of secondary and miliary tubercles, occupying the middle region of each plate, and extending to the median line (Pl. XVIII. figs. 4, 5). On the ambulacral plates the secondaries are distant and more irregularly arranged than on the interambulacral plates (Pl. XVIII. fig. 1, 2, 4, 5). The coronal plates vary in colour from greenish to light violet brown, the intervening bare spaces of the membrane of the test are of a milky colour.

The suckers of the tentacles are tipped with orange on the actinal side. The test of this species is remarkably thin, even in the largest specimen (64 mm. in diameter), the calcareous plates do not give to the test any degree of solidity. In alcohol the general outline of the test is angular with rounded corners, and when seen in profile the edges of the test are somewhat swollen, the test sinking below the level of the ambitus between it and the actinostome, and also between the ambitus and the abactinal system. There are three kinds of pedicellariæ found upon the test resembling those of the test of *Phormosoma*. The pointed suckers of the abactinal side are large, and commence close to the ambitus. In Plate XVIII. fig. 6, the abactinal system has accidently been drawn out of line; the axis passing through the madreporic body should be on the left to have it correspond with the other figures of the abactinal system on the same plate. The larger primary spines, especially those near the ambitus on the actinal surface, resemble somewhat the curved trumpet-shaped hollow spines of *Asthenosoma grubii;* they are, however, longer, more slender, and of a lighter colour and transversely banded with vermilion, the other secondary and miliary spines of both areas are shorter, sharp pointed, and only a few of the primary spines of the abactinal surface near the ambitus are trumpet-shaped; the others resemble the secondary spines, but are larger and comparatively stouter, and are more or less irregularly banded with carmine.

In young specimens (Pl. XVIII. figs. 1, 2; Pl. XVIII.[a] figs. 14, 15) the vertical row of primary tubercles adjoining the poriferous zone is not as well marked as in the older specimens, nor are the horizontal rows of secondaries and miliaries well defined. In the smallest specimens collected (Pl. XIX. fig. 1–3) the spines are transversely banded with broad carmine rings. In young specimens the primary spines are proportionally longer, but as in older specimens of this species they are cylindrical, scarcely tapering towards the tip. The secondary and miliary spines are fine, sharp pointed and uniformly tapering. The integument of the abactinal system nearly conceals the calcareous plates irregularly arranged round the anal opening, and also encroaches considerably on the outer edges of the plates of the genital ring. The ocular plates are pentagonal, horizontally elongate; the genital plates (Pl. XVIII. fig. 6) are pear-shaped, pointed towards the median interambulacral line. The genital and ocular plates carry two or three secondary tubercles near the anal edge.

In somewhat younger specimens the abactinal system is marked for the greater uniformity in the size of the genital and ocular plates (Pl. XVIII. fig. 3).