skins present a beautiful iridescent appearance under the microscope when viewed by reflected light.

These larvæ feed on the cantharides all winter, and if in quantity, commit great havoc, leaving only the hard exterior portions untouched, such as the upper portion of the thorax, the green wing cases, and transparent wings. When their legitimate food gives out they have no compunction about first eating their dead parents, and then each other, but on this diet they do not seem to thrive so well.

The beetle emerges in May or June, and is about one-eighth of an inch long, oval and black, the upper parts being marbled and streaked with whitish and rufous, which are rubbed off after death if the insect is subjected to any rough usage.

Camphor does not kill these larvæ, and after keeping some for a day in a small box about a quarter full of camphor, the only thing worthy of remark in their actions was that they did not seem quite so lively as those kept without it. That they have a distaste for it, however, is proved by the fact that some which were put in a box with holes in it, left the box during the night. The Pharmacopœia direction to keep camphor with the cantharides is, therefore, not a *remedy*, merely a preventive measure, and not a very good one either. The vapor of chloroform rapidly kills them, so that by putting a small quantity of chloroform in a gallipot on the top of the infested cantharides, the heavy vapor will sink through it and destroy them.

NOTE.—The essay was accompanied with specimens of the larvæ, skins and beetles, mounted for examination by means of the microscope.

THE PARASITE OF PHYLLOXERA VASTATRIX, AND THE GALL INSECT OF THE NETTLE TREE.

BY REV. THOMAS W. FYLES, COWANSVILLE, P. Q.

Upon request, I sent to Dr. H. A. Hagen specimens of the parasite of the Phylloxera, *Diplosis* (?) *grassator*. At the same time I sent him specimens of the *Psylla* described on page 198 of vol. xiv. Dr. Hagen favored me with information as follows :—

“The fly is a *Cecidomyia*; I think it is not sure that it belongs to *Diplosis*. At least the reticulation of the wing differs in having the

median vein straight, and the fork at the hind margin wanting. You will see in Osten Sacken's Catalogue that the museums do not possess this type for *Cecidomyia*. I have gone through the literature, and find till now your species is not described. The larva is shrivelled up, therefore the trophi are not visible.

"Your other insect is *Psylla venusta*, O. Sacken, raised by him, and described with its galls on *Celtis occidentalis*.—Fettner Entom. Zeit., 1861, p. 422."

With regard to the *Psylla*, Mr. Fletcher's note in the February number reminds me that I ought to have mentioned that I found *Celtis occidentalis* at Como, in Vaudreuil Co., in the grounds of Mr. I. J. Gibb, with whom I spent some time last year. I have not met with the tree at Cowansville.

In Mr. Ashmead's list of described Psyllidæ, on page 222, vol. xiii., there is no *Celtidis-mamma*. And the doubt remains whether the *Celtidis-mamma* of Prof. Riley is not the insect previously described by Osten Sacken under the name *venusta*. Professor Riley seems satisfied that they are distinct species; and it would be pleasing if we could regard him as infallible.

Where does the Professor obtain the word *Celtidis*? The generic term *Celtis* is obtained from the name of the African lote-tree, mentioned by Pliny, H. N. xiii., 17 in § 32: "Africa arborem loton gignit quam vocant celtin et ipsam Italiæ familiarem." *Celtin* indicates *Celtis* as the genitive, and not *Celtidis*.

MR. JOHN B. SMITH'S PAPER ON N. AM. HELIOTHINÆ.

BY A. R. GROTE, A. M.

For my part, I am very glad that a plate of tibial structure has at last been published, and by Mr. Smith. It illustrates characters upon which I have long insisted, and is a valuable addition to the present "Synopsis." The second plate might well have been omitted; it hardly assists the student, and is badly drawn. The "Synopsis" itself is a gratification to me; it is scientifically written so far as the characters it discusses are concerned. Its difference from my own work in its conclusions are more apparent than real. Mr. Smith writes with a critical eye to my shortcomings, and really finds very little to say.