

The anal aperture is subcentral and large, but no modification occurs in the surrounding paxillæ.

The madreporiform body is entirely obscured by paxillæ, a group of five or six larger than any of the others marking its position, which is rather nearer the marginal plates than midway between them and the centre of the disc. The madreporiform body is of large size; and appearances lead to the inference that it is compound.

The ambulacral tube-feet are conical, with a very small mamelon-like termination.

Colour in alcohol, a bleached ashy white, rather darker and greyish on the paxillar area.

Locality.—Station 343. South-west of the Island of Ascension. March 27, 1876. Lat. $8^{\circ} 3' 0''$ S., long. $14^{\circ} 27' 0''$ W. Depth 425 fathoms. Volcanic sand. Bottom temperature $40^{\circ} \cdot 3$ Fabr.; surface temperature $80^{\circ} \cdot 8$ Fabr.

Remarks.—This species is readily distinguished by its broad supero-marginal plates, and by the row of well-developed spinelets on the actinal surface of the adambulacral plates, immediately behind the furrow series; as well as by the incipient grouping of the outer granules on the actinal surface of the plate.

3. *Plutonaster rigidus*, n. sp. (Pl. XIV. figs. 3 and 4; Pl. XV. figs. 3 and 4).

Rays five. $R = 80$ mm.; $r = 21$ mm. $R < 4 r$. Breadth of a ray between the fourth and fifth supero-marginal plates, 16 mm.; midway along the ray, 9.75 mm.

Rays elongate and rather narrow, tapering from the base to the extremity. Interbrachial arcs very open, with a wide well-rounded curvature. Rays depressed and flat, lateral walls nearly equally rounded abactinally and actinally. Disk comparatively large. Abactinal and actinal surfaces subplane, the latter slightly prominent at the mouth-angles. Abactinal surface faintly carinate along the median radial line. The general form has consequently a flat appearance and is of nearly uniform thickness throughout, excepting towards the end of the rays.

The abactinal surface of the disk and rays is covered with numerous, rather small, compact, closely crowded, uniform paxillæ. These bear on a low broad tabulum from ten to twenty papilliform granules, two to five or sometimes even more being central. Although closely crowded the individual paxillæ may be more or less clearly distinguished. In the central region of the disk, along the median radial line, and upon the whole of the outer two-thirds of the rays, no order of arrangement is discernible. In the abactinal interradial areas, on a region adjacent to the marginal plates, the paxillæ are disposed in lineal series, the lines of which if produced beyond the margin would meet at a point in the prolongation of the median interradial line. These series do not extend far along the basal portion of the ray, and gradually diminish in length as they recede from the median interradial line.

The supero-marginal plates, thirty-one in number from the median interradial line to the extremity, are rather large, and form a conspicuous and well-rounded border to the