

left in decalcified specimens. The great difference between the wide reticulation of this variety and the densely convoluted and minutely fenestrate habit of the variety I have termed "*cæspitosa*," is very remarkable, if the two in reality belong to one species, which there seems little room to doubt. But it is to be remarked that an equally great diversity of habit exists in the arctic *Retepora elongata* or *wallichiana*, some specimens of which are distinctly fenestrate, whilst others are as distinctly reticulato-ramose, whilst in *Retepora imperati*, which, as before observed, may be regarded perhaps merely as a variety of *Retepora elongata*, the mode of growth is always truly fenestrate. I would further remark that there is a form which I should regard also as a variety of *Retepora tessellata*, and of which the only specimen I am acquainted with is in the Oxford Museum, in which the zoarium, besides being bilaminar, is exactly like an *Eschara* (but fissile) throughout, except in a few spots here and there, where it presents the true Reteporine character, whilst the opercula and mandibles are exactly those of *Retepora tessellata* and its varieties. This form, which seems to be as yet undescribed, might be termed *Retepora escharoides*.

§§ 2. Oœcium with a vertical fissure in front.

(6) *Retepora gigantea*, n. sp. (Pl. XXVI. fig. 7).

*Character*.—Zoarium 2 to 3 inches wide, flabelliform, expanded, springing from a short thick stem. Fenestræ rhomboidal or broadly ovate, about 0"·1 long, and very uniform; trabeculæ nearly cylindrical. Zoœcia elongated, linear, quite immersed except the oral end, which forms a rounded pustulose elevation, in the centre of which is the sunken mouth. Anterior surface uneven, glistening; dorsal coarsely granular, very irregularly areolated, and presenting a few scattered circular pits. Orifice immersed, circular, with a shallow sulcus in front, on one side of which is frequently placed a small avicularium with a semicircular mandible pointing obliquely upwards. In many, more especially of the marginal zoœcia, the peristome rises into a blunt eminence or mucro. Oœcia deeply immersed, with a vertical fissure in front. Anterior avicularia (besides the oral) very rare, and of two kinds, one with an acute curved acuminate mandible pointing obliquely downwards and outwards (fig. 7, *b.*), and more rarely others of small size and oval form with a semicircular mandible (fig. 7, *c.*), and appearing like minute circular pits; in fact they resemble the dorsal pits, which, however, never appear to be furnished with any mandible. Operculum semicircular, 0"·006 × ·0045.

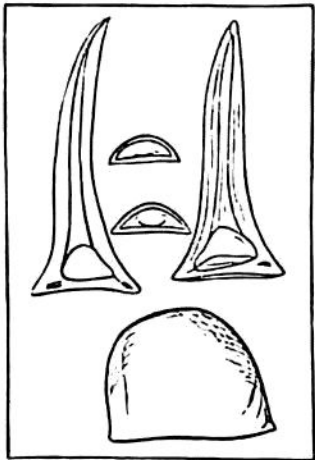


FIG. 22.—*Retepora gigantea*.

*Habitat*.—Station 148, lat. 46° 47' S., long. 51° 37' E., 210 to 500 fathoms, hard ground, gravel, shells.