The following table will illustrate the varying proportions in the length of the segments in the two individuals:—

			Cephalothorax.	Th. 1.	Th. 2.	Th. 3.	Th. 4.	Th. 5.	Th. 6.
Individual from Station 323,	2040	•	34	10	20	20	21	21	14
Individual from Station 45,	•		45	12	16	19	23	19	19

Station 45, S.E. of New York, May 3, 1873; lat. 38° 34′ N., long, 72° 10′ W.; depth, 1240 fathoms; bottom temperature, 37° 2 F.; blue mud.

Station 323, off the River Plate, February 28, 1876; lat. 35° 39′ S., long. 50° 47′ W.; depth, 1900 fathoms; bottom temperature, 33°·1 F.; bottom, blue mud.

Leptognathia, G. O. Sars.

Leptognathia, G. O. Sars, Revision, &c., Archiv f. Math. og Nat., vol. vii. p. 40.

In his revision of this group of Isopods Professor Sars has included several new species, as well as certain other species described by Lilljeborg and others under the genera *Tanais*, *Paratanais* and *Leptochelia*, within a new genus which differs from any of the above named in the following particulars.

The eyes are absent. The mandibles are extremely feeble in structure, whence the name Leptognathia, and the antennæ are four-jointed in the female; in the latter character Leptognathia approaches Cryptocope, Haplocope, Strongylura and Anarthrura; it differs from any of these, however, in the fact that the abdominal appendages are present and well developed in the female; in the above mentioned genera these appendages are either absent or very feebly developed in the female sex.

A single specimen, which I refer without hesitation to this genus, was obtained during the Challenger Expedition off the shores of Kerguelen, in comparatively shallow water (120 fathoms), thus extending the range of the genus (hitherto only known from the North Sea, Mediterranean, and Atlantic shores of America) into the Southern Hemisphere.

Leptognathia australis, n. sp. (Pl. XVI. fig. 8).

This species is probably new, but agrees very closely with Leptognathia longiremis, which has been recently fully described by Professor Sars in his account of the Crustaceans collected during the Norwegian North Sea Expedition (p. 78). As far as I can make out from a comparison of his description and figures with the single specimen