

The actinal interradial areas of the disk are covered with membrane, beneath which may be detected traces of small intermediate plates; and on only one or two of these is there a single short stumpy spine.

The madreporiform body is small, circular, convex, and situated about midway between the centre of the disk and the margin.

The ambulacral tube-feet have a large, fleshy, centrally invaginated terminal disk.

Colour in alcohol, a dirty brownish white.

Young Phase (?).—There is a very small example of a *Crossaster* from Station 145, which I am inclined to think may be the young of this species, but the specimen is too small for accurate determination, measuring only $R = 7.5$ mm. There are ten rays. In the armature of the adambulacral plates there are two or three spinelets in the furrow series, and four or five in the transverse series.

Localities.—Station 135c. Off Nightingale Island, Tristan da Cunha. October 17, 1873. Lat. $37^{\circ} 25' 30''$ S., long. $12^{\circ} 28' 30''$ W. Depth 110 fathoms. Surface temperature $54^{\circ} 0$ Fahr.

? Station 145. Off Marion Island. December 27, 1873. Lat. $46^{\circ} 43' 0''$ S., long. $38^{\circ} 4' 30''$ E. Depth 140 fathoms. Volcanic sand. Surface temperature $41^{\circ} 0$ Fahr.

Remarks.—This species resembles *Crossaster papposus* in habit, but is distinguished from that form by the number of rays, which are also narrower and more attenuate, by the widely spaced marginal combs, by the smaller paxillæ on the abactinal surface, which are more widely spaced and have fewer and more elongate spinelets in the crown, by the distinctly rounded interbrachial arcs, and by the skin-covered actinal interradial areas devoid of spinelets, as well as by the character of the armature of the adambulacral plates.

Genus *Rhipidaster*, n. gen.

Disk large, slightly convex, general form depressed, the habit resembling that of *Crossaster*. Rays (eight in the type form) robust and tapering.

Abactinal plates forming a wide-meshed reticulated network, bearing isolated paxilliform tufts of spinelets. Several large isolated papulæ are present in the meshes; and the membrane of the interspaces is beset with round, granule-like, fleshy papillæ round the margin of the papular orifice, and groups of the same are present on the membrane.

A series of marginal plates (? supero-marginal) which bear paxilliform tufts of rather elongate spines appressed to the ray, defines the abactinal area.

A single complete longitudinal series of actinal intermediate (or perhaps the representatives of infero-marginal) plates is present between the supero-marginal and adambulacral plates, each plate bearing a flat fan of spines appressed to the ray.

Adambulacral plates large. Armature consisting of two series of spines. (1.) The furrow series of seven or eight delicate spines partially united by a membranous web,