

paxillæ in an entire specimen ; and the appearance of the abactinal surface, either to the naked eye, or even under a low power of magnification, is that of a fine granulation. The pseudo-paxillæ upon the disk are larger than those along the rays, in that they are composed of more spinelets, but this is only noticeable under magnification, for the character is the same throughout both on disk and rays. A number of small pedicellariæ, formed of three or four slightly enlarged and modified spinelets, occur at intervals amongst the paxillæ, both upon the disk and along the sides of the abactinal surface of the rays.

The supero-marginal plates, forty-six or forty-seven in number from the median interradial line to the extremity, are confined almost entirely to the lateral wall of the ray, and although there is a slight sharp bevel towards the abactinal surface, little more than their thickness is visible when viewed from above. They constitute a very narrow but remarkably well-defined border to the rays and disk. When seen from the sides the plates are perfectly rectangular, the length being slightly greater than the height, excepting the seven or eight innermost plates on each side of the median interradial line in which the height is at first slightly greater than, and then equal to, the length. Each plate bears on its upper margin, immediately on the angle uniting the abactinal and lateral planes, a short robust, conical, sharply pointed spine, not placed exactly midway between the adoral and aboral extremities of the plate, but rather nearer the latter. It is directed parallel to the vertical plane through the axis of the ray, and points towards the extremity at an angle of about 45° to the horizontal. The longest of these spines measures about 2.5 mm., and they decrease in length slightly as they proceed along the ray. The surface of the plate is covered with small, hemispherical, widely spaced granules, which become crowded along the vertical margins, and two or three embracing the base of the conical spine are often more or less spiniform.

The infero-marginal plates are exactly correspondent to the superior series ; their length and height in the lateral wall being the same as in the superior series on the inner portion of the ray, whilst the height diminishes proportionally rather more along the ray than in the superior series. Their breadth on the actinal surface is at first much greater, and afterwards only slightly less, than the length. The lateral and actinal planes form a right angle, the union being sharp and scarcely rounded. Each plate bears a single, short, conical spinelet, similar in size and character to the supero-marginal spine. It is placed on the angle at the junction of the lateral and actinal planes, and is directed horizontally and at a slight angle towards the outer extremity. On isolated and rarely occurring plates two spines may be present, one rather smaller than the other. The surface of the plate is covered with small, widely spaced hemispherical granules, with a tendency to become papilliform on the actinal surface. They are crowded along the adoral and aboral margins, and several at the base of the lateral spine are usually definitely spiniform.

The adambulacral plates are long and narrow, subequal to the infero-marginal plates, to which they appear to correspond throughout, with very few exceptions. The margini