

The marginal plates are broad and massive; and the supero-marginal plates occupy the whole of the abactinal area of the ray, those of the opposite sides meeting in the median line. The abactinal or paxillar area of the disk is consequently a well-defined pentagon, which is further emphasised by a slight convexity in the central area, and a faint depression along the inner margin of the supero-marginal plates. The lateral and abactinal areas of the plates are at right angles to one another, with the junction subangular; the lateral wall being vertical, the section of the ray is rectangular in outline. The supero-marginal plates are about thirty in number (29 to 31) from the median interradiial line to the extremity. In the interbrachial arc the height is a little greater than the length, but as they proceed along the ray the proportion of the height decreases, and along the outer half the length is the greater dimension. In the innermost plate adjacent to the median interradiial line, the breadth is to the length in the ratio of 3 : 2, and the proportion increases up to the fifth plate, which is at the base of the ray, and is the first that unites with its corresponding plate from the opposite side of the ray in the median abactinal line. From this plate outward, the proportion of breadth gradually decreases, until near the extremity of the ray the length is slightly greater than the breadth. There is some slight irregularity in the length of the plates along the ray here and there, in consequence of which the plates of the two sides do not always correspond, nor the lateral sutures fall in one and the same line. The surface of the plates is covered with a uniform, minute, semi-globular, miliary granulation, rather widely spaced and without order upon the plate except at the margins where the series is lineal and regular. There are no spines and no pedicellariæ of any kind upon the marginal plates. The odd terminal plate is very small and subcordiform, rounded and thickened in front and angular adorally; its breadth is in conformity with the general taper of the ray, to the extremity of which it forms the obtuse termination.

The infero-marginal plates are not always regularly correspondent to the superior series, though they would appear normally to be so. The length is greater than the breadth, excepting in two or three of the innermost plates; the innermost three are also the broadest, and this is their greatest dimension; from the fourth plate outward the infero-marginal plates are contiguous to the adambulacral plates, and their length is greater than their breadth, the proportion increasing as they proceed along the ray. The junction between the lateral and actinal areas of the plate is more rounded than in the superior series. The infero-marginal plates are covered with a uniform miliary granulation rather larger than that on the supero-marginal plates, the granules having a tendency to become slightly papilliform; all are distinctly spaced and the marginal series are well defined. No spines or pedicellariæ are present.

The armature of the adambulacral plates consists of a furrow series of about seven rather short, but robust, equal spinelets, tapering to an obtuse extremity and transversely compressed; about the middle of the ray there may be nine or ten. Their base line on the