

The bristles of the inferior tuft are translucent. The terminal or dilated portion of the shaft presents minute serrations along its convex edge, and the distal articulation is comparatively short, resembling that observed in *Onuphis* and others. It has a boldly bifid tip (Pl. XVIIA. fig. 10) with a thin process or guard.

All the bristles are very much larger than those of any known example of the genus.

The cuticle seems to be thin, but the hypodermic tissue is largely developed, both on the body-wall and the dorsal cirri, which have long parallel vessels running from the centre to the circumference. These organs (which appear to be blood-vessels) are probably branchial in function. The circular muscular fibres are well developed, both dorsally and ventrally, and the vertical and oblique are strong. The longitudinal ventral muscles are elliptical in section, and appear to be formed of a double fold. The nerve-cords, as usual in the group, are very large. The alimentary canal has a very regular series of folds internally, each fold being somewhat dendritic in section.

The dorsal cirrus and other parts of the foot of this form approach the structure of the foot of the *Anisoceras* of Grube,¹ from St. Catherine on the coast of Brazil. The head and other parts of the latter clearly demonstrate its connection with the *Staurocephalidæ*, and Grube indicates in his description and outline of the foot that the inferior bristles are jointed. Two brownish-red bars occur in each segment. Grube in this paper does not mention its relationships, but Ehlers and he² do so subsequently, the genus being merged into *Staurocephalus*. The *Staurocephalus lovéni* of Kinberg,³ from Port Jackson, Sydney, differs in having a shorter dorsal cirrus, in the position of the ventral cirrus, and in the presence of eyes.

Staurocephalus atlanticus, n. sp. (Pl. XXXVI. figs. 4, 5; Pl. XVIIA. figs. 5-8).

Habitat.—Procured by the dredge at Station 73 (west of the Azores), June 30, 1873; lat. 38° 30' N., long. 31° 14' W.; depth, 1000 fathoms; bottom temperature 39°·4, surface temperature 69°·0; sea-bottom, Pteropod ooze.

A few fragments of this comparatively large example of the genus occurred. The longest (anterior) portion measures about 7 mm., and has a diameter of 1·5 mm.

The head (Pl. XXXVI. fig. 5) is well marked, forming anteriorly an elongated blunt cone, without trace of eyes, and having at each side a short tentacle. No other process remains on the head. The mouth opens inferiorly in the buccal segment immediately behind the former. The dark teeth shine through the body-wall in the next segment (which bears no foot).

The body is more rounded dorsally than ventrally, and divided into very distinct segments. The two somites behind the head are devoid of feet, but the third has

¹ *Archiv f. Naturgesch.*, 1858, p. 213.

² *Op. cit.*

³ *Öfversigt k. Vetensk.-Akad. Förhandl.*, 1864, p. 574.