5. Porites explanata, n. sp. (Pl. XI. figs. 3-3a).

Corallum incrusting, thin, about 2.5 mm. thick, explanate, undulate, or gibbously convex, sometimes mammillate, fixed at the central part and free for a large portion at the margin, which is unevenly flexed. Under surface with a strong epitheca, distinctly striated and concentrically ridged. Calicles from about 1 to 1.5 mm. wide, very shallow, almost inconspicuous owing to the walls being scarcely distinct, very porous and loosely reticulate. Septa generally indistinct and unequal, joined within, the second cycle generally incomplete; pali four, five or six, small, almost indistinguishable from the echinulations of the wall, but always surrounding a small and distinct depression in which no columella can be perceived. Texture light and porous.

A single small specimen of this species was obtained. It has much general resemblance to an explanate *Montipora*, and in its essential characters presents on the one hand an approach to that genus, and on the other to *Synaraa*.

Locality.—Samboangan, Philippines.

6. Porites lichen, Dana.

Porites lichen, Dana, Zoophytes, p. 357, pl. lvi. fig. 4.

A very large specimen and several fragments show well the variation in form of this species. The edges are free for a very large portion, undulate and revolute, and often quite thin and contorted, but sometimes rather thickened and mammillate; the fixed and incrusting, central portion is quite thick and mammillate. The cells are from 1 to 2 mm. wide, rather shallow, but never superficial; the pali are small and often scarcely apparent; the walls are thin and raised and have a somewhat ragged outline.

The characters of these specimens seem to point to the identity of *Porites lichen* and *Porites reticulosa*.

Locality.—Reefs, Honolulu, and from depths varying from 1 to 40 fathoms.

7. Porites guadalupensis, Duchassaing and Michelotti.

Porites guadalupensis, Duchassaing and Michelotti, Mém. Cor. des Antilles, p. 83.

The species is closely allied in the sum of its characters to the massive species, Porites arenosa and Porites conglomerata from the Pacific and the Red Sea. Its walls are subcircular or neatly polygonal, thin and raised, being very distinct, resembling the structure in Rhodaraa. The septa are thin at their upper part, projecting but slightly from the wall, thick and projecting almost to the centre within, where the pali are found to be irregularly developed and inconspicuous, from six to one in number, or absent. Columella almost invariably absent. Size of calicles about 2 mm.