

The mouth-plates are large, elongately oval, and slightly convex actinally. Their armature consists of a marginal series of small spinelets, similar and equal in size to the adambulacral armature on the outer part, but longer, thicker, and conically-pointed at the inner extremity. On the actinal surface of the plate are two or three series of short, well spaced, papilliform granules, one of which is more or less definitely parallel to the median suture line, but the others show no definitely regular order. A few near the inner extremity of the plate are slightly larger than the others, and there is a general diminution in size towards the outer extremity of the mouth-plates.

The actinal interradial areas are comparatively large, and form a triangular area extending as far as the fifth free adambulacral plate, and the sixth or seventh infero-marginal plate. They are occupied by small intermediate plates, which do not appear to present a specially definite order of arrangement so far as can be judged from the small groups of granuliform papillæ or spinelets borne upon them, and these are well spaced. The majority of the plates bear a large pedicellarian apparatus composed of three or four enlarged papillæ, which are very conspicuous in comparison with the small subequal granuliform papillæ on the other plates.

An anal aperture appears to be present in a subcentral position, but there is no modification of the papillæ in its neighbourhood.

The madreporiform body, which is rather large and partially hidden by papillæ, is situated near the margin and less than its own diameter distant from the supero-marginal plates. In the narrow intervening space most of the papillæ form incipient pedicellariæ, and are arranged in well spaced lineal series running from the madreporiform body to the margin, and consequently parallel to the median interradial line.

Colour in alcohol, a slightly brownish white, with a bluish grey tinge over the disk, the latter probably owing to the thinness of the integument and the dark contents of the viscera.

Localities.—Station 156. In the neighbourhood of the pack ice, near the Antarctic Circle. February 26, 1874. Lat. $62^{\circ} 26' 0''$ S., long. $95^{\circ} 44' 0''$ E. Depth 1975 fathoms. Diatom ooze. Surface temperature $33^{\circ} 0$ Fahr.

Station 157. South of Australia. March 3, 1874. Lat. $53^{\circ} 55' 0''$ S., long. $108^{\circ} 35' 0''$ E. Depth 1950 fathoms. Diatom ooze. Bottom temperature $32^{\circ} 1$ Fahr.; surface temperature $37^{\circ} 2$ Fahr.

Remarks.—This species is clearly very nearly related to *Lonchotaster tartareus*, from the deep water off the west coast of Africa. The example from Station 156, which has served as the type above described, appears to have been probably a young, or at any rate not a fully grown, specimen. After the foregoing description had been written, and the accompanying figures drawn on stone, I received two small specimens, which had been found amongst other material, from Station 157. They are slightly larger than the more southern example, but I place them with little hesitation in the same species. It is