

of the ray than by the regular curve of the side as a whole. Margin thick and vertical, equally rounded actinally and abactinally. Actinal area plane or slightly concave, undulating, more or less flexible, and capable of some inflation; a slight sulcus usually defined along the median interradial line.

The whole abactinal area is covered with small, regular, polygonal tabula, which diminish in size as they approach the margin (where they are very small); they are also smaller in the central region of the disk and along the edge of the interradial sulcus than in the median radial area and on the actual floor of the sulcus. The larger tabula in the radial areas, which are more or less elevated or paxilliform, are comparatively widely spaced, exposing the papulæ, of which there are about six round each tabulum, separated from one another by the stellate prolongations of the basal portion of the plates. The paxillæ consist of a hexagonal, rhomboid, or polygonal tabulum, slightly raised and faintly convex in the radial regions, where the paxillæ are widely spaced. The tabulum is covered with coarse, low, and almost truncate granules, and the margin is surrounded by a series of thin lamelliform papillæ or flattened granules, which have a striking appearance as compared with other species (see Pl. XLIX. fig. 1). A small excavate pedicellaria with two rather broad jaws and associated pit is present on some of the tabula, and appears to be always placed at the margin of the tabulum, some of the neighbouring granules being scooped away as it were for its reception.

The supero-marginal plates, which are seventeen in number, counting from the median interradial line to the extremity, form a well-defined and nearly uniformly broad border to the abactinal area. The plates near the interradial line have their length and breadth subequal, the length being perhaps slightly in excess; as they proceed along the ray, however, the length diminishes step by step, until at the extremity the breadth is fully twice as great as the length. The plates are distinctly tumid. The lateral surface of the plates is covered with very small, uniform, crowded granules, but on the abactinal area of the plate there is a large naked quadrangular space which occupies nearly the whole of that surface, being separated from the margin only by two (or rarely three) rows of the small granules. The majority of the plates bear one, or occasionally two, small pedicellariæ placed at the edge of the naked space.

The infero-marginal plates correspond to the superior series, and are, like them, covered with small crowded granules, excepting, however, a small circular area on the actinal surface of each plate, which is naked. Nearly all the infero-marginal plates bear one of the small excavate pedicellariæ similar to those on the supero-marginal plates; a few plates bear two. The pedicellariæ appear to be invariably placed close to one of the margins of the plate.

The adambulacral plates are slightly broader than long, and their armature consists of a marginal series of six short, subequal spinelets, excepting the adoral spine of the series, which is smaller. The spinelets are thick and subprismatic or quadrangular in section, and have a