

posture that at first sight the foremost spine of this pair appears as if it stood alone, the companion spine seeming at the same time to disturb the regularity of the succeeding pair.

The mouth-plates are narrow and united, forming a sharp-ridged keel along the median line, which is prolonged exteriorly into a vitreous spine-like prolongation. Their armature consists of three or four very small spines on the free margin of each plate, attached at a low level, and almost hidden by the overhanging prominence of the mouth-plates anteriorly. The last adambulacral plate merged in the mouth-plate bears larger spines than any of the others and differently shaped, there being three greatly thickened spines, and sometimes a fourth much smaller at the outer end of the series, standing in line close to the elevated keel of the mouth-plate; and a smaller one on each side of the innermost of these large spines forming a line of three on the furrow margin of the plate.

The actinal interradiar areas are extensive, and reach very nearly, if not quite, to the extremity of the ray. They are occupied by numerous small and regularly disposed plates, bearing pseudo-paxilliform groups of granules, which become more spiniform and pointed on the inner part of the interradiar area, whilst those near the margin and along the ray are low, subprismatic, and roundly truncate. The form of the groups on the inner part of the area is circular, and there are nine or ten spinelets with one central. The innermost paxilla, which occupies the angle of the area next the mouth-plates, has a central pedicellarian apparatus formed of three or four delicate, straight, tapering, pointed spines, rather wide apart at their bases, but meeting in a point, giving a pointed conical form to the pseudo-pedicellaria. Similar but smaller pedicellariæ may be present on five or six of the paxillæ adjacent to the adambulacral plates on the inner part of the area. The groups of granules along the ray are quadrate in form and have no resemblance to paxillæ. The whole plate and tabulum whereon the granules or spines are borne is sunken below the general actinal membrane, the groups of spines and granules alone marking the separate plates; the groups, however, are very distinctly defined, and are arranged in regular lines which proceed from the adambulacral plates to the infero-marginal plates, about ten being present in the lines adjacent to the median interradiar line, whilst not more than three or perhaps four are present midway on the ray. Within the disk the adambulacral plates and their armature stand up as a prominent margin on each side of the furrow, and the inner part of the interradiar area has in consequence more or less of an impressed character in the neighbourhood of the mouth-plates.

The anal aperture is subcentral and distinct.

The madreporiform body is small and slightly convex. It lies midway between the centre of the disk and the marginal plates, and is bounded on its adcentral side by a large crescentiform plate larger than any of the others on the abactinal area. The striations are fine and comparatively straight from the point of flexure, which is usually angular.

The ambulacral tube-feet have a fleshy sucker disk.