1. Porania pulvillus (O. F. Müller), Norman.

Asterias pulvillus, O. F. Müller, 1788, Zool. Dan., vol. i. p. 19, tab. xix. figs. 1 and 2. Goniaster Templetoni, Forbes, 1839, Mem. Wern. Soc., vol. viii. p. 118, pl. iv. figs. 1 and 2. Porania gibbosa, Gray, 1840, Ann. and Mag. Nat. Hist., vol. vi. p. 288. Asteropsis pulvillus, Müller and Troschel, 1842, System der Asteriden, p. 63. Asteropsis ctenacantha, Müller and Troschel, 1842, System der Asteriden, p. 63. Porania pulvillus, Norman, 1865, Ann. and Mag. Nat. Hist., ser. 3, vol. xv. p. 122.

Localities .- "Lightning" Expedition:

Off Valentia. Depth and conditions not stated.

"Porcupine" Expedition:

Station 8. Off the west coast of Ireland. Lat. 53° 15′ N., long. 11° 51′ W. Depth 106 fathoms. Bottom temperature 10°.7 C.; surface temperature 12°.3 C.

Several specimens without record of locality or depth.

"Knight Errant" Expedition:

Station 3. Off the Island of North Rona. August 3 and 4, 1880. Lat. 59° 12′ N., long. 5° 57′ W. Depth 53 fathoms.

2. Porania antarctica, Smith (Pl. LIX. fig. 3).

Porania antarctica, Smith, 1876, Ann. and Mag. Nat. Hist., ser. 4, vol. xvii. p. 108; Phil. Trans., Zool. Kerguelen Island, &c., 1879, vol. clxviii. p. 275, pl. xvii. fig. 1.

Localities.—Station 145. Off Marion Island. Depth 50 fathoms.

Station 145A. Off Prince Edward Island. Depth 85 to 150 fathoms.

Station 147. West of the Crozet Islands. December 30, 1873. Lat. 46° 16′ 0″ S., long. 48° 27′ 0″ E. Depth 1600 fathoms. Diatom cozc. Bottom temperature 34° 2 Fahr.; surface temperature 41° 0 Fahr.

Remarks.—A good series of this species was collected. The spiny character is present in all stages of growth. The rays are longer and more pronounced than indicated in the original figure. There is an example from the great depth of 1600 fathoms, in which I fail to find any difference worthy of note. The rays are well pronounced and narrow at the base, and the marginal spinelets are relatively longer than in the shallower water forms. The inner or furrow spines on the adambulacral plates are remarkable for being strongly channelled on the outer side, and appearing at first sight like two spines closely pressed together, especially at the base.

3. Porania glaber, n. sp. (Pl. LIX. figs. 1 and 2).

Rays five. R = 91 to 97 mm., r = 35 mm. R > 2.75 r.

Marginal contour stellato-pentagonal. Disk large. Rays moderately produced, sub cylindrical towards the extremity, and tapering to a point; in their present position more or less recurved over the disk. Interbrachial arcs wide and rounded. Abactinal surface convex, high and tumid when inflated. The lateral wall in the interbrachial arc may be