

Localities.—"Porcupine" Expedition:

Station 52, 1869. In the Faerøe Channel. Lat. 60° 25' N., long. 8° 10' W. Depth 384 fathoms. Bottom temperature - 0°·8 C.; surface temperature 11°·2 C.

Station 55,¹ 1869. In the Faerøe Channel. Lat. 60° 4' N., long. 6° 19' W. Depth 605 fathoms. Bottom temperature - 1°·2 C.; surface temperature 11°·4 C.

2. *Lophaster stellans*, n. sp. (Pl. LXXI. figs. 4 and 5; Pl. LXXII. figs. 11 and 12).

Rays five. $R = 32$ mm.; $r = 11$ mm. $R < 3 r$. Breadth of a ray at the base, 12 to 13 mm.

The rays are broad at the base, and taper gradually therefrom up to the extremity. The abactinal surface is convex over the disk and upon the rays, and tapers regularly to the extremity. The actinal surface is plane. The interbrachial arcs though wide are angular; and in consequence of the height and convexity of the disk, the declivity there at the summit of the arc is rapid.

The abactinal surface is beset with well-developed paxillæ, which are widely spaced and arranged with more or less regularity in longitudinal lines along the rays. The paxillæ have a thick, robust, skin-covered pedicle, and are surmounted by a crown of five to eight moderately robust subequal spinelets, with denticulate tips, usually shorter than the pedicle, which radiate widely apart, and, when well preserved, have a strongly marked stellate character; whence the name of the species. Numerous papulæ are present in the interspaces, usually in groups of four or five, or more.

The supero-marginal plates are well developed, and bear robust paxillæ with long pedicles, similar to those on the abactinal surface, excepting that the pedicles are longer and thicker. The infero-marginal plates bear still larger paxillæ, which are surmounted by a crown of rather more numerous spinelets. The rotundity of the pedicle is maintained, and there is no modification in the form of the paxillæ. The paxillæ are well spaced, and there are about eighteen between the median interradiial line and the extremity.

The adambulacral plates are large, and are separated superficially by channels or wrinkles in the membrane with which the whole actinal surface is invested, passing obliquely from the furrow to the margin. Their armature consists of two series of spines. (1.) A furrow series of rather large but delicate, tapering, skin-covered spines, which radiate apart, and are partially united by web, forming a fan parallel to the furrow. Near the mouth five spinelets are present in each comb, but the number is successively reduced to four, three, and two, as they proceed along the ray, and probably only one spine is present at the extremity. (2.) On the actinal surface of the plate is a lineal transverse series of three (occasionally four near the mouth) large, robust, tapering, skin-

¹ This occurrence is recorded in Sir Wyville Thomson's Depths of the Sea, but I have not seen an example from this station.