

Genus *Pontaster*, Sladen.

Pontaster, Sladen in Narr. Chall. Exp., 1885, vol. i. p. 610.

Disk small. Rays long and tapering.

Marginal plates forming a definite vertical wall or a well-rounded margin. Often elongately oval, or subtriangular in form. The two series have a tendency to alternate more or less, which causes the horizontal margin that touches the companion series of plates to be more or less definitely angulated or to form two facets. Supero-marginal plates usually with one prominent well-developed spine. Infero-marginal plates with one to three similar prominent spines. On the general surface of the plates of both series are borne minute spiniform granules or miliary spinelets.

Abactinal area with round squamiform plates, bearing more or less well-defined paxillæ. No definite order of arrangement. Papulæ confined to an area at the base of the ray, frequently associated with a special calcareous structure of the skeleton—the papularium.

Actinal interradial areas with very few intermediate (ventral) plates.

Armature of adambulacral plates consisting of:—(1.) a semicircular furrow series of small spines; and (2.) one to three outer spines on the actinal surface, usually larger and conical; and a few miliaries may also be present.

Madreporiform body small, usually near the margin, but sometimes nearly midway between the margin and the centre of the disk.

Pedicellariæ frequently present, sometimes comb-formed, sometimes quadrivalvate, sometimes bivalvate.

Remarks.—The type of this genus is the starfish originally described by Düben and Koren¹ under the name of *Astropecten tenuispinus*, which was subsequently referred by Sars² to the genus *Archaster*, a determination which has been followed by the majority of the succeeding writers. Reference has already been made (p. 1 of this Report) to the incongruous character of the assemblage of species that have been included in the genus *Archaster* of Müller and Troschel, and in my remarks under the head of that genus (below, p. 121) will be found a further expression of my views as to the only species that can be retained under the generic name of *Archaster*. These conclusions are arrived at after a careful study of the structure and anatomy of the forms; and in the present place it is unnecessary to recapitulate the grounds upon which the limitation of the genus is based. A glance at the diagnosis of the genus given above, and of that of *Archaster* (*sensu stricto*) as formulated on a subsequent page, is sufficient to indicate that the two types are widely separate and can certainly not be classed as factors of the same generic term.

¹ *K. Svensk. Vetensk.-Akad. Handl.*, År 1844 (1846), p. 251, pl. viii. figs. 20-22.

² *Oversigt af Norges Echinodermes*, Christiania, 1861, p. 38, pl. iii. figs. 5-7.