

are frequently pointed and channelled along their length, or gouge-shaped. The spinelets in the webbed fringe on the three attingent sides of the adambulacral plates are fewer in number, as also are the spinelets on the paxillæ of the abactinal area (see Pl. XVIII. fig. 1). These, however, are characters which I regard as attributable to the smaller size.

Localities.—Challenger Expedition :

Hong Kong, 10 fathoms.

Station 203. East of Panay Island (Philippine group). October 31, 1874. Lat. $11^{\circ} 6' 0''$ N.; long. $123^{\circ} 9' 0''$ E. Depth 20 fathoms. Mud. Surface temperature $85^{\circ} 0$ Fahr.

Other localities: Japan (Müller and Troschel); Banka Straits (Stockholm Museum); Singapore (von Martens).

Remarks.—Müller and Troschel's type-specimen in Berlin from Japan, collected by Captain Wendt, which I have examined, conforms in all points—in so far as the dry specimen can be compared—with the form above described from Hong Kong. It is, however, somewhat smaller, measuring $R = 41$ mm., $r = 11.5$ mm. The thumb-like spinelet is present in the adambulacral armature. The thumb is also present in a specimen from Banka Straits preserved in the Stockholm collection.

I have likewise seen the type of Möbius's *Stellaster sulcatus*. It is unquestionably the same species. The two specimens are rather small, $R = 35$ and 36 mm., with $r = 12$ mm., in the example measured by me. This observer has noted¹ the peculiar bordering of spinelets on the marginal and actinal intermediate plates, also the granulate covering of these plates and the general character of the paxillæ.

An example preserved in Copenhagen, which I have also studied, has been carefully described by Lütken,² who at the same time pointed out that *Stellaster sulcatus*, Möbius, was synonymous with *Archaster hesperus*.

In the specimen at Leyden, seen by Müller and Troschel, I find that the thumb-like spine on the adambulacral plates is not so largely developed or so prominent as it sometimes is, nevertheless it is present. The locality of this example is unknown; it is simply stated in the System der Asteriden to have been collected by von Siebold.

Genus *Leptoptychaster*, Smith.

Leptoptychaster, Smith, Ann. and Mag. Nat. Hist., 1876, ser. 4, vol. xvii. p. 110.

Leptoptychaster, Smith, Phil. Trans., Zool. Kerguelen Island, 1879, vol. clxviii. p. 278.

The type of this well-marked genus was obtained off the island of Kerguelen during the sojourn of the British Expedition to observe the transit of Venus in 1875. The collection of Starfishes was described by Mr. E. A. Smith, who clearly diagnosed the present genus; and gave a figure of the species for the reception of which it was established.

¹ Neue Seesterne des Hamburger und Kieler Museums, 1859, p. 11, Taf. iv. figs. 1 and 2 (*Abhandl. a. d. Gebiete Naturw. Hrsq. v. d. naturwiss. Verein*, Hamburg, Bd. iv. Abth. 2, 1860).

² Videnskab. Medd. naturh. Foren. i Kjøbenhavn, 1864 (1865), p. 136.