The genus Carposphæra comprises a large number of double-shelled S p hær o i dea, formerly united with Haliomma, but different from this genus by the absence of radial spines. The shell is composed of two concentric latticed spheres, the inner of which (or the medullary shell) is situated within the central capsule, the other (or the cortical shell) outside it. Both shells are connected by radial beams which pierce the wall of the central capsule. The distance between the shells is at least as large as (commonly much larger than) the radius of the inner shell, whilst in the following genus, Liosphæra, that distance is much smaller than this radius.

Subgenus 1. Melittosphæra, Haeckel, 1881, Prodromus, p. 451.

Definition.—Pores of the cortical shell regular, hexagonal (or circular, with hexagonal frames or lobes), all of nearly equal size and form.

1. Carposphæra capillacea, n. sp.

Cortical shell very delicate, four times as broad as the similarly constructed medullary shell, with regular hexagonal meshes (twenty to twenty-five on the quadrant) and very thin thread-like bars. Both shells connected by twenty (?) very thin radial beams. (Similar to *Heliosoma radians*, Pl. 28, fig. 3, 3a, but with smooth surface, without any radial spines.)

Dimensions.—Diameter of the outer shell 0.2, inner 0.05, pores 0.01, bars below 0.001. Habitat.—Central Pacific, Station 274, surface.

2. Carposphæra cubaxonia, n. sp.

Cortical shell smooth, three times as broad as the medullary shell, with regular hexagonal pores, four times as broad as the bars. Eight to ten pores on the quadrant. Medullary shell with regular circular pores, twice as broad as the bars. Both shells connected by six radial beams, which are three-sided prismatical, opposite in pairs in the three dimensive axes.

Dimensions.—Diameter of the outer shell 0·15, inner 0·05; outer pores 0·01, inner 0·005. Habitat.—South Pacific, Station 291, surface.

3. Carposphæra infundibulum, Haeckel.

Haliomma infundibuliforme, Stöhr, 1880, Palæontogr. Bd. xxvi. p. 87, Taf. i. fig. 6.

Cortical shell very thick-walled, two and a half times as broad as the medullary shell, with rough surface and regular hexagonal, funnel-shaped pores, of about the same breadth as the bars. Five to six on the quadrant.

Dimensions.—Diameter of the outer shell 0.1, inner 0.04, outer pores and bars 0.01. Habitat.—North Atlantic, Station 354; fossil in Tertiary rocks (Barbados and Sicily).