

armature consists of a marginal series of about eight short, lamelliform spinelets, similar to, but larger than, those on the adambulacral plates, which increase in size as they proceed inward. On the actinal surface of each mouth-plate, near the inner end, is one spinelet, exactly similar in size and shape to the corresponding spinelets on the adambulacral plates.

The actinal interradial areas are large and occupied by intermediate plates which are comparatively large in size and few in number. All are slightly tumid and covered with the uniform granulation and membrane already referred to. Each of the plates in the series next the adambulacral plates bears a number of small, two-lipped, valvate pedicellariæ, similar to those in *Anthenea*, but uniform in height with the granulation; from three to seven are present on a plate and show no definite order of arrangement. A few of the other intermediate plates bear occasionally a similar but isolated pedicellaria. Not more than three series of intermediate plates, and perhaps a few supplementary ones, are present.

The madreporiform body, which is large and elongately oval, is situated external to the basal plate. It is bounded laterally and outwardly by two large plates; and its outer end is rather nearer the centre than midway between that point and the margin. Its surface is marked with very fine striations, which radiate with more than usual regularity from the centre to the margin.

The ambulacral tube-feet are large and have very large flat sucker-disks.

The primary apical plates are easily distinguishable on the disk:—The dorso-central, the under-basals, and the basals, the last mentioned being especially conspicuous. When the madreporiform body is placed in the right anterior interradius the anal aperture is on the right posterior side of the dorso-central plate.

Small, isolated, pincer-formed pedicellariæ, with two rather coarse jaws, are present here and there on the abactinal plates, and occasionally on the infero-marginal plates in the interbranchial arcs near the lateral spines.

Colour in alcohol, a bleached yellowish white.

Young Phase.—The smallest example collected by the Challenger which measures $R = 85$ mm., $r = 25$ mm., has only two lateral spines on each infero-marginal plate, and the longest of these measures about 7 mm. This specimen has twenty supero-marginal plates, and in all other essential respects corresponds to the description given above.

Locality.—Station 187. Booby Island, Torres Strait. September 9, 1874. Lat. $10^{\circ} 36' 0''$ S, long. $141^{\circ} 55' 0''$ E. Depth 6 fathoms. Coral mud. Surface temperature $77^{\circ} 7$ Fabr.

Remarks.—This species is readily distinguished from all other species of *Stellaster* by the three large lateral spines, by the tumid marginal plates, by the character of the armature of the adambulacral plates, as well as that of the actinal intermediate plates. The character of the abactinal plates points to its close affinity with *Goniodiscus*.