

outer part of the ray there are probably not more than one or two of these pairs, or even single spines, present.

The papular areas, which contain numerous papulæ, form regular longitudinal lines along the ray, except amongst the irregularly disposed plates, and there is frequently placed near their margin a large, coarse, subtriangular, forciform pedicellaria, very blunt and broad at the apex, having on its margin four or five coarse interlocking denticles.

The armature of the adambulacral plates consists of two rather short, slightly compressed, slightly tapering, obtusely pointed, equal spinelets, which radiate apart and form two regular rows. At the base of the innermost, and placed quite within the furrow, are a number of small forciform pedicellariæ.

The madreporiform body is small and rather nearer the margin than the centre of the disk. Its periphery is surrounded by a close circlet of sixteen or more short equal spinelets with vesicles at their base, and a few small forciform pedicellariæ.

The ambulacral tube-feet are quadriserially arranged, and have a deeply invaginated terminal fleshy disk.

Colour in alcohol, a bleached yellowish white.

Locality.—Station 304. South of Port Otway, Gulf of Peñas. December 31, 1875. Lat. 46° 53' 15" S., long. 75° 12' 0" W. Depth 45 fathoms. Green sand. Surface temperature 57°·2 Fabr.

Remarks.—This species appears to be nearly allied to *Asterias spectabilis*, Philippi, sp., with which I at first supposed it to be identical. After a careful study of the series of specimens collected by the Challenger, however, this seems to be impossible, so far as I can judge from Dr. Philippi's description alone, for no figures are given, and I have not been able to find any authenticated examples of his species in European collections.

Notwithstanding the many points in which the description¹ of *Asterias spectabilis* coincides with the present form, it is stated that the plates of the third series of abactinal plates from the median series bear only single spines, whereas in the Challenger examples above described three or more are always present. The pedicellariæ in *Asterias spectabilis* are stated to be very numerous, and apparently smaller than in the allied species, neither of which remarks seem to me applicable to *Asterias (Cosmasterias) tomidata*; furthermore, no mention is made of the comparatively numerous and extraordinarily large forciform pedicellariæ, which could not possibly have escaped the eye of such a careful observer as Dr. Philippi had they been present in his form. On these grounds I consider the species to be distinct. It is not without great reluctance that I have added a new specific name to the already long list of Chilian forms which have a place in literature, but any of which I have failed to recognise definitely amongst the numerous series collected in that region that I have examined.

¹ *Archiv f. Naturgesch.*, 1870, Jahrg. xxxvi., Bd. i. p. 271.