in a well-formed chelate extremity in the female (o, ?), of which the dactylos is longer than the pollex, and is also fringed with the hair on the upper surface.

The anterior pair of pleopoda is large, oval, and foliaceous. The others consist of a small outer foliaceous plate and a long slender three-jointed branch, which supports and carries the ova during gestation.

The male differs from the female in being about one-fourth smaller. It has the third pair of pereiopoda with the propodos broad as in the female, but not so broad as the second pair, where, as in the female, it is larger; and the fifth pair has the dactylos long, slender, simple, and almost as long as that of the fourth (o, 3).

The anterior pair of pleopoda is slender and foliaceous; the three following pairs are rudimentary, and decrease in size with each succeeding somite.

Arctus tuberculatus, n. sp. (Pl. X. figs. 1, 2).

Dorsal surface of the pleon furnished in the median line with a row of large nodulated tubercles, one corresponding to each of the four central somites, the second and third being very elevated, the latter conspicuously overhanging posteriorly, and laterally thickened.

Length, 50 mm. (2 in.).

Habitat.—Station 190, between New Guinea and Australia, September 12, 1874; lat. 8° 56′ S., long. 136° 5′ E.; depth, 49 fathoms; bottom, green mud.

Carapace quadrate, scarcely longer than broad. Median crest formed by a double line of tubercles, flanked by a longitudinal row on each side, and divided into four sections, the anterior or rostral, the gastric, cardiac, and post-cardiac. The gastric rises higher anteriorly than the rostral, and the cardiac higher than the gastric, from which it is separated by a deep cervical sulcus; gradually declining posteriorly it is separated from the post-cardiac section by another sulcus that traverses the carapace from the post-lateral angle on one side to that on the other. The median crest of the post-cardiac section is not elevated higher than the rostral section. On each side, commencing with the inner canthus of the orbits, a longitudinal ridge formed of strong tubercles extends to the posterior margin, being bisected by the deep cutting of the cervical sulcus a short distance behind the orbits. The outer or branchial region of the carapace is strongly marked with anteriorly directed tubercles, placed in longitudinal rows.

The pleon is marked by a tuberculated ridge that traverses the median line, reaching its highest level at the third somite, where it is produced into a large, tuberculated, laterally-compressed knob that extends anteriorly and posteriorly beyond its base and forms a distinguishing feature of the species. The central ridges on the fourth and fifth somites are of a similar character, but less important; there is no central ridge on the sixth.