

to the extremity of the delicate innermost spine. One or two small ciliary spines may be present on the extreme outer edge of the adambulacral plate, adjacent to the first longitudinal row of intermediate plates; and two or three similar small spines are present in the same position at the outer edge of the non-prominent intermediate adambulacral plates, but no spines whatever are present on the surface of these plates within the furrow.

The actinostome is deeply depressed, and the mouth-plates are entirely within the cavity, and are not apposable. Their armature consists of pointed, moderately robust spines similar to the larger spines on the ridges of the adambulacral plates.

The madreporiform body, which is small and inconspicuous, is placed external to one of the interradial (basal) plates.

The anal aperture is small, distinct, surrounded by a circlet of small ciliary spines, and is placed at the side of the dorso-central plate, and consequently slightly excentric in position.

The ambulacral tube-feet form four rows. They are rather small, subconical, and have a small but distinct fleshy terminal disk.

Young Phase.—The young form,¹ measuring $R = 11$ mm., $r = 2.25$ mm., has a very remarkable appearance, owing to the prominence and distinctness of the component parts of the skeleton. The disk is much higher than in the adult. The dorso-central plate is prominent and assumes the shape of a rounded cone. The basal or interradial and first radial plates are of nearly equal size, and are very tumid or almost semiglobular in form. The plates of the median radial line are large and distinct, occupying a large portion of the abactinal surface of the ray. The supero-marginal series of plates form the margin of the ray and the intermediate plates are small. Between the supero-marginal series and the adambulacral plates there are not more than two fully developed longitudinal rows of plates, with a partially developed series commencing to appear between the latter and the adambulacral plates. The terminal (ocular) plates are very large, somewhat resembling the shape of a serpent's head, and are armed with one or two pairs of comparatively large robust spinelets, near the extremity, which are directed upward.

The large plates of the disk and the median radial series have already a small tubercle, but only some of these bear spinelets. All the plates have a few widely spaced and very minute granules and microscopic ciliary spinelets. The spinelets on the lower rows of plates are comparatively long and well developed. The character of the alternate prominent adambulacral plates is already discernible, although not more than one or two spinelets are present in the armature of each.

The madreporiform body is outside and external to the interradial or basal plate, and almost in the ravine of the interbrachial arc. The anal aperture is excentric, and

¹ I have given a drawing of this young example in my account of the Asteroidea dredged during the cruise of H.M.S. "Triton" (*Trans. Roy. Soc. Edin.*, 1883, vol. xxxii. pl. xxvi. figs. 9-11).