

diminishing distally to 0.005 mm., and then increasing to 0.02 mm. just below the cladome; cladi 0.18 long, chord 0.175 mm.

Habitat.—Christmas Island, 120 fathoms, January 29, 1874.

Station 150, Heard Island, February 2, 1874; lat. 52° 4' S., long. 71° 21' E.; depth, 150 fathoms; bottom, coarse gravel; bottom temperature, 35°·2.

Remarks.—The general appearance of this variety differs in an undefinable way from *Tetilla grandis*, chiefly owing to the projection of long spicules all over the sponge, and these lying flat on the surface give it a white glistening appearance. The absence of an anchoring mass is probably connected with a difference of the ground on which the sponge occurs; *Tetilla grandis* lives on a muddy bottom, and *Tetilla grandis*, var. *alba*, on coarse gravel.

Tetilla merguensis (Carter).

Tethya merguensis, Carter, Ann. and Mag. Nat. Hist., ser. 5, vol. xi. p. 366, pl. xv. figs. 6–8, 1883.

Sponge, a thick disc with rounded edges, or cushion-shaped, texture loose; surface densely hispid; ectosome thin, densely charged with pigment-cells; oscules several, large; pores in sieves.

Spicules.—I. Megascleres. 1. *Oxea*, fusiform, anisoactinate, 3.2 by 0.04 mm. (Ch.),¹ 4.2 by 0.058 mm. (Cr.).

2. *Protriæne*, rhabdome fusiform, cladome variable, tending towards two types, one in which the cladi are comparatively short and thick, the other in which they are longer and more slender. Rhabdome 3.5 by 0.008 mm. (Ch.), 6.17 by 0.013 mm. (Cr.); cladome, cladi 0.0775 mm., sagitta 0.071 mm., chord 0.0645 mm. in length (variety 1 Ch.); cladi 0.2 mm. long (variety 2 Ch.); cladi 0.09 mm., chord 0.05 mm. long (Cr.).

3. *Anatriæne*, rhabdome conical, attenuating from the cladome to a hair-like termination, cladome terminal, cladi not very much recurved. Rhabdome 3.5 by 0.009 mm. (Ch.), 6.17 by 0.007 mm. (Cr.); cladome, cladi 0.0387 mm., chord 0.058 mm., sagitta 0.026 mm. in length (Ch.); cladus 0.039 mm., chord 0.058 (Cr.).

4. *Ectosomal orthotriæne*, rhabdome conical, usually shorter than the cladi, frequently strongylate; in one instance the rhabdome measured 0.058 mm., the cladi 0.206 mm. in length; in another the rhabdome 0.10 mm., and the cladi 0.21 mm.; in a third the rhabdome 0.13 mm., and the cladi 0.10 mm.; the maximum length attained by the cladi in the Challenger specimens is 0.27 mm., in Carter's specimen 0.43 mm.

II. Microscleres. 5. *Microxea*; 0.25 mm. in length, immeasurably thin. 6. *Sigma-spire*; 0.017 mm. (Ch.), 0.016 mm. (Cr.) in length.

Colour.—Brownish-black.

¹ (Ch.) indicates measurements obtained from Challenger specimens, (Cr.) from Carter's specimen.