

thick and obtusely rounded, and they are usually grouped close together in consequence of the crowding of the paxillæ. A number of the paxillæ have two or four enlarged papillæ, which form incipient pedicellariæ. The paxillæ present no definite order of arrangement.

The marginal plates are small and short; the plates of the superior series are the smallest, and are inconspicuous, being much less in height than those of the companion inferior series. The supero-marginal plates are thirty in number counting from the median interradial line to the extremity, and are rectangular with the height about equal to the length throughout. They are covered with short, uniform, equal, papilliform spinelets, similar to, but slightly longer than, those on the paxillæ, and are devoid of any large or true spines whatever. The position of the supero-marginal plates is entirely marginal.

The infero-marginal plates correspond exactly in length to the superior series, but their height or transverse dimension is much greater, being from twice to three times as great in the interbrachial arc, but diminishing along the ray until at the extremity the height and length are subequal. Their posture is such as to form a broad marginal border to the actinal area of the disk and along the inner half of the ray, the breadth diminishing towards the extremity, where they conform to the rounding of the ray, and only a small part is visible in the actinal view. Their surface is covered with short, robust, papilliform spinelets, subconically pointed. The transverse furrows between adjacent plates are well defined. Normally every plate in the interbrachial arc, and as far as midway along the ray, bears at its end, adjacent to the supero-marginal plate, a pedicellarian apparatus, formed by two to four thickened and enlarged papilliform spinelets, and larger than those constituting the general covering of the plate. This pedicellarian apparatus is consequently a conspicuous object, and there are no larger spines on the plate.

The adambulacral plates are longer than broad (in fact remarkably large for so small a form), and they have a slightly convex margin towards the furrow. Their armature consists of a furrow series of seven or eight short, subclavate, papilliform spinelets, subequal in length on the outer half of the ray, but with the median ones slightly longer on the inner part of the ray; these are directed over the furrow, radiating slightly apart. External to the furrow series, and on the actinal surface of the plate, is a longitudinal series of five or six short, equal, papilliform granules (scarcely worthy of being called spinelets); and again external to this are one or two subparallel, but often irregular, longitudinal series of similar and equal-sized papilliform granules or spinelets, the number in these outer series being smaller in consequence of the presence of a large pedicellarian apparatus composed of three or four (usually four) considerably enlarged papilliform spinelets, placed near the aboral margin of the plate, and preventing the extension of the one or two outer series of papilliform granules there.