

Dimensions.—Diameter of the spongy shell 0·24, of its inner cavity 0·12, of the central cube 0·02; length of the spines 0·4, breadth 0·01.

Habitat.—North Pacific, Station 254, surface.

3. *Octodendron pinetum*, n. sp.

Radial spines eight, three-sided prismatic, three to four times as long as the diameter of the inner shell-cavity, with three spirally contorted edges. From each spine arise at equal distances (equal to the half radius of the cavity) fifteen to twenty verticils of branches which increase in size from the base of the spine. Each verticil is composed of six forked branches (two from each spine-edge); the inferior are richly branched, and form by their connection the loose network of the spongy cortical shell, the surface of which is covered with numerous bent threads. Each spine bears a resemblance to a pine tree.

Dimensions