end of the inner third or fourth, beyond which it gradually tapers to an attenuate extremity. The interbrachial arcs are a mere close cleft, in consequence of the crowding of the rays at the base.

The disk is large and circular, subplane, and capable of slight inflation, slightly elevated above the base of the rays, and more or less distinctly defined. The abactinal surface is beset with small imbricating plates forming a wide meshed network, the whole being covered with a membrane which is punctured in the interspaces by numerous papulæ. The plates bear small uniform spinelets, scarcely, if at all, larger than those upon the rays, and here and there, widely spaced, are large, triangular, forficiform pedicellariæ; much smaller, elongate, forficiform pedicellariæ are more numerous.

The abactinal surface of the ray on the basal portion is similarly beset with small imbricating plates, which form a wide meshed network, the meshes being more or less quadrangular. The longitudinally directed series of plates are, however, confined strictly to the abactinal surface, and do not occur on the lateral walls of the ray, where widely spaced, transverse series only are found, one opposite about every third adambulacral plate. The lowest plate, which abuts on the adambulacral plates, is probably the representative of an infero-marginal plate, and bears a single small, sharply pointed spinelet. The abactinal plates do not extend far beyond the ovarial region of the ray, and the transverse bands are then probably represented only by an aborted rudiment of the infero-marginal plate, bearing, however, a fully developed spine, which may extend for two-thirds of the length of the ray or more. The abactinal plates bear small, isolated, sharply pointed spinelets, similar to those upon the disk, and the membrane which covers the interspaces is punctured by numerous papulæ. A number of small forficiform pedicellariæ occur on the membrane, and great numbers of comparatively large forcipiform pedicellariæ are present, borne on a roll or sacculus of membrane, and disposed as a thick transverse ruff or annulus, isolated and well spaced from its neighbours, encircling the ray, and extending on each side to the adambulacral plates.

The ambulacral furrow occupies the greater part of the actinal surface of the ray, measuring about 4 mm. at a part where the whole ray is 6·25 mm. The adambulacral plates are short and narrow, inclined at a considerable angle aborally, and are separated by a space nearly equal to their length occupied by muscular ligament. Their armature consists of two short, cylindrical, tapering, sharply pointed spines, which diverge slightly, one towards the furrow, the other outwardly. The bases of the two spinelets together occupy the whole of the actinal surface of the small adambulacral plates. On the outer side of the outer spine is a rather elongate tuft of small forcipiform pedicellariæ, and within the margin of the furrow and at the base of the inner spine may be one or occasionally two very small forficiform pedicellariæ. The ambulacral tube-feet, which are robust and crowded, are biserial in their arrangement, and have a small, button-like, centrally invaginated terminal disk.