

Station 146, December 29, 1873; lat. $46^{\circ} 46'$ S., long. $45^{\circ} 31'$ E.; 1375 fathoms; bottom, Globigerina ooze.

Station 147, December 30, 1873; lat. $46^{\circ} 16'$ S., long. $48^{\circ} 27'$ E.; 1600 fathoms; bottom, Diatom ooze.

The above cited Monograph of Grube contains a description and figures of a species of *Serolis* (*Serolis tuberculata*) which differs from all the species known at that time and from all those already described in the present Report by the characters of the fifth and sixth thoracic segments; the tergum of the fifth segment, which is generally narrower than the preceding ones, is in this species extremely narrow, not measuring more than one-sixth of the diameter of the segment in front, while the tergum of the sixth thoracic segment has entirely disappeared: the Challenger obtained two specimens of this same species, *Serolis tuberculata*, besides examples of four other species which agree with *Serolis tuberculata* in the characters just mentioned; all these species are inhabitants of the shallow waters off the southern and eastern coasts of Australia, and form a well-marked group, agreeing with each other in a number of structural points. These species I have briefly described in my "Preliminary Report," and named as follows:—*Serolis pallida*, *Serolis australiensis*, *Serolis elongata*, *Serolis minuta*, and *Serolis longicaudata*; all these species, with the exception of *Serolis minuta*, agree with each other and with *Serolis tuberculata* in the following points, some of which are peculiar to the group, while others again are not confined to the group, but are also to be found in other species.

They are all of small size; the females are larger than the males (?). The thoracic epimera are short and closely applied together for their whole length, while the epimera of the two abdominal segments are very short and not prolonged beyond the anterior margin of the caudal shield. The tergum of the fifth thoracic segment is extremely narrow; the tergum of the sixth segment is obsolete in the middle line, the suture which separates it from the succeeding first segment of the abdomen passes forwards and disappears underneath the segment in front (*cf.* Pl. VI. fig. 1) in *Serolis tuberculata* and *Serolis pallida*; in *Serolis australiensis*, *Serolis elongata*, and *Serolis longicaudata* the general appearance of the two last thoracic terga is the same, but a careful inspection shows that the posterior sutures of both segments become obsolete just before the middle line of the body, so that which apparently is the tergum of the first abdominal segment in reality includes also the middle part of the terga of the two last thoracic segments. In *Serolis minuta* the fifth and sixth thoracic segments are not quite so narrow as in the other Australian species. The fifth segment is divided off by a sutural line which is entirely continuous from one side of the body to the other; the sixth segment, however, though proportionately somewhat broader, resembles that of *Serolis australiensis*, &c., in being fused mesially with the succeeding abdominal segment. In the other Australian species the rostrum is long, reaching beyond the first joint of the anterior pair of