1. Marginaster fimbriatus, n. sp. (Pl. LVIII. figs. 4-6).

Rays five. R = 6 mm.; r = 5 mm., including the breadth of the marginal fringe. Thickness about 4.75 mm. at the apex.

Marginal contour pentagonal, with the sides slightly incurved and the angles rounded. Abactinal area convex, definitely keeled along the median radial lines, and with the intermediate areas slightly hollowed. Actinal area slightly convex, with the intermediate areas slightly hollowed. Margin presenting a sharp thin edge, formed by the inferomarginal plates, which extend far beyond the supero-marginal plates. Both abactinal and actinal surfaces covered with thick membrane.

The infero-marginal plates are ten in number on each side of the pentagon, or perhaps twelve if a small comb of spinelets at the radial extremity represents an independent plate. These plates, which are thin and lamelliform, are very large in proportion to the size of the test, are broader than long, and have their free margin curved outwardly and furnished with a comb of five or occasionally six short, flattened, roundly pointed, subequal spinelets, which radiate slightly apart, the base line of the series occupying the whole of the curved free margin. The posture of the fans or combs of marginal spinelets is consequently horizontal. On the abactinal surface of the plate is a row of four or five granules, parallel to the margin, and sometimes one, two, or more supplementary granules irregularly placed. The actinal surface of the plate is covered with membrane and bears no granules or spines.

The supero-marginal plates are entirely hidden by the membrane which covers the whole abactinal surface; they stand almost vertical and imbricate upon each other slightly at the abactinal or upper end, but are scooped out at the actinal end, so as to leave an interspace between each plate. These plates may bear a few conical robust granules irregularly placed.

The ambulacral furrows are almost closed. The adambulacral plates are small. Their armature consists of two small, equal spinelets, standing side by side on the furrow margin and quite hidden in the furrow; and, on the actinal surface of the plate, two much larger, flattened, pointed, and thickly skin-covered spinelets, which are obliquely placed one behind the other; the innermost one of the pair is directed over the furrow and almost touches or interlocks with the corresponding spine on the opposite side of the furrow, and the outer spine is also directed towards the furrow but is less inclined. Seen superficially the adambulacral armature appears to form two longitudinal and alternating series of spines on each side of the furrow, the innermost or marginal series being at first sight unnoticeable.

The whole actinal area is covered with membrane and is traversed by indications of faint channels passing from the marginal plates to the ambulacral furrow. The actinal intermediate plates are entirely hidden by membrane, but appear to be comparatively large. The plates adjacent to the marginal plates bear normally a small conical papilliform