

From Mr. Smith's account we learn that the same form had been collected at Kerguelen by the Antarctic Expedition of 1840, but that the species had remained unnoticed and undescribed until worked out by him. Several specimens were obtained by the Challenger Expedition from the same locality.

I have referred to this genus the North-Atlantic form described by Sars under the name of *Astropecten arcticus*, which has since been erroneously relegated to the genus *Archaster*.

Chorology of the Genus Leptoptychaster.

a. *Geographical distribution:—*

ATLANTIC: One species between the parallels of 35° and 75° N.

Leptoptychaster arcticus off the North Cape, the coast of Norway, and off the eastern coast of North America.

SOUTHERN OCEAN: Two species between the parallels of 40° and 50° S.

Leptoptychaster kerguelenensis off Kerguelen Island and Marion Island. *Leptoptychaster antarcticus* between Marion Island and Kerguelen Island.

β. *Bathymetrical range: 10 fathoms to 1350 fathoms.*

Greatest range of one species: *Leptoptychaster arcticus*, 20 fathoms to 690 fathoms; and the American variety of the same species, *Leptoptychaster arcticus*, var. *elongata*, extends to 1350 fathoms.

γ. *Nature of the Sea-bottom: Leptoptychaster arcticus* is found, at least in the European area, on clay, sometimes sandy. The American variety, *Leptoptychaster arcticus*, var. *elongata*, occurs on gravel and stones, and an example from 1350 fathoms on blue mud. *Leptoptychaster antarcticus*, on hard ground (gravel, shells). *Leptoptychaster kerguelenensis* on volcanic mud,

Chorological Synopsis of the Species.

	Ocean.	Range in Fathoms.	Nature of the Sea-bottom.
<i>Leptoptychaster arcticus</i>	Atlantic.	20 to 690 ¹	Clay, sometimes sandy.
<i>Leptoptychaster arcticus</i> , var. <i>elongata</i>	Atlantic.	85 to 1350	{ Gravel, stones (85 fathoms). Blue mud (1350 fathoms.)
<i>Leptoptychaster antarcticus</i>	Southern Ocean.	210	Hard ground (gravel, shells).
<i>Leptoptychaster kerguelenensis</i>	Southern Ocean.	10 to 100	Volcanic mud.

¹ This depth is recorded by Sir Wyville Thomson for *Leptoptychaster arcticus*, west of Ushant (Depths of the Sea), but I have not seen a specimen. Verrill states that this species was dredged by the "Albatross" in 1883 in 547 fathoms (Report of Commissioner of Fish and Fisheries for 1883, Washington, 1885, p. 543).