

The specific characters of *Arcturus furcatus* are as follows:—

The length of the largest specimen, a male, is 41 mm., the antennæ measure 44 mm.

It most closely resembles *Arcturus spinosus*, but differs from that species in a number of characters, and is clearly distinct.

The antero-lateral margin of the head (Pl. XXV. fig. 6) is furnished with a short forwardly directed spine which is wanting in *Arcturus spinosus*.

Between the eyes are a pair of long spines, which instead of being nearly parallel to each other in their direction as in the latter species, are inclined outwards nearly at right angles; behind these are a pair of shorter spines, and the hinder region of the head is covered with tubercles.

Of the four anterior thoracic segments the fourth is the longest; each of the segments bears a stout ridge posteriorly, covered with spines and tubercles, which are disposed as in the females of *Arcturus spinosus* (see description, p. 88), the spines are shorter and blunter than in the males of that species and are more abundant; the tubercles between the spines are also better developed.

The most striking difference between the two species is in the abdominal segments and the caudal shield; in *Arcturus spinosus*, as already mentioned, the two sexes differ in the relative development of tubercles in this region of the body; they are much more strongly marked in the female than in the male. In both sexes of *Arcturus furcatus* the abdominal segments and the caudal shield are covered with numerous stout short spines of unequal length, and curved backwards; a comparison of my figures of *Arcturus spinosus* (Pl. XX. figs. 1, 2) with Studer's figure of *Arcturus furcatus* (*loc. cit.*, pl. i. fig. 3) will show this difference, which is very striking and serves at once to distinguish the two species.

Betsy Cove, Kerguelen, January 14, 1874; depth, 7 fathoms; volcanic mud.

Station 149B, off Royal Sound, Kerguelen, January 17, 1874; lat. 49° 28' S., long. 70° 30' E.; depth, 25 fathoms; volcanic mud.

Station 149H, off Cumberland Bay, Kerguelen, January 29, 1874; lat. 48° 45' S., long. 69° 14' E.; depth, 127 fathoms; volcanic mud.

Station 151, off Heard Island, February 7, 1874; lat. 52° 59' 30" S., long. 73° 33' 30" E.; depth, 75 fathoms; volcanic mud.

Station 153, Southern Ocean, February 14, 1874; lat. 65° 42' S., long. 79° 49' E.; depth, 1675 fathoms; bottom, blue mud.

*Arcturus glacialis*, F. E. Beddard (Pl. XXI. figs. 1-4).

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

This new species of *Arcturus* agrees with *Arcturus spinosus* and *Arcturus furcatus* in the extraordinary development of spines upon the carapace and limbs; it comes