a smaller tubule, have in general the same shape as in the closely allied Sagosphærida and Orosphærida, and agree in their strong development with that of the Aulacanthida. The collection of the Challenger contains numerous well-preserved preparations of Aulosphærida, which were stained by carmine immediately after being captured, and in which the central capsule and its nucleus exhibit the same intimate structure already accurately described by R. Hertwig. The diameter of the capsule is usually between 0.2 and 0.3, rarely less than 0.15 or more than 0.35 mm., the nucleus has half that size. The phæodium has usually about the same volume (Pl. 109, fig. 1), but seems to be in many Aulosphærida less developed than in the other Phæodaria.

## Synopsis of the Genera of Aulosphærida.

I. Subfamily Aularida.  Meshes of the network triangular, regular or subregular. Six tangential tubes united at each nodal point of the net.	Shell spherical, with a simple network.		682.	Aularia.
		With radial tubes in the nodes of the net,	683.	Aulosphæra.
	Shell spherical, with pyra- midal elevations or with < spongy framework.	Shell covered with pyramidal elevations, the top of which bears a radial tube, Shell with spongy framework, the	684.	Auloscena.
		surface of which bears radial tubes,	685.	Auloplegma.
	Shell not spherical, either lenticular or spindle-shaped, with simple network.	Shell lenticular, with shortened main axis and radial tubes, .	686.	Aulophacus.
		Shell spindle-shaped, with pro- longed main axis and radial tubes,	687.	$Aulatractus. \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
Aulonida.  Meshes of the network polygonal, usually irregular.  Three or four (rarely more) tangential tubes united at each		Without radial tubes,	688.	Aulonia.
	Shell spherical, with a simple j network.	With radial tubes in the noles of the net,	689.	Aulastrum.
	Shell spherical, with a spongy framework.	Without radial tubes,	690.	Aulodictyum.
nodal point.				

## Subfamily 1. AULARIDA, Haeckel.

Definition.—Network of the shell with triangular, regular or subregular meshes; six tangential tubes being united at each nodal point.