

Genus 79. *Hexacontium*, Haeckel,¹ 1881, Prodrömus, p. 452.

Definition.—Shell with three concentric lattice-spheres and six simple spines of equal size.

The genus *Hexacontium*, the ancestral form of the Hexacontida, is probably derived from *Hexalonche* by duplication of the medullary shell. As in the latter, all six spines are of equal size, opposite in pairs in the three dimensive axes, and correspond therefore to the three equal axes of a tesseral crystal.

Subgenus 1. *Hexacontanna*, Haeckel.

Definition.—Pores of the cortical shell regular or subregular, of nearly equal size and similar form; surface smooth, without radial spines or papillæ (other than the six main spines).

1. *Hexacontium phænaxonium*, n. sp.

Cortical shell thin walled, smooth; its pores regular hexagonal, six to nine times as broad as the bars; twelve to sixteen on the radius. Radial proportion of the three spheres = 1:2:4. Both medullary shells of the same structure as the cortical shell, only with smaller pores. The three spheres connected by six thin radial beams, which are prolonged on the outside into six strong triangular pyramidal spines, as long as the radius of the cortical shell, and, at the base, as broad as one of its pores. (Differs from *Hexastylus phænaxonium* and from *Hexalonche phænaxonia*, Pl. 21, fig. 3, in the larger size and the triple shell.)

Dimensions.—Diameter of the outer sphere 0.2, middle 0.1, inner 0.05; cortical pores 0.008, bars 0.0012; length of the spines 0.1.

Habitat.—Central Pacific, Station 270, surface.

2. *Hexacontium axotrias*, n. sp. (Pl. 24, fig. 3).

Cortical shell thin walled, smooth; its pores regular circular, five to six times as broad as the bars; eleven to thirteen on the radius. Radial proportion of the three spheres = 1:3:8. Outer medullary shell with hexagonal frames around the regular circular pores (five to six on the radius). Inner medullary shell with simple small circular pores (three on the radius). The two outer shells connected by six triangular prismatic beams, which are prolonged outside to the length of the cortical radius or more.

Dimensions.—Diameter of the outer sphere 0.2, middle 0.07, inner 0.025; cortical pores 0.016, bars 0.003; length of the spines 0.1 to 0.015, basal breadth 0.02.

Habitat.—North Pacific, Station 253, surface.

3. *Hexacontium hexactis*, Haeckel.

Actinomma hexactis, Stöhr, 1880, Palæontogr., vol. xxvi. p. 91, Taf. ii. fig. 7.

Cortical shell thick walled, smooth, or a little rough. Pores regular circular, of the same breadth as the bars; five to seven on the radius. Radial proportion of the three spheres

¹ *Hexacontion* = Shell with six darts; ἑξάκωντιον.