

divided, those of the last cycle less distinctly so. They are not closely crowded, and are rather unequally raised. The tentacular teeth are not developed on any of the septa. The whole corallum has a very dense and compact structure.

In the smaller of the two specimens a second mouth has formed at a short distance from the centre, just where a fracture of the corallum has taken place.

*Locality*.—Tahiti.

7. *Fungia valida*, Verrill.

*Fungia valida*, Verrill, Bull. Mus. Comp. Zool., Cambridge, U.S.A., vol. i. p. 51.

*Fungia valida*, Klunzinger, Cor. roth. Meer., iii. p. 62, pl. viii. figs. 7, 8.

A single large specimen was obtained, which seems referable to this species. It differs from the Indian Ocean form in its much more unequal septal teeth, which are less acute and are often rounded.

The species has many points of agreement with the *Fungia horrida*, but differs in the more unequal septa and in the form of the septal teeth, which in that species are eroso-dentate and irregular.

*Locality*.—Reefs, Fiji.

8. *Fungia acutidens*, Studer.

*Fungia acutidens*, Studer, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, 1877, p. 649, pl. iv. fig. 13.

Three specimens of this species were collected. The costæ are very distinct and very uniformly radiate, extending nearly to the centre, and sublamellate and prominent towards the margin, evenly divided into cylindrical blunt spines, the ends of which are very granulated or finely spinulose. In young specimens the centre is nearly bare.

The species is close to the *Fungia horrida*, but differs in its less remote, thinner, and less unequal septa, and in its closer and more regular, spinose costæ.

*Locality*.—Tahiti.

9. *Fungia rugosa*, n. sp. (Pl. VI. figs. 2-2a).

Corallum circular, somewhat undulate, slightly concave below and convex above. Costæ in distinct radial rows nearly to the centre, very unequal; the larger costæ, for about half the radius, are very prominently lamellate, rather thin at the margin, becoming less lamellate within and thickened, not continued to the centre (except probably in large and old specimens); alternating with these large costæ are others which are nearly as large, less prominent and less prolonged, while between them are placed from three to four