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INACCURATE FIGURE OF A BUTTERFLY'S EGG.

I have always wondered where the figure of the egg of the vanessid butterfly *polychloros* of Europe came from, as it was manifestly incorrect, although it has been extensively copied, and so far as I know, never found fault with. Dr. Riley has just lent me the volumes of Sepp's Nederlandsche Insecten, and there I find the culprit. It is figured as having the shape of a pear or perhaps better of a gourd, being much constricted and produced at the top. In Sepp's other figures of eggs which are laid in batches, the clusters are figured likewise, as for instance in the case of *urticae*, but here this is not done, and I am strongly under the impression that Sepp, whose accuracy is well known, must have mistaken the egg of some other insect for that of *polychloros*, the eggs of which are laid in clusters and resemble those of *antiopa*, both in their manner of deposition and in their form, so closely that they can hardly be distinguished.

S. H. Scudder.

MACULATION AND PUPATION OF SMERINTHUS EXCAECATUS.

In Lexington, Mass., 17 Aug. 1888, I confined a large female *Smerinthus excaecatus* in a breeding cage. In a few hours she began to lay, attaching, singly or in small clusters, some eighty roundish, light-green eggs to the netting with which the cage was covered. I then removed them to a glass jar, to prevent the escape of the young larvae—should they hatch—through the meshes of the netting. On 25 Aug. the eggs began to hatch, and the larvae ate freely of willow (*Salix*), with which I supplied them. The first molt was taking place 2 Sept., and the second 11 Sept. Up to this time I had noticed no red spots, but after this they appeared on less than one-half of the specimens then alive. As is the case amongst most of the *sphingidae*, I believe, while young, the mortality of my *S. geminatus* and *S. excaecatus* has been great, so that at the completion of their second molt less than half had survived, though I had taken much pains to keep their jar clean and well supplied with fresh twigs of willow.

The red spots, besides being present in only a part of my specimens, were unequally distributed in these, some having both the stigmatal and dorsal, while others had only the stigmatal spots.

About 25 Sept. the greater part of these larvae stopped eating and settled to rest in the bottom of their jar. As they were apparently very far from being fully grown, having reached a size perhaps half or two-thirds of that which should normally be attained by these larvae, I was disinclined to consider their behavior a preliminary to pupating. After a few hours, however, to my great surprise, they pupated, forming of course very small chrysalids. The interesting question in regard to these larvae is this:— did I overlook two molts, owing to the habit that this larva has of eating all of its cast-off skin but the head, or did they pupate when they had accomplished only two of their orthodox number of molts? The former supposition seems to be rendered unlikely from the fact that at the time of pupating they were so far from having attained their normal size, not to speak of the improbability

of two molts escaping my frequent and somewhat careful scrutiny. The latter supposition seems to be favored by the circumstance of the lateness of the season when the parent moth was taken, as it is rare to find one so late as 17 Aug. Several of the pupae soon sickened and, on being handled, readily collapsed, showing that they lacked the robustness of normal specimens.

As to the distribution of the red spots, I find, on consulting William Buckler's work "The larvae of the British butterflies and moths," that the three British specimens of the genus *Smerinthus* (*S. ocellatus*, *S. populi*, and *S. tiliae*), all show the same disparity as does our *S. excaecatus* in regard to number and distribution.

Holmes Hinkley.

PROCEEDINGS OF SOCIETIES.

CAMBRIDGE ENTOMOLOGICAL CLUB.

(*Continued from p. 139.*)

11 March 1887.—The 127th meeting was held at 61 Sacramento St., Cambridge, 11 March 1887. The meeting was called to order shortly after eight, the president, Mr. J. H. Emerton in the chair.

The additions to the library were announced by the librarian.

Mr. S: H. Scudder exhibited specimens of *Melitaea harrisii* which had been kept in a cyanide bottle since June 1886 and called attention to the curious fading of the black in the wings.

He then showed a photograph of Major John LeConte taken from a miniature.

Mr. Scudder read a letter dated 16 January, 1887, from Miss Adele M. Fielde of Swatow, China, containing six larvae. These were found "on the level surface of the coarse sand which covers the bottom of an aqueduct, under an inch or two of fresh, clear, running water; little structures which resembled a tiny cave with a gray gauze awning stretched in front. They were to be seen in scores, always opening up stream, the gauzy entrance arched at the top and having a span of an eighth to half an inch. There was usually a buttress of sand in the rear, which in some cases had been swept away. The largest of the larvae found was five-eighths of an inch long. It burrowed in the sand, forming the floor of its cave, and stretched its head out of its furrow, appearing to feed on what had been caught in the delicate roof of its den. Its head and the three thoracic segments, each of which bore a pair of jointed legs, were a glossy reddish-brown, while the following eight segments were, in some specimens bright green, in others opaque gray. The terminal portion, a translucent white segment, bore two cylindrical prongs, ending in a tuft of long setae and having a brown hook on the under side, like the hooks on the feet. Nine segments, beginning with the mesothoracic, bore on the ventral surface tracheal gills, which issued from the body in a single stem and then branched irregularly into finger-shaped processes. The arrangement of these gills is much like that of the setae on the ventral surface of the earthworm, as far as I could discover without a dissecting microscope, in four longitudinal rows. The two outer ones being the larger. (I am not certain whether there were really four rows or whether the branching gave the appearance of four rows.) No antennae were visible. The eyes are small and close to the mouth. The metathoracic appears to coalesce with the first abdominal segment, but differs in color. There are many may fly larvae flitting about the little structures, probably uninvited guests at the banquet spread out in the net of their host. The species is probably allied to one described by Miss Cora H. Clarke."

(See Proc. acad. nat. sci., Phil. 1888, p. 129-130, pl. 8.)

Mr. S: H. Scudder then showed figures of the fossil butterflies known from America.

Mr. W: Trelease exhibited specimens which he supposed to belong to some species of *coccidae*.