Chorology of the Genus Thoracaster.

α. Geographical distribution :—

ATLANTIC : One species between the parallels of 20° and 30° N.

Thoracaster cylindratus off the west coast of Africa, between the Canary Islands and the Cape Verde Islands.

β. Bathymetrical range: 2400 fathoms.

γ. Nature of the Sea-bottom: Globigerina ooze.

Chorological Synopsis of the Species.

	Ocean.	Range in Fathoms.	Nature of the Sea-bottom.
Thoracaster cylindratus . . .	Atlantic.	2400	Globigerina ooze.

1. *Thoracaster cylindratus*, Sladen (Pl. XXIX. figs. 1–6).

Thoracaster cylindratus, Sladen, 1883, Journ. Linn. Soc. Lond. (Zool.), vol. xvii. p. 245.

Rays five. $R = 62$ mm.; $r = 21$ mm. $R = 3\,r$.

Marginal contour stellate, with large disk and very narrow cylindrical rays, which taper to a point. The disk is slightly inflated, forming a convex surface of low curvature. The minor radius is in the proportion of 33·8 per cent. The interbrachial arcs are wide and well rounded.

The abactinal area is covered with small, compact, and closely crowded paxillæ, which are, however, confined entirely to the disk in consequence of the junction of the supero-marginal plates in the median line along the whole of the free portion of the ray. The paxillæ are very small, and composed of six to ten small spinelets closely appressed into a fascicule—the whole area appearing to the unaided eye almost like a uniformly granular surface. The paxillæ are a shade smaller in the centre of the disk, which they further define by their arrangement, although no prominent epiproctal peak is produced. The actinal area of the disk is slightly convex and slopes downwards at a small angle to the prominent mouth-plates.

The marginal plates are high, forming a gently rounded margin to the disk, the plates curving slightly inward towards the abactinal and the actinal areas respectively. When viewed from above they are seen to encroach on the abactinal area to a very slight degree, and still less on the actinal. Along the free portion of the ray the supero-marginal plates of the two sides of the ray meet in the median radial line and entirely encase the ray;