

twice as broad at the base as one pore. (Very similar to some species of *Castanella*, Pl. 113, but without the osculum characteristic of this Phæodarian; may be easily confounded with it.)

Dimensions.—Diameter of the shell 0·3, pores 0·015, bars 0·015; length of the main spines 0·25, basal breadth 0·03

Habitat.—North Pacific (Japan), Station 234, surface.

Subgenus 2. *Heliosphæromma*, Haeckel.

Definition.—Pores of the shell irregular, of different size or form.

10. *Heliosphæra polygonaria*, n. sp.

Shell very thin walled, with thread-like bars and irregular, polygonal pores (having four to eight angles, commonly five to seven); eight to ten on the radius. Radial spines at all the nodal-points of the network, bristle-shaped; forty to sixty main spines, as long as the radius, twice as thick as the numerous by-spines, which are not larger than one mesh.

Dimensions.—Diameter of the shell 0·15 to 0·2, pores 0·012 to 0·02, bars 0·001; length of the main spines 0·08 to 0·1.

Habitat.—Central Pacific, Stations 266 to 272, surface.

11. *Heliosphæra heteracantha*, n. sp.

Shell thin walled, with irregular, polygonal pores, twice to four times as broad as the bars; six to eight on the radius. Twenty radial main spines, three-sided pyramidal, nearly as long as the diameter of the shell, as broad as a larger mesh; innumerable bristle-shaped by-spines variously distributed on the bars and at the nodal-points of the net; half as long as the radius.

Dimensions.—Diameter of the shell 0·12, pores 0·006 to 0·012, bars 0·003; length of the main spines 0·1, basal breadth 0·012.

Habitat.—Equatorial Atlantic, Station 347, surface.

12. *Heliosphæra hyperionis*, n. sp.

Shell thick walled. Pores irregular, roundish, with polygonal frames, three to six times as broad as the bars; twelve to fourteen on the radius. Thirty to forty main spines, angular, pyramidal, scarcely as long as the radius and twice as long as the numerous bristle-shaped by-spines.

Dimensions.—Diameter of the shell 0·24, pores 0·006 to 0·012, bars 0·002; length of the main spines 0·1, basal breadth 0·012.

Habitat.—North Pacific, Station 256, surface.

13. *Heliosphæra elector*, n. sp.

Shell thick walled, with irregular, roundish pores, twice to three times as broad as the bars; eight to ten on the radius. Twenty main spines, three-sided pyramidal, somewhat longer than the radius and four times as long as the short bristle-shaped by-spines.