

The madreporiform body is small, and but little more than its own diameter distant from the inner edge of the marginal plates. It is slightly below the level of the general paxillar area; and its surface is grooved by rather coarse but deep striation furrows.

Colour in alcohol, a bleached yellowish white, with a deeper shade, verging on light brown, on the paxillar area.

Locality.—Off the Cape Verde Islands. (Depth and conditions not recorded.)

Remarks.—This species is unquestionably allied to *Psilaster andromeda* and *Psilaster acuminatus*, but is at once distinguished by the much greater breadth of the supero-marginal plates; by the comparative smallness and regularity of the abactinal paxillæ; by the single spine on the infero-marginal plates; and by the character of the granulation of the marginal plates generally.

4. *Psilaster gracilis*, n. sp. (Pl. XLI. figs. 5 and 6; Pl. XLII. figs. 9-11).

Rays five. $R = 65$ mm., $r = 12$ mm. $R < 5.5 r$. Breadth of the ray at the third supero-marginal plate, 11.5 mm.

Rays elongate, narrow and tapering throughout to a finely pointed extremity, having a subcylindrical facies, slightly compressed. Abactinal area slightly convex and capable of inflation. Actinal area subplane. Lateral walls comparatively high and vertical. Interbranchial arcs open and widely rounded.

The abactinal paxillar area of the disk and rays is covered with comparatively large and closely placed paxillæ. These are composed of very short, stumpy, papilliform spinelets. Three to five are central, more robust than the rest, often almost granuliform, and about a dozen or more form the marginal series, all very short and radiating outward. In some of the paxillæ the central spinelets are posed in such a way as to form incipient pedicellariæ, in others three or four of the central spinelets are slightly longer, and are distinctly pedicellarian in function. At the margin of the area an arrangement of the paxillæ in transverse series may be observed, but is not very conspicuous at first sight, on account of the crowding of the paxillæ, and is only well seen near the base of the rays.

The supero-marginal plates, thirty-six in number from the median interradial line to the extremity, stand vertically, and, being confined entirely to the lateral wall of the ray, can hardly be said to have a distinct breadth on the abactinal area, excepting on the outer part of the ray, as they merge so gradually into the rounding of the lateral wall. On the outer part, however, they are more distinctly curved over and flattened on the abactinal area. The surface of the plates in relation to one another forms a continuous plane. On the inner part of the ray the height is about one-third greater than the length, and further outward than midway along the ray the dimensions are nearly subequal. The surface of the plates is closely covered with short obtusely tipped papillæ, equal in length but slightly more robust along the median region of the plate; and all so closely placed