Art. XXII.—*The Occurrence in New Zealand of* Craterostigmus tasmanianus *Pocock (Chilopoda).*

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The genus *Craterostigmus* has hitherto been known from only two specimens, collected on the summit of Mount Rumney, Tasmania, in 1892, by Mr. G. M. Thomson, of Dunedin. It was described in 1902 by Pocock,* who pointed out its great importance, in that it occupies an intermediate position between the Scolopendromorpha and the Lithobiomorpha. The former have 21 body-segments, each with tergum, sternum, and a pair of legs; the latter have only 15 of such segments. *Craterostigmus*, however, has 21 terga, but only 15 sterna and 15 pairs of legs. Certain other characters show the relationship of the genus to one or other of the groups Lithobiomorpha, Scolopendromorpha, and Geophilomorpha; and in one or two characters, particularly in the presence of a bivalved sclerite at the posterior end, bearing the genito-anal aperture, the genus is unique. It therefore takes rank equally with the above-mentioned groups, and is the sole representative of the order Craterostigmomorpha. For full particulars of these details reference must be made to Pocock's important memoir cited above.

I am now able to record the species from the South Island of New Zealand, where it has been found in several localities.

A description of the species, mainly taken from Pocock's paper, is given here for the convenience of New Zealand workers who may not have access to the *Quarterly Journal of the Microscopical Society.*

Order CRATEROSTIGMOMORPHA Pocock, 1902.

Genus Craterostigmus Pocock, 1902.

Craterostigmus tasmanianus Pocock, 1902. R. I. Pocock, *Quart. Journ. Micr. Soc.*, vol. 45, p. 423, pl. 23, 1902.

Colour (in spirit) greenish-yellow, head and toxicognaths dark reddish-brown. Integument sparsely hairy and punctured. (Pocock describes the colour as yellowish-brown: this may be due to the use of a different preservative.)

Cephalite (fig. 1) parallel-sided, its posterior border convexly rounded; frontal area with its sides converging between the eyes and the base of the antennae. Eyes some distance behind the antennae; frontal sulcus projecting posteriorly between the eyes, with strongly convex backward curvature. Antennae with 18 segments, the segments hirsute, especially towards the distal end of the appendage, subcylindrical, longer than wide. Praecoxal processes of toxicognaths (fig. 2) long, armed apically and externally with 7 teeth, inner side of femur and femoral processes armed with about 5 teeth, inner side of the trochanter armed with 1 tooth just behind the suture marking the line of union of trochanter and femur. Basal plate with posterior angles rounded. Terga without longitudinal grooves, with posterior border straight, posterior angles rounded, and unthickened

* R. I. Pocock, *Quart. Journ. Micr. Soc.*, vol. 45, pp. 417–48, pl. 23, 1902.

margins. Sterna without grooves, those of the posterior somites granular; sternal area of last marked anteriorly on each side with an oblique shallow groove. Legs shortish, hairy, armed with a single inferior tibial and tarsal spine. Claw with 2 basal spinules, one inferior and one posterior. Posterior legs long and slender, about one-third the length of the body and head, without spines, protarsal and tarsal segments subequal. Trochanter of the 13th and 14th armed below with a horny spike, which is shortest on that of the 13th; coxa of 15th similarly armed. Genito-anal sclerite (figs. 3 and 4) is about one-half the length of the last leg-bearing somite. When

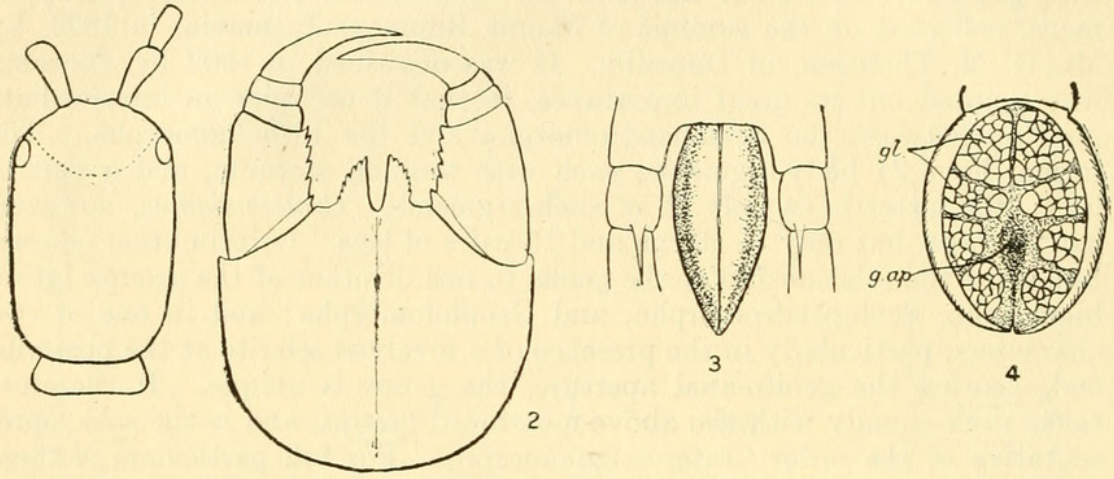

Fig. 1.—Cephalite, dorsal view.
Fig. 2.—Toxicognaths, showing teeth on praecoxal processes and femora.
Fig. 3.—Genito-anal sclerite, ventral view, valves closed.
Fig. 4.—Genito-anal sclerite, ventral view, valves open, showing genito-anal aperture (*g. ap.*) and gland-like bodies (*gl.*).

viewed from the dorsal or ventral aspect its sides are seen to be convex, and to converge posteriorly to a point. From the lateral aspect its upper edge, which is compressed, is straight and horizontal; its inferior edge convex, the two meeting at an acute angle of about 45°. When the valves are open (fig. 4) they are seen to border a shallow oval cavity, in the centre of which is the genito-anal aperture (*g. ap.*), with a row of 4 gland-like bodies (*gl.*) on either side.

Length, 20–45 mm.

Localities of New Zealand Specimens. — Mount Starveall, Nelson (G. Kidson); Mount Dick, Ben Lomond, and Kingston, Otago (T. Hall); Mount Algidus (T. Hall); Cass, and Hawdon Valley, Canterbury (G. A.); Staircase, the Remarkables, and Routeburn, Otago (T. Hall).

Hab.—Tasmania and South Island of New Zealand.

The occurrence of such an archaic form as *Craterostigmus* in both New Zealand and Tasmania is of considerable interest, for it may be regarded as having some significance in connection with the question of a former land connection between these two countries. *Craterostigmus* is fairly common within its range in New Zealand, and is easy to find, and therefore it is not likely to be overlooked by a collector. Centipedes have been collected in the North Island of New Zealand and over a considerable part of Australia, so that, as far as Australia and New Zealand are concerned, it is fairly safe to assume that it is confined to the southern portion of these two regions. If later search proves this to be the case, the occurrence of the same species in New Zealand and Tasmania will have greater value as evidence for the existence of the supposed former land connection.