

Simon's Bay, Cape of Good Hope. (Depth and conditions not recorded.)

Remarks.—This form is very nearly allied to the North-Atlantic species *Psilaster andromeda*. It may be distinguished by the infero-marginal plates at the base of the ray having three or four small flattened spinelets grouped in a slightly oblique series near the aboral end of the lateral margin; by the inner pair of mouth-spines being conspicuously larger than the rest; and by the supero-marginal plates not encroaching conspicuously on the abactinal area on the outer part of the ray.

3. *Psilaster cassiope*, n. sp. (Pl. XLI. figs. 1 and 2; Pl. VII. figs. 9 and 10).

Rays five. $R = 63$ mm.; $r = 16.5$ mm. $R < 4r$. Breadth of a ray near the base (between the third and fourth supero-marginal plates), 14.5 mm.

Rays elongate and tapering; attenuate towards the extremity but with the breadth diminishing very slightly along the inner half of the ray. Lateral walls rather high, well and equally rounded towards the abactinal and actinal surfaces, but nearly straight and vertical between these curves. Abactinal and actinal areas subplane, giving the rays a more or less depressed conico-cylindrical form. Interbrachial arcs acutely but distinctly rounded.

The abactinal paxillar area of the disk and rays is covered with numerous small and closely crowded paxillæ. These are low and of uniform height throughout, and the larger ones consist of ten to sixteen very short, thick, papilliform spinelets, with one to three irregularly central, the whole forming a compact group, and looking more like rounded granules than papillæ. Excepting upon the central area of the disk, and along a narrow band-like strip in the median dorsal line of the rays, the paxillæ are arranged in very distinct and conspicuous transverse series, each series distinctly spaced from its neighbours, and with the paxillæ slightly elongate in the direction of the axis of the ray. The paxillæ diminish slightly in size as they approach the margin, and also in the central area of the disk.

The supero-marginal plates, thirty in number from the median interradial line to the extremity, form a broad and conspicuous border to the disk and rays. Midway along the ray the breadth is subequal to that of the intermediate paxillar area, and the latter contracts continuously up to the extremity; the area is also at a slightly lower level than the marginal plates, and this, together with the well-rounded curvature of the latter, gives an emphatic character to the border. Except on the inner part of the ray the breadth is greater than the height, and is considerably greater than the length throughout. The abactinal and lateral planes of the plate are united by a full and well-rounded semicircular curve. The two or three plates in the midst of the interbrachial arc are shorter and less tumid in their curvature than the succeeding plates. The surface of the plates is covered with rather large distinctly spaced granules, which become smaller, more crowded, and