

*Arcturus purpureus*, F. E. Beddard (Pl. XXIV. figs. 5-8).

*Arcturus purpureus*, F. E. Beddard, Proc. Zool. Soc. Lond., 1886, pt. i. p. 109.

A single specimen of this species was dredged in the North Atlantic at Station 23, from a depth of 450 fathoms.

I have named it *purpureus* on account of the purplish colour which appears to characterise the species, and is very distinct in the spirit-preserved specimen.

It is closely allied to *Arcturus anna* and to *Arcturus cornutus*, but differs sufficiently from both to constitute the type of a new species.

The extreme length of the specimen, which is a female, is 18 mm., the length of the antennæ 31 mm.

On the head between the eyes are a pair of long forwardly curved spines; the hinder portion of the head is occupied by a rounded median convexity; at the antero-lateral margin of the head is a very short forwardly directed spine, beneath which the margin is excavated by a semicircular notch.

Of the first four thoracic segments the fourth is rather the shortest. Each of the segments bears an outwardly directed spine on each side of the body corresponding to the pair on the head, and of about equal length; those on the fourth segment, although broken, appeared to have been originally somewhat shorter; close to the lateral margin of each segment, near to its junction with the epimeron, is another long spine projecting outwards and over the epimeron. The first segment differs from the succeeding ones in having no separate epimeron, and its lateral margin has two spines instead of one, of which the anterior is the longer; they are both directed forwards as well as outwards. The fourth thoracic segment has also a second spine, and its postero-lateral margin inclined downwards and backwards as well as outwards.

Of the three posterior thoracic segments the first is the largest, the two posterior being equal in size; the epimera of all three segments bears a spine directed outwards, and at right angles to the longitudinal axis of the body; that of the first of the three segments is considerably the longest; this segment bears also a pair of spines upon the tergum continuous with those on the segments in front, and exactly overlying that on the epimeron.

The first three segments of the abdomen are separated by distinct sutures; the first and the third of the segments have a pair of long lateral spines; those of the third segment mark the boundary between it and the caudal shield; the first abdominal segment has a pair of short ventral spines placed on either side of the median ventral line, and upon a ridge which forms the posterior margin of the segment; anteriorly the segment is bounded by a similar ridge, but without any distinct spines.

The caudal shield is oval and convex, with a faintly marked, longitudinal carina which terminates in a long spine; the lateral margins of the caudal shield are flattened and