longer than the diameter of the disk, robust, broad at the base, and tapering to the extremity, slightly convex actinally. Interbrachial arcs acute.

Abactinal area with plates forming a reticulated network with wide meshes. The plates bear at widely spaced intervals tubercular eminences, on which are borne paxilliform tufts of four or five spinelets, which are robust at the base, tapering to a point, about 3 mm. in length, and usually all drawn together at the tip like a paint-brush when moistened and drawn to a point. No order of arrangement is discernible in the disposition of the paxillæ. Large isolated papulæ are present in the meshes, five, six, or even more, in those which are largest. These are remarkable from the fact that the margin of the orifice is beset with a ring of round, granule-like, fleshy papillæ, groups of which also occur on the intervening membrane, giving it a more or less verrucose appearance. The papulæ also appear to be delicately verrucose.

The marginal plates (? supero-marginal) form a regular and well-defined longitudinal line, and each bears a tuft of five or six spinelets rather longer and more robust than those on the abactinal paxillæ and appressed to the ray, the direction being nearly horizontal and outward. This series of plates is separated by a rather wide and well-defined space, occupied by smooth membrane, from another perfectly regular longitudinal series of plates situated midway between the supero-marginal plates and the adambulacral plates, and consequently midway on the actinal surface of the ray. These are either infero-marginal plates or actinal intermediate plates, but I am unable to say definitely which series they represent without mutilating the single example; I am inclined to rank them as intermediate plates. The plates in question are armed with a flat comb of four or five spinelets, similar to those on the marginal plates above described, more or less appressed to the ray, their direction being usually oblique and outward at an angle of about 45° to the line of the furrow.

The adambulacral plates are large and broader than long. Their armature consists of two series of spinelets. (1.) An inner or furrow series of seven or eight delicate, rather elongate, tapering spinelets, the outermost of the series rather smaller than the others, and all united for about half their length by a membranous web, forming a rather elongate, semicircular scoop or fan, the membrane extending uninterruptedly upon and covering the plate. (2.) Far back on the actinal surface of the plate is an oblique flat comb of four elongate, pointed spinelets, much larger and more robust than the furrow series, and similar to the spinelets on the actinal intermediate plates above described. They are appressed to the ray, their base line is oblique in position on the plate, and their direction is outward and at an angle of about 45° to the line of the furrow. The series of these actinal spines forms a regular longitudinal line along the ray. There are thus three regular, distinctly spaced, longitudinal lines of combs of spines visible on the actinal surface of the starfish.

The mouth-plates are very large, and have an elongate median eminence along the line