

base of the rays, convex and arched along the rays. Actinal surface of the disk prominent and tubercular at the mouth-angles, but flat and level externally and along the rays, forming, with the lateral wall, a sharp angular margin.

The abactinal surface of the disk and rays is covered with small closely crowded paxillæ, which are composed of short, cylindrical, papilliform, obtusely tipped, equal-sized spinelets, seven to ten, or occasionally more in each on the disk, but fewer at the extremity of the rays. These spinelets stand vertically, in little round brush-like groups, distinctly paxilliform upon the disk, but becoming very low and granule-like towards the end of the ray. No pedicellariæ are distinguishable on the abactinal surface.

The supero-marginal plates, forty-two in number from the median interradial line to the extremity, are confined entirely to the lateral wall, except perhaps a very faint bevel at the extremity of the ray; and it is only here that they have a tendency to form a visible border to the abactinal surface when viewed from above. When seen from the side the plates are rectangular, with the length slightly greater than the height, excepting on the nine or ten innermost plates on each side of the median interradial line, in which the height is at first slightly greater than, and then equal to, the length. On the outer part of the ray the length is about twice the height. Each plate bears on its upper margin a short, conical, sharply pointed spine, the longest about 2.5 mm. in length, and they decrease very slightly as they proceed along the ray. The surface of the plate is covered with short papilliform granules, tolerably closely placed, but especially crowded near the vertical margins, where they are also smaller.

The infero-marginal plates correspond to the superior series, and their dimensions in the lateral wall are approximately similar. Their breadth on the actinal surface is greater than their length on the inner part of the ray, about equal midway between the extremities, and less than the length on the outer part. The junction of the actinal and lateral areas is more or less angular along the greater portion of the ray, but more rounded on the plates in the interbrachial arc; the sutures between these plates are also bevelled, which gives a certain convexity and appearance of distinctness to the infero-marginal plates in this region, which is not noticeable elsewhere. The same character is also present in the corresponding supero-marginal plates. Each infero-marginal plate bears a single, short, conical spine, similar in size and character to the supero-marginal spine. It is placed on the angle at the junction of the lateral and actinal planes, and is directed horizontally and at a slight angle towards the outer extremity. The surface of the plate is covered with short papilliform granules similar to those on the supero-marginal plates; they are crowded and smaller near the adoral and aboral margins, and are slightly longer on the actinal area; occasionally also a few at the base of the lateral spine are more definitely spiniform. All are invested with a delicate membrane.

The adambulacral plates are long and very narrow, subequal in length to the infero-marginal plates, to which they have the appearance of corresponding more or less closely.