

to the much less porous condition of the wall. With *Halomitra* it agrees in the nature of the septal teeth, and in the size and distinctness of the parent calicle; but it is easily distinguished by the costal rays, which are fine and do not form strong and thick lamellæ with coarse spines, by its manner of growth with high septal cycles on the long axis, by the development of few smaller calicles in the longitudinal axis, and by the reduced wall. From *Zoopilus*, to which it seems to be more closely related, it is distinguished by the possession of a distinct, large, central calicle, by the development of fresh calicles in the course of the long axis close to the parent calicle and interrupting the larger as well as the smaller septa, and by the costæ, which are fine and not prominent nor divided into strong clustered teeth. In the specimen of *Zoopilus* figured by Dana, there is a distinct central depression, but this is stated by him to be an "accidental distortion and not the position of a medial orireme." In the absence of such a central calicle, the nature of the long, large, radiating, uninterrupted septa remains incomprehensible.

*Sandalolitha dentata*, Quelch (Pl. VII. figs. 1-1*d*).

*Sandalolitha dentata*, Quelch, Ann. and Mag. Nat. Hist., vol. xiii., 1884, p. 295.

Corallum almost flat, irregularly sandal-shaped, fragile, translucent, being about 6 mm. thick, except immediately around the mouth of the central calicle where the septa are somewhat elevated and thickened. The parent calicle attains a large size, nearly 15 cm. in length, before the smaller calicles are developed. Wall very thin, pierced with numerous small pores; costæ slightly unequal, with very small, granulated, blunt spines, distinct, curving in radiating lines towards the short axis of the corallum except at the centre, where the costal spines become crowded over a thickened circular space that seems to have been a former base of attachment. Septa of the central calicle of seven complete cycles, but incomplete orders are developed at the extremities of the long axis of as many as sixteen cycles; those of the first three cycles subequal, slightly thickened and prominent at the centre; and, with the exception of the very small ones, all the septa are nearly equally raised over the general surface, cut into strong, long, and narrow teeth, very granulated, especially at the apex of the teeth; the teeth are obtuse or pointed, the extremity being subdivided into pointed spinules. The septa of the higher orders unite, one on each side, with one of a lower order at that part of it from which they originate. Columella rudimentary.

Only a single specimen of this species was obtained. It is rather bent to one side, about 15 cm. long and 6.5 cm. wide, narrowing slightly towards the extremities and rounding off suddenly. At the centre, where the septa are raised, it is about 15 mm. thick, and, except at this thickened portion, the corallum is quite translucent. The under portion is marked with many concentric, curved undulations, elongated in the direction of the long axis, following the growth of the corallum. In one direction of its