

supero-marginal plates; the minor radius is in the proportion of 30 per cent. The interbrachial arcs are well rounded.

The abactinal area is much contracted in consequence of the inward arching of the marginal plates, the latter forming a broad border enclosing a regular pentagonal area when seen from above. The whole abactinal area, excepting a very small space at the base of the rays, is beset with simple spinelets, uniformly distributed over the surface and moderately well spaced, the spinelets being very small, short, cylindrical, and invested with membrane. In the interspaces between the spinelets, small papulæ may, with difficulty, be detected here and there; in external appearance they resemble the spinelets, but are rather larger and thicker. A broad tapering epiproctal tubular prolongation or anal funnel, about 3 mm. in length, is present near the centre of the disk.

The marginal plates are high, arch inward, and form a sloping or bevelled edge to the disk in the interbrachial arcs; and a similar inclination is also continued along the rays. The abactinal surface of the rays is consequently arched, and the supero-marginal plates of the two sides almost meet in the median line, being separated only by a narrow furrow. The actinal surface of the ray is flat. The supero-marginal plates are higher than long, and each bears a large robust spinelet nearly as long as the height of the plate. The innermost spinelet, on each side of the median interradiial line, is smaller than any of the others. There are seven supero-marginal plates from the median interradiial line to the tip of the ray, exclusive of the terminal plate. This latter is large and very prominent, compressed laterally, high, tubercular, and rounded abactinally, and bears four spines—one placed in the median line above the termination of the ambulacral furrow, and one on each side of the furrow at a lower level, all the three being close together at the very extremity, whilst the fourth spine is placed in the median line well back on the tubercular elevation of the terminal plate.

The infero-marginal plates, which are nine in number, are longer than high, and do not curve round on the actinal surface, but rise abruptly at a sharp angle to it. At the extremity of the ray there are occasionally two or three small irregular supplementary plates intercalated between the superior and inferior series, but they in no way interfere with the form or position of the terminal plate.

Three cribriform organs are present in each interbrachial arc, the median one being the broadest; they are well spaced, and each has a depression down the median line. The structure is lamelliform. (See Pl. XXVII.)

The ambulacral furrows are wide, straight, and open. The adambulacral plates are elongate in the direction of the ray, and their form simulates the appearance in outline of caudal vertebræ. Their armature consists of a single short curved spinelet, which is articulated at the adoral extremity of the margin, and usually directed transversely across the furrow, or sometimes at an angle more adorally, the curvature of the spine being downwards.