Abactinal area with large oblong hexagonal paxillæ, the major axis in the direction of the axis of the ray. A conspicuous medio-radial series larger than the rest, each of these paxillæ being well spaced from its neighbours in the series. Papulæ regularly distributed. Abactinal plates arranged in lines parallel to the axis of the ray (longo-radial).

Actinal interradial areas small, with plates bearing small, conical-pointed spinelets

similar to those on the infero-marginal plates.

Armature of the adambulacral plates in two longitudinal series parallel to the furrow. The post-adambulacral series of intermediate plates with fascioles at the margins obliquely transverse to the axis of the ray.

Madreporiform body small. No pedicellariæ.

Remarks.—This handsome form resembles in many respects the general facies of several of the unarmed Archasteridæ and Astropectinidæ. It is distinguished from the preceding genus by the longitudinal arrangement of the adambulacral armature, and by the presence of the remarkable "fascioles" on the post-adambulacral plates.

Chorology of the Genus Aphroditaster.

a. Geographical distribution:—

ATLANTIO: One species between the parallels of 30° and 40° N.

Aphroditaster gracilis between the islands of San Miguel and Santa Maria (Azores).

- β. Bathymetrical range: 1000 fathoms.
- y. Nature of the Sea-bottom: Volcanic mud.

Chorological Synopsis of the Species.

	Ocean.	Range in Fathoma	Nature of the Sea-bottom.
Aphroditaster gracilis	Atlantic	1000	Volcanic mud.

1. Aphroditaster gracilis, n. sp. (Pl. XVII. figs. 1 and 2; Pl. XVIII. figs. 7 and 8).

Rays five. R = 59-60 mm.; r = 15 mm. R = 4 r approximately.

Rays elongate, tapering gradually from the base to the narrow, pointed extremity, which is slightly turned upward; breadth midway between the centre of the disk and the extremity, 8 mm. Interbrachial arc well rounded.

The paxillæ of the abactinal area are moderately large, tabulate, and regularly hexagonal; those along the ray have their longest diameter in the direction of the axis of the ray, and all are arranged in regular longitudinal series. A series of paxillæ, which are