

disk have a delicate elongate central spinelet, and these are chiefly in the region of the papularia; along the rays, however, the occurrence of the central spinelet is more frequent. No order is traceable in the arrangement of the paxillæ. No pedicellariæ are present on the abactinal surface, nor elsewhere on this species.

The marginal plates form a broad and slightly raised border to the disk and rays, the breadth of which diminishes gradually towards the extremity of the rays. The supero-marginal plates are thirty-nine in number (forty-four in the largest example) from the median interradial line to the extremity. Their breadth is greater than their length. The breadth of the paxillar area midway on the ray is only equal to, or very little greater than, the breadth of the supero-marginal plates. The height is greater than the length in the innermost plates of the ray, but rapidly diminishes, being subequal along the greater part of the ray, and less than the length near the extremity. Each supero-marginal plate, excepting the first on each side of the median interradial line, bears a single very small conical-pointed spine, which stands on the middle of the rounded angle of the plate. The longest of these spines is not more than 1.75 mm. in length, and they diminish in size as they proceed outwards, becoming mere microscopic thornlets on the outer part of the ray. The surface of the plates is slightly tumid, emphasising the divisional sutures, the direction of which is slightly oblique, trending from within outwards towards the base. The surface of the plates is covered with very minute subpapilliform spinelets, widely spaced.

The infero-marginal plates correspond to the superior series, and on the inner part of the ray the two series alternate instead of being directly superposed. Each plate bears a single short, robust, tapering lateral spine, the longest about 2.5 mm. in length, and decreasing in length on the outer part of the ray. The surface of the plate is covered with small, short, papilliform but slightly tapering thornlets, well spaced, which become more spiniform as they approach the lateral spine, the two or three immediately below this being longer than any of the others, but still none long enough to be ranked as a companion lateral spine.

The adambulacral plates have a prominent angular projection towards the furrow. Their armature consists of:—(1.) A furrow series of six or seven rather elongate, cylindrical, tapering spinelets, the median one longest, and all radiating apart. In consequence of the straight sides of the angular projection of the adambulacral plate the furrow series of spines have more or less the appearance of being divided into two sets which radiate apart. (2.) On the actinal surface of the plate are two robust tapering spines, and occasionally three on the inner part of the ray, forming an oblique series, the median spine being longest when three are present, and this is usually equal to or longer than the longest of the furrow series. On the aboral side of this oblique series and on the actinal surface of the plate are usually two small delicate spinelets which appear to form with more or less regularity a secondary series parallel to the larger one. On the adoral margin of