

which increase in length and robustness as they approach the inner end of the mouth-plates.

The actinal interradial areas are large and well defined, and occupied by plates arranged in regular series or columns passing from the adambulacral plates to the marginal plates; four or five plates may be counted in the series on each side of the median interradial line, and intermediate plates extend as far as the fourth or fifth infero-marginal plate and the eighth adambulacral plate. The surface of the intermediate or ventral plates is covered with small, uniform, papilliform granules, forming more or less well-defined rectangular groups.

The madreporiform body is obscure and hidden by paxillæ. It is near, but not adjacent to, the marginal plates.

The tube-feet are conical, and have a very small but distinct terminal mamelon-like knob.

Colour in alcohol, an ashy white, with a slight ochraceous shade on the paxillar area.

*Locality*.—Station 78. Between San Miguel and St. Maria, Azores. July 10, 1873. Lat.  $37^{\circ} 26' 0''$  N., long.  $25^{\circ} 13' 0''$  W. Depth 1000 fathoms. Volcanic mud. Surface temperature  $71^{\circ} 0$  Fahr.

*Remarks*.—This species is most nearly related to *Plutonaster notatus*, but is distinguished by the shorter, broader, and more robust rays. The marginal plates have also a more massive appearance. The differences in point of structure are slight but noteworthy, and the two forms are unquestionably closely allied.

#### Subgenus *Telhyaster*, nov.

The species placed in this subgenus differ from the other species of *Plutonaster* chiefly in the character of the armature of the adambulacral plates. The whole armature of the plate is spiniform, and is arranged in a co-ordinated group, the general plan of the arrangement having a more or less striking resemblance to that found in *Astropecten*. The adambulacral plates are much broader than in the true *Plutonaster*, and the madreporiform body is simple and exposed.

This subgenus has been established for the reception of the two comparatively little known but well marked species originally described under the names of *Asterias subinermis*, Philippi, and *Astropecten parelii*, Düben and Koren. The former of these was ranked by Müller and Troschel as an *Astropecten*, and subsequent writers followed this reference until Perrier has recently placed the form in the genus *Archaster*. The second species was referred to the genus *Archaster* by Sars, and that determination has been maintained by succeeding writers.

These two species are in my opinion very closely allied to the true *Plutonaster* species; but as they exhibit the above-mentioned constant differences in their morphological