line of the ribbing while towards the grooves they decrease in size. The rough spindles are continued on the retractile portion of the polyp wall, but they are there smaller and less thickly set in the mesoderm. Thick, warty, transversely disposed spindles form a ring under the base of the tentacles, while some spindles are continued on to the tips of the tentacles; these spindles measure 0·1 to 0·18 mm. in length, with a diameter of 0·07 mm. They are closely packed, but are not continued into the pinnæ. In the wall of the esophageal tube scattered spicules also occur. In the wall of the stolons the spindles become smaller, more delicate, and more sparsely beset with warts; the spicules are often slightly curved, but even here they form a thick layer. They measure 0·4 mm. in length by 0·04 mm. in breadth.

The colour of the colony as preserved in spirit is white.

The species is distinguished from all related forms by the marked development of the calyx.

Habitat.—Station 23, lat. 18° 24' N., long. 63° 28' W.; near Sombrero Island, West Indies; depth, 450 fathoms.

B. Membranipoda.

Clavularia elongata, n. sp. (Pl. XLII. fig. 11).

The polyps rise from a thin basal membrane which covers a dead univalve shell. They attain a height of 12 mm., and occur in part singly, in part in groups. The individual polyps are narrowed superiorly, but are swollen out at the base. The wall of the calyx is somewhat flabby.

The membrane which contains the endoderm canals is thin, slightly stretched, and filled with spicules. The polyps spring especially from its margin, but are few in number. Each includes a calyx portion, with completely retractile tentacles and an esophageal region. The calyx portion is about 12 mm. in height; near the somewhat thinner base it expands to a thickness of 4 mm., while superiorly it measures but 3 mm. The wall is rough owing to spiny spicules which are embedded in it, but it is not rigid, rather in fact flabby and yielding. Distinct broad grooves run from the base to the oral region; between these the wall shows eight broad and slightly projecting ridges; when the polyps are retracted the oral region presents the form of an eight-rayed star.

The tentacles, which are provided with spicules, are folded together over the oral disc, and by the infolding of the wall below the oral region they are partly drawn into the calyx.

Spicules are embedded in the calyx ribs in longitudinal bundles; they are bright silvery spindles, slightly curved, and with a tendency to assume a club-shape by being slightly thickened and truncated at one end. They are beset by sharp somewhat distant spines. Their length and breadth vary, and are respectively 0.83 and 0.042,