

buccal membrane, being parallel to the median interradial line, the outer one radiating outward at an angle of about 45° in the same plane. These spinelets are covered with delicate membrane, upon which a few microscopic pedicellariæ are borne near the tip. Midway on the actinal surface of the plate is a single, small, tapering, secondary or superficial spinelet, about 1.75 mm. in length, also invested with membrane bearing pedicellariæ. At the aboral end of each plate is a single small invested spinelet, directed horizontally over the ambulacral furrow, and separating the first and second tube-feet. It is similar in character and size to the small inner spinelet on the adambulacral plates above described.

The madreporiform body, which is small and subtubercular, is situated close to the margin of the disk, and it is marked with very few and simple striation furrows.

Colour in alcohol, a bleached ashy grey, with a slight brownish or flesh-coloured shade on the ovarian regions owing to the transparency of the membrane allowing the internal organs to be distinctly visible.

Locality.—Station 46. Off the coast of North America, east of New Jersey. May 6, 1873. Lat. $40^\circ 17' 0''$ N., long. $66^\circ 48' 0''$ W. Depth 1350 fathoms. Blue mud. Bottom temperature $37^\circ.2$ Fahr.; surface temperature $40^\circ.0$ Fahr.

Remarks.—This species, although allied to *Brisinga endecacnemos* and *Brisinga armillata* in many points of general detail, is readily distinguished from the former by the smaller number of rays, by their great delicacy, as well as by the delicacy of all their appendages, by the small and limited ovarian inflation, by the great prominence of the transverse ridges over these regions, by the absence of tegumentary spicules, and by the armature of the adambulacral plates and mouth-plates.

Brisinga verticillata may also be distinguished from *Brisinga armillata* by the number of rays, by their great delicacy, by the character of the ovarian regions, and by the great prominence of the transverse calcareous ridges. The general habit of the two species is quite different.

4. *Brisinga cricophora*, n. sp. (Pl. CLX. figs. 6-8).

Rays eleven. $R = ?$; $r = 10$ mm. Breadth of a ray at the base, 6.25 mm.; at the widest part of the ovarian inflation, 7 mm. (measured at 25 mm. from the disk); at 120 mm. from the disk, 5 mm.

Rays very long and narrow, cylindrical, and slightly depressed at the base, gradually swelling into a very elongate, slightly fusiform ovarian inflation, which contracts still more gradually and terminates imperceptibly, being altogether lost at 75 mm. from the disk. Beyond this the section of the ray is subtriangular, with a broad truncate median carination; the rays are rather broad and depressed, much more so than in *Brisinga endecacnemos*.