

than the greatest breadth at the aboral extremity. Each plate bears one (or sometimes two) small mouth-spines on the adoral margin. The inner pair are a little removed from the median line of juncture, and are directed horizontally over the buccal membrane parallel to one another; the second pair when present are external to these, and are likewise directed horizontally, but at an angle outward away from the median line prolonged. These spines are about 1.75 mm. in length or rather less, and they are encased in a delicate membrane, on which are numerous small pedicellariæ. A single robust secondary mouth-spine is borne on the actinal surface of each plate; it is about 5 mm. in length, and is encased in a very wide, delicate, saccular, membranous sheath, somewhat expanded at the tip, which gives it a very robust appearance, and the membrane is covered with numerous small pedicellariæ.

The madreporiform body is small, prominently tubercular in form, and situated close to the margin of the disk at the summit of one of the cleft-like interbrachial arcs. The striations are more numerous than in some species of the genus, more or less convoluted, and placed on the side regarding the interbrachial arc. The surface of the plate is quite naked, but the margin is to a certain extent fringed by an indistinct circlet of the spinelets of the dorsal integument. A distinct anal aperture is present conspicuously excentric in position, and the margin of the orifice is bordered by a circlet of spinelets.

Colour in alcohol, a bleached greyish or ashy white.

Localities.—Station 146. Between Marion Island and the Crozet Islands. December 29, 1873. Lat. 46° 46' 0" S., long. 45° 31' 0" E. Depth 1375 fathoms. Globigerina ooze. Bottom temperature 35°·6 Fahr.; surface temperature 43°·0 Fahr.

Station 156. In the neighbourhood of the pack ice, near the Antarctic Circle. February 26, 1874. Lat. 62° 26' 0" S., long. 95° 44' 0" E. Depth 1975 fathoms. Diatom ooze. Surface temperature 33°·0 Fahr.

Remarks.—*Freyella fragilissima*, apart from its general habit that is characteristic when once known, may be distinguished from the other species in which the abactinal plates bear small spinelets with simple membrane devoid of pedicellariæ, by the number of its rays, and by the presence of largely developed villous appendages on the buccal membrane.

5. *Freyella bracteata*, n. sp. (Pl. CXIV. figs 1-4).

Rays twelve. $R = 210$ mm.;¹ $r = 12$ mm. Breadth of a ray at the base, 5.5 mm.; at the widest part of the ovarian inflation, 8.5 mm. (measured at about 22 mm. from the disk); and at 70 mm. beyond the disk, 4.5 mm.

Rays very long and attenuate, but comparatively robust for the habit of the genus, narrow and irregularly cylindrical at the base, thence gradually swelling into an elongate, irregularly fusiform, ovarian inflation, of small tumidity, which contracts gradually and

¹ Unfortunately all the specimens are more or less broken. I have not been able to find a single entire ray. The above measurement is taken from a smaller example than the type specimen.