

Disk large, convex, and much inflated. Rays elongate, narrow, and more or less rounded cylindrically. Margin rather angular, the marginal plates being very inconspicuous. Interbrachial arcs wide and rounded. Actinal surface concave and deeply depressed within the disk (possibly this is either a mere body contraction, or may indicate the formation of a nursing cavity such as occurs in some forms of *Asterias* and *Echinaster*). The actinal surface of the rays is slightly convex.

The abactinal area is covered with small irregularly disposed plates, which bear groups of from three to ten spinelets. The spinelets are short, subequal, papilliform, covered with membrane and imbedded at the base in a thick fleshy mass, the groups looking more like irregular echinulated masses than paxillæ. The form of the masses varies considerably, and elongate groups are not infrequent. Large and smaller groups are interspersed irregularly, and all are widely spaced. In the interspaces are numerous large papulæ, and groups of three to five may be counted.

The marginal plates, which are very small and quite inconspicuous, are at first sight scarcely distinguishable from the actinal and abactinal plates on the median part of the ray, and much irregularity occurs in their size. In the interbrachial arc and on the outer half of the ray they are more distinct; and the superior and inferior series are seen to alternate to a certain degree. The plates, which are subequal and similar in character, are covered with small papilliform granules, skin-covered and imbedded in membrane similar to those on the abactinal and actinal plates. More than fifty infero-marginal plates may be counted between the median interradiial line and the extremity, but it is scarcely possible without dissection and preparation to count the number accurately on account of their small size and the interference of intermediate plates on the middle part of the ray.

The adambulacral plates are short, and their armature consists of:—(1.) A single large spine on the furrow margin, which is very robust and cylindrical at the base, but flattened and truncate at the tip like a chisel in the direction transverse to the axis of the ray. These spines are thickly covered with membrane. On the ten or twelve plates near the mouth there are two spines on the furrow margin, very obliquely placed, the adoral one of the pair being pushed far back. (2.) On the actinal surface of the plates is a lineal series of three short, subequal, skin-covered, papilliform spinelets, much smaller than the furrow series, slightly tapering at the end but obtuse, the direction of the series being usually in a straight line behind the furrow spine, at right angles to the furrow, but sometimes slightly oblique. Occasionally there is a fourth spine in this series, and sometimes the line of the series is slightly curved.

The actinal intermediate plates are small and form well-defined longitudinal series, two of which extend nearly to the end of the ray: about eight series may be counted on each side of the median interradiial line. Each plate bears a group of from three to seven short, subequal, slightly tapering spinelets, covered with skin and imbedded at the base