separated, and with the interspace filled in with ligament. Their armature consists of a single large spine which stands perpendicularly, and is articulated on a tubercular elevation occupying the whole of the actinal surface of the plate. A spine near the base of the ray about midway along the ovarial inflation measures 4.5 mm. in length, is broad and robust at the base, tapers to the middle of the shaft, and then expands gradually into a flaring and compressed extremity, which is truncate and chisel-shaped. As they recede from the base of the ray, after passing the ovarial region, the breadth of the tip of the spine diminishes, and the chisel-like character is almost, if not quite, lost midway along the ray, where the spines still measure 4.5 mm., but are much more delicate. Traces of a membranous sheath with crowded microscopic pedicellariæ are present on the outer side of a great number of these spinelets, but as to whether the spine was entirely invested I am unable to say.

The actinostome is wide, its diameter being 15 mm. in a disk measuring 29 to 30 mm. The buccal membrane is thick and plicate, becoming papillate at the mouth-margin. The mouth-plates, as well as the succeeding pair of adambulacral plates, which are apparently ankylosed, may be placed more or less obliquely or even perpendicularly and form a vertical margin to the actinostome. They are deeply excavated by the first pair of tube-feet, and this character is emphasised by the fact that lateral extensions proceed towards the adjacent pair and entirely bar the actinostomial entrance of the ambulacral furrow.

The free margin of each plate which abuts on the buccal membrane is very slightly curved, and bears two or three short, robust, skin-covered mouth-spines, somewhat dog-tooth shaped, the outer two radiating away from the innermost one towards the furrow, and touching or interlocking with the corresponding spines of the adjacent mouthangle, barring the entrance to the ambulacral furrow. One or two small isolated pedicellariæ may be present on these spines. Near the outer extremity of each plate is a single small, conical, skin-covered spinelet, which is directed over the furrow and separates the first and second pair of ambulacral tube-feet. No other spinelets are present on the mouth-plates. The width of the united pair of plates midway between their extremities is very narrow, and is less than the diameter of the adjacent tube-foot.

The ambulacral tube-feet have large, centrally invaginated, terminal disks.

The madreporiform body, which is convex and prominent, is situated at the extreme margin of the disk. Its surface is marked with fine, convoluted striations, rather widely spaced.

Colour in alcohol, a bleached yellowish white, with a slight pinkish shade on the side of the ovarial regions.

Localities .- "Lightning" Expedition :

Station 7. In the Faeroe Channel. September 3, 1868. Lat. 60° 7' 0" N., long. 5° 21' 0" W. Depth 500 fathoms. Bottom temperature 1° 1 C.; surface temperature 10° 5 C.