

the proportion of 71 per cent.  $R = 138$  mm. ;  $r = 98$  mm. General form much depressed, slightly elevated in the centre of the abactinal area. Radial areas very conspicuously defined, the paxillæ-spinelets being exclusively confined to those areas, which consequently appear to stand at a higher level than the wide interradial areas, which are destitute of spinelets and covered with a thick fleshy membrane. Actinal surface flat, the margins of the ambulacral furrows being rather tumid or convex.

The supradorsal membrane is comparatively thin over the radial areas and rather parchment-like in appearance. The paxillæ usually bear three spines, which are long, prominent, and arranged in triangles. Each spinelet raises the membrane into a sharp conical elevation, each maintaining its individuality, the subtriangular area in the centre of the paxillæ-crown remaining, however, more or less elevated above the general level. The paxillæ are arranged in regular longitudinal lines along the rays, three on each side of the median line, which is left free. The spinelets that compose the crowns are likewise remarkably uniform in disposition, two standing aboral to the third, which is opposite to their interspace; the base of the triangular crown-area thus formed is consequently at right angles to the median line of the ray, and the apex is directed adorally. In the outermost row, however, on each side of a ray, this arrangement is more or less modified in consequence of lateral compression of the paxillæ-crowns,—these being more compact and with the spinelets less regular in their disposition. The oscular orifice is large and very conspicuous, and the valves are composed of about a dozen moderately long, rather fine spinelets, all of which are webbed together; the valves expanding fan-like when open form a prominent vertical wall to the orifice. The spiracula are small, very numerous, closely and equidistantly placed, occupying the whole interspace between adjacent paxillar-crowns. Very remarkable elongated tracts or lines of spiracula and an accompanying wrinkled membrane extend from the paxilliferous radial areas out upon the fleshy interradial membrane, which has the appearance of being inlaid with them. These lines are slightly curved, nearly equal in length to the half of the radial area, placed regularly parallel to one another, and directed at an angle inward in relation to the direction of the ray.

The ambulacral furrows are broad, almost straight, and very slightly petaloid. The tube-feet are large and robust, arranged in simple pairs. The armature of the ambulacral plates consists of one rather short spinelet, invested with a wide membrane which extends beyond the tip as a saccular prolongation twice as long as the spinelet itself. The aperture-papillæ are large, fleshy, subspatulate or oval, occupying nearly the whole space between the bases of the actino-lateral spines.

The mouth-plates form a broad rounded ridge at their line of junction, prominent aborally. Each plate bears one short secondary or superficial spine, with a wide investing sacculus, placed about midway on the surface of the plate, quite behind the mouth-spines, the pair being very widely separated. The mouth-spines, which are three in number, are