The madreporiform body is rather small, oval or subcircular in outline, and is placed rather nearer the odd supero-marginal plate than midway between it and the centre of the disk. Its surface is usually level with the surrounding area, and is marked with numerous fine striation furrows which have the general appearance of radiating from the centre outwards. Several long and prominent spinelets surround the margin, and one larger than the rest stands at the adcentral side.

The papulæ are comparatively large and numerous, and occupy an area at the base of the rays which may stretch as far as the sixth or eighth supero-marginal plate, though seldom more than stragglers occur beyond the fifth even in large specimens: the papulæ also extend upon the disk, but are absent from the central region and along the median interradial lines.

There is a small genital aperture situated on each side of the odd supero-marginal plate, opposite the first paired supero-marginal plate, and opening on the abactinal surface close to its margin. The foramen is oval or subreniform, and is guarded by a simple papilliform spinelet, attached on the adcentral margin, and directed over the aperture outwards and consequently towards the marginal plate.

Colour in alcohol, a bleached greyish white.

Individual Variation.—So far as I am able to judge from the material at my disposal, this species appears very constant in general character. The following particulars seem to be noteworthy. In one example the disk is relatively large, the radial measurements being R=60 mm.; r=9 mm. It may be noticed also that in some cases one of the two large spinelets on the actinal surface of the adambulacral plates is either much reduced in size or may be absent altogether. One example presents a very interesting modification in the number and disposition of the large spiracle-formed pedicellarian apparatus on the actinal surface, these not being confined to the interradial area only, but three or four are distributed along the ray, standing between adjacent infero-marginal plates; on one side of a ray four are present as well as the normal interradial ones, and the outermost one observed stands between the eighth and ninth infero-marginal plates.

Locality.—Station 343. Off the Island of Ascension. March 27, 1876. Lat. 8° 3′ 0″ S., long. 14° 27′ 0″ W. Depth 425 fathoms. Volcanic sand. Bottom temperature 40° 3 Fahr.; surface temperature 80° 8 Fahr.

Remarks.—This extremely elegant form is at once distinguished from all the other species of Pararchaster by its delicately attenuate and flexible rays, and by its remarkably spinous character—the number and delicacy of the spinelets on the infero-marginal and abactinal plates forming a special and conspicuous feature.

4. Pararchaster pedicifer, n. sp. (Pl. I. figs. 3 and 4; Pl. IV. figs. 3 and 4).

Rays five. R = 165-168 mm.; r = 15.5 mm. R = 11 r. Breadth of a ray near the base, 14 mm.