extremity where they become quite microscopic. The rest of the plate is covered with very minute, uniform, thorn-like, or spiniform granules, widely spaced.

The infero-marginal plates are correspondent to the superior series, and similar in every respect; but they extend much further on the actinal surface than the superior series do on the abactinal surface, and are distinctly tumid in the actinal aspect; their breadth up to the middle of the ray is greater than their length, and on the inner part at least of the ray the two series alternate instead of being directly superposed. Each plate bears a single conical spine, similar to that on the supero-marginal series, directed horizontally and very slightly outwards. The fourth or fifth spine from the median interradial line is the longest, and measures about 3 mm.; outward from this the length diminishes gradually, but to a less degree than in the superior series; on the outer half of the ray they are consequently longer than the companion series, and are distinctly visible up to the extremity although very small—less than one millimetre in length at the tip. Midway between the lateral spine above described and the inner margin of the plate is a small spinelet similar in character but one third the size; this disappears, however, on the outer part of the ray. The rest of the plate is covered with minute, widely spaced, thorn-like spinelets, rather longer and more spine-like than the covering of the supero-marginal plates; but their isolation and paucity are remarkable.

The adambulacral plates form conspicuous semicircular or angular projections into the furrow. Their armature consists of:—(1.) A furrow series of six to eight small, cylindrical, slightly tapering, blunt or roundly pointed spinelets, the outer one on each side being much shorter than the rest. These spinelets are covered with a delicate tissue, and are arranged on the margin of the semicircular projection. When the furrow is contracted and the spines are directed vertically to the plane of the actinal surface, they form a subpalmate group with a more or less acute angle into the furrow; the opposite series on the two sides of the furrow touching one another, and entirely separating each pair of tube-feet from their neighbouring pairs. (2.) On the actinal surface of the plate is a single, robust, conical, and sharply-pointed spine similar in character to the lateral spines, and about half the length, and behind this are usually two or three small, short, thorn-like spinelets; but no other spinelets or granules are present on the plate.

The mouth-plates are large, tumid actinally, and the united pair are as broad as long. Each plate bears on its free margin an armature of seven spines, which increase in length as they proceed inwards, the innermost being twice the length of the outermost, which are not greater than the smallest spines of the adambulacral armature. The innermost pair stand parallel, and are directed towards the centre of the actinostome, the succeeding spines being parallel or only radiating very slightly at the outer part of the series. On the surface of the plates there are three small spinelets in a line with the median suture, the innermost the longest, and the outermost the smallest; and in the space between the outermost spine of this series and the free marginal series of spines is a tolerably robust, conical, and pointed spine longer than the rest, the representative of the