

4. *Asterias torquata*, n. sp. (Pl. CII. figs. 1-4).

Rays five. $R = 76$ mm. ; $r = 9$ mm. $R > 8r$. Breadth of a ray at the base, 11.5 mm. ; breadth at 10 mm. from the base, 15.5 mm., and midway between the disk and the extremity, 14 mm.

Rays long in proportion to the disk, broad and stout, tapering very slightly on the inner two-thirds, then rather rapidly on the outer third ; abruptly constricted laterally at the base, where the rays appear crushed together and give at first sight a false appearance of a larger size to the disk than is actually the case. Junction of the base and disk marked abactinally by a slight depression, where the rays easily separate.

The abactinal area is beset with plates which bear single, isolated, short, robust spinelets, very slightly tapering and obtusely rounded at the tip. The spines are covered fully half their length with a thick membranous sheath which rises perpendicularly and terminates abruptly, and its free margin is beset with a regular circlet of large uniform forcipiform pedicellariæ. Occasionally round the large spines the circlet may be doubled or a few additional pedicellariæ may be present. The spines are widely spaced, and the intervening membrane is naked. It is punctured by numerous papulæ in groups of four or five. In some examples the median radial series of plates is distinctly traceable, and may be even conspicuous, in consequence of the presence of two or three spinelets on a plate placed in line transverse to the direction of the ray.

The armature of the adambulacral plates consists of two short, rather delicate, slightly tapering, obtusely-tipped, equal spinelets, which form two longitudinal rows. No pedicellariæ are present. Immediately external to the adambulacral plates is a slightly oblique transverse series of three equal spinelets borne on an actinal plate (? infero-marginal) which form three longitudinal rows. The spinelets are spaced apart, but rather closely ; they are rather longer and much more robust than the armature of the adambulacral plates, slightly tapering and obtusely tipped, and each is covered with a membranous sheath which extends nearly to the tip, terminates abruptly, and bears on the margin at the outer side of the spine a few forcipiform pedicellariæ which are most numerous on the outermost of the three spinelets. This series of spinelets is separated by a very narrow space occupied by papulæ, and at wide intervals apart, on the inner part of the ray, by an occasional rather large forcipiform pedicellaria, from a subregular longitudinal series of spinelets, which is perhaps the representative of a supero-marginal series, but is in no way distinguishable from the spinelets of the abactinal plates generally, excepting in its more regular longitudinal disposition.

The actinal interradiial regions are narrow and devoid of spinelets, but may bear one or more forcipiform pedicellariæ.

The madreporiform body is distinct and situated close to the margin ; it is surrounded by a circlet of well-spaced spinelets, similar in all respects to those on the abactinal surface generally, with sheath and pedicellariæ. Its surface is grooved with fine convoluted striations.