Retepora magellensis, Busk (Pl. III. fig. 5).

Retepora magellensis, Busk, Zool. Chall. Exp., part xxx. p. 126, pl. xxxvi. fig. 20.

There is on the zoœcium, about the middle, an avicularium with semicircular mandible, and on the dorsal surface there are also similar avicularia and divisional lines. These are distinctly seen when calcined, but otherwise may be overlooked, and no doubt this accounts for Mr. Busk's description "without vibices or dorsal avicularia." This corresponds in the zoœcial characters with Retepora simplex of the Challenger, but that name must be dropped, as Mr. Busk had already used it in his Crag Polyzoa. As Retepora simplex seems to be only a slender form, I should propose that it be distinguished as Retepora magellensis, var. minima. The variety minima has similar oral and surface avicularia, but the zoœcia are only about half as long as those of the variety typica.

Turritigera stellata, Busk (Pl. I. figs. 22, 25).

Turritigera stellata, Busk, Zool. Chall. Exp., part xxx. p. 130, pl. xxiv. fig. 1.

The end of the zoœcial tube is closed by a calcareous layer, reminding us of the closure of the Cyclostomata. In one case there is a prolongation of the zoœcium, formed by a plain narrow tube extending beyond the circle of avicularia, in another case sections show the calcareous closure to be double, but usually it is only single. When looking at the specimen in Edinburgh, I considered that the aperture was Schizoporellidan, but the piece brought away having no opercula, I have been unable to confirm the observation.

The inflation of some of the zoecia, referred to by Mr. Busk, is an ovicell, as may be distinctly seen in sections.

Cribrilina latimarginata, Busk (Pl. I. figs. 11, 12).

Cribrilina latimarginata, Busk, Zool. Chall. Exp., part xxx. p. 131, pl. xxii. fig. 10.

A specimen from the Edinburgh duplicates has numerous large vibracula, and they are also well preserved in a specimen which I found at the British Museum among some duplicate material, and this is the only *Cribrilina* in which vicarious vibracula are known. When the vibracula are removed, a bar is seen extending half across the "large suborbicular opening." The vibraculum has a process at one side of the base, and this is situated below the bar, with one muscle attached to it and two powerful ones higher up. I have elsewhere alluded to the unsymmetrical shape of the base of the vibracula, and to this fundamental difference between avicularia and vibracula.

I do not find the flattened borders or bands as described by Busk, but, when calcined, a thick calcareous growth is seen surrounding the area, leaving small triangular hollows where the neighbouring zoœcia meet, or nearly meet, and a thick membrane covers the whole. The ovicell is not much raised, and has a triangular mark on the front. This is