

plates the larger one only is present, and is relatively increased in size and prominence in proportion to the size of the plate and the accompanying spinelets.

The mouth-plates are elongate and triangular, slightly truncate posteriorly; and the free margin of each plate forms a straight line in continuation of the series of adambulacral plates which border the furrow, the united pair thus completing conformably the apex of the rectilinear angle of the actinal interradial area which is bounded by the two adjacent furrows. The actinal surface of the plates is plane and presents no prominence or convexity. The armature of each plate consists of a marginal series of eight or nine short, subprismatic, roundly truncate spinelets, exactly similar to those on the adambulacral plates. Behind this on the actinal surface of the plate are five or six thick, coarse, subprismatic papillæ, the foremost three standing in a line parallel to the median suture, and this line is continued to the outer extremity of the plate by about half a dozen small, low, prismatic granules; the outermost three stand parallel to the marginal spines, and a few small granules extend from this point along the margin contingent with the adjacent adambulacral plate; and occasionally one or two stand in the intervening space between the line thus formed and the line of granules parallel to the furrow above noticed.

The actinal interradial areas are covered with a great number of small, regular, quadrangular intermediate plates. The largest are adjacent to the adambulacral plates; and these as well as the next two or three longitudinal series are a little broader than long, the breadth diminishing in each row away from the furrow; the remaining intermediate plates have the length and breadth subequal, and all diminish in size as they approach the margin, where some small and irregular plates are found. The plates fit close together, forming a compact pavement. The surface of the plates is covered with coarse, uniform, subprismatic granules, those forming the marginal series on each tabulum being a shade larger than the others, and always presenting a straight side to the margin, as if the outer edge of the whole series had been trimmed with a knife. The granules are closely placed, but do not touch one another. On a few of the plates is an excavate pedicellaria of similar character to those on the abactinal surface already described, but much larger and with broader jaws; the largest ones are nearest the mouth, and pedicellariæ generally are also of more frequent occurrence on the inner third of the area. Sometimes the pedicellariæ appear as if formed of two pedicellariæ closely juxtaposed, with the jaws either opening in the same plane or at an angle. In this case the pedicellarian apparatus of the plate has four jaws; in others there may be three jaws. The breadth of the jaws varies considerably, and there is no regularity in the orientation of the pedicellariæ. The pedicellariæ nearest the margin are much smaller, and nearly of the same character as those on the abactinal surface.

The anal aperture is subcentral, and is on the right posterior area of the dorso-central plate, when the madreporite is placed in the right anterior interradium.

The madreporiform body is rather small, subpolygonal in form, and flatly convex; it is situated at about one third of the distance from the centre to the margin. It is remark-