

tube-feet. It would seem probable that the function of the numerous pedicellariæ on the sacculi of these spinelets was mainly, if not wholly, that of keeping the tube-feet clean. The actinal spinelet is about 5 mm. in length at 60 mm. from the disk, and is articulated on a robust tubercle, which occupies most of the actinal surface of the plate between the middle and the adoral end. It is encased in a delicate membranous sheath, crowded with very small pedicellariæ. The lateral spines are not remarkable for their length, being about 9 to 10 mm. at 70 to 80 mm. from the disk; they are articulated on a tubercle-like rudimentary infero-marginal plate ankylosed on the lateral margin of the adambulacral plate, in a line with the tubercle on the actinal surface, and are rather robust at the base, but taper to a fine extremity, and they are encased in a delicate membranous sheath crowded with small pedicellariæ.

The actinostome is of great width, its diameter being 13 mm. in a disk measuring 23 mm. The buccal membrane is thick and opaque, and the margin of the mouth is beset with a closely crowded villous fimbriation (? probably an exposure of the internal surface). The mouth-plates are small and inconspicuous, somewhat in the form of a truncate wedge, the adoral margin of the pair presenting only a slightly convex margin. Each plate bears two small mouth-spines about 1 mm. in length; the inner pair are a little removed from the median line of juncture, and are directed horizontally over the buccal membrane, usually parallel to one another, or only slightly divergent; the second pair are at the extreme edge of the adoral margin of the plates, *i.e.*, one spine on each plate, and are directed horizontally at a right angle to the median interradial line, and in such a manner that with the corresponding spine of the neighbouring mouth-angle a bar is formed across the ambulacral furrow at the margin of the actinostome. Both the mouth-spines are encased in a delicate membranous sheath, that of the inner pair being wide and bag-like, usually expanded at the tip and pyriform, and numerous small pedicellariæ are borne upon the membrane. The outer pair of spinelets which cross the furrow have the appearance of being imbedded in the actinostomial membrane, and their presence is only detected by the pedicellariæ. A robust secondary mouth-spine is placed well back on the actinal surface of each plate, articulated on a tubercular eminence, and encased in a rather wide, delicate, membranous sheath crowded with pedicellariæ.

The madreporiform body is small, about 2.5 mm. in diameter, convex, subtubercular, and situated quite at the margin of the abactinal surface of the disk, at the summit of one of the cleft-like interbranchial arcs, its position in relation to the plane of the abactinal surface being slightly oblique. Its surface is marked with a few highly convoluted striation-furrows, and the margin is surrounded by an indistinct circlet of the abactinal tegumentary spinelets. A very distinct anal aperture is present; it is excentric in position, and the margin is surrounded with rather larger spinelets than elsewhere upon the disk, and a retracted tubular structure with punctured extremity may be seen within its periphery.

Colour in alcohol, a bleached yellowish white.