A somewhat similar structure is described by Mr. Busk in *Siphonicytara*, and they should on this account be placed, at any rate, in the same family.

Urceolipora dentata, MacGillivray, has a similar structure, and so has *Calwellia bicornis*, so far as I can judge the latter from dried specimens, leading to the conclusion that the correlation of aperture, pores, and ovicell in these species, shows that too much importance has been attached to the form of growth.

As to *Flustra bombycina*, I am in doubt; but in the British Museum specimen there is a projecting tongue (fleshy?) projecting partly over the pore.

Habitat.—Add Station 150, 150 fathoms.

Genus *Retepora*.

Since Mr. Busk's Report was written, a paper by MacGillivray, dealing with *Retepora*, has appeared in the Zool. of Victoria, decade x., and as both were in print about the same time, there is some overlapping; so that now several of the names used in the Report are changed, and probably others will be found to be only synonyms.

Reteporæ frequently require calcining to distinguish all the structure, and by this means round dorsal avicularia have been found on several species where they were said to be absent.

As far as I am aware, the embryology of *Retepora* has never been described, and as the genus is one presenting many peculiarities, an acquaintance with its earlier stages is much to be desired.

Mr. Kirkpatrick informs me that a specimen in the British Museum, named *Retepora græffei*, Kirchenpauer, is the *Retepora producta* of Busk. As this is probably from the Museum Godeffroy, it may be the type specimen, but as the description is insufficient the name must be dropped.

The gland-like sacks found at the two sides of the aperture in many *Reteporæ* are referred to when describing the avicularia of *Lepralia margaritifera*.

Retepora tesselata, Hincks, var. *imperati*, Busk (Pl. III. figs. 7, 8, 39).

Retepora imperati, Busk, Zool. Chall. Exp., part xxx. p. 110, pl. xxvi. fig. 9.

The operculum is quite similar to that of the typical *Retepora tesselata* from Australia, and I am in doubt as to whether they should be separated as varieties. In *Retepora imperati* the avicularian chamber is stouter than in *Retepora tesselata*, and there are none of the gigantic avicularia. In some parts of the zoarium the ovicell is almost entirely immersed. In both this and the typical *Retepora tesselata* there is a minute sinus in the oral aperture. There are numerous strong calcareous radical processes; but this is not at all uncommon in the *Reteporæ*, though *Retepora columnifera* of the Challenger seems to