Communications, exchanges and editors' copies should be addressed to Editors of Psyche, Cambridge, Mass. Communications for publication in Psyche must be properly authenticated, and no anonymous articles will be published.

Editors and contributors are only responsible for the statements made in their own communications.

Works on subjects not related to entomology will not be reviewed in Psyche.

For rates of subscription and of advertising, see advertising columns.

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 excacaecatus 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. excacaecatus 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 sup-
position seems to be favored by the circum-
stance 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. tiliæ), all show the same disparity
as does our S. excaecalus in regard to num-
ber 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 aque-
duct, under an inch or two of fresh, clear,
running water; little structures which resem-
bled a tiny cave with a gray gauzy 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 spec-
imens 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 arrange-
ment of these gills is much like that of the
setae on the ventral surface of the earth-
worm, 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, prob-
ably 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 spe-
cies of coccidae.