my judgment the name Astrogonium, Muller and Troschel, 1842, has, for the reasons above stated, a ten years' priority, irrespective altogether of usage, which ought not to be set aside in favour of Stephanaster, and it is therefore to this group only, in my opinion, that the name Astrogonium can logically be applied.

The small series of species which have now to be considered are readily distinguished by certain structural characters from all the other Pentagonasteridæ. I propose to group them together under the generic name of *Gnathaster*, and define the genus by the following characters:—

- (1.) Plates of the abactinal area more or less truly paxilliform.
- (2.) Tegumentary developments more or less spiniform.
- (3.) Mouth-plates with a prominent keel developed into an elongate spiniform process.
- (4.) An odd interradial marginal plate present in most, if not in all, cases.

In this genus I include the species previously described under the following names:—

Goniodiscus singularis, Müller and Troschel.
Astrogonium miliare, Gray.
Astrogonium paxillosum, Gray.

Pentagonaster dilatatus, Perrier. Astrogonium meridionale, Smith. Calliderma grayi, Bell.

To these are added two new species discovered by the Challenger.

## Chorology of the Genus Gnathaster.

## a. Geographical distribution:-

ATLANTIC: Three species between the parallels of 50° and 60° S.

\*Gnathaster pilulatus, near the Atlantic entrance to the Strait of Magellan. Gnathaster grayi and Gnathaster paxillosus, at Sandy Point in the Strait of Magellan. The latter species is also found in the Eastern Archipelago off the coast of North Australia.

Gnathaster miliaris and Gnathaster dilatatus, off New Zealand.

PACIFIC: Three species between the parallels of 30° and 55° S.

Gnathaster singularis, off the west coast of South America.

Eastern Archipelago: One species between the parallels of 5° and 15° S.

Gnathaster paxillosus, from Port Essington, off North Australia.

This species also occurs in the Strait of Magellan (fide Bell 1).

Southern Ocean: Two species between the parallels of 40° and 60° S.

\*Gnathaster meridionalis and \*Gnathaster elongatus, off Marion Island, Kerguelen Island, and Heard Island.

The species collected by the Challenger are indicated in the foregoing list by an asterisk.

1 Proc. Zool. Soc. Lond., 1881, p. 97.