

The exhalent oscula, ten to fifteen in number, are larger, and form a corona on the elevated peripheral margin of the disc (as shown in Pl. VII. fig. 2B). The diameter of the disc is 12 to 15 mm., the thickness 1.12 to 1.18 mm.

The two hard parallel dermal plates of the disc are easily detached from each other, and then is seen between them a softer medullar plate, composed of the branched canal-system of the sponge, and of the network of the symbiotic Spongoxenia (Pl. VII. fig. 3). The structure of the canal-system is difficult to make out, but seems to be similar to that of *Psammina globigerina* (fig. 2D). The inhalent pores on the upper face of the disc open into small canals, and the main tubes of the canal-system open on the elevated margin of the disc by exhalent oscula.

The symbiotic Spongoxenia (fig. 3, *h*) (probably the reticular hydrorhiza of *Stylactis* or an allied tubularian Hydroid) forms an elegant network with polygonal meshes, expanded horizontally in the equatorial plane of the disc between the branches of the canal-system. The anastomosing chitinous tubes of the network are filled by a dark green-brown cellular detritus, sharply defined from the whitish tissue of the sponge.

Genus 5. *Holopsamma*,¹ Carter (1885).

Definition.—Psamminidæ with a massive tuberoso or lumpy body, which bears groups of distinct oscula either on prominent ridges or on the top of projecting lobes.

The genus *Holopsamma* was founded in 1885 by Carter with the following definition:—"Arenaceous sponges without fibres, whose composition consists of foreign microscopic objects (sand, fragments of sponge-spicules, &c.) diffused in the flakes of the parenchymatous sarcode, traversed by the canals of the excretory system."² Carter points out that "there is absolutely no fibre, but the foreign material is diffused, and so far held together by being imbedded in the delicate flakes of the parenchymatous sarcode" (*i.e.*, the maltha, or the ground-mass of the mesoderm). Carter describes five different species of *Holopsamma*; the three first of these are characterised by a massive lumpy or tuberoso body, in which numerous distinct oscula are visible, usually placed on the most projecting parts, either on the margin of crests or the top of lobes. These three typical species of *Holopsamma* are *Holopsamma crassa*, *Holopsamma lævis*, and *Holopsamma laminæfavosa*. To these are closely allied two new deep-sea species obtained by the Challenger, and described in the following pages (*Holopsamma cretaceum* and *Holopsamma argillaceum*). The two remaining species of Carter might be better placed in the genus *Psammopemma* of Marshall.

¹ *Holopsamma* = Whole sand, ὅλος, ψάμμα.

² *Loc. cit.*, p. 211.