

of the series mere band-like strips, and finally become gradually more or less aborted until they disappear altogether. These plates bear uniform and more or less squamule-like papillæ, invested with membranous sacs, and scarcely distinguishable from the covering of the marginal plates, with which they appear to form a continuous series, and also with the armature of the adambulacral plates.

No anal aperture is distinguishable. The central epiproctal prolongation is conical and well-defined, rising abruptly from the general paxillar area to a height of about 1.5 mm.

The madreporiform body is oval, and is situated at about its own diameter distant from the margin of the paxillar area. Its surface is traversed by very few, widely spaced furrows, convolution being chiefly limited to the two extremities of the oval, and a consequently simple appearance results.

Colour in alcohol, a bleached yellowish white.

Young Phase.—A small example from Station 46 ($R = 15$ mm., $r = 5$ mm.), which I first thought might be a distinct species, I now place provisionally as the young of *Phoxaster pumilis*. It accords in all essential points with the form above described, but in comparison presents the following differences. The tapering of the rays is more abrupt; the paxillar area is less contracted—the marginal plates being scarcely visible when viewed from above, so slight is their curvature, and the paxillæ are composed with great regularity of four truncate and compactly fitting papillæ; occasionally there are only three, but it is very rare to find cases of more than four. The armature of the adambulacral plates is rather simpler, but fully conforms to the general character and arrangement seen in the adult. The epiproctal cone is quite as large as in the much larger example, and is consequently more conspicuous. The general abactinal area is slightly inflated. The ocular or terminal plates bear three prominent spinelets, one central in the median abactinal line, the others lateral.

Colour in alcohol, a slightly bluish grey shade over the paxillar area.

Localities.—Station 44 or 45.

Station 44. Off the coast of North America, east of Maryland. May 2, 1873. Lat. $37^{\circ} 25' 0''$ N., long. $71^{\circ} 40' 0''$ W. Depth 1700 fathoms. Blue mud. Bottom temperature $36^{\circ} 2$ Fahr.; surface temperature $56^{\circ} 5$ Fahr.

Station 45. Off the coast of North America, east of Delaware. May 3, 1873. Lat. $38^{\circ} 34' 0''$ N., long. $72^{\circ} 10' 0''$ W. Depth 1240 fathoms. Blue mud. Bottom temperature $37^{\circ} 2$ Fahr.; surface temperature $49^{\circ} 5$ Fahr.

Station 46. Off the coast of North America, east of New Jersey. May 6, 1873. Lat. $40^{\circ} 17' 0''$ N., long. $66^{\circ} 48' 0''$ W. Depth 1350 fathoms. Blue mud. Bottom temperature $37^{\circ} 2$ Fahr.; surface temperature $40^{\circ} 0$ Fahr.