

The armature of the adambulacral plates is arranged in three series on the inner part of the ray, but becomes reduced to two on the outer portion. The inner or furrow series consists of three spinelets, which are rather short—the middle one delicate and clavate at the extremity, and the two lateral companions rather shorter, flat and obtuse. The second series consists of two or three spinelets shorter than the inner series, and more or less flattened and truncate. When a third spinelet is present it is very frequently placed somewhat behind the other two, opposite their interspace; and might almost be ranked with the third series, which latter may consist of only two or three small cilia-like spines, or of four flat modified spines, forming a well-developed pedicellaria. These organs are irregular in their occurrence, and are only present on the inner half of the ray; on the outer part of the ray the third series of spines of the adambulacral armature is apparently wanting altogether. The pedicellariæ are large and conspicuous, and four or five are present along each side of a furrow, usually on alternate plates; all are uniform, and with four valves, regularly apposed two and two, the spinelets which form the valves being more or less flattened and arched, and terminating in an abruptly pointed or lanceolate extremity.

Very few actinal intermediate plates are present; the two immediately behind the mouth-plates each bear a large pedicellaria similar to those just mentioned.

The mouth-plates are elongate and narrow, with a single line along their superficies of comparatively long and robust spinelets, which are cylindrical or slightly compressed and obtuse; all are nearly uniform in size excepting the innermost one or two, which are somewhat larger than the others.

Colour in alcohol, a very light brown or chocolate colour on the paxillar area, which is mottled with spots and lines of a darker tint of the same. These marks fall in a line parallel to, and midway between, the marginal plates and the median radial line. On the inner third of the ray the line or band of colour is generally continuous and meets the corresponding band of the adjacent ray on the disk, forming a V-shaped mark, thickened in the angle. On the outer part of the ray the markings are discontinuous, forming spots, and these frequently extend up to and over the marginal plates. The actinal surface and ambulacral tube-feet are yellowish white.

Young Phase.—A small specimen measuring $R = 11$ mm., which has twelve supero-marginal plates, as yet possesses no trace whatever of the conspicuous spines present on the supero-marginal plates in the interbrachial arc of the adult form. On the infero-marginal plates there is no indication of the aboral line of spinelets, only a single well-developed lateral spine accompanied by a very small companion. No pedicellariæ are yet to be found on the adambulacral plates; but a pair of actinal intermediate plates are very conspicuous, and the papilliform spinelets they bear are very robust and are grouped in such a way as to lead to the inference that they perhaps performed the functions of a pedicellarian organ. The rays are shorter and broader at the base in this young form as compared with the adult stages.