The genus Styptosphæra presents a spherical shell with smooth or rough surface (without radial spines), the whole mass of which is composed of looser or denser spongy wicker-work.

Styptosphæra spumacea, n. sp.

Spongy framework of the solid sphere loose, with large polygonal meshes of slightly different size, ten to twenty times as broad as the bars. Structure of the whole spongy sphere the same. Central capsule filled with crystals. Surface smooth.

Dimensions.—Diameter of the sphere 0.32, of the central capsule 0.26, meshes 0.01 to 0.02, bars 0.001.

Habitat.—North Pacific, Station 236, surface.

2. Styptosphæra spongiacea, n. sp.

Spongy framework in the central part of the solid sphere much more compact than in the peripheral part, becoming gradually looser towards the rough surface. Meshes in the centre three to five times, in the periphery fifteen to twenty times as broad as the bent bars.

Dimensions.—Diameter of the sphere 0.45, inner meshes 0.006 to 0.01, outer meshes 0.03 to 0.04, bars 0.002.

Habitat.—Central Pacific, Station 271, surface.

3. Styptosphæra stupacea, n. sp.

Spongy framework of the solid sphere rather compact, everywhere of the same structure, with roundish, nearly equal meshes, six to eight times as broad as the bars. Surface rough with prominent thorns.

Dimensions.—Diameter of the sphere 0.22, meshes 0.01 to 0.012, bars 0.0015.

Habitat.—South Pacific, Station 291, surface.

Genus 26. Plegmosphæra, Haeckel, 1881, Prodromus, p. 455.

Definition.—Liospærida forming a hollow sphere of spongy framework, without a medullary shell in the central cavity.

The genus *Plegmosphæra* develops a large hollow sphere, the wall of which is composed of looser or denser spongy wicker-work. On the inner as well as on the outer face of the spongy shell-wall may be present a simple lattice-sphere from which the threads of the framework arise; but in some species these lattice-plates are quite absent.

Plegmosphæra = Sphere of wicker-work; πλίγμα, σφαίζα.