

The actinal interradial areas are small, and confined to the interbrachial region, not appearing to extend beyond the fifth or sixth infero-marginal plate counting from the median interradial line; they are occupied by small intermediate plates arranged in regular columns, which bear a number of small, short, skin-covered papillæ, with three or four much larger than the rest in the midst, forming a massive pedicellarian apparatus; a few of the innermost plates in the large specimen have one papilla more spiniform than the others, and this may either be present along with the pedicellaria or in its place.

The anal aperture is subcentral and distinct, although there is no change in the form of the paxillæ in its neighbourhood.

The madreporiform body is compound, and occupies a large circular area about 10 mm. in diameter, its outer edge being not more than 2 or 3 mm. distant from the marginal plates. Numerous large paxillæ, much greater than any of the others on the abactinal area, spring from, or at the junction of, the madreporic plates, almost entirely hiding the striated surface from superficial view. This may be seen in places, however, for the paxillæ are not very closely placed, and here and there one is wanting. The striations are seen to be very fine, numerous, and very slightly convoluted. The papillæ which compose these paxillæ are rather more robust and distinct than those of the general paxillæ, having more the appearance of hemispherical granules when seen from above; and none are modified into pedicellariæ.

Colour in alcohol, a bleached yellowish white. On one of the small specimens there are traces of a dark purple colour along one of the rays, but whether this is the original colour of the species, or is only pigment derived by abrasion from some other organism, I am unable to say.

Locality.—Station 89. Between the Canaries and the Cape Verde Islands. July 23, 1873. Lat. $22^{\circ} 18' 0''$ N., long. $22^{\circ} 2' 0''$ W. Depth 2400 fathoms. Globigerina ooze. Bottom temperature $36^{\circ} 6$ Fahr.; surface temperature $73^{\circ} 5$.

2. *Lonchotaster forcipifer*, n. sp. (Pl. XXXI. figs. 5 and 6; Pl. XXXII. figs. 9 and 10).

Rays five. $R = 20$ mm.; $r = 7$ mm. $R > 3r$. Breadth of a ray between the sixth and seventh infero-marginal plates, 5 mm.

Disk comparatively large and inflated. Rays moderately elongate, subdepressed and subcarinate, narrow and tapering throughout to the extremity. Interbrachial arcs wide and well rounded. Abactinal surface convex over the disk, the slight carination of the rays culminating in a distinct tumidity on the inflated disk-area at a little distance from the base of the ray. Actinal surface of the disk plane, but becoming rounded on the outer part of the ray. Lateral walls low and more or less rounded.

The abactinal surface of the disk and rays is covered with very small and closely packed paxillæ, consisting of five to eight small, short, but comparatively robust, papilliform spinelets, one of which is frequently central. The tips of these papillæ are