

NOTE BY ED.—E. R. M. is fortunate not to have met with this caterpillar before, as it is a great pest where it is common, stripping the leaves from cherry and plum as well as apple trees. We have also met with it occasionally on the American poplar (*Populus tremuloides*).

The parent of the worm *Notodonta concinna* is a very common-looking light brown moth, with dark brown and greyish markings. She deposits her eggs in clusters on the under side of the leaves, where they soon hatch into small caterpillars. These at first, and while very small, eat only the under surface of the leaves, leaving the upper untouched, but their presence may be at once discovered by the discoloration of the leaf, which becomes brown. As they grow larger and stronger, they eat the leaves entire, clearing the branch in their course. When full grown they are about an inch and a quarter long, of a yellowish brown colour, with fine longitudinal blackish lines and small black spines, a bright red head, and a red hump on the top of the fourth ring or segment.

There is one peculiarity about this caterpillar which we have not observed in any other. When handled it discharges a clear liquid, having a strong acid smell and taste. This is probably given as a means of defence against birds, since their feeding in flocks and so openly would render them particularly liable to attacks from these active foes.

The larva of the Ladybird had changed to a chrysalis before it reached us. It is one of our common species.

Cut-Worm on Corn.

To the Editor.

SIR,—The enclosed is the only specimen of the kind I have ever seen.

I found three or four Indian Corn leaves, 2½ inches broad, cut nearly off about 3½ feet from the ground (done by this specimen), and observing an injury to the tassel coming out of the stalk supporting the leaves which were cut, I opened the folding leaves enclosing the tassel and followed downward about eight inches, where the specimen was found. As this is a new pest (at least in this part of the country) or I may become troublesome, will you please to introduce him to your readers—with instructions how to treat him.

Very truly yours.

Oshawa.

A. FAREWELL.

NOTE BY ED.—The specimen referred to is a large whitish caterpillar, with dark brown spots, about an inch and a half long. From its appearance, and our correspondent's account of its habits, we consider it to be a cut-worm and the larva of some dull-coloured night-flying moth. It is quite new to us, and we shall not be able to determine its proper generic and specific names without rearing it to its perfect state, a matter of some difficulty with this class of insects. It bears a considerable resemblance to some cut-worms

that we have found very injurious to the roots of the hop. All these worms are night feeders, and conceal themselves in the daytime, either by burrowing in the earth, hiding under chips or stones, or among the leaves of their food-plant, as in the case before us. The only remedy we can suggest is to hunt them out and crush them under foot, whenever their ravages are observed.

The Three-lined Potato-beetle.

To the Editor.

SIR,—About a week ago I found on my potatoes, or at least on one potato top, a little slug or slugs. I pinched off the leaves that had them on, put them into the fire, and was in hopes that I should see nothing more of the kind; but this evening I found quite a lot of them, and, ugh! such disgusting-looking things. They all seem to have a lump of excrement on their backs, and they strip the leaves as they go. They come from eggs, I believe, as I found eggs both with the first and second lots (I have laid aside some of the eggs on purpose to see). I put some ashes on them, and as soon as the ashes touched them, they threw a kind of a dirty green liquid out of their mouths.

JOHN HOLLOWAY,

Scarboro, Ont.

NOTE BY ED.—Our correspondent has given a correct description of the disgusting larva of the Three-lined Potato-beetle (*Lema trilineata*, Oliv.), which is becoming a great nuisance in many parts of Canada. The annexed wood-cut represents the parent beetle magnified. It is of a deep yellow colour, like beeswax, with three black stripes on the wing covers. It lays its eggs



in clusters of half-a-dozen, on the under side of the leaves, and from these the larvæ soon hatch out. When full-fed, these slug-like grubs go into the earth, and from their cocoons the first brood come out as winged beetles in about a fortnight after their disappearance, while the second brood, which appear on the vines in August, remain all winter in the chrysalis state under ground.

The most successful remedies appear to be dusting the larvæ with ashes or lime, and catching and killing the beetles.

BUPRESTIS BORER.—The large metallic-looking beetle, coppery underneath, received in good order from Mr. H. J. Beam, Black Creek, Welland Co., is a specimen of a Pine Borer (*Chalcophora Virginica*, Drury), whose larva bores into pine, and is often very destructive, making long tunnels through what would otherwise be good clear lumber, and reducing its market value. The grub is rather long and white, with a broad flattened head, and hard dark-coloured jaws. It belongs to the same family of beetles as the Flat-head, or *Buprestis* Borer of the apple tree.

CORN WORM.—Mr. Farewell, of Oshawa, sends us the following additional communication respecting the corn worm previously noticed:—"Last week, one hundred miles west of Omaha, I saw several specimens of the corn worm, the same kind you received from me some weeks since. These worms are of several years' standing in Nebraska, but are not regarded as being destructive to corn, although in one piece I found a considerable number of them. They burrow in the top of the ear, producing more or less injury, and sometimes cut through the husk, making their exit in this way instead of returning the way they entered."

MOSQUITOES.—The eggs of the mosquito are laid in a bowl-shaped mass upon the surface of stagnant water by the mother fly. After hatching out they finally become the "wiggle-tails," or wriggling worms that may be seen in the summer in any barrel of water that is exposed to the atmosphere for any length of time. Finally, the "wiggle-tails" come to the surface, and the full-fledged mosquito bursts out of them, at first with very short limp wings, which in a short time grow both in length and in stiffness. The sexes then couple, and the above process is repeated again and again, probably several times in the course of one season. It is a curious fact that the male mosquito, which may be known by its feathered antennæ, is physically incapable of sucking blood. The mosquito is not an unmitigated pest. Although in the winged state the female sucks our blood and disturbs our rest, in the larva state the insect is decidedly beneficial by purifying stagnant water, that would otherwise breed malarial diseases. Linnæus long ago showed that if you place two barrels of stagnant and impure water side by side, neither of them containing any "wiggle-tails," or other living animals, and cover one of them over with gauze, leaving the other one uncovered, so that it will soon become full of "wiggle-tails," hatched out from the eggs deposited by the female mosquito, then the covered barrel will in a few weeks become very offensive, and the uncovered barrel will emit no impure and unsavoury vapours.—*American Entomologist*.

ENORMOUS SWARMS OF LADYBIRDS.—The English papers contain accounts of an unprecedented visitation of Ladybirds in various parts of the country, especially in the south-eastern counties. The London *Field* speaks of swarms of these insects almost unparalleled in number and duration. The species most prevalent was the common seven spotted variety, *Coccinella Septem-punctata*, and their numbers defied all efforts either to count or compute them. The air was in some places, it is said, literally darkened with them, and shrubs and trees were covered by the unwonted incursion of these friendly *Aphis* eaters. An unusual quantity of Hop and other *Aphides* are reported as abounding at the same time.