

small spines on the adoral margin of each plate, which are directed horizontally over the buccal membrane, and radiate slightly apart, forming an elegant comb of six spinelets at each mouth-angle. The spinelets are subequal in length, invested with delicate membranous sheaths, on which are borne several comparatively large pedicellariæ. On the actinal surface of the plate is a single, comparatively large, and robust secondary or superficial spine, about 2 mm. in length, often, and perhaps normally, slightly flaring at the tip. This spinelet was invested with membrane, but I am unable to remark upon the character or number of the pedicellariæ borne upon it.

The madreporiform body, which is small and rather inconspicuous, is somewhat more remote from the margin than usual in the Brisingidæ. It is very simply punctured, a single figure-3-shaped striation and one or two isolated irregular pores being all that I can detect.

Colour in alcohol, a light dirty ashy grey.

Locality.—Station 171. North-east of the Kermadec Islands. July 15, 1874. Lat. $28^{\circ} 33' 0''$ S., long. $177^{\circ} 50' 0''$ W. Depth 600 fathoms. Hard ground. Bottom temperature $39^{\circ} \cdot 5$ Fahr.; surface temperature $66^{\circ} \cdot 5$ Fahr.

Remarks.—*Freyella polycnema* differs from all the other species of the genus by the great number of its rays, by their delicacy, and by its small size. With the single exception of *Freyella pennata*, a large robust form with ten rays, it is the only other species with three true mouth-spines on each mouth-plate. By the above-mentioned characters, as well as by other minor points of detail, it may be readily distinguished from all the known species.

3. *Freyella echinata*, n. sp. (Pl. CXII. figs. 1-5).

Rays eleven. $R = 202$ to 212 mm.; $r = 12$ mm. $R > 17 r$. Breadth of a ray at the base, 6 mm.; at the widest part of the ovarian inflation, 9 mm., which is measured at a distance of about 18 mm. from the junction with the disk. At 40 mm. beyond the disk the width of the ray is 4.5 mm., and about midway between the base and the extremity, 3.2 mm.

Rays of great length and delicacy, cylindrical and narrow at the base, thence gradually swelling into a robust, but not greatly tumid, fusiform ovarian inflation, occupying less than the proximal fifth of the length (actually 37 mm.), beyond which the ray is subtriangular, with a truncate carination, and tapers gradually to a very attenuate extremity.

The disk is small and slightly elevated above the level of the rays at their base, with the abactinal surface probably capable of slight inflation; in its present condition rather concave, which is somewhat emphasised by the moderate prominence of the basal arches of the rays, formed by the ambulacral plates at their junction with the disk. The ovarian inflation is not so great abactinally as laterally, hence the concavity seen in the profile view of the ray, intervening between the elevated margin of the disk and the ovarian inflation, is not so deep as in some species.