longer than the first and fourth. Each of the four segments is ridged posteriorly, the ridge being very narrow dorsally and widening out laterally as in other species; at the junction of the tergum with the epimeron is a short blunt lateral tubercle, which overhangs and completely conceals the latter when the animal is viewed dorsally; the epimera, which are extremely short, are produced into a similar tubercle which exactly underlies that of the tergum; on the first segment the tubercle is prolonged into a spine.

The three posterior thoracic segments are shorter than any of the four anterior ones; the first is the longest of the three; on its inferior surface is a transverse ridge which reaches nearly right across the segment and bounds it anteriorly; each of the segments has a posterior ridge; laterally there is a large rounded convexity separated by a shallow furrow from the ridge and from the epimeron; the latter is smooth.

The *antennules* reach about half way along the third joint of the antennæ.

The two basal joints of the *antennæ* are very short; the third is twice the length of the first two; the fourth is half again as long as the third; the fifth is longer still and the flagellum half as long again.

The anterior thoracic appendages (fig. 7) are furnished with one or two short spines upon the proximal joints, the posterior thoracic appendages (fig. 8) have also a few tubercles on the basal joint.

At Station 184, off Cape York, two specimens of an *Arcturus* were dredged at a depth of 1400 fathoms, which appear to belong to the same species, though it is rather difficult to speak with certainty owing to the imperfect condition of the specimen from Station 281, and the fact that the only perfect specimen from Station 184 was a female, while the example of *Arcturus abyssicola*, described above, is in all probability a male, as there were no traces of ovigerous lamellæ. This being the case, it will be better to describe the characters of the specimens without regarding them, for the present at least, as belonging to another species.

The anterior thoracic segments are rather shorter in proportion, but otherwise present pretty much the same characters.

The abdominal segments are convex dorsally; the first has a pair of short tubercles ventrally on either side of the median line; the sides of the segments are rather more roughened than the thoracic segments.

The caudal shield is keeled, and terminates in a blunt spine; it is covered with a few low scattered tubercles.

Station 281, October 6, 1875, near the Low Archipelago; lat. 22° 21′ S., long. 150° 17′ W.; depth, 2385 fathoms; bottom temperature; 34°·9 F.; bottom, red clay.

Station 184, August 29, 1874, between Australia and New Guinea; lat. 12° 8′ S., long. 145° 10′ E.; depth, 1400 fathoms; bottom temperature, 36°·0 F.; bottom, Globigerina ooze.