely to occur.

Soon after the escape of the moths they pair, and then shortly the female begins to deposit her eggs, which require the remainder of the season to develop, as already detailed; hence there is only one brood during the year.

In Harris' "Insects Injurious to Vegetation," published in Boston, Mass., in 1852 this insect is referred to as very common in the Eastern States. Dr. Fitch, State Entomologist for New York, also refers to it in his third report. In the *American Entomologist*, vol. 1, p. 79, reference is made to it as common in many parts of the Western States, and in the *Canadian Entomologist*, vol. 3, p. 9, Mr. G. J. Bowles, of Quebec, refers to the damage done to his imported currant borer is very numerous and destructive, and while with us it chiefly infests the red currant bushes, it is not confined to them, but attacks the black currant also, and occa-