[286.] VIII. LEPIDOPTERA.

FAMILY PAPILIONIDAE.

401. PAPILIO TURNUS *Linn.*—Taken in Canada by Dr. Bigsby. [It is, of course, quite unnecessary to repeat Kirby's description of this very familiar butterfly.]

[287.] 402. COLIAS EDUSA *Fabr*,—Several specimens from North America. [This species is, no doubt, *C. eurytheme* Boisd., which is quite common at Sault Ste. Marie and other localities in the North-west. For description and admirable figures see Edwards' "Butterflies of North America," vol. i., part iv.]

PERSONAL.—Our esteemed friend, J. Pettit, Esq., has removed from Grimsby, Ontario, to Buffalo, New York. Correspondents when writing him will please bear in mind this change of address.

CORRESPONDENCE.

A CHEAP ENTOMOLOGICAL CABINET.

DEAR SIR,—

I have recently been looking over the back volumes of the ENTOMOLOGIST, and have found them, as I do the later numbers, very interesting and instructive reading. Among other valuable items, I have noticed suggestions regarding the construction of cheap cases for holding specimens, and as the question of expense is always an important one, especially to young collectors, I will, if you can spare me space, briefly describe the style of cabinet I am now using, and which has been adopted by one of my friends.

Among the substitutes for cork mentioned by Packard (in his Guide to the Study of Insects) are thin frames covered on each side with paper

and fitted into the bottom of drawers in a cabinet. Now I have gone a step farther, and discarding the drawers entirely, have adopted the frames and adapted them to a cabinet without drawers. This cabinet can be made of any size and be divided by upright partitions to suit the taste of the owner, and the frames can run in grooves made in the sides and partitions before it is put together, or between movable strips tacked or screwed in afterward at suitable distances, say two inches. The one I now use (a small one made as an experiment) is three feet two inches wide inside, with two partitions, so that there are three spaces each one foot in width. It is fifteen inches deep and two feet high. Placing the frames two inches apart gives me twelve in each section, or thirty-six in all, and as each has a surface of twelve by fifteen inches, I have an aggregate expanse of thirty-six square feet. The advantages claimed for this cabinet are its lesser weight and expense. It is easily handled and can stand pretty rough usage without fear of damaging specimens, as the pins are firmly held, and the frames, running in grooves or between strips, cannot stir when the door shuts close against them. It does away with the expense of drawers, the cork alone for which (thirty-six feet at 18 cents per foot) would be $6.48. The frames constructed of thin stuff (say quarter-inch) cost at the most five cents each, and suitable stiff cartridge paper is very cheap. If the frames are made slightly smaller than those mentioned, one sheet will cover both sides of two frames. The paper is put on when damp, but should not be too wet. The frames can be easily re-papered if needful, and if the sections are made of equal width, they will all be interchangeable, which will be found a great convenience.

This manner of keeping specimens will, I think, be particularly useful to collectors of Coleoptera. I send this, feeling that each member of the Society should contribute his mite of experience and knowledge for the benefit of his fellow-workers.

W. H. HARRINGTON, Ottawa, Ont.

THE TOMATO-WORM *(Sphinx quinque-maculata).*

DEAR SIR,—

This insect has been extraordinarily abundant this year in the neighborhood of Port Hope, so much so that many persons had to take vigorous

measures for the preservation of their crop. On the few plants in my own garden scores of the larvæ were found. A market-gardener who lives close by me—Mr. Wm. Eddie—informs me that on one day during the summer he and his assistants together gathered *four bushels* of the "worms" off an acre and a quarter of tomatoes! During many days following they seemed almost as numerous as ever, in spite of continuous hand-picking. Yesterday (Oct. 18) Mr. Eddie brought me a newly escaped imago. Is not this autumnal appearance most unusual? I suppose that it may be attributed to the long continuance of warm weather; up to to-day nothing has yet been touched by frost in my garden.

C. J. S. BETHUNE, Port Hope, Ont.

ON L. LUCIA AND PSEUDARGIOLUS.

DEAR SIR,—

In the absence of all knowledge of the preparatory stages of *Lycaena Lucia*, the date of the first appearance of this species and *L. pseudargiolus* var. *neglecta*, at this place the present season, are not favorable to Mr. Edwards' view of their being one and the same thing. One male example of *Lucia* was found on April 4th. On the 8th several appeared, two males taken. On the 12th males common, one female taken. On the 19th several pairs taken copulating; many observed. A male *neglecta* taken, apparently just emerged. On 22nd both sexes of *Lucia* common; males worn; several male *neglectas* abroad. On April 30th and May 4th females of *Lucia* observed depositing eggs on flower buds of *Cornus Florida*. May 9th, female *neglectas* abroad, both sexes of which have been observed up to July 10th. The last *Lucia* was observed May 9th. The above observations were carefully and conscientiously made. If, in the end, it shall be proved that *Lucia* is an early spring form of *pseudargiolus*, the above is almost couclusive evidence that deep coloration is not wholly the result of frigid weather.

NOTE.—It is with trepid hand that I pen the fact that two species of *Rhopalocera*, believed by some of our boreal friends to exist no where in this State outside of famous Center—*N. canthus* and *A. vialis*—are frequently met with in this section.

E. C. HOWE, M. D., Yonkers, N. Y.

DEAR SIR,—

The cutting sound heard by Dr. Packard, and discovered to be two black points used by the insect to cut its way out of prison, is not confined to *Luna*. I have heard the same sound when *Polyphemus* was about to leave its wintry mansion, but supposed it was done by the moth working its feet against the softened part of the cocoon. The feet and legs seem as strong when the insect first emerges as they do any time afterwards; indeed it is surprising, after the exhaustive effort the insect must have made to get through the tough cocoon, to see how readily it crawls up to a convenient place for its ample wings to spread into shape and beauty. As all breeders of moths are aware, the wings, when the moth first comes out, are soft and weak, and are the last parts we should suppose would assist in the arduous task.

On two occasions I have heard a sharp report when *Cecropia* was about to make its exit from the cocoon. The sound was similar to that produced by toy torpedoes such as boys amuse themselves with. I have thought perhaps the corrosive liquid used by the moth to soften the silk might be of an explosive nature, and on coming in contact with the oxygen of the air, might produce the sound. I should like to know if any of the readers of the CAN. ENT. have heard this remarkable sound, and what their opinions are. ROBERT BUNKER, Rochester, N. Y.

DEAR SIR,—

Saperda candida Fab. made their appearance this year about twenty days earlier than usual. Trees leafed out in this vicinity about thirty days earlier than in ordinary seasons. Took June 2nd, 3 ♂ and 1 ♀.

June 6th, I took one pair of *Saperda puncticollis* Say on poison ivy (*Rhus toxicodendron* L.)—the first of these handsome *Saperdas* taken in this locality.

June 12th, took the first *Saperda Fayi* Bland. This borer attacks the limbs and stem (½ to 1½ inches in diameter) of our wild thorn (*Crataegus crus-galli* L. and *C. tomentosa* L.), creating a gall-like, gnarly swelling, weakening the branch so that it sometimes breaks off by the wind, and often killing it. The beetle cuts its way out from one to three inches above or below the swelling. In 1876 I took a ♀ *S. Fayi* Aug. 15th.

CHAS. D. ZIMMERMAN, Buffalo, N. Y.