oval, narrower than the trabeculæ. Zoæcia ovate or subrhomboidal, flattened in front; very distinct in the younger portions and separated by a thin septal ridge; walls very thin and transparent, surface smooth. Orifice suborbicular. Peristome thin and usually pro-

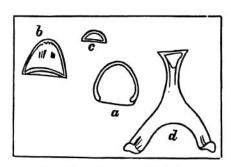


Fig. 32.—Retepora tubulata.

duced on the sides and in front into a spout-like projection, sinuated in the middle. Labial fissure small and apparent only in some zoœcia, being usually merged in the wide canalicular sinus. An angular ridge descends from the projecting lip and is lost on the flattened anterior surface of the zoœcium. A small avicularium, seated on a low eminence, is sometimes seen a little below and to one side of the orifice, with an obtuse, or sometimes acute, triangular mandible pointing laterally or in front. Dorsal avicularia

small and sparse, resembling the anterior or semicircular ones. In some of the fenestræ are boat-shaped, retentive avicularia, with a double bifid beak, and furcate membranous mandible, very like those in *Retepora columnifera*. Occia of large size, subglobose, with a trifoliate stigma, the upper limb of which usually terminates in an acuminate tubercular point.

Habitat.—Station 186, off Cape York, lat. 10° 30′ S., long. 142° 18′ E., 8 fathoms, coral mud.

Differs from Retepora philippinensis (in which species the zoarium is also constituted of more or less tubular or trumpet-shaped, but much wider, alveoli) in having the celliferous surface, as usual, on the internal face of the alveoli. And besides this, Retepora philippinensis seems in all probability to be completely unarmed.

## (17) Retepora columnifera, n. sp. (Pl. XXVI. fig. 5).

Character.—Zoarium 1 inch to 2 inches or more in height, composed of numerous,

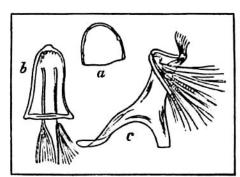


Fig. 33.—Retepora columnifera.

a, Operculum; b, Columnar avicularium;
c, Fenestral avicularium.

widely expanding, flexuose, infundibuliform alveoli; spreading over and affixed to foreign bodies, not by a common peduncular base, but by numerous solid or tubular calcareous columnar processes springing from the dorsal surface. Fenestræ oval, about the same width as the trabeculæ, and of very uniform size. Zoæcia two or three in the width of a trabecula, immersed and flattened in front; surface entire, smooth. Orifice orbicular, with a small shallow fissural notch in front, which in the youngest zoæcia sometimes presents a very minute

avicularian tubercle on one angle. Generally, however, the peristome is thin, slightly