

4. *Cyclothyrphorus vulvanus*.

Spirobolellus vulvanus, Karsch, Zeitschr. ges. Naturwiss. (3) vi. (liv.) p. 55 (1881).

Colour black, with the posterior borders of the tergal plates flavous.

Head nearly smooth, with 3 or 4 labral pores on each side; area between the antennæ impressed. First tergal plate with its lateral portion extending inferiorly as far as that of the second, narrowed, subacute, the anterior margin excavated and defined by a sulcus. The rest of the segments with the transverse sulcus not deep; the median portion very finely subrugose, sculptured with longitudinal striæ and scattered punctures; inferiorly striate, posterior portion slightly convex, sulcate beneath, sparsely impressed with punctures, marked with a median dorsal sulcus and a lateral sulcus behind the pore, which is placed behind the transverse sulcus. Anal segment punctured; tergal plate widely rounded; valves strongly convex, vulviform.

Number of segments 43. Length 30 millim.

Hab. MEXICO, Puebla (*Berckenbusch*).

So far as can be judged from the description, this species is very nearly related to *S. nietanus*. The form of the first tergal plate is not very, if at all, different in the two, and the conformation of the anal valves appears to be the same—that is to say, they are convex with the margins uncompressed and forming a re-entering angle where they meet, so as to conform to the type that Karsch described as “vulviform.” In size and number of segments the two species are also alike. Unfortunately Karsch says nothing about the secondary sexual character of the male, although both sexes were available for examination. *C. vulvanus* appears, however, to differ from *C. nietanus* at least in the distinct sculpturing of the tergal plates.

SPIROBOLELLUS.

Spirobolellus, Pocock, in Max Weber's Zool. Ergebnisse einer Reise in Niederl. Ost-Ind. 1894, p. 398.

For characters, see *infra*, p. 89.

This genus was based upon a single species, *S. chrysodirus*, from Sumatra. It is possible that the Central-American forms here referred to it may prove to be generically distinct; but until a revision of all the genera of this family has been taken in hand, I prefer to assign to *Spirobolellus* the three species described below. These may be distinguished as follows:—

- a. Larger, length up to or over 50 mm.: sculpturing very coarse and pitted; a well-developed caudal process; posterior lamina of coleopod entire inferiorly; first tergal plate very wide laterally, with the thickened anterior border largely overlapping the base of the mandible *richardsoni*, sp. n.
- a'. Smaller, length only up to about 40 mm.: sculpturing comparatively weak; no caudal process; posterior lamina of coleopod deeply emarginate below, cut out into an outer stout and an inner slender more styliiform process; first tergal plate much narrower laterally, and its anterior border less thickened and not concealing the basal segments of the mandibles.