

the tip in the other dimension when seen from the side. All are of uniform length except the outermost at each end of the series, or that at the adoral end only, which is shorter; they stand compactly side by side or radiate very slightly, the base line being almost straight or presenting only a very gentle curve. The adoral spinelet is rather more robust than the rest and is placed a little backward on the plate. External to the furrow series is an outer series of six spinelets, which are much more robust than the furrow series but are about equal in length to them, except the outer ones which are smaller, the median spines being the longest. These form a curved longitudinal line, often somewhat oblique in its position on the plate; and the spines are very robust at the base, having the form of four-sided rectangular prisms, which taper to a pointed extremity. External to these are one, two, or three, longitudinal series, according to the position on the ray, of short, truncate, prismatic or polygonal granules, of equal height and well-spaced; four or five granules are present in each series, and sometimes one or two additional to fill in the interspaces caused by the obliquity of any of the series.

The actinal interradiar areas are extensive and almost equilaterally triangular in outline, excepting the interbrachial curve. They are paved with well-defined actinal intermediate plates, the series adjacent to the adambulacral plates being pentagonal in shape, whilst the majority of the rest are square or rectangular, though a few may be hexagonal or irregular. The series of plates next to the adambulacral plates are about twelve to eighteen in number, and diminish in size as they proceed outward; the other plates of the area are arranged in lines parallel to the last named and consequently parallel to the furrow. The median interradiar line of the area is not marked by any abrupt termination of the converging series; and the plates diminish in size as they approach the margin, being smallest at the position corresponding to the termination of the interradiar line there. The plates have a series of small subprismatic granules arranged round their margin and rather well spaced; and the surface of the plate bears a number of larger and more elongate granules of prismatic form and well spaced; on the larger plates from seven to twelve or even more are present, the number and size varying in proportion to the size of the plate. Adjacent plates have the appearance of being separated by a narrow channel and this feature is further emphasised by the well-defined series of marginal granules. Entrenched pedicellariæ are present on the plates adjacent to the adambulacral plates and are there usually guarded by two or more granules, larger than the rest, placed near the median part where the jaws articulate. Similar pedicellariæ may also be found on a few of the other actinal intermediate plates, but are quite occasional and of rare occurrence.

Mouth-plates elongate and narrow, with a series of twelve spinelets on the free margin in the ambulacral furrow similar in character to the adambulacral spinelets, but increasing in robustness as they proceed inward. A lincal series of nine papilliform spinelets stands on the actinal surface of the plate parallel to the median suture; the inner three or four are moderately elongate and spiniform, robust, subprismatic, pointed, and well-spaced,