

(2.) On the actinal surface of the plate is one comparatively large spinelet, robust at the base, and tapering to a pointed extremity; on the outer side of this a second, but smaller and more delicate, spinelet is present, and frequently also a small miliary spinelet on the adoral side of the large spinelet. The presence, however, of the second spine and of the miliary is by no means constant. They are often (perhaps usually) absent in small examples and on the inner and outer parts of the ray even of large specimens. The larger actinal spine measures about 1.7 mm. in length on the fifth or sixth plate from the mouth-angle, the marginal or furrow series being normally less than half this length.

The mouth-plates are large, and convex actinally, and the united pair form a broad projection towards the actinostome, the free margin being more than a semicircle, and bulging laterally. The armature consists of a marginal series of five, or sometimes six, short, slightly tapering mouth-spines on each plate, the innermost being twice as large as the others. On the actinal surface of the plate are three subequal tapering spinelets, forming a line parallel to the imperfectly closed median suture; sometimes a fourth is present on the outer side of the series, and sometimes its place is occupied by a miliary thornlet only; but often it is wanting altogether. No other spines are present, and the surface of the plates is covered with thin membrane.

The actinal interradial areas are very small indeed, not more than three or four intermediate plates being present in young examples, and in larger ones not more than eight to ten. These form only a single series between the marginal plates and the adambulacral and mouth-plates; their surface is covered with membrane and the larger plates bear two or three small thornlets. There is usually one small pedicellarian apparatus in each area, which does not stand in the median interradial line, but is usually separated therefrom by one plate. It is of the "spiracle"-like or double-comb form, previously described. Rarely two are present. There are no pedicellarian apparatus between the infero-marginal plates.

The anal aperture is subcentral and distinct, and usually there are two or three spinelets in its neighbourhood larger than those borne on the spicules generally.

The madreporiform body is comparatively large and oval, placed about midway between the centre of the disk and the margin, and its surface is conspicuously convex and is grooved with deeply cut and highly convoluted striation furrows.

The papulæ are tolerably numerous, but are large and distinct and limited to a small area at the base of the ray, which does not extend outwardly beyond the first supero-marginal after the odd interradial plate, and its inward extent on the disk would be bounded by a circle drawn upon the disk, with its margin touching the inner edge of the madreporiform body.

Colour in alcohol, a bleached ashy white.

*Individual Variation.*—In some examples a second infero-marginal spine, standing below the true lateral spine, is much more strongly developed than in others, and this in specimens of the same size and from the same locality. In others again it is repre-