what is called the "flamboyant" style. Consequently, in the following catalogue I have primarily grouped the species in three artificial, or perhaps natural, divisions or sections, distinguished respectively by their general habit or mode of ramification, though it should be understood that no very definite or abrupt limitation between them can be laid down.

§ a. reticulatæ.

Species in which the branches are connected so as to form a reticulate rather than Oœcia, when conspicuous, entire in front. fenestrate growth.

(1) Retepora apiculata, n. sp. (Pl. XXV. fig. 6).

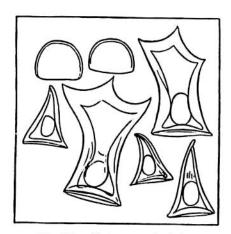


Fig. 16.—Retepora apiculata.

Character.—Zoarium of considerable size, irregularly flexuose, much folded, ex-Meshes extremely irregular in form and size, panding. often traversed by barren trabeculæ. Zoœcia obscurely rhomboidal; primary orifice orbicular, with a wide secondary notch in front. Peristome rising on one side into one or two broad pointed teeth. Anterior avicularia prominent, rostriform, with an erect, acute beak; mandible narrow, lanceolate, acute, horizontal. Occia lofty, contracted and hollowed in front, inferiorly with a vertical median keel, and a depression on each side; anterior lip of the opening trifid. Dorsal surface coarsely granular, with a few irregularly dispersed depressed retentive avicularia, with a wide three-pointed mandible.

Habitat.—Station 172, Nukalofa, Tongatabu, 18 fathoms, coral mud.

(2) Retepora producta, n. sp. (Pl. XXV. fig. 7).

Character.—Zoarium rising from a rather broad base; expanding very irregularly in a hypocrateriform fashion, and very flexuose. Meshes elongated, narrow, acute at both

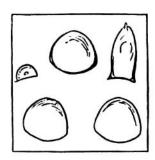


Fig. 17 .- Retepora producta.

ends, and of very irregular size. No barren transverse trabeculæ. Zoœcia urceolate, quite indistinct, orifice of the central ones deeply immersed, orbicular. Peristome level with the surface and unarmed, a rounded papillary eminence, usually on one side of the front. the lateral zoœcia the peristome very much produced, subtubular, pectinate, each denticle supporting a delicate articulated spine. very minute labial fissure, one angle of which frequently supports a minute avicularium, with a semi-circular mandible. Oœcia incon-Anterior avicularia very rare, with a long slender pointed spicuous.

mandible and usually a trifid beak (fig. 7f.). Dorsal surface (c) divided into irregular