

15. *Astropecten cingulatus*, Sladen (Pl. XXXV. figs. 5 and 6; Pl. XXXIX. figs. 1-3).

*Astropecten cingulatus*, Sladen, 1883, Journ. Linn. Soc. Lond. (Zool.), vol. xvii. p. 266.

Rays five.  $R = 28$  mm.;  $r = 9$  mm.  $R > 3r$ . Breadth of a ray at the base, 10 mm.

Rays rather short and of moderate breadth, tapering gently with a slight curve to the extremity, which is sharply pointed. Interbrachial arcs subacute and not rounded.

The paxillar area is very limited in consequence of the great breadth of the supero-marginal plates. The paxillæ are large upon the disk, but become smaller along the rays; the former have four or five rather large granules in the centre on the tabulum, surrounded by a dozen or more small short spinelets. Along the rays there are not more than two or three central granules, and these are arranged in line, the paxilla (tabulum) being more or less elongately oval in the direction of the axis of the ray. The paxillæ are closely placed. In the centre of the disk a small conical elevation is present, upon and in the neighbourhood of which the paxillæ are smaller.

The supero-marginal plates, which are nineteen in number from the median interradial line to the extremity, are all much broader than high, the breadth of those midway on the ray being greater than the adjacent paxillar area. The breadth of the supero-marginal plates increases towards the summit of the interbrachial arc, where the maximum is attained; the innermost plate of each ray, which is contiguous to the median interradial line, is triangular or wedge-formed, the apex being directed outward; whilst the bases of the two adjacent triangles form a wide rounding to the inner contour-line of the marginal wall. The border formed on the abactinal surface by the marginal plates is very broad and conspicuous. The length of the supero-marginal plates in the inner half of the ray is not more than one-third of their breadth. The plates are rather tumid along the median line of breadth, which produces a slight furrow between each; and the surface of the plate is covered with closely placed uniform granules, which become finer along the margins. No spinelets, tubercles, or enlarged granules are present on the plates.

The infero-marginal plates are broader than high, and extend very slightly beyond the superior series. Each bears two lateral spines, standing side by side, which are equal in length, short, very delicate, cylindrical, or faintly flattened, tapering to a sharply pointed extremity, and slightly bent. Behind these stand two or three very small, delicate spinelets; and a row of similar, though somewhat smaller, spinelets is placed on the adoral side of the plate. The surface of the plate is covered with small, flat, subcircular squamules, rather widely spaced; the margins being bordered with crowded, short, delicate, ciliary spinelets, hidden in the divisional furrows.

Only two or three actinal intermediate plates are present in the immediate interradial area: these carry usually one moderately long tapering spinelet, surrounded by a marginal series of papilliform spinelets.

The armature of the adambulacral plates usually forms three series, although the third