

4. *Ophidiaster tuberifer*, n. sp. (Pl. LXV. figs. 1-4).

Rays five. $R = 48$ mm.; $r = 7$ mm. $R < 7r$. Breadth of a ray near the base, 8 mm., and 5 mm. broad at about 7 or 8 mm. from the extremity.

Rays elongate, cylindrical, tapering slightly towards the tip, which is rather obtuse. Disk small, slightly convex. Interbrachial arcs subacute.

The abactinal and marginal plates, which are arranged with great regularity in seven longitudinal series, are small and slightly convex, and united by well-defined, slightly raised dissepiments. The plates and dissepiments are covered with rather large, rounded granules, those on the median region of the plate usually larger. Many of the plates bear a single, comparatively large, robust, conical, smooth tubercle, and on the outer part of the ray all the plates may be thus furnished, excepting the series on each side of the median radial line of plates. Small entrenched pedicellariæ of the characteristic figure-of-eight form, named by Perrier¹ "pédicellaires en salière," are frequent near the margin of the plates adjacent to a papular area, but there is much variation in different specimens as to the number of pedicellariæ present; and the same remark applies to the conical tubercles; on one example scarcely any tubercles are present.

The papular areas, which are very regular, and subcircular or slightly oval in outline, form six longitudinal series. They are slightly depressed, which gives great prominence to the plates and dissepiments, and are covered with small rounded granules, smaller than those on the plates; there are about ten to twelve papulæ in each, and occasionally more.

The actinal intermediate plates are covered with large, uniform, rounded granules, larger than those of the marginal plates, the whole so uniform and crowded that it is almost impossible to distinguish the separate plates.

The armature of the adambulacral plates appears to form three series, at least on the inner part of the ray. Of the inner or furrow spines there are two to each plate, and these form a continuous series along the furrow; they are short, obtuse, compressed laterally, and each alternate spinelet is rather larger than its companion. Immediately behind the furrow series is a single and rather shorter spinelet or papilliform granule, not quite midway between the large and small furrow spines, but rather nearer the former. Behind these and opposite the larger furrow spinelet is a robust fusiform spinelet, which forms an outer series similar to that found in *Ophidiaster* generally. In the interspaces between these spines small miliary granules are present, which extend up to the furrow series, and thus separate the spinelets or papillæ of the median series also.

Entrenched pedicellariæ similar to those on the abactinal area are present on the actinal intermediate plates immediately behind the large outer spines on the adambulacral plates. Sometimes a short series, fairly equidistantly spaced, occurs, but often only isolated ones are present. The number varies in different examples.

The madreporiform body, which is rather large and subcircular, is situated near the

¹ Révis. Stell. Mus., p. 125 (*Archives de Zool. expér.*, 1875, t. iv. p. 389).