

composed of nine joints. The second and third joints of the antennæ are raised into tubercles on the upper surface.

*Mouth Appendages.*—The *mandibles* (Pl. VIII. figs. 9, 10) as well as the maxillipedes (fig. 12) are much sculptured, the under surface being raised into a number of ridges separated by deep depressions as shown in the figure; the masticatory edge, instead of being comparatively straight and smooth, as in the majority of species, is denticulate, one tooth on its posterior boundary being specially prominent. On the upper surface (fig. 10) are two spine-like processes.

The *maxillæ* do not differ much from those of other species; the anterior pair (fig. 11) have a short basal joint, and the terminal joint is much bent.

The *maxillipedes* are shown on fig. 12 of Pl. VIII.; the under surface of the basal portion, instead of being flat and smooth, as is ordinarily the case in *Serolis*, is traversed by a number of ridges, the direction and form of which are displayed in the figure; the second joint of the palp has the peculiar shape that it has in *Serolis australiensis*. The outer margins, instead of being convex, are concave and almost parallel with the inner margins; they are traversed from end to end by a ridge, close to and quite parallel with the outer margins.

The *second pair of thoracic appendages* are shown on fig. 13 of Pl. VIII., and several of the spines from the inner surface of the penultimate joint on figs. 14, 15 of the same plate. The latter are very characteristic in shape—the longer spines terminate in two large oval expansions traversed by longitudinal striæ which converge at the proximal extremity; the anterior of the two is shorter and broader than the posterior; but at the hinder end of the joint they become much smaller and nearly equal in size and similar in shape; between the two wing-like processes the axis of the spine is continued into a thicker cylindrical tapering extremity which reaches a trifle beyond the level of the posterior wing-like process.

The *third pair* are in the male modified in the ordinary way (Pl. VIII. fig. 16). The penultimate joint is oval, and furnished on the inner surface with six or seven pairs of cylindrical spines, the axis of which is prolonged into a short filiform process. The first joint, as in the succeeding ambulatory limb, has a row of fine branched hairs on the inner side.

The *remaining thoracic appendages* are stout and strong, and furnished with serrated spines, especially upon the outer surface; the second joint has invariably a single slender spine springing from about the middle of the inner surface; the third, fourth, and fifth joints increase progressively in size, the fifth joint being nearly or quite as long as the second, though narrower.

The *three first abdominal appendages* have no inner angle bearing hairs upon the basal joint.

The suture which traverses the exopodite of the operculum is at right angles