

and a lover of innocent pranks, yet at the same time he possessed an ambition to excel and an earnestness which impressed all who knew him. In entomology he was especially interested in the Diptera and had intended to devote his leisure time to studies in that group. He was an enthusiastic collector, and on leaving Washington he gave his small collection to the National Museum.

—Mr. Webb presented the following note:

A NEW SPECIES OF LEPTURA.

(COLEOPTERA, CERAMBYCIDÆ.)

By J. L. WEBB.

Leptura straussi, n. sp.

Length 8 mm. Head black, shining; mandibles, labrum, and clypeus usually ferruginous. Thorax red, shining, sparsely and very finely pubescent. Elytra black, with light-yellow vitta extending almost to tip, but abbreviated in some individuals, coarsely punctured, and covered with rather fine yellowish pubescence. Ventral aspect black, except prothorax, very finely pubescent.

Type.—No. 10345, U. S. National Museum. Tryon, N. C., April 25, 1904. Collected by Mr. W. F. Fiske. Eight specimens were taken by Mr. Fiske on the flowers of dogwood (*Cornus florida*) at an altitude of over 2,000 feet.

This species is related to *L. vibex*, which it resembles very closely in form and in the markings of the elytra. It differs from that species, however, in that the thorax is red and shining; in *L. vibex* the thorax is black, and neither thorax nor head is shining.

—Mr. Barber spoke of the finding, in Guatemala, of a luminous larva of the coleopterous group Phengodini which may possibly make a fourth section of this group. He reports as follows:

THE GLOW-WORM ASTRAPTOR.

By H. S. BARBER.

Mr. E. A. Schwarz and the writer were sifting for insects beside a creek near Cacao, Finca Trece Aguas (between Pan-

zos and Senajú), in Alta Vera Paz, Guatemala, in April, 1906 (altitude between 800 and 900 feet), when we found a very small phengodid larva or adult female, about one-fourth of an inch long, bearing a ruby light in the head. This light seemed to be thrown directly forward so that it was not easily seen from above except when the head was raised or when the light was reflected from some object in front. No other lights were observed on our single specimen, but we only watched it for a short time, during daytime, having no facilities for keeping it alive with us, and no more examples were taken. No males referable to this species were found at that place, but at the coast, at Livingston, Guatemala, a few weeks later, a small male *Mastinocerus*(?), agreeing very closely with Gorham's figure and description of *Euryopa singularis* and description of *E. brunnea*,^a was taken which gives the only clue to the possible adult male obtainable.

It was a pleasant surprise on our return to find that this larva (or adult female) agrees very closely with Murray's figures, and that there appears to be a chance of associating his name *Astraptor* with a genus of these queer beetles.

In 1868 Murray read a paper^b "On an undescribed light-giving coleopterous larva (provisionally named *Astraptor illuminator*)" in which he discussed luminous larvæ in general and described, with figures (Pl. I, figs. 1-7, copied herewith as Pl. I, figs. 1, 1^{a-d}), the queer specimen found by Mr. Fry at Rio, which had "Red light in the head, white light in the tail, and one light on each side at each segment of the body. Light in head permanent, the others showing by flashes."

