1. Auloscena mirabilis, n. sp. (Pl. 110, figs. 1, 2).

Radial tubes cylindrical, straight, smooth, about as long as the smooth pyramidal tubes (or the convergent tubes which form the edges of the six-sided pyramids of the network). The distal end of each radial tube bears an elegant spathillate terminal corona (fig. 2), or a verticil of fifteen to twenty curved radial branches, the distal end of which is armed with a spinulate knob.

Dimensions.—Diameter of the sphere 2.0 to 3.0; pyramidal tubes 0.16 to 0.24 long, 0.008 broad. Habitat.—Central Pacific, Stations 271 to 274, depth 2350 to 2750 fathoms.

2. Auloscena spectabilis, n. sp. (Pl. 110, figs. 8, 9).

Radial tubes cylindro-conical, straight, smooth, twice as long as the smooth pyramidal tubes, armed at the distal end with a conical terminal corona, or a verticil of twelve to sixteen divergent, straight, pointed, terminal branches.

Dimensions.—Diameter of the sphere 4.0 to 5.0; pyramidal tubes 0.25 to 0.3 long, 0.012 broad. Habitat.—Antarctic Ocean, Station 154, surface.

3. Auloscena pyramidalis, n. sp.

Radial tubes slender, conical, straight, smooth, of the same length as the smooth pyramidal tubes, armed at the distal end with a hexagonal terminal corona, or a verticil of six divergent, straight, pointed, terminal branches, which correspond to the six sides of a pyramid; the proximal apex of this terminal pyramid is opposed to the distal apex of the similar basal pyramid.

Dimensions.—Diameter of the sphere 3.0 to 4.0; pyramidal tubes 0.2 to 0.3 long, 0.01 broad. Habitat.—Tropical Atlantic, Stations 347 to 349, surface.

Subgenus 2. Auloscenidium, Haeckel.

Definition.—Radial tubes thorny, with lateral branches or spines, usually with a terminal verticil at the distal end.

4. Auloscena tentorium, n. sp. (Pl. 110, fig. 6).

Radial tubes spindle-shaped, tapering towards both ends, nearly smooth, of the same length as the smooth pyramidal tubes. The distal part of the radial tubes is thorny, and bears a verticil or a corona of twenty to thirty slender terminal branches, which are about one-third as long as the tube, sabre-shaped, with concave outer edge and pointed distal end.

Dimensions.—Diameter of the sphere 4.0; radial tubes 0.3 to 0.4 long, 0.02 to 0.03 broad. Habitat.—North-Western Pacific (off Japan), Station 231, surface.