

Radial spines thirty to forty, prismatic, with three smooth, spirally contorted edges, without lateral branches between the two shells; their free outer part half as long as the shell radius.

Dimensions.—Diameter of the spongy cortical shell 0·2, of its inner cavity 0·12, of the medullary shell 0·04.

Habitat.—Central Pacific, Station 265, surface.

3. *Rhizoplegma trigonacantha*, n. sp.

Spongy cortical shell with a rather loose framework and coarse bars, with nearly smooth surface (without by-spines). Its inner cavity twice as broad as the medullary shell, which exhibits irregular, roundish pores. Radial spines forty to sixty, prismatic, with three smooth straight edges, without free branches between the two shells; their outer pyramidal part only one-third of the shell radius. (Very similar to the common *Rhizosphæra trigonacantha*, but with simple medullary shell.)

Dimensions.—Diameter of the spongy shell 0·2, of its inner cavity 0·16, of the medullary shell 0·08.

Habitat.—North Atlantic, Station 353, surface.

Subgenus 2. *Rhizoplegmidium*, Haeckel.

Definition.—Between the two shells free lateral branches arise from the three edges of the radial spines.

4. *Rhizoplegma radicum*, n. sp. (Pl. 15, figs. 9, 9a).

Spongy cortical shell with a very loose framework; on the surface are innumerable thin, forked, or repeatedly dichotomous by-spines. Its inner cavity three times as broad as the medullary shell, which exhibits regular, hexagonal meshes (fig. 9a). Radial spines twelve, prismatic, with straight dentated edges, their outer pointed part as long as the shell radius. Each spine between the two shells has a verticil of three forked lateral branches (fig. 9a). The central capsule completely distends the medullary shell, and forces out through each mesh a hernia-shaped process (fig. 9).

Dimensions.—Diameter of the spongy shell 0·5, of its inner cavity 0·25, of the medullary shell 0·08.

Habitat.—Central Pacific, Station 271, surface.

5. *Rhizoplegma lychnosphæra*, n. sp. (Pl. 11, fig. 5).

Lychnosphæra rhizoplegma, Haeckel, 1879, Atlas (pl. xi. fig. 5).

Spongy cortical shell with a very loose framework, composed of long thin beams as in *Lychnosphæra regina* (Pl. 11, figs. 1–4). Surface covered with short bristles. Its inner cavity six times as broad as the medullary shell, which exhibits regular, hexagonal meshes. Radial spines twelve, prismatic, with three smooth edges; their outer pointed part half as long as the shell radius. Each spine has three verticils of three forked branches; the first verticil is free