

curved simple, slightly spinose, spicula about 0·2 mm. long, partly of three- or four-armed cruciform bodies with the arms slightly curved. On the dorsal surface, which is rather rough, four-armed bodies (Pl. XXXV. fig. 5), of variable shape, are found closely crowded together; their arms are more or less strongly arcuated and spinose, attain a length of 0·24 mm., and give off one or more processes; from the centre of these deposits a long spine runs out which gives the surface of the integument its roughness. The tentacles as well as the pedicels are strengthened by some slightly curved spinose spicula; the latter have no supporting terminal plates.

From want of material I have not been able to examine more closely the calcareous ring; but judging from what I have observed, its structure must be of great interest. The ring seems to be composed of five separate pieces resembling those in the family Elpidiidæ, but instead of a few rods running out in opposite directions, each piece consists in this species of an innumerable number of rods, which anastomose and form a kind of network which becomes most obvious towards the centre of the pieces. In the connective tissue, which surrounds the calcareous ring, a great number of deposits are found resembling in shape those of the ventral perisoma. The polian vesicle is about 20 mm. long. The madreporic canal, which seems to communicate with the exterior by a pore, contains a great number of deposits in the form of irregular unbranched or three- to four-armed, generally strongly spinose spicula. The ambulacral cavities of the small dorsal processes are very minute, while each of the two canals of the azygous appendage communicates with a large slightly curved and branched ambulacral cavity (Pl. XL. fig. 7). The cloaca being very wide fills up the posterior part of the peritoneal cavity, but it has no cæcal prolongation. The reproductive organ (Pl. XLVI. fig. 4), in the female, consists of two unbranched tubes about 32 mm. long, the posterior half of which is enlarged and sacciform, with many tuberculose prominences; the organ opens externally by a pore situated about 25 to 30 mm. behind the anterior extremity of the body.

The individuals from Station 300 are of gigantic size, the largest having a length of about 375 mm., and a breadth anteriorly of from 110 to 120 mm. The mouth is situated 45 to 50 mm. behind the anterior extremity of the body, and the anus about 20 mm. in front of the posterior extremity. The brim is very broad, especially round the anterior and posterior extremities. One of the specimens is of a light grey or somewhat violet colour, the other, on the contrary, is dark violet or rather black. The dorsal ambulacra carry anteriorly only six processes about 5 mm. long, which are indistinctly arranged in pairs. The large azygous appendage situated about 110 mm. from the posterior extremity of the body attains in its contracted state a length of 35 to 40 mm. and a breadth of 25 to 30 mm. at its base; probably it was considerably larger when fully extended. At the top of the appendage two small papillæ are distinguishable which are in communication with the two canals. The calcareous bodies, which are of the same shape as those in the