3. *Arachnosphæra dolichacantha*, n. sp.

Innermost shell with regular, hexagonal meshes, very small; its diameter only as long as the equal distances between every two concentric shells. At each nodal-point occurs one radial spine with twelve to sixteen verticils (altogether thirty to forty spines).

Dimensions.—Diameter of the innermost shell 0·05; distance between the concentric shells 0·04 to 0·05.

Habitat.—Central Pacific, Station 265 to 274, surface.

4. *Arachnosphæra increscens*, n. sp.

Innermost shell with regular, hexagonal meshes; its diameter three times as long as the distance between it and the second shell, quite as long as the distance between the fifth and sixth shells; the distances between the concentric shells gradually increasing from the centre. Radial spines about fifty to sixty, each with six to eight verticils.

Dimensions.—Diameter of the innermost shell (A) 0·75; distances between the following shells —A, B = 0·025, B, C = 0·037, C, D = 0·05, D, E = 0·062, E, F = 0·075, &c.

Habitat.—Central Pacific, Station 271, surface.

Subgenus 2. *Arachnosphæromma*, Haeckel.

Definition.—Pores of the innermost shell irregular, polygonal.

5. *Arachnosphæra tenuissima*, n. sp.

Innermost shell with irregular, polygonal meshes; its diameter twice as long as the equal distance between every two concentric shells. Forty to fifty radial spines, each with twelve to sixteen verticils.

Dimensions.—Diameter of the innermost shell 0·1, distance between the concentric shells 0·04 to 0·05.

Habitat.—South Atlantic, Station 332, surface

6. *Arachnosphæra velaris*, n. sp.

Innermost shell with irregular, polygonal meshes; its diameter twice as long as the distance between it and the second shell, quite as long as the distance between the third and fourth shells; the distance between the concentric shells gradually increasing from the centre. Radial spines twenty to thirty, each with ten to twelve verticils.

Dimensions.—Diameter of the innermost shell (A) 0·5; distances of the following shells—A, B = 0·025, B, C = 0·037, C, D = 0·05, D, E = 0·062, E, F = 0·075.

Habitat.—Tropical Atlantic, Station 347, surface.