

raised and prominent in front. Oœcia rather large, globose, with a trifoliate stigma. Anterior adventitious avicularia very sparse, in the form of cylindrical, slightly curved, obliquely truncated columns, which spring from the front of a cell (fig. 5c), and have a blunt duck-bill shaped mandible. At the lower angle of many of the fenestræ retentive avicularia occur, in the form of a boat with a double prow (fig. 5e), each of the prows having a bifid beak, and each branch of the furcate, membranous mandible fits into one of the bifid beaks, the space between the branches of the fork being partially filled with a delicate membrane (fig. 5d).

Dorsal surface shining, finely granular or submuricate, with distant indistinct vibices, and a few immersed avicularia of the same conformation as the fenestral, but of very much smaller size.

*Habitat.*—Station 190, lat. 8° 56' S., long. 136° 5' E., 49 fathoms, green mud.

This species, which has several characters in common with *Retepora tubulata*, is, however, at once distinguished by its peculiar mode of attachment by means of solid columnar dorsal processes, which are doubtless homologous with the chitinous tubular processes, by which several *escharan* species of *Membranipora* and *Diachoris* are attached. The anterior columnar avicularia also form a conspicuous feature, altogether wanting in *Retepora tubulata*. These may, perhaps, be regarded as homologous with the columnar dorsal processes.

(18) *Retepora philippinensis*, n. sp. (Pl. XXVII. fig. 5).

*Character.*—Zoarium (in a single specimen) about 1 inch long, infundibuliform, with the sides pinched in. Fenestræ very small, circular, and very uniform in size. Celliferous surface external, dorsal (or non-celliferous) surface interior, smooth, dull. Zoœcia urceolate, distinct. Orifice orbicular. Peristome thick, deficient or slightly tuberculated behind, slightly raised in front and on the sides; sometimes subcanaliculate in front. Labial fissure, or rather sinus, rather wide and shallow. Oœcia conspicuous, acuminate in front, with a row of three or four punctures close to the border of the orifice (fig. 5b). Avicularia 0 (?)

*Habitat.*—Station 212, lat. 6° 54' N., long. 122° 18' E., 10 to 20 fathoms, sand.

As the only specimen is a small dead and imperfect fragment, the general habit and size of the zoarium and the characters of the chitinous parts cannot be stated, but it probably consists of a congeries of infundibuliform or trumpet-shaped alveoli. One peculiarity consists in the circumstance that, contrary to the usual arrangement, the celliferous surface is on the outside of the folds; and another peculiarity is the apparently complete absence of avicularia of any kind.