traced as far as 28 mm. from the base. The outer part of the ray is covered with a very delicate semitransparent membrane.

The ambulacral furrow is wide and measures 1.6 mm. at a part where the ray is The adambulacral plates are remarkable for their length and generally attenuate character. Indeed the same remark applies to the whole ambulacral ossicle or segment, the latter when seen from above having the appearance of two thin cylindrical rods placed side by side. The length of the adambulacral plate is 2.8 mm. at 25 mm. from the base; its furrow-margin is deeply concave, and the outer margin to a less degree, the shape of the plate being that of an elongate phalangial bone considerably constricted in the median region; when seen from the actinal side it has also a slightly angulated or twisted appearance in consequence of the posture and formation of the tubercle upon which the actinal spine is articulated. The plates overlap considerably, the aboral end of one being hollowed out to receive the produced adoral end of the next plate, and a rather wide space between is occupied by ligament. The adambulacral armature consists of:—(1.) a very minute inner spine directed over the furrow, but which is present only on the extreme basal portion of the ray; (2.) a short actinal spine, articulated on a rudimentary infero-marginal plate on the actinal surface of the plate; (3.) a short delicate lateral spine articulated on the lateral margin of each alternate plate. The small inner spine, excepting on the first one or two segments, is quite microscopic, thornlike and sharply pointed, and deeply placed in the furrow, near the aboral extremity of the plate, and covered with membrane, upon which I find no trace of any pedicellariæ. The actinal spine is small, about 2 mm. in length, very delicate, tapering to a sharp point, and encased in a thin membranous sheath, crowded with small pedicellariæ, which develops a rather elongate sacculus at the distal extremity. Notwithstanding its small size this spine has a large expanded condyloid base by which it is articulated on a prominent tubercle situated slightly on the aboral side of the median point of the actinal surface of the adambulacral plate. The lateral spine is extremely delicate, about 6.5 mm. in length, and is encased in a thin membranous sheath, with an elongate saccular extension at the distal extremity, and covered with numerous small pedicellariæ. It resembles the actinal spine in the character of its base, and is articulated on a prominent tuberclelike rudimentary infero-marginal plate, ankylosed on the lateral margin of the adambulacral plate in a line with the tubercle that bears the actinal spine.

Colour in alcohol, a delicate pellucid white, with a fleshy shade on the ovarial region.

Locality.—Station 226. West of the Mariana or Ladrone Islands. March 25, 1875.

Lat. 14° 44′ 0″ N., long. 142° 13′ 0″ E. Depth 2300 fathoms. Radiolarian ooze.

Bottom temperature 35°.5 Fahr.; surface temperature 79°.0 Fahr.

Remarks.—At first sight I was disposed to think that possibly this might be the young form of Freyella heroina, to which it is most nearly allied, but when the extraordinary length and attenuation of the ray segments, greater than that found in any part