20. Aulosphæra undulata, n. sp. (Pl. 109, fig. 6).

Radial tubes slender, cylindro-conical, undulate, about twice as long as the spinulate and undulate tangential tubes; studded with numerous short, perpendicular, lateral branches which are partly simple, partly forked, and bear small terminal spathillæ. The distal end of each radial tube bears usually a verticil of four to eight similar pediculate spathillæ.

Dimensions.—Diameter of the sphere 2.4; tangential tubes 0.2 long, 0.005 broad. Habitat.—North Pacific, Station 252, surface.

21. Aulosphæra spinosa, n. sp. (Pl. 109, fig. 5).

Radial tubes and tangential tubes equal in size and similar in form, more or less curved, slender, cylindrical, densely studded with numerous irregular spines.

Dimensions.—Diameter of the sphere 1.6; tangential tubes 0.1 long, 0.004 broad. Habitat.—Central Pacific, Station 271, depth 2425 fathoms.

Genus 684. Auloscena, n. gen.

Definition.—Aulosphærida with triangular meshes in the network, the tangential tubes of which arise in pyramidal groups of six over the surface of the spherical shell. Radial tubes arise at the tops of the six-sided pyramids, which cover the whole surface.

The genus Auloscena differs from the preceding Aulosphæra, its ancestral form, in a very remarkable and elegant character. The tangential tubes of the network here lie not on a spherical face (as in the latter), but arise over the surface of the spherical calymma in the form of numerous, regular, hexagonal pyramids; each pyramid being composed of six convergent ascending tubes, which are united in a common nodal point; at the latter arises a radial tube, which usually bears an elegant corona of radially divergent terminal branches. Therefore the base of each hexagonal pyramid is in contact at its six corners with the basal corners of six similar neighbouring pyramids, whilst the neighbouring sides of the bases are separated by six regular triangular meshes, which lie on the spherical face. In some species this remarkable and elegant structure is quite regular, whilst in others it becomes more or less irregular.

Subgenus 1. Auloscenium, Haeckel.

Definition.—Radial tubes smooth, without lateral branches or spines, bearing a terminal verticil at the distal end.

1 Auloscena = Tubular tent; κύλός, σκηνή.