Tethya multifida (Carter).

Donatia multifida, Carter, Ann. and Mag. Nat. Hist., ser. 5, vol. ix. p. 358, pl. xii. fig. 22, 1882.

Sponge.—Membraniform, lacinulate, expanded, flat or erect, fan- or vase-shaped, proliferous. Texture hard, tough. Surface even, presenting white lines (spicular-fibres) radiating from the excentric expansions to the circumference, which is fimbriated by irregular lacinulate processes of variable length, ending in thin expansions, by which they become adherent, like the tendrils of a scandent plant, to surrounding hard objects (empty shells, &c.); terminal expansions of the processes charged with microscleres.

Spicules.—I. Megasclere. 1. Strongyloxea, straight or slightly curved, with a slight tendency to pass into a tylotoxea; when fully grown the ecactine is somewhat roundly pointed, 1.92 by 0.035 mm.

- II. Microscleres. 2. Spheraster, 0.044 mm. in diameter.
- 3. Somal chiaster, sexuadiate, centrum spherical, actines straight, terminally tylote, 0.0125 mm. in diameter. 4. Choanosomal oxyaster, actines three to six in number, straight or crooked, branched or spined irregularly, centrum absent, 0.0415 mm. in diameter.

Colour.—Pinkish. Size, 25 mm. in diameter exclusive of the external filaments. Habitat.—Acapulco, west coast of Mexico; depth, 4 to 9 fathoms.

Remarks.—As I have not seen this sponge I have departed but little from the text of Carter's description. The spicules, notwithstanding the difference in the general appearance of the sponge, are those of a typical Tethya, and call to mind those of Tethya seychellensis in particular.

## Genus 2. Columnitis, O. Schmidt.

Tethyidæ of irregular form, incrusting; the spicular fibres rising in vertical columns from the base to the upper surface.

## Columnitis squamata, O. Schmidt.

Columnitis squamata, O. Schmidt, Spong. Atlant. Gebiet., p. 25, pl. v. figs. 3, 4, 1870.

" Carter, Ann. and Mag. Nat. Hist., ser. 4, vol. xii. p. 27, 1873.

" F. E. Schulze, Zeitschr. f. wiss. Zool., Bd. xxix. p. 10, 1877.

Sponge.—A highly irregular lobate mass; involving fragments of shells with the cortex. Surface almost uniformly facetted with hexagonal areas, about 1 mm. in diameter. The edges of the facets are coloured deep brown; a groove runs over them, which first appears on the completely formed parts of the sponge; over the membranous