antennæ. The sterna of the abdominal segments are prolonged into stout spines in both sexes. The caudal shield is truncated at its extremity. The proximal joint of the anterior abdominal appendages is narrow, and, as in *Serolis schythei*, the basal triangular process furnished with branched hairs is absent; the suture on the operculum is at right angles to the long axis of the body. The palp of the maxillipede has this peculiarity, that the second joint, instead of being cordate in shape, has the two margins curved inwards and parallel with each other.

This assemblage of characters is very distinctive of all the Australian species with the sole exception of *Serolis minuta*; this latter appears to be intermediate between the other Australian species and the more typical species of *Serolis* such as *Serolis paradoxa*; in the characters of the last thoracic segments, as above stated, it more closely resembles the former, while in other respects it comes nearer to the latter; it would be difficult to classify it definitely with either; for this reason, and also considering the compactness in other respects of the genus, it appears to me inadvisable to divide *Serolis* into two separate genera or subgenera.

11. Serolis tuberculata, Grube (Pl. VI. figs. 1, 2).

Serolis tuberculata, Grube, Archiv f. Naturgesch., 1875, p. 227.

The Challenger obtained two specimens of a small species of *Serolis*, which I identify with Grube's *Serolis tuberculata*; one of these specimens is a male, the other a female; they were obtained from different localities, the male from Station 161, the female from Station 162; the former specimen is unfortunately much damaged.

The female is larger than the male—it measures 19 mm. long by 17 mm. broad; the length of the male is 12 mm., its breadth about the same. It appears therefore that the males of this species, if not smaller than the females, are broader in proportion to their length, as is generally the case in this genus. The colour of the two specimens is rather different; the female is pale yellowish brown, with innumerable black dots; on the outside of each epimeron is a larger black spot; the male is of a uniform but darker brown.

I have but little to add to Grube's excellent description of this species; in my specimens the epimera are not so closely applied together as he describes, and this is especially the case in the male, where the points of all the epimera project freely. On the cephalic shield between and in front of the eyes is a semicircular ridge of the integument; the convexity is directed forwards, and the two lateral ends are prolonged backwards into two short spines; the lateral tubercles on the thoracic segments are eight or nine in number on either side, and are situated on a low ridge which commences near the junction of the tergal portion of the segment with its epimeral portion, and terminate a little before the middle of the segment; this ridge is longer in the third free thoracic