

A single dead specimen, but not worn. In the Brit. Mus. Cat. the dorsal surface is described and figured as being divided into hexagonal areas, and the surface as verrucose. But in the older condition, probably, as in the Challenger specimen, the dorsal surface is very finely sulcate, and the areas into which it is subdivided are more or less quadrangular, but in most parts of unequal size. The pits with which the areas are furnished appear to be quite shallow, but they may represent occluded pores, in which case the dorsal aspect would bear some resemblance to that of *Cupularia canariensis*, Busk. In other respects, however, the distinction between the two species is sufficiently obvious.

(2) *Cupularia monotrema*, n. sp. (Pl. XIV. fig. 5).

*Character*.—Zoarium orbicular, depressed, about 0"·5 in diameter. Area pyriform; orifice linear narrow, with entire edges. Oral valve epidermic, elongated hippocrepian, broad at the base. Vibracular opening large, auricular, with a large tooth on one side, and a rather wide sinus. Occasionally a zoecium is converted into a prominent avicularium with an acuminate mandible pointing downwards, and a wide cup-shaped beak. Dorsal surface divided into square areas, each with a central perforation.

*Habitat*.—Off Bahia, 10 to 20 fathoms.

This form is distinguished from all its congeners known to me by the circumstance that many zoecia are transformed into avicularia. The only specimen is covered with its epidermis or epitheca, so that the exact conformation of the lamina cannot be seen, but it would appear to be of an elongated narrow shape. The oral valve as shown in the figure is placed quite at the summit of the zoecium; it is surrounded by a thick chitinous frame, and is not articulated to any part of the calcareous skeleton. The peculiar characters of the dorsal surface cannot be seen unless the epidermic covering be removed, as shown in the figure.

(3) *Cupularia owenii*, Gray, sp.

*Lunulites owenii*, Gray, Spicilegia Zool., pt i. p. 8, pl. iii. fig. 15.

*Cupularia owenii*, Bk., Brit. Mus. Cat., II. p. 99, pl. cxv.

„ *denticulata* (?), Conrad; Lonsdale; Bk., Crag Polyzoa, p. 85, pl. xiii. fig. 1.

*Lunulites alveolatus* (?), S. Wood, Ann. and Mag. Nat. Hist., vol. xiii. p. 18.

*Habitat*.—St. Vincent, Cape Verde Islands, 11 fathoms, mud.

[Coast of Africa; Canaries, M'Andrew.]