

regular transverse parallel rows of tubercular eminences on which are attached large flat scales; the upper ones are large, irregularly fan-shaped, as broad as long; the lower ones are more elongate, lanceolate in form, and more or less pointed, all closely appressed. A well-defined channel occurs between this series and the infero-marginal plates, and single isolated papulæ are present between the plates. The next series of plates, which may be regarded from their position as the representatives of the infero-marginal plates, are smaller (in breadth) than the superior series; each of these bears normally a single, naked, elongate, delicate, tapering and more or less compressed lateral spine, near the actinal margin of the plate, which is directed outward and upward, and appressed to the ray; the longest measures between 3 and 4 mm. Above this lateral spine are two pairs of small almond-shaped, or lanceolate, and pointed scale-like spinelets, the upper pair forming a lineal series throughout the ray and partially masking the channel above described. There may also be two or three small miliary papillæ or scutes near the base of the lateral spine. Single isolated papulæ are present between the infero-marginal and actinal intermediate plates. There are three rows of closely fitting actinal intermediate plates between the infero-marginal and adambulacral plates, which form regular longitudinal and transverse series. Each plate bears a single large spinelet, similar and nearly equal in size to the lateral spine, articulated on a prominent tubercle, and several small miliary papillæ.

The adambulacral plates are small, broader than long, and well spaced, the interspace being filled with muscular tissue. Each alternate plate is developed into a thin, comparatively large, prominent ridge, which extends far into the furrow, and separates the neighbouring tube-feet; whilst the intermediate plates are smooth and appear to form the true furrow wall. The armature of the prominent adambulacral plates consists of a pair of small and very delicate spines situated at the extreme inner end of the ridge and consequently high in the furrow, which radiate rather widely apart; behind these and on the surface of the ridge is either a single spine, or a pair of spines placed obliquely, and about equal in size to the furrow spines; and these are followed by either one or two similar and similarly placed spinelets. On the outer part of the plate is a group of small, subequal, compressed, scutiform spinelets or papillæ. On the non-prominent adambulacral plates there is a similar group of scutiform papillæ on the outer part of the plate, and two or three similar appendages advance towards the furrow margin of the plate.

The actinostome is rather small and depressed. The mouth-plates trend upward into the buccal cavity.

The madreporiform body is very difficult to find and almost hidden by scales. The few striæ which may be seen are coarse.

The anal aperture, which is inconspicuous, is excentric, and lies outside the dorso-central plate and its circle of scales. The orifice is closed by three or four scales, scarcely distinguishable from the neighbouring scales.