## THE GENUS BOLTERIA UHLER (HEMIPTERA-MIRIDÆ).1

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The extensive Lugger collection of insects which now forms the basis of that of the Division of Entomology and Economic Zoölogy of the University of Minnesota, contains many important specimens which have been largely overlooked by specialists. A good example of this which has come to the attention of the writer seems to be of sufficient importance to merit special note.

When the writer first glanced over the Hemiptera collection his attention was immediately arrested by the label bearing the name Bolteria amicta Uhler. There are six specimens bearing the locality label "N. Mex." and the handwriting of the name label indicates an origin dating back to near the time of the original description of the species. On closer inspection of the specimens the writer was greatly surprised to find them identical with the recently described Dichrooscytus speciosus var. Thropallidus Knight. By consulting some correspondence saved from Dr. Lugger's files covering the years 1889 to 1892, it was found that Mr. A. Bolter was a personal friend of Lugger and that exchanges of insects frequently took place. It was easy to establish that the handwriting on the name label was that of Mr. Bolter, first by comparison with specific names written in his correspondence, then by labels on other specimens which he had sent to Dr. Lugger.

The genus Bolteria was established on the single species amicta by Uhler in his paper of 1887 (Ent. Amer., III, p. 33). At the close of the description the author stated: "Mr. Bolter collected several specimens in New Mexico and kindly gave me a pair of both sexes." When the writer studied the Uhler collection early in 1915, no specimens bearing the label Bolteria amicta were to be found. Van Duzee states, 1916 (Psyche, XXIII, p. 141) in his note on the genera Hyoidea and Bolteria, that: "Dr. Reuter did not know Bolteria amicta, the type of the genus, but placed

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picta in Hyoidea and described a new species grisea. An examination of fresh material of picta shows that it wants the free converging arolia found in Hyoidea and must be placed in subfamily Phylinæ. It is probably safe to assume that amicta is congeneric with picta although the type is lost and so far as I know the species is now unrecognized."

A comparison of the Bolter specimens with the original description of Bolteria amicta shows that they agree in every detail, and the specimens in the Lugger collection received from Mr. Bolter are undoubtedly of the type material. When the writer described Dichrooscytus speciosus in the did not consider the genus Bolteria since it had been placed in the subfamily Phylinæ, therefore the failure to recognize the form. The form irropallidus was described as a variety of Dichrooscytus speciosus Van D. since the writer could point out no distinguishing structural difference, yet the forms differ so greatly in general appearance.

Mr. Van Duzee evidently placed speciosus in Dichrooscytus since it runs to that genus in his tables, and did not consider it sufficiently different to establish a new genus. The writer does not believe that the genus Bolteria Uhler (1877) should be thrown into synonomy with Dichrooscytus Fieber (1858) for several other genera in the Miridæ are apparently separated on points of less difference than is the case here. The species amicta and speciosus may well be separated from Dichrooscytus by the broader and nearly vertical head, depressed vertex, reniform eyes approaching pedunculate, and with the width of the head across the eyes nearly as great as the width of the pronotum at base.

The species (Bolteria) picta Uhler (1893) and hirta Van D. (1916) are not congeneric with Bolteria amicta Uhler, and lacking free arolia, must belong in the subfamily Phylinæ where Van Duzee placed them. Since there is no genus in the Phylinæ to receive them the writer designates a new genus for their reception: Phyllopide new genus. Type of the genus: (Bolteria) picta Uhler 1893 (Proc. Ent. Soc. Wash., II, p. 373).

Phyllopidea is characterized by the presence of pseudo-arolia and genitalia very similar to the general form found in Plagiognathus; the tip of the penis twists to the left, lying closely within

the bend of the left genital clasper, extending downward and beyond it to the left side, a condition found in nearly all the Phylinæ and is perhaps a good group character. The genus Phyllopidea is distinguished by the broad and thick head, tumid front and vertex, the basal margin of the head not forming an evenly arcuated line as in Europiella, but having the curve interrupted by the posterior extension of the vertex at the median line; rostrum reaching to near apex of the intermediate coxæ, the first segment thick, in length scarcely surpassing the base of the head; lower face thick, produced downward, when viewed from the side extending below the eye for a distance equal to the height of an eye, in outline the tylus presenting a curve downward and backward, its base distinguished from the front by an incised suture which lies above a line drawn connecting the base of the antennæ; width of vertex equal to or nearly equals one half the width of the pronotum at base, apex of the pronotum in width as great as or greater than is the length; dorsum and head strongly hirsute; width of the hind femur equal to not more than one fourth its length, while in Europiella the width is equal to one third the length.

The writer here takes occasion to designate the type specimens of (Bolteria) picta from the type material used by Uhler for the original description.

Lectotype: Cat. No. 22561 U. S. N. M., Q, June 22, 1891, American Fork, Utah (E. A. Schwarz).

Allotype: Same date as the type: (Heidemann Coll.) Cornell University Collection. There is also in the U. S. National Museum Collection: &, "Colo. 1690"; Q, May 28, 1904, Govan, Wash. (J. A. Hyslop). In the Cornell Collection: Q, "Colo. 1690." Specimens from Colorado are larger and more elongate than are those from farther west.

In the absence of type material of amicta in the Uhler collection the writer here designates types of Bolteria amicta Uhler from the specimens sent to Dr. Lugger. Lectotype  $\mathfrak{P}$ , "N. Mex." (A. Bolter); Minnesota University Collection. Allotype: With the type. Paratypes: I  $\mathfrak{P}$ ,  $\mathfrak{P}$ , same date as the types.