In this species the rays enclosed some masses of a sponge, as if for purposes of food, and I found several pieces of the same held apparently by the actinal spines on the inner part of the rays, which perhaps warrants the inference that the numerous large pedicellarize there may help in the securing of food and in directing it towards the mouth.

The general habit of this species in its present state is worthy of notice, as different from that of any of the other species. It is not unsuggestive of a Comatula or crinoid with its rays drawn together. The rays in the case of the Freyella being bent at a right angle to the plane of the abactinal surface of the disk, entirely enclose the actinal area of the disk and rays, which gives a very elegant and remarkable appearance, altogether unusual for a starfish. Whether this disposition is due to the contraction attendant on death, or whether it was one naturally assumed on occasion during life, I am unable to say. All the examples of this species, both the echinulate and the unarmed forms, are unlike in this respect.

7. Freyella remex, n. sp. (Pl. CXVL figs. 1-3).

Rays ten. R=450 mm.; r=14 mm. R>32 r. Breadth of a ray at the base, 7.5 mm.; the greatest breadth of the ovarial inflation, 11 to 12 mm. (which is situated at about 12 mm. from the disk); the breadth at 30 mm. from the disk is 6 mm., at 50 mm. from the disk, 5.5 mm.; and at about midway on the ray, 4.25 mm.

Rays very long and attenuate, but rather robust in appearance when compared with other species, narrow at the base, but immediately swelling into a short, tumid, pyriform ovarial inflation, which contracts rather more gradually and terminates at 20 mm. from the disk, thus occupying only the proximal twenty-second of the length. The disparity of the ovarial inflation in different rays is only slight. Beyond the ovarial region the ray is subtriangular, with a broadly truncate median carination, and tapers throughout to a very attenuate extremity. The interbrachial arcs are sharply rounded, and when seen from above show a subpyriform outline consequent on the ovarial tumidity.

The disk is small, with the abactinal surface subplane, and slightly above the level of the base of the rays, towards which the margin passes abruptly with a gentle slope. The abactinal surface of the disk and of the rays, as far as the ovarial regions extend, is covered with a thick membranous tissue, the basement stratum of which contains a number of small irregular disconnected calcareous plates completely hidden from superficial view. These plates are of various shapes and sizes, some oval, some clongate, and others cruciform, and they bear very small microscopic spinelets, from 0.45 to 0.7 mm. in length, which are multiradiate in structure, slightly flaring at the tip, and covered with simple membrane causing the spinelets to appear more or less clavate at the tip. The spinelets are rather wide apart and tolerably equidistantly spaced; no order of disposition is observed,