

hexasters are characterised by long and thick principal rays which divide at the extremities into three or four strong, short, and slightly bent terminal rays (Pl. XIII. fig. 6).

The dermal skeleton, which agrees in general with those of the other Euplectellidan species, exhibits long and comparatively strong hexact hypodermalia, whose proximal ray penetrates the parenchyma far beyond the middle of the entire thickness of the wall (Pl. XIII. fig. 5).

The floricones which are attached to the distal rays, and which almost exactly agree with those of *Euplectella aspergillum*, are very delicate, and measure only 0.008 mm. in diameter. From eight to twelve terminal rays are associated with each principal.

The gastralial are simple pentacts with slightly bent tangential rays, which are rough on the surface (that is to say, closely beset with fine tubercles), and with a short smooth distal ray. The atrophied proximal ray is represented by an inconspicuous or hemispherical projection.

The basal tuft consists, for the most part, of long smooth spicules, some of which are provided with barbs. On the inferior extremities of the latter, there is always a knob-like terminal swelling with three or more anchor teeth directed upwards and outwards. In a four-toothed anchor of this kind I found the typical intersection of the axial canals in the head of the anchor. The transverse canals only extend to the base of the anchor teeth without penetrating the latter. A six-toothed anchor with hemispherical rounded extremities is figured on Pl. XIII. fig. 7.

The soft parts were in some places sufficiently well preserved to show that the chamber layer exhibited no complicated folding, and that it consisted of relatively large saccular chambers (Pl. XIII. fig. 5).

Probably we have here to deal with a relatively young specimen, as in the case of *Euplectella nodosa*.

7. *Euplectella nodosa*, n. sp. (Pl. XIV. figs. 1-5).

In the neighbourhood of the Bermuda Islands¹ was found the fragment, 3 cm. long by 1.5 cm. broad, figured in Pl. XIV. fig. 1. Since the upper extremity of the somewhat loose and delicate tubular body is absent it cannot be determined whether a terminal sieve-plate was present, but, on the other hand, the siliceous hairs which project from the inferior extremity point to the existence of a basal tuft of fibres.

The main part of the skeletal framework, which lies close to the inner surface, consists of longitudinal and transverse strands of fibres, forming regular quadrate meshes somewhat more than 1 mm. in breadth. Some of these meshes enclose parietal apertures, but on account of the insufficient preservation of the entire specimen, their form, number and arrangement could not be determined with certainty.

¹ The label bore only the words "Euplectellid, off Bermudae."