

these outer series of paxillæ extends beyond the base of the ray. The margin of the tabulum is surrounded by ten to fourteen short, truncate, papilliform granules, and in the centre are usually two small semiglobular granules, though one only frequently occurs in the outer rows; occasionally four are present. Very few of the paxillæ on the abactinal area are furnished with pedicellariæ.

The abactinal interradial areas are very small and triangular in outline; the plates (paxillæ), which are square or subrhomboid, are closely placed and have no papulæ between them. They form series parallel to the radial series above described, but there is no abrupt indication of the median interradial line by the converging series, and not more than five or six plates are present in the longest row. These plates have a marginal series of papilliform granules and one in the centre.

The primary embryonic plates are discernible. The basals and dorso-central are larger than the other plates, and the under-basals are larger than the radials. The under-basals appear normally to be in contact with the dorso-central plate, but two or three irregular plates are present. The madreporiform body is subcircular, with numerous minute striæ, and lies external to the adjacent basal plate, which covers a rather larger area.

Colour in alcohol, a yellowish white.

*Locality*.—Station 219. North of Admiralty Island. March 10, 1875. Lat.  $1^{\circ} 54' 0''$  S., long.  $146^{\circ} 39' 40''$  E. Depth 150 fathoms. Coral mud. Surface temperature  $84^{\circ}\text{.0}$  Fahr.

*Remarks*.—It is possible that this form may turn out ultimately to be the young of *Nymphaster symbolicus*, when a more extended range of specimens can be studied. So far, however, as judgment can be drawn from a single specimen, the characters appear to be so well marked that I prefer to place the form for the present as an independent species. The difference of the abactinal paxillæ from those of *Nymphaster symbolicus* is very marked, the armature of the adambulacral plates also, but in a less degree; furthermore, the larger size and smaller number of the actinal intermediate plates, as well as the shorter and comparatively broader rays, all seem to warrant its recognition as a distinct species, notwithstanding the fact that the characters referred to are all largely implicated in growth changes.

### 3. *Nymphaster protentus*, n. sp. (Pl. L. figs. 3 and 4; Pl. LIII. figs. 9 and 10).

Rays five.  $R = 71$  mm.;  $r = 18$  mm.  $R < 4r$ . The minor radius is thus in the proportion of about 25 per cent.

Rays elongate, tapering continuously from a fairly robust base to a slender-pointed extremity, the outer half being very narrow and attenuate. Width midway between the centre of the disk and the extremity, 5.5 mm.; width at the commencement of the outer fourth, 3 mm. Interbrachial arcs wide and well rounded.