

than the rest, which are subequal in length. When standing upright they are parallel to one another, and when directed over the very narrow ambulacral furrow, radiate only to a slight degree, often not at all. The succeeding combs thus formed are distinctly spaced. (2.) On the actinal surface of the plate is borne a lineal series of three or four subclavate or subfusiform, papilliform, spinelets, parallel to and close behind the furrow series. These are more robust, but slightly shorter, than the marginal series, and are well spaced apart. External to these, and with a well-defined space between, are two irregular series of short, robust, obtuse, papilliform granules, which have a tendency to associate themselves into groups of three or four, suggestive (but probably nothing more) of incipient pedicellariæ. Occasionally on the larger plates one or two supplementary thornlets or papilliform granules may be present between these groups and the papilliform series of spinelets next to the marginal series. On the outer fourth of the ray the adambulacral plates bear a single conical-pointed spinelet, external to the furrow series, which increases in size as the extremity is approached. No trace of this spine is found on the plates along the inner part of the ray.

The mouth-plates are small and narrow; the united pair have an elongate elliptical outline, and are slightly convex actinally. Nearly half their length is free and protrudes over the actinostome, which they can completely close in. Their armature consists of a marginal series of nine or ten, or more, short papilliform mouth-spines on each plate, which decrease in length as they recede from the mouth, and stand upright and parallel to one another on the free margin. The actinal surface of the plate is covered with numerous papilliform granules which increase in length and robustness as they approach the inner extremity, where they are very robust and definitely papilliform, even longer than the marginal series of true mouth-spines.

The actinal interradial areas are large and well-developed, and intermediate plates extend up to nearly half the length of the ray, the outer ones, however, being very narrow and long. The areas are occupied by well-defined plates arranged in regular series or columns, extending from the adambulacral to the marginal plates. The innermost plate of each series is normally subequal in breadth to the adjacent adambulacral plate, and the columns diminish in breadth as they proceed towards the margin; but the columns generally increase in breadth as they proceed along the ray, whilst their length diminishes *pari passu*, hence the narrow band-like plates on the outer part of the actinal area noticed above. The surface of the plates is covered with numerous small papilliform granules, nearly similar to those on the actinal surface of the adambulacral plates, disposed in regular subrectangular groups, each group marked out from its neighbours by distinct channels, and indicating conspicuously the regularity of the arrangement of the plates. There is usually on each plate a group of three or four papilliform granules slightly larger than the others, simulating an incipient pedicellaria, similar to those mentioned on the adambulacral plates; and in some cases two such groups are present.