

6. *Pontaster teres*, n. sp. (Pl. IX. figs. 5 and 6 ; Pl. XII. figs. 11 and 12).

Rays five. $R = 42$ mm. ; $r = 7.5$ mm. $R > 5.5 r$. Breadth of the ray at the base, 8 mm.

Rays elongate, narrow, subdepressed ; not very broad at the base, tapering throughout up to the extremity. Interbranchial arcs well-rounded. Abactinal surface subplane, sloping slightly from the centre of the disk to the extremity of the rays. Actinal surface flat and level.

The paxillæ of the abactinal surface are large, ornate, and uniform, but decrease in size as they proceed along the ray. The large ones on the disk have a broad tabulum, bearing a double circlet of short papilliform spinelets, surrounding a central, robust, subconical, obtusely pointed spinelet, three or four times their length and thickness. There may be sixteen or even more spinelets in the outer circlet and about half that number in the inner circlet, which are slightly more robust, often subconical, and sometimes appearing subgranuliform, sometimes disposed so as to give the appearance of several larger central spinelets, one of which, however, is usually longer than the rest. On the outer half of the ray, only the outer circlet of papilliform spinelets is usually present, with a smaller number of spinelets, which are very short, obtuse, and subgranuliform in appearance. The embryonic basals, though quite inconspicuous, may be traced ; their paxillæ being rather larger than the rest.

The supero-marginal plates, twenty-seven in number from the interradial line to the extremity, form a comparatively broad, but roundly bevelled margin to the rays when viewed from above. On the inner half of the ray the breadth is greater than the length, but towards the extremity the proportions are reversed. The plates are slightly convex, and the transverse sutures between them are very oblique, passing from within outwards adorally ; the obliquity increases on the outer part of the ray, and the plates there have an oval appearance in consequence of their convexity and increased length. The surface of the plates is covered with numerous very short, subtapering or obtusely conical, papilliform thornlets, those on the centre of the plate, especially near the inner abactinal margin, being coarser than the rest. Most of the plates bear a single, delicate, tapering spinelet about 1 to 1.5 mm. in length. Perhaps normally all were thus armed, but many are absent in the specimens under notice, in one case apparently due to abrasion.

The infero-marginal plates alternate with the superior series. They are as high as, or even higher than, broad on the inner half of the ray. Their whole surface is covered with numerous closely placed, cylindrical or subclavate, delicate spinelets, which, though very minute, are much longer than those covering the supero-marginal plates. Each plate bears a delicate, tapering, sharply pointed lateral spine, the longest a little longer than 3 mm., and behind this normally one, or occasionally two, similar but smaller spinelets.

The adambulacral plates have an extensive acute angular projection into the furrow, which causes them to have a very broad appearance. Their armature consists of :—(1.) A