

series; the innermost spine on each plate is greatly enlarged, and forms with its companion a robust pair directed horizontally inward at each mouth-angle. On the actinal surface of each plate are two longitudinal series of short, stumpy papillæ, the innermost two or three rather more elongate than the rest, and all covered with membrane.

The actinal intermediate plates are confined to a small area in the interradiation region, where they are arranged in regular columns or series parallel to the median interradiation line; and they do not extend along the ray further than the ninth adambulacral plate, or the fifth infero-marginal plate. They bear a number of short skin-covered spinelets, similar to those on the actinal surface of the adambulacral plates, and, as these are more or less grouped together, the separate plates remain distinguishable.

The madreporiform body is very small, situated about midway between the margin and the centre of the disk. Its surface is grooved by comparatively few coarse striation furrows, and in the central region of its surface there is a tendency towards the development of a few isolated granules upon the intervening dissepiments.

Colour in alcohol, a bleached yellowish white.

*Locality*.—Off the Cape Verde Islands. (Depth and conditions not recorded.)

*Remarks*.—This is a very abnormal *Astropectinid*, and I feel great doubts as to the correctness of referring it to the genus *Psilaster*. The form presents several points of affinity to the *Archasteridæ*, but I am unable to include it in any of the genera belonging to that family. Under the circumstances I consider it better to refrain from constituting a new genus for the reception of this single species until more is known of its structure.

The species cannot be mistaken for any of the other forms of *Psilaster*; the broad and distinctly tumid marginal plates, the presence of the incipient pedicellariæ, the character of the paxillæ, and the armature of the infero-marginal plates readily distinguish it.

#### Genus *Phoxaster*, Sladen.

*Phoxaster*, Sladen in Narr. Chall. Exp., 1885, vol. i. p. 611.

Disk small. Rays moderately elongate, robust and tapering. Lateral walls high and nearly vertical.

Marginal plates short and high, confined to the lateral wall. Superior and inferior series correspondent. The surface of both series of plates is covered with short, uniform, flat-lying squamiform papillæ. No large or prominent spines are normally present.

Abactinal area with small compact paxillæ, composed of short skin-covered papillæ, which fit together subprismatically. A small but prominent and well-defined conical epiproctal protuberance is present in the centre of the disk.

Actinal interradiation areas small in the interbrachial region, but a series of narrow band-like plates extends along the ray, nearly to the extremity, separating the adambulacral