possessed by only two other forms, *Freyella tuberculata* and *Freyella sexradiata*. It may be distinguished from both of these by the spinulation of the abactinal plates, each plate bearing two or three small spinelets covered with simple membrane devoid of pedicellariæ. The general proportions are also different.

10. *Freyella heroina*, n. sp. (Pl. CXIV. figs. 5–8).

Rays nine. $R = 320$ mm.; $r = 10$ mm. $R = 32r$. Breadth of a ray at the base, 5·5 mm.; at the widest part of the ovarial inflation, 8·5 mm.; and at 40 mm. beyond the disk, 4·5 mm.

Rays delicate and of remarkable length, cylindrical and narrow at the base, but almost immediately swelling rather abruptly into a short ovoid ovarial inflation of moderate tumidity, which hardly extends beyond 15 mm. from the base of the proximal twenty-first part of the ray. From thence the ray is subtriangular and tapers continuously to the extremity. The rays are distinctly spaced at the base, the interbrachial arcs being sharply rounded.

The disk is small, with the abactinal surface, which is subplane and capable of slight inflation, very little higher than the base of the rays. The membrane covering the disk and the basal portion of the rays, to the limit of the ovarial region, is underlaid by a pavement of calcareous plates of subhexagonal form, which appear rather widely spaced. The plating of the disk is invisible superficially, but that of the ovarial region may be clearly traced with a hand-magnifier. On the disk the plates bear only very small spinelets, about a millimetre in length or rather less, which taper slightly and are covered with simple membrane, and they are sufficiently numerous to give a fairly hirsute appearance to the disk. On the ovarial regions the spinelets are smaller and are congregated in little groups of three to five on the centre of each plate, and the groups have consequently a distinct and isolated appearance when seen with a low power. No pedicellariæ occur normally among the spinelets on the disk and ovarial regions, but here and there a small sporadic one may be found. On the outer (distal) portion of the ovarial swelling, however, the spinelets diminish in number, and their place is taken by small crowded pedicellariæ, which speedily fall into crowded transverse bands, the spinelets disappearing altogether. These pedicellariæ are very small and measure from 0·12 to 0·15 mm. in length. Beyond the ovarial inflation the abactinal surface of the ray is covered with the usual delicate transparent membrane, bearing saddle-like sacccular bands crowded with minute pedicellariæ, the corresponding bands on the two sides of the ray being united across the median keel.

The ambulacral furrow occupies nearly the whole of the actinal surface of the ray, measuring about 2 mm. in width at a part where the whole ray is 4 mm. The adambulacral plates are elongate, nearly 2 mm. in length, and form a narrow rounded margin to the furrow; their form is strikingly suggestive of a caudal vertebra; the adoral end of