

*Localities.*—"Porcupine" Expedition:

Off Valentia. Depth 100 to 150 fathoms.

Station 51 ("Porcupine," 1869). In the Faerøe Channel. Lat.  $60^{\circ} 6' N.$ , long.  $8^{\circ} 14' W.$  Depth 440 fathoms. Bottom temperature  $5^{\circ} 5 C.$ ; surface temperature  $10^{\circ} 9 C.$  (A single badly preserved specimen, which I refer with some doubt to this species.)

Station 2 ("Porcupine," 1870). South-west of the Scilly Islands. Lat.  $48^{\circ} 37' N.$ , long.  $10^{\circ} 9' W.$  Depth 305 fathoms. Bottom temperature  $14^{\circ} 8 C.$ ; surface temperature  $16^{\circ} 2 C.$

*Remarks.*—This species is in many respects a near ally of *Pontaster tenuispinus*, but is readily distinguished by the small disk, by the short and regularly tapering rays, and by the broad border of the supero-marginal plates on the abactinal surface. It is further distinguished by the character of the paxillæ, by the remarkably small spines on the supero-marginal plates, by the short and solitary lateral spines on the infero-marginal plates, by the character of the armature of the adambulacral plates, and by the absence of pedicellariæ therefrom. The papularia and also the actinal interradial areas are different.

5. *Pontaster oxyacanthus*, n. sp. (Pl. IX. figs. 1 and 2; Pl. XII. figs. 7 and 8).

Rays five.  $R = 73 \text{ mm.}$ ;  $r = 11 \text{ mm.}$   $R > 6.5 r.$  Breadth of a ray near the base, 11 mm.

Rays elongate, tapering continuously from the base to the extremity, the outer part narrow and attenuate, and of great flexibility; the outer part in the specimen under notice curled round with an abactinal recurvature. Interbrachial arcs well-rounded. Abactinal surface plane. Actinal surface subplane. Lateral walls of the rays comparatively high and vertical.

The general paxillæ of the abactinal surface are comparatively small and simple, closely placed on the disk and inner part of the rays, but diminish greatly in size as they proceed outward, and are more widely spaced on the outer half of the ray. The crown consists of four to seven short, delicate, tapering spinelets, which radiate outward nearly horizontally, and appear to proceed almost from the centre of the tabulum. A few have a small central spinelet, more elongate and robust than the surrounding series. Upon the disk and at the extreme base of the rays a number of larger and specially-armed paxillæ are distributed amongst the general paxillæ above described. Each of these bears an elongate conical, tapering, robust, vertical spinelet, surrounded at the base by a ruff-like collarette of twenty or more minute ciliary thornlets. The central spine is powerful, and may measure 2 to 3 mm., but the length decreases as the paxillæ recede from the centre of the disk. The disposition of these armed paxillæ is somewhat irregular; they are, however, confined to a median radial area, and two or perhaps three irregularly