

starfish bears only very small and slightly tapering spinelets similar to those on the actinal intermediate plates. The actinal intermediate plates are comparatively large, but are scarcely definable. They bear numerous small, uniform, well-spaced, tapering spinelets which present no definite order of arrangement, but whose presence gives a decidedly hispid appearance to the actinal surface; all the spinelets are slightly inclined towards the margin of the starfish.

The adambulacral plates have their length and breadth nearly equal. Their armature consists of a furrow series of three or four short, tapering spinelets, the fourth spinelet, when present, being adoral and very small. The series is slightly oblique in position, the adoral end being more remote from the furrow than the aboral. On the actinal surface of the plate is a series of about three spines, normally forming a slightly oblique line parallel to the furrow series, but often irregular. These spinelets are rather more robust than the furrow series and the aboral one is usually the largest, especially on the outer part of the ray, where the difference is very striking.

The mouth-plates are flat and inconspicuous. Their armature consists of a marginal series of about four short, tapering spinelets rather wide apart, similar to those on the furrow margin of the adambulacral plates; and on the actinal surface of the plate are four spinelets near the outer margin remote from the mouth; and in the intermediate space two or three secondary mouth-spines, the innermost being robust and larger than any other spinelets on the actinal surface.

The madreporiform body is hidden. I have not detected the presence of any pedicellariæ.

Colour in alcohol, a bleached white, with a dark umber shade over part of the abactinal area, perhaps caused by the presence of mud beneath the clavate papillæ or spinelets of the abactinal plates.

Locality.—Station 78. Between the islands of San Miguel and Santa Maria (Azores). July 10, 1873. Lat. 37° 26' 0" N., long. 25° 13' 0" W. Depth 1000 fathoms. Volcanic mud. Surface temperature 71°·0 Fabr.

Remarks.—There is little doubt in my mind that this is a young and immature form; and as to its true generic position I have felt much uncertainty. Its affinities appear to be nearest to *Pentagonaster*, and it has also some resemblance to *Astrogonium*. Notwithstanding its very hispid character and several other structural peculiarities, I have placed it with the former group, at least until other material is available for settling the question more satisfactorily. Of course it is quite possible that this may prove to be the young of one of the species recently described by Perrier¹ from this area of the Atlantic, but I am unable to hazard even a suggestion. I am inclined to think from its general character, as well as from the presence of the odd interradial marginal plate, that the present form is distinct, and I have accordingly given it a name. *Pentagonaster lepidus* is quite devoid

¹ *Ann. Sci. Nat.* (Zool.), 1885, t. xix., Art. No. 8, pp. 34–36.