

but the small lateral tubercle of the male has become developed into a long spine. The third and fourth segments of the male have exactly the same spines, with the addition of another spine which replaces the lateral tubercle of the second segment, and a short median dorsal spine; the female is much the same. On the second, third and fourth segments there are in both sexes a single transverse row of longish spines near to the anterior margin of the segment.

Each of the three posterior thoracic segments bears a ridge with a single row of long spines arranged at equidistant intervals; there are three pairs of spines, one pair epimeral, and in the female several shorter ones in addition.

The first abdominal segment has a single row of comparatively short backwardly-curved spines; on the second and third segments these spines become considerably longer, especially the lateral spine on either side which marks the anterior extremity of the caudal shield.

The caudal shield in both sexes is covered with longish curved spines; just above and near to the termination of its lateral margins are an extremely long pair of spines directed outwards and slightly upwards.

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

The first three joints of the *antennæ*, more particularly the third joint, are furnished on the upper surface with spines; there are four or five of these spines on the third joint. The fourth and fifth joints are longer than the third joint; they have no spines, but like the preceding joints, are also beset with numerous fine long hairs; the flagellum is moderately short, barely half as long as the fifth joint, and consists of about seven rings.

The proximal joints of the *thoracic appendages* (fig. 3-6) are furnished with spines.

The *uropoda* are tuberculate in the male and covered with short curved spines in the female.

Station 147, December 30, 1873; lat. 46° 16' S., long. 48° 27' E.; depth, 1600 fathoms; bottom temperature, 34°·2 F.; Diatom ooze.

*Arcturus abyssicola*, F. E. Beddard (Pl. XXI. figs. 5-8).

*Arcturus abyssicola*, F. E. Beddard, Proc. Zool. Soc. Lond., 1886, pt. i. p. 111.

Of this species again only a single specimen was obtained by the Challenger; the specimen is unfortunately mutilated, the abdomen having been broken off and lost. The species is interesting from the fact that it was dredged in water of 2385 fathoms, nearly the greatest depth at which any genus of Isopods is known to live. In other respects it is not remarkable.

The head and thorax measure some 15 mm. in length, the antennæ, which are of great size, 42 mm.

Of the first four thoracic segments the second and third are equal in size, and rather