

inner part of the ray is not greatly angulated, but near the base of the ray and outwards the margin of the adambulacral plate presents a sharply defined angular prominence into the furrow, and the spinelets which are arranged on this margin have the appearance of being divided into two divergent sets—one on the adoral facet and the other on the aboral, the spines on each being directed at right angles to the base line and nearly parallel to one another on the same facet. Frequently a single spinelet stands at the apex of the angle from which the two sets above mentioned appear to diverge. Near the middle of the ray the adoral facet is the shorter and does not bear more than three or four spinelets; and towards the extremities of each series the spinelets are usually compressed in the direction of the margin of the plate to which they are attached, whilst the median spinelets remain compressed transversely as previously remarked. External to the furrow series is a series of short papilliform spinelets, slightly compressed and tapering to an obtuse extremity. Near the mouth-plates, where the adambulacral plates are short, there are only two of these outer spinelets, but the number gradually increases as the plates become longer, until six are present near the middle of the ray. The line is slightly angulated in correspondence to that of the furrow series, but to a less degree. The most adoral spinelet (papilla) of the series is the smallest, and the rest are fairly subequal, the median one at the apex being, however, sometimes faintly larger. These spinelets decrease in size as they proceed outward from the mouth, until they become little more than granules, before attaining the middle of the ray. The outer part of the plate is occupied by two series of small conical granules scarcely larger than those on the actinal intermediate plates, about five in each, and there are often a few additional spinelets corresponding to the increased area caused when angularity occurs in the lines of spines.

The actinal interradiar areas are comparatively small, whilst the intermediate plates are large and few in number. Those adjacent to the adambulacral plates are normally rectangular, but some irregularity in shape frequently occurs throughout the area. All the plates are well defined and are covered with small subconical granules, which are well spaced and decrease a little in size as they approach the margin of the plate, where a marginal series is more or less regularly formed, the small granules of which it is composed having a tendency to become conical and pointed. There are no pedicellariæ on the actinal intermediate plates.

The mouth-plates, which are small and inconspicuous, have an armature of eight or nine spinelets on the furrow margin similar to those on the adambulacral plates, and behind these a parallel series of three or four spinelets, pointed and more robust; the outer part of each plate is occupied by four or five short, conical, pointed papillæ, more or less irregular in disposition, but three of which usually form a line parallel to the median suture-line of the plates. Occasionally one or two additional spinelets of larger size are present on the median part of the plate.

The plates of the abactinal area are all normally uniform in shape and character; they