In the neighbourhood of the mouth-angle, and adjoining the adambulacral plates, the actinal intermediate plates become larger and altered in form, and appear independent of the series of columns. The actinal interradial area is covered with a very fine and almost imperceptible membrane, plates and membrane together being so thin that traces of the internal organs of the starfish can be seen through them. A number of small irregularly disposed granules are distributed over the area, but seldom more than two or three are present on a plate, and they are often wanting. The imbrication of the plates appears to be very slight in this species, and is perhaps only present in the outer part of the areas.

Colour in alcohol, grey, with traces of a purple shade remaining here and there upon the paxillar area and on the rays.

Locality.—Station 157. In the Southern Ocean, near the meridian of 110° E. March 3, 1874. Lat. 53° 55' 0" S., long. 108° 35' 0" E. Depth 1950 fathoms. Diatom ooze. Bottom temperature 32° 1 Fahr.; surface temperature 37° 2 Fahr.

Remarks.—This species is at once distinguished from the other species with seven cribriform organs by the supero-marginal plates of the two sides of a ray not meeting in the median radial line, but in being separated by a band of membrane; and also by the presence of the secondary or actinal series of granules behind the furrow series on the surface of the adambulacral plates.

Genus Thoracaster, Sladen.

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

Rays five, moderately long, cylindrical, and rigid. Disk large, and capable of slight inflation.

Supero-marginal plates united in the median radial line, forming a cylindrical encasement to the ray. Marginal plates devoid of spinelets.

Abactinal area covered with small closely crowded paxillæ. No central epiproctal protuberance present.

Actinal internadial areas extensive, paved with plates imbedded in membrane, and carrying numerous small, uniform, rather closely placed, papilliform granules or spinelets.

Ambulacral furrows narrow and enclosed. Armature of the adambulacral plates, consisting of short equal spines, ranged on the furrow margin of the plate, and forming a lineal series along the ray. The actinal surface or outer portion of the plate is occupied by small papilliform spinelets more or less definitely arranged.

Cribriform organs fourteen in number in each interbrachial arc, in the single species known.

Terminal plate small, inconspicuous, and unarmed.