

saccular, membranous sheath, upon which are a few isolated and comparatively large pedicellariæ.

The madreporiform body is rather small and elongately oval, slightly convex, and with the surrounding parts somewhat prominent; the surface is traversed with tolerably numerous, slightly convoluted, striation-furrows, the main direction of which corresponds to the major diameter. A very distinct anal aperture is present in an excentric position, and within its periphery the termination of a punctured (?) tube may be seen.

Colour in alcohol, a bleached ashy yellowish white.

Locality.—Station 181. In the Coral Sea, south-east of New Guinea. August 25, 1874. Lat. $13^{\circ} 50' 0''$ S., long. $151^{\circ} 49' 0''$ E. Depth 2440 fathoms. Red clay. Bottom temperature $35^{\circ} 8$ Fahr.; surface temperature $80^{\circ} 0$ Fahr.

Remarks.—This species is perhaps the most handsome member of the group. It is distinguished from all other forms by the long delicate lateral spines, by the peculiar aborted character of the mouth-spines, by the rudimentary nature of the abactinal plating, as well as by a number of minor details which it is unnecessary to recapitulate.

8. *Freyella tuberculata*, n. sp. (Pl. CXVII. figs. 1-3).

Rays six. $R = 240$ mm.; $r = 6$ mm. $R = 40 r$. Breadth of a ray at the base 4 mm.; at the widest part of the ovarian inflation, 5 mm. (measured at 15 mm. from the disk); and at 80 mm. beyond the disk, 2.60 mm.

Rays of great length and delicacy, cylindrical at the base, gradually swelling at a short distance from the disk into a very slightly fusiform ovarian inflation, which as gradually contracts, and the ray thence becomes subtriangular and tapers continuously to a very attenuate extremity. The ovarian region extends for about 30 mm. from the disk, *i.e.* about the proximal eighth of the ray. The rays have a well-spaced appearance at the base, for this genus, and the interbrachial arc is sharply rounded.

The disk is small and its abactinal surface is flush with that of the rays at the base; it was probably capable of slight inflation, but there is in its present state a faint depression within the periphery of the perisomatic ring. The abactinal area of the disk and of the rays, even for some distance beyond the ovarian inflation, is covered with small hexagonal plates, overlaid with the most delicate membrane. On the ovarian region the plates are larger than elsewhere and their major diameter lies parallel to the axis of the ray. Each plate bears centrally a small rounded tubercle, on which is articulated a short, delicate, tapering, and sharply pointed spinelet, about 1.25 mm. in length on the disk; these are encased in a very delicate membranous sheath, upon which are crowded minute pedicellariæ. A number of the spinelets on the disk and nearly all those on the ovarian regions are now devoid of membrane, probably accidentally on account of