sequent on the expansion of the membrane at the base of the spinelets, where they are attached to the tabulum.

The supero-marginal plates are proportionally shorter than in *Dytaster madreporifer*; the length and height being subequal, and the former never in excess as in that species. They are also confined entirely to the lateral wall of the ray, and do not form a visible border when viewed from above.

The armature of the adambulacral plates is much simpler. The furrow series consists of six or seven spines, with one very small. They are greatly compressed laterally, slightly curved, and of nearly uniform breadth throughout. The secondary series immediately behind is altogether wanting, and there are no pedicellariæ. The row of papilliform granules along the outer margin is the only armature on the actinal surface of the plate.

The plates of the actinal interradial areas are large, and their spinulation can hardly be said to form true paxillæ, though the character is incipient. The small papilliform spinelets are rather widely spaced, and appear to spring from the uniform continuous membrane of the flat tabula.

The madreporiform body is of great size, occupying a circular area 12·5 mm. in diameter. It is not specially raised above the general abactinal surface as in *Dytaster madreporifer*. In one of the examples under notice its structure is well shown. It is built up of a number of plates all slightly convex, which give it an undulating character; some of the plates are more or less regularly hexagonal, and have their sutures distinct, but frequently the sutures are obliterated. The striation furrows cover the whole of all the plates, and are very fine and numerous; on some plates they are highly convoluted, on others simply wavy, and no definite order of direction is present. Paxillæ are distributed over the surface (more numerously in some specimens than in others), and they spring from the sutural junctions of the plates. Their pedicle is comparatively elongate and thin, and the spinelets of the crown radiate outwards, entirely hiding the striated surface of the madreporiform body from view when the paxillæ are numerous. The madreporic area is not quite close to the marginal plates, there being an intervening space of about 2 mm.

Colour in alcohol, a dirty brownish ashy grey.

Locality.—Station 325. Off the coast of South America, east of Buenos Ayres. March 2, 1876. Lat. 36° 44′ 0″ S., long. 46° 16′ 0″ W. Depth 2650 fathoms. Blue mud. Bottom temperature 32°·7 Fahr.; surface temperature 70°·8 Fahr.

Remarks.—One of the specimens is interesting from bearing a colony of small, naked, Hydroid-like polyps on its actinal interradial areas; the polyps are very small, isolated, erect and pedunculate, suggesting the appearance of an isolated, decalcified, small-crowned paxilla. The bases are united by delicate thread-like prolongations which pass to the neighbouring polyps and form a most delicate but wide-meshed reticulation amongst the ventral plates of the starfish. The polyps are wide apart and few in number, and are only to be detected with a magnifying glass.