

their irregularly bent and divergent forms, and the apical bunch of proliferous branchlets on the large specimens, give a peculiar appearance to the corallum. It closely resembles *Madrepora abrotanoides*, and may ultimately prove to be only a well-marked variety of that species.

*Locality.*—Tahiti.

11. *Madrepora austerica*, Dana.

*Madrepora austerica*, Dana, Zoophytes, p. 478.

The specimen of this species consists of a broad, low clump, which has evidently grown under peculiar conditions. The base has formed on one side a solid massive piece, while on the other sides it has grown incrusting over a mass of dead coral. The branches are short, thick, and very proliferous, and many of them have been broken during growth. The surface is very rough, reticulated and echinulate. The lateral calicles are harshly striated, frequently dimidiate, or tubo-nariform, with a very elongated aperture, very unequal, often proliferous, and becoming immersed on the basal parts of the branches and on the incrusting base. On the upper parts of the branches and branchlets immersed cells do not occur as numerous as in *Madrepora abrotanoides*, but they are often present in large numbers on the under side.

*Locality.*—Mactan Island, Philippines.

12. *Madrepora scabrosa*, n. sp. (Pl. X. figs. 2-2e).

Corallum fruticose, much branched, closely crowded, and proliferous, attaining a very large size; the branches subterete, thick at the base, often as much so as 3 cm., ascending, arcuate or irregularly bent, but not divaricate; branchlets subattenuate, often much elongated, but generally short, especially at the exterior basal part, where they are thick, irregular, and almost spike-shaped. Apical calicles about 3 mm. wide, prominent, with thick, somewhat porous edges, and a distinct star of twelve unequal, narrow septa, which meet deep down in the cell. Lateral calicles rather appressed, very unequal, often 5 mm. long; scarcely crowded above, where they are tubiform and long, quickly becoming tubo-nariform and rostrato-nariform; crowded below, short, rostrato-nariform, and round-nariform, rarely proliferous, and almost or completely immersed on the basal parts; many very short and small cells occur between the prominent ones, opening sideways or downwards; and numerous, long, tubiform cells on the upper branches and branchlets become proliferous with short calicles along their under side, remaining bare on their upper side during a long period of growth; the aperture of the cell is large, round below and oblong above, with the lower side very rough and generally finely spinulose; star