shells very elegantly denticulated; radial by-spines (very numerous in the surface of the inner shell) smooth.

Dimensions.—Diameter of the outer shell 0.7, inner 0.24.

Habitat.—Indian Ocean, Madagascar, surface, Rabbe.

3. Diplosphæra dictyota, n. sp.

Inner shell with regular, hexagonal meshes, six times as broad as the bars; at each nodal-point one radial by-spine; outer shell two and a half times as broad, with very delicate square meshes, separated by thread-like bars which arise from the sides of the triangular main meshes. Radial main spines with three serrated edges. (Differs from the similar Diplosphæra gracilis in the simple main spines, with delicate dentition of the edges.)

Dimensions.—Diameter of the outer shell 0.5, inner 0.2.

Habitat.—North Atlantic, Canary Islands, surface.

4. Diplosphæra polygonalis, n. sp.

Inner shell with irregular, polygonal meshes and very thin thread-like bars, covered with very numerous bristle-shaped by-spines; outer shell twice as broad, with simple triangular meshes. Radial main spines with three smooth edges.

Dimensions.—Diameter of the outer shell 0.44, inner 0.22.

Habitat.—South Pacific, Station 288, surface.

Subgenus 2. Diplosphæromma, Haeckel.

Definition.—Radial main spines with three rows of lateral branches (one row on each edge).

5. Diplosphæra gracilis, Haeckel.

Diplosphæra gracilis, Haeckel, 1862, Monogr. d. Radiol., p. 354, Taf. x. fig. 1.

Inner shell with regular, hexagonal meshes and very thin bars; at each nodal-point one simple bristle-shaped radial by-spine; outer shell twice as broad, with very delicate square meshes, separated by thread-like bars which arise from the sides of the triangular main meshes. Radial spines with smooth edges and with three rows of simple curved lateral branches (four to six branches on each edge).

Dimensions.—Diameter of the outer shell 0.54, inner 0.27.

Habitat.-Mediterranean (Messina).

6. Diplosphæra denticulata, n. sp.

Inner shell with regular, hexagonal meshes, four times as broad as the bars; at each nodal-point is a simple bristle-shaped by-spine; outer shell three times as broad, with simple triangular meshes.