half of its margin are more papilliform than the other granules on the abactinal plates generally.

The anal aperture is small and excentric in position, and is surrounded by a number of small scutiform papillæ, which trend over the orifice.

The primary apical plates are very conspicuous.

Colour in alcohol, a brownish white, mottled with patches on the abactinal area of a light chocolate colour. All the papular areas are a dark greyish brown. This distribution of colour produces a very ornate appearance. The actinal surface is yellowish white.

Locality.—Station 187. Booby Island, Torres Strait. September 9, 1874. Lat. 10° 36′ 0″ S., long. 141° 55′ 0″ E. Depth 6 fathoms. Coral mud. Surface temperature 77° 7 Fahr.

Remarks.—This large and elegant form is distinct from any other species with which I am acquainted. It resembles in some of its details Ophidiaster tuberifer, but is readily distinguished by the larger size, the tapering rays, the absence of tubercles on the abactinal plates, the small size of the granulation on the abactinal plates, the peculiar character and disposition of the granulation of the papular areas, the difference in the adambulacral armature (which in Ophidiaster helicostichus is in two series, whereas in Ophidiaster tuberifer three series are present), and in the presence of the large-bossed pedicellariæ. The pedicellariæ generally are, if anything, smaller in the species under notice than in Ophidiaster tuberifer.

Genus Leiaster, Peters.

Leiaster (subgen.), Peters, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, April 1852, p. 177.

Lepidaster, Verrill, Trans. Conn. Acad. Arts and Sci., 1871, vol. i. part 2, p. 577 (non Lepidaster, Forbes, 1850).

Ophiuliaster (pars), Perrier, Revis. Stell. Mus., p. 121 (Archives de Zool. expér., 1875, t. iv. p. 385).

This small group of species, although distinctly allied to Ophidiaster, appears to me worthy of generic recognition. The soft thick skin with which they are covered causes them to have a gelatinous or slimy character to the touch when alive, and this together with minor differences of structure produces a facies altogether different from that of any of the species of true Ophidiaster. Von Martens and de Loriol have both expressed the same opinion. Leiaster, as at present known, is confined to the Indian Ocean, the Eastern Archipelago, and the Pacific, and appears to be local in its occurrences.

Chorology of the Genus Leiaster.

a. Geographical distribution:—

Indian Ocean: Three species between the parallels of 10° and 30° S.

Leiaster coriaceus and Leiaster glaber, from Querimba Island. Leiaster coriaceus and Leiaster leachii, from Mauritius.

- 1 Archiv f. Naturgesch., Jahrg. xxxii., Bd. i. p. 71.
- ² Mem. Soc. phys. hist. nat. Genève, t. xxix. p. 40.