

1. *Thecosphæra triplodictyon*, n. sp.

Cortical shell thin walled, smooth, with regular, hexagonal pores, four times as broad as the bars. Radial proportion of the three spheres = 1:2:8. Both medullary shells with regular circular pores, twice as broad as the bars, the inner half as broad as the outer. All three shells connected by six thin radial beams, opposite in pairs in the three dimensive axes.

*Dimensions*.—Diameter of the outer shell 0.2, middle 0.05, inner 0.025; cortical pores 0.012, bars 0.003.

*Habitat*.—Central Pacific, Station 271, surface.

2. *Thecosphæra phænazonia*, n. sp.

Cortical shell thick walled, rough, with regular, circular, hexagonally framed pores, twice as broad as the bars. Radial proportion of the three spheres = 1:2:6. Both medullary shells with regular hexagonal pores and thin bars. All three shells connected by six prismatic radial beams, opposite in pairs in the three dimensive axes. (Shell similar to *Hexacontium sceptrum*, Pl. 24, fig. 1, 1a, but without external spines.)

*Dimensions*.—Diameter of the outer shell 0.12, middle 0.04, inner 0.02; cortical pores 0.01, bars 0.005.

*Habitat*.—North Pacific, Station 253, surface.

3. *Thecosphæra favosa*, n. sp.

Cortical shell thick walled, thorny, with regular, circular, hexagonally framed pores, of the same breadth as the bars. Radial proportion of the three spheres = 1:3:10. Both medullary shells with regular circular pores, connected with the former by twelve short prismatic, regularly disposed radial beams.

*Dimensions*.—Diameter of the outer shell 0.2, middle 0.06, inner 0.02; cortical pores and bars 0.008.

*Habitat*.—Central Pacific, Station 268, surface; also fossil in Barbados.

4. *Thecosphæra floribunda*, n. sp.

Cortical shell thick walled, smooth, with regular, elegantly six-lobed pores, three times as broad as the bars. Radial proportion of the three spheres = 1:2:4. Both medullary shells with simple regular circular pores, connected with the former by six dimensive radial beams. (Similar to *Hexacontium floridum*, Pl. 24, fig. 4, but without external spines.)

*Dimensions*.—Diameter of the outer shell 0.12, middle 0.06, inner 0.03; cortical pores 0.01, bars 0.0033.

*Habitat*.—Central Pacific, Station 266, depth 2750 fathoms.