

Chorological Synopsis of the Species.

	Ocean.	Range in Fathoms.	Nature of the Sea-bottom.
<i>Pararchaster armatus</i> ¹ .	Atlantic.	1250 to 1350	Blue mud.
<i>Pararchaster antarcticus</i>	Southern Ocean.	1675	Blue mud.
<i>Pararchaster pedicifer</i> .	Southern Ocean.	1600 to 1900	{ Diatom ooze (1600 fathoms). Globigerina ooze (1900 fthms).
<i>Pararchaster semisquamatus</i> .	Pacific. :	565 to 1875	{ Green mud (565 fathoms). Blue mud (1875 fathoms).
<i>Pararchaster semisquamatus</i> , var. <i>occidentalis</i> ² }	Atlantic.	1700 or 1240	Blue mud.
<i>Pararchaster spinosissimus</i>	Atlantic.	425	Volcanic sand.

1. *Pararchaster semisquamatus*, n. sp. (Pl. II. figs. 1 and 2; Pl. IV. figs. 7 and 8).

Rays five. $R = 166$ mm.; $r = 15$ mm. $R = 11 r$. Breadth of a ray near the base, 14.5 mm.

Rays very elongate, comparatively narrow and flat, tapering gradually and slowly from the base to the extremity, the outer part being very attenuate. Disk very small. Abactinal surface plane, feebly convex or subcarinate along the median line of the rays. Lateral walls of the ray low and vertical. Actinal surface of the disk prominent at the mouth-angles, and sloping thence to the margin and very slightly along the rays. Inter-brachial arcs widely rounded.

The abactinal surface of the disk and rays is covered with small, uniform, subcircular scale-like plates, which are overlaid with a delicate membranous tissue. The plates bear on their centre a single minute subconical or cylindrical spinelet; along the rays these are quite microscopic thornlets, but upon the disk and at the base of the rays there are a number of much larger spinelets; the largest are elongate, about 7 to 8 mm. in length, robust, tapering, and sharply pointed, and their position probably marks the primary apical plates; the primary radials and basals being especially distinguishable, and perhaps also the dorso-central and the under-basals; other spinelets rather smaller are present in the vicinity of these, but they rapidly decrease in size as they recede from the central area; and really definite spinelets do not extend further along the base of the ray than the third or fourth supero-marginal plate.

The supero-marginal plates, fifty-five in number from the median interradial line to the extremity, are elongate and suboval in form, and are confined entirely to the lateral wall of the ray; their posture appears slightly oblique when viewed from the side, the aboral end of one plate standing over the adoral end of the next outward; their height is

¹ The exact station off the coast of Portugal is not recorded.

² It is uncertain whether this species is from Station 44 or Station 45.