

very small ones, which are only distinct quite at the margin, where they are separated by long slits; the surface below is very slightly perforated, having a very dense and smooth appearance, especially at the centre, which is very sparsely marked with small costal spines (probably much enlarged in old specimens); the spines on the costæ are very irregular, crowded, ragged, elongated, often 5 mm. or more in length, bent or contorted, and often clustered and divided; they are slender or thickened, not sharp, but more or less divided at the apex into numerous fine, irregular spinules, which are also sparsely placed throughout the length of the spines and are faintly visible to the naked eye. Seven cycles of septa complete, an eighth more or less incomplete. The septa are rather thin, unequally thickened at the central part, becoming nearly equal at the margin and more or less equally raised, except those of the last cycles; the primaries and secondaries equal, very suddenly thickened near the inner margin, where those of opposite sides are closely approximated, so as nearly to touch above; the tertiaries nearly as large. The teeth of the septa are peculiar; the margin of the free border of the septa is slightly wavy, and the teeth appear as the projecting ends of opposite lateral thickenings, which are continued downwards on the face of the septa for about 3 or 4 mm. Except on the last cycle, the teeth are subequal, crowded, somewhat irregular, rather short, small and acute, but finely pointed, being broader across than in the direction of the septa. Fossa elongated, narrow above, but rather wide below, owing to the crescentic shape of the septal ends; columella rudimentary.

This species is very distinctly marked both by the characters of its costæ and of its septa. The waviness and plication of the margins of the septa recall the structure often seen in delicate specimens of *Fungia patella*, while the nature of the teeth brings to mind *Fungia scruposa*. The costal characters resemble those of *Fungia horrida* in many respects.

Two specimens were obtained, which are from about 10 to 11 cm. in diameter.

Locality.—Tahiti.

10. *Fungia plana*, Studer.

Fungia plana, Studer, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin. 1877, p. 650, pl. iv. fig. 15.

A single specimen of this species was obtained. It is somewhat elongated and quite flattened. The species is extremely close to the *Fungia serrulata*, Verrill, and probably it is not distinct from it.

Locality.—Banda.