

β. *Bathymetrical range*: 5 to 150 fathoms.

*Gnathaster meridionalis* ranges from 5 to 150 fathoms, and *Gnathaster elongatus* from 50 to 150 fathoms. *Gnathaster pilulatus* is found in 55 fathoms. *Gnathaster singularis* is recorded from shallow water to 30 fathoms, *Gnathaster paxillosus* and *Gnathaster grayi* from 9 to 10 fathoms.

Greatest range of one species: *Gnathaster meridionalis*, 5 to 150 fathoms.

γ. *Nature of the Sea-bottom*: The character of the ground is only recorded in the case of the species above mentioned. *Gnathaster meridionalis* and *Gnathaster elongatus* are found on volcanic mud and coarse gravel (the latter in 150 fathoms). *Gnathaster pilulatus* inhabits a sandy bottom. *Gnathaster singularis* occurs on rock, kelp, and mud. *Gnathaster paxillosus* and *Gnathaster grayi* on sand.

*Chorological Synopsis of the Species herein mentioned.*

	Ocean.	Range in Fathoms.	Nature of the Sea-bottom.
<i>Gnathaster elongatus</i> . . . .	Southern.	50 to 150	Volcanic mud ; coarse gravel.
<i>Gnathaster meridionalis</i> . . . .	Southern.	5 to 150	Volcanic mud ; coarse gravel.
<i>Gnathaster pilulatus</i> . . . .	Atlantic.	55	Sand.

1. *Gnathaster meridionalis*, Smith, sp. (Pl. XLVII. figs. 1 and 2; Pl. XLIX. figs. 11 and 12).

*Astrogonium meridionale*, Smith, 1876, Ann. and Mag. Nat. Hist., ser. 4, vol. xvii. p. 109.

*Pentagonaster meridionalis*, Smith, 1879, Phil. Trans., Zool. Kerguelen Island, vol. clxviii. p. 276, pl. xvi. figs. 6, 6a.

*Localities*.—Station 145. Off Marion Island. December 26, 1873. Depth 50 fathoms.

Station 149D. Royal Sound, Kerguelen Island. January 20, 1874. Depth 28 fathoms.

Station 149H. Off Cumberland Bay, Kerguelen Island. January 29, 1874. Depth 127 fathoms. The bottom deposit at all Stations in the neighbourhood of Kerguelen is a greenish volcanic mud.

Station 150. Between Kerguelen Island and Heard Island. February 2, 1874. Lat. 52° 4' 0" S., long. 71° 22' 0" E. Depth 150 fathoms. Coarse gravel. Bottom temperature 35°·2 Fahr.; surface temperature 37°·5 Fahr.

Station 151. Off Heard Island. February 7, 1874. Lat. 52° 59' 30" S., long. 73° 33' 30" E. Depth 75 fathoms. Volcanic mud. Surface temperature 36°·2 Fahr.

*Remarks*.—A fine series of this species was obtained off Kerguelen, Marion, and Heard