

or outer series is often absent or indistinguishable from the ciliary spinelets of the infero-marginal plates on the outer part of the ray. The inner or furrow series consists of three spines, which are short, cylindrical, or flattened transversely, slightly taper, the middle one a little longer than the companion spines, and standing forward prominently in the furrow. The second series has usually two spines standing wide apart, opposite the two outer spines of the furrow series: these spines are shorter than the inner trio, flattened in the plane of the axis of the ray, do not taper, and are roundly truncate at the extremity. Sometimes a third spinelet, similar in size and shape, is present between them. The outer series consists of three small papilliform spinelets, which are only slightly longer and more robust than the transitional or ciliary spinelets above mentioned.

The mouth-plates are small and narrow, with a single line of rather long compressed spinelets standing perpendicular to the superficies, excepting those near the inner extremity, which are directed horizontally over the mouth, and are also larger and more robust; those at the outer extremity are directed outward. Low down on the sides are a few small and irregular supplementary spines.

The madreporiform body is about its own width distant from the marginal plates, and is almost hidden from view by the paxillæ.

Colour in alcohol, almost pure white.

Locality.—Station 122-122c. Off the coast of Brazil, south-east of Pernambuco. September 10, 1873. Lat. $9^{\circ} 5' 0''$ S. to $9^{\circ} 10' 0''$ S., long. $34^{\circ} 49' 0''$ W. to $34^{\circ} 53' 0''$ W. Depths, 32, 120, 350, 400 fathoms. Red mud. Surface temperature $77^{\circ} \cdot 5$ Fahr.

There is unfortunately no indication as to which of these dredgings the specimen came from.

Remarks.—This form is readily characterised by the remarkably broad border of large marginal plates, and by the two small, delicate, sharply pointed, lateral spines, placed side by side, as well as by the character of the adambulacral armature and the spinulation of the infero-marginal plates.

16. *Astropecten mesactus*, Sladen (Pl. XXXIV. figs. 5 and 6; Pl. XXXVIII. figs. 7-9).

Astropecten mesactus, Sladen, 1883, Journ. Linn. Soc. Lond. (Zool.), vol. xvii. p. 267.

Rays five. $R = 34$ mm.; $r = 11$ mm. $R > 3 r$. Breadth of a ray at the base, about 11 mm.

Disk of moderate size and somewhat tumid. Rays rather short and moderately broad at the base, tapering continuously to a finely pointed extremity. Interbrachial arcs rounded.

The paxillar area is extensive over the disk, and contracts rapidly along the rays, terminating in a point, in conformity with the shape of the starfish. The paxillæ are moderately large, with a broad tabulum bearing in the centre one, or occasionally two isolated granules, and surrounded by eight to twelve short, claviform spinelets around the