

and are of equal size, short, compressed, lanceolate, tapering to a sharp point, and invested with membrane, which adds to the apparent breadth of their base. The outer spines on the actinal surface of the plate are subject to a considerable amount of variation, both in number and position. Three only may be present, each placed behind the other, external to the furrow spines, forming a transverse series on the adambulacral plate; or one, two, or even all three, of these spines may be reduplicated—the companion spine usually standing rather oblique. These variations do not appear to be dependent on position in the ray but may occur in any part. All the outer spines on the actinal surface of the plate are of uniform size, cylindro-conical in shape, rather obtusely pointed, and covered with membrane.

The mouth-plates form a triangular mouth-angle, not prominent or protuberant superficially, and perfectly conformable with the triangular outline of the interradial area. The mouth-aperture is completely closed, and the arrangement of the armature of the mouth-plates is suggestive of that in certain *Pentagonasteridæ*. The mouth-spines are short, robust, and stand perpendicularly. One odd spine is placed at the extreme angle, at the junction of the two plates of a mouth-angle, and five similar spines, all closely placed, occupy the free or furrow margin of the plate, decreasing in size as they recede from the mouth; the odd spine being the largest, the next three slightly smaller, and the two outer ones much smaller. All the spines are cylindrical, slightly tapering, and obtusely rounded at the tip. Upon the surface of the plates, and on a line with the two small outer mouth-spines, stand two short secondary or superficial mouth-spines, one on each plate, very robust at the base, conical and pointed; and further outward again a second but much smaller spine behind each of the secondary mouth-spines; this small pair perhaps belonging to the adambulacral plate adjacent to the mouth-plates. A single minute spinelet, situate on the median or sutural line of the mouth-plates, stands midway between each of the pairs of secondary mouth-spines; and no other spines of any description are present on the mouth-plates.

Remarks.—The form above described is nearly allied to *Rhegaster tumidus*, Stuxberg, sp. The following appear to be the chief points of difference. The length of the ray is much less in *Rhegaster murrayi*, the radial proportions being for *Rhegaster murrayi*, $R = 1.3 r$, and for *Rhegaster tumidus*, $R = 1.9 r$, in specimens of the same size. The rays are consequently much less defined, and are more widely expanded at the base. In *Rhegaster murrayi* the marginal contour is distinctly festooned by the infero-marginal plates, and each of these bears a group of enlarged spinelets, neither of the characters being present in *Rhegaster tumidus*. The spines of the adambulacral armature appear to be more numerous in *Rhegaster murrayi*, the armature of the mouth-plates somewhat different, the papulæ more numerous distributed on the abactinal surface, and the character of the spinelets, both on the abactinal and actinal areas, more simple.

Locality.—“Triton” Expedition: