

2. *Aulonia pentagonia*, n. sp.

Meshes subregular, pentagonal, intermingled with a smaller number of quadrangular and triangular irregular meshes. Bars cylindrical, of equal breadth.

Dimensions.—Diameter of the spherical shell 2·8 to 3·2, of the meshes 0·15 to 0·2; breadth of the bars 0·01.

Habitat.—South Pacific, Stations 293 to 302, depth 1375 to 2270 fathoms.

3. *Aulonia hexagonia*, n. sp. (Pl. 111, fig. 1).

Meshes regular or subregular, hexagonal, often intermingled with a variable number of pentagonal and heptagonal meshes. Bars cylindrical, of equal breadth.

Dimensions.—Diameter of the spherical shell 2·5 to 3·3, of the meshes 0·15 to 0·25; breadth of the bars 0·012.

Habitat.—Tropical Atlantic, Stations 347 to 349, surface.

4. *Aulonia metagonia*, n. sp.

Meshes subregularly alternating, larger octagonal and smaller tetragonal. The network of this remarkable species has a striking similarity to the arrangement of the radial tubes in some species of *Sycon*, figured in my Monograph of the Calcispongiæ (1872, Bd. iii., Taf lx. fig. 12).

Dimensions.—Diameter of the sphere 4·4, of the greater octagonal meshes 0·24 to 0·3, smaller tetragonal 0·1 to 0·12; breadth of the bars 0·007.

Habitat.—Indian Ocean, Cocos Islands (Rabbe), surface.

5. *Aulonia polygonia*, n. sp.

Meshes irregular, polygonal, variable in form and unequal in size; the majority usually pentagonal or hexagonal, but numerous intermingled meshes with three, four, seven, or eight sides. Very variable in the size of the bars and the form of the meshes.

Dimensions.—Diameter of the sphere 2·5 to 5·5, of the meshes 0·1 to 0·2; breadth of the bars 0·008 to 0·12.

Habitat.—Cosmopolitan; Atlantic, Indian, Pacific, surface.

Genus 689. *Aulastrum*,¹ n. gen.

Definition.—Aulosphærida with polygonal meshes in the network, the tangential tubes of which form a simple lattice-sphere. Radial tubes arise at its nodal points.

¹ *Aulastrus* = Tubular star; αὐλός, στρεφόν.