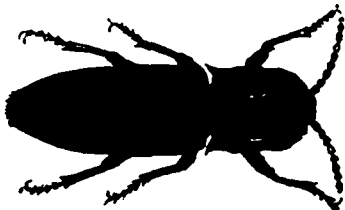


carvings, often of gigantic size, have been found. It was supposed to be a mystical representation of the resurrection of the soul, the motions of the earth and sun, eternity, &c., from its curious habits, which may be seen in a rather rare Canadian species (*Anthrenus laticus*) of rolling globular balls of dung, in which its eggs are laid, along the ground to some distance from the original mass, and then burying them.

**EMPEROR MOTH COCOON.**—Thanks to careful packing, we have received in excellent order a cocoon of the large-eyed Emperor Moth (*Titea polyphemus*, Hubner), from Mr. J. Le Bontillier, of Sidney, County of Hastings. A picture of the moth, which is one of our largest and handsomest species, and an account of its habits and transformations, may be found in the CANADA FARMER for June 15, 1866, p. 181, to which we must refer our correspondent. The moth will probably come out of its silken cocoon in a few days now; about the first of June is their usual time for appearing, but we have frequently had them much earlier, when the cocoons have been kept in a moderately heated room all winter.

**THE EYED SNAPPING-BEETLE.**—The same correspondent also sent us a specimen of the large eyed Spring-back or Snapping-beetle



(*Alaus oculatus*, Linn.), so called from the habit possessed by it, in common with all the *Elater* family, of throwing itself up into the air, when laid upon its back, by means of a peculiar spring on the under side of the thorax, which fits into a socket beneath the abdomen.

We have seen even small species throw themselves eighteen inches up into the air in this way. This is as if a man were to lie on his back, and by pressing his head and heels on the ground, jerk himself up two hundred feet into the air, and all for the sake of getting on his feet again! The species before us, which is not uncommon, is the largest we have in this country, being often an inch and a half or more in length. It is of a shining black colour, varied with whitish spots and streaks, which give it the appearance of a cinder. On the back of the thorax are two large eye-like spots, which give the insect a very peculiar and rather formidable appearance. The larvæ of all this family are called "wire-worms," and are sufficiently well-known, no doubt, to all our readers, from their destructive propensities. This species, however, infests decaying wood, often of old apple-trees, and cannot therefore be considered to do any particular damage

## The Currant Worms Again.

To the Editor.

SIR,—In a recent issue, a correspondent who writes an article headed, "How to kill the Currant Worm," under the signature of "L," gravely charges me with giving "careless" or "indifferent advice" on the subject of the important matter of the destruction of this pest, in my report to the Fruit Growers' Association, intimating at the same time that I ought to and probably do understand the matter well. Since I cannot plead guilty to his charge, it becomes necessary for me to defend myself.

Your correspondent speaks of three worms which infest the currant bushes, "1st, the Borer; 2nd, the Measuring Worm; 3rd, a smaller worm hatched from the egg of a fly," by which he means the worm of the Gooseberry Sawfly (*Nematus ventricosus*.) It is when speaking of this latter that the disparaging statements above referred to are made, and the following is advanced to substantiate their correctness: "Mr. Saunders says they (the worms) may be hand-picked from the bushes. Undoubtedly they may; so may farmers dig their wheat with a spade, but will they do it? Quite as likely as to hand-pick the worms from the currant bushes in their gardens." If "L" had ever read my report with any care, he would have seen that I did not allude to hand-picking at all when speaking of this insect, which is small, and would be very difficult to destroy by such a method. The case in which I suggested that remedy was that of the Measuring Worm, a larger and more easily handled creature, and in this instance it was associated with treatment with hellebore.

After referring to the desirability of a "cheap, expeditious, and effectual method of destroying these pests," "L" announces the fact that such we have in hellebore and water, as if this excellent remedy had never been mentioned before. It has been used extensively in England for many years on gooseberry bushes for this purpose, and for several years in Canada with unvarying success. On reference to my report—the innocent subject of his harmless banter—page 197, he will find the following when speaking of remedies for this same worm: "As soon as they (the worms) are observed at work, they should be checked, which may be readily done by mixing an ounce of powdered hellebore with a gallon or two of water, and sprinkling the bushes lightly with a watering pot, or the hellebore may be applied by means of the bellows before described." If "L" did not copy the receipt he advances with such an air of originality from my report, he might easily have done so had he read it with any ordinary care.

There are other of "L's" statements open to objection. He says that this Sawfly Worm differs from the Measuring Worm in this respect, that no amount of violence short of

killing will cause them to let go their hold," and considers the recommendation of our esteemed President, who advises brushing them off with a broom, as absurd. I do not know whether "L" has ever had any of these worms to deal with. He certainly has not observed them with much care. The Measuring Worm has three pairs of sharp claws or feet, and two pairs of thick fleshy legs, called by entomologists prolegs. Each of these latter is furnished with a large number of hooks, by means of which the worm holds fast most tenaciously to almost any substance. The prolegs of the Sawfly are without these hooks, and it holds fast almost exclusively by its front claws, so that it is much more easily dislodged by jarring. In my own garden, I have frequently strewed the ground with them by simply jarring the bushes with my foot, and I consider the use of the broom as well worthy of trial in the absence of hellebore.

It may not be inappropriate to reproduce here a short history of this insect, since its ravages will be near their height when this reaches your readers. The parent of the worm is a small four-winged fly about the size of a common house fly. It appears on the wing late in April or early in May, flying only during the day, and most active in the sunshine. Soon after, the female deposits her eggs on the thick veins on the under side of the leaves on the gooseberry or currant bush. The insect is provided with a double saw at the hinder extremity of her body, by which she saws little slits in the substance of the leaf, and into these the eggs are thrust. During the next few days the egg swells considerably, and then hatches into a small green worm, dotted with black, which at once begins to devour the leaves voraciously. When fully grown, it is nearly three quarters of an inch long, and of a uniform green colour. Shortly after it spins a small, silken, papery-looking cocoon, either above or a little below the surface of the ground, and within it changes to a chrysalis. Early in July the perfect insect escapes, and soon we have another supply of eggs, resulting in a second brood of worms, which enter the chrysalis state later in the season, in which condition they remain until the following spring. There are thus two regular broods, and besides these sundry stray individuals appear between times, so that one is obliged to keep a sharp look-out most of the season.

WM. SAUNDERS.

London, Ontario.

## A Batch of Noxious Insects.

From J. McD., of Bayfield, Ontario, we have received a number of specimens, accompanied by a series of enquiries, which we shall endeavour to answer as briefly as possible. He signs himself "a subscriber," but we fear he does not read his paper, and so get the worth of his money, as he asks, for instance, how to destroy the common currant