exceeding 11 mm. in length. The innermost twelve or fourteen actinal spines on the adambulacral plates are modified in shape in a remarkable manner. They are robust, about 5 mm. in length, decreasing as they approach the disk, and have a large, flaring, truncate extremity, the component rods becoming enlarged and fusiform at a definite distance from the end, which produces the appearance of a superadded, composite, flower-like head to the shaft.

The actinostome is large and measures 12·5 mm. in diameter in a disk 20 mm. in diameter. The mouth-plates are small and insignificant, and slightly prominent at their aboral end. Their armature consists of one small spine on the adoral margin, invested with a thin membranous sheath extended into a vermiform sacculus, the whole about 2·5 mm. in length, and bearing numerous minute pedicellariæ. On the actinal surface of each plate are two spinelets with greatly prolonged sacculi, one behind the other, and forming two pairs on each mouth angle, the anterior pair measuring about 5·5 mm., and the posterior pair somewhat less. The sacculi are crowded with microscopic pedicellariæ.

The madreporiform body, which is prominent and subtubercular, is situated at the margin of the disk, and nearly on the curvature uniting the abactinal surface and the lateral wall.

Colour in alcohol, a bleached ashy white, with a slight flesh-coloured shade on the ovarial regions.

*Locality.*—Station 24. North-west of St. Thomas, Virgin Islands. March 25, 1873. Lat. 18° 38′ 30″ N., long. 65° 5′ 30″ W. Depth 390 fathoms. Pteropod ooze. Surface temperature 76°·0 Fahr.

*Remarks.*—This form is very nearly allied to *Brisinga endecacnemos;* in fact, owing to the fragmentary nature of the material at my disposal, I felt great hesitation at first in ranking it as a distinct species. A careful and comparative study of the specimens, however, has led me to believe that this step is fully warranted, and that *Brisinga cricophora* may be distinguished by the narrower and more prominent annular ridges with small widely spaced spinelets; by the presence and character of the sacculi crowded with pedicellariæ; by the more limited position of the tegumentary spicules; by the more elongate and less inflated ovarial regions; by the relatively broader and more depressed rays; by the relative proportions of the actinal and lateral spinelets; by the remarkable form of the actinal spinelets on the adambulacral plates at the base of the ray, and by the character of the armature of the adambulacral plates and mouth-plates.

5. *Brisinga armillata*, n. sp. (Pl. CX. figs. 1–3).

Rays seven. $R = 240$ mm.; $r = 9$ mm. $R > 26\ r$. Breadth of a ray at the base, 4·5 mm.; at the widest part of the ovarial inflation, 7·5 mm. (measured at 24 mm. from the disk); at 100 mm. from the disk, 4·5 mm.