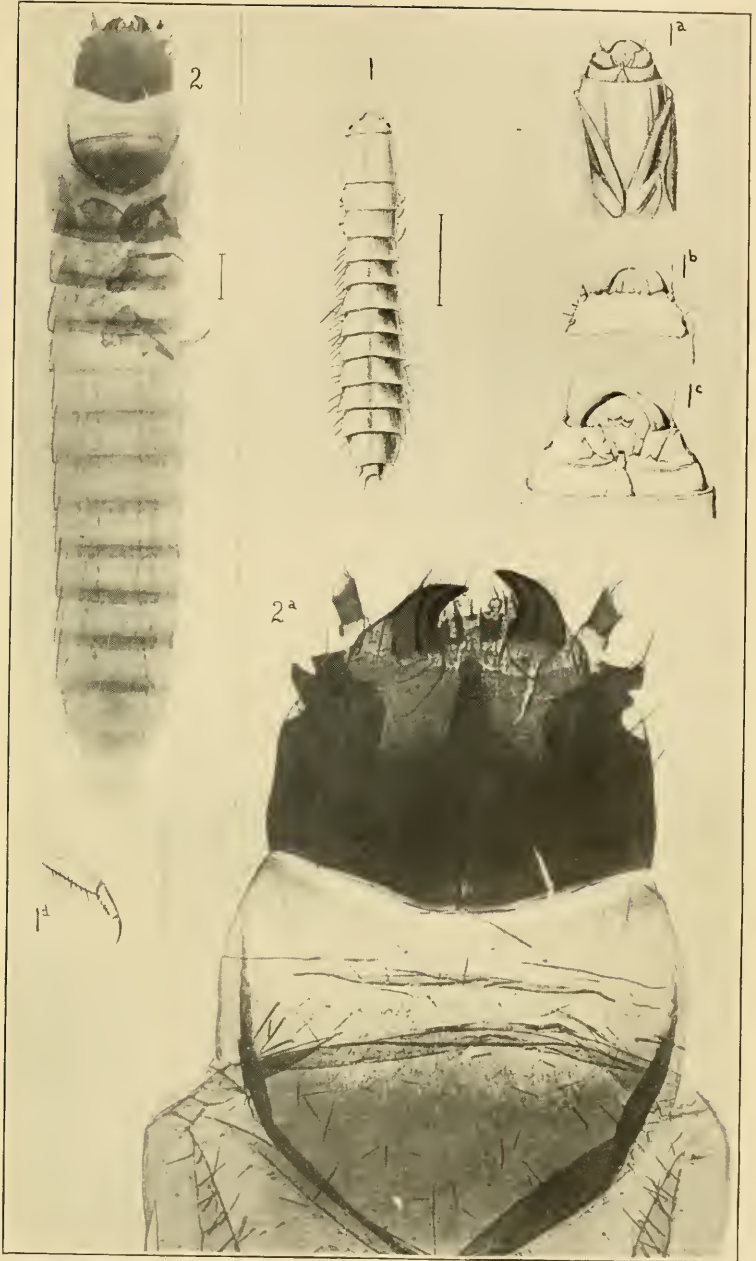
Our single specimen is much smaller than Mr. Murray's, being only 6 millimeters long as against nearly 12 millimeters. Its affinities with *Mastinocerus* are apparent, but the heavily chitinized head and the reduced size of the maxillary palpi, together with its more compact form, separate it as a fourth type of larvæ in the Phengodini, the other types being represented by Phengodes, Cenophengus, and *Mastinocerus*.

The specimen is mounted in balsam, and the accompanying photographs (Pl. I, figs. 2, 2^a) were made directly from it.

The synonymy of *Astraptor* cannot now be given, but the name must be used for a genus of the Phengodini closely related to *Mastinocerus*, and to which may belong Gorham's species *singularis* and *brunnea*, which he placed in his manifestly heterogeneous genus *Euryopa*; and also two undescribed species in the National Museum collection.

^a Biol. Centr.-Am., Coleoptera, Vol. III, part 2, p. 109, pl. 6, fig. 4.

^b Journ. Linn. Soc. London, Vol. x, p. 74.



THE GLOW-WORM ASTRAPTOR.

EXPLANATION OF PLATE I.

FIG. 1. *Astraptor illuminator*. (After Murray.)

a, head and prothorax from below.

b, head from above.

c, head from below.

d, leg.

2. *Astraptor* sp., from Guatemala. (Original.)

a, head.

—Professor Webster spoke on the spring grain-aphis (*Toxoptera graminum* Rond.) and the very great importance of the pest in the Middle West. This insect is probably a native of Europe and was introduced a number of years ago; he had himself worked on its life history, in 1884, in Northern Indiana. This insect has been found over a considerable area in the United States from latitude 41° south and in altitudes varying from 19 feet to 5000 feet above sea level. Weather conditions during winter and spring almost entirely control the destructive numbers of many pests, but in this case unfavorable weather seems to aid the multiplication of the pest. The *Toxoptera* will breed through the entire winter where the temperature is occasionally below the freezing point, while during this period the parasites are entirely dormant. It takes but a few warm sunshiny days for the parasites to appear and begin their telling work, multiplying enormously. It is a peculiar phenomenon that the *Toxoptera* should breed so prolifically in cold climates when it is a decided warm-climate species. Frequently the parasitized *Toxoptera* are so numerous that the entire field assumes a brownish color, since the parasites produce a brownish leathery appearance in the later stages.

Professor Quaintance reported that the black peach-aphis (*Aphis persicæ-niger* Er. Sm.) bred throughout the winter on peach trees in the insectary yard of the U. S. Department of Agriculture, although at times the trees were covered with sleet and ice. He spoke of his observations on the eggs of *Aphis mali* Fab., in which he found that less than 2 per cent of the many eggs laid preserved their form through the winter and were evidently fertile. Apparently over 98 per cent were infertile of the 2,000 or more examined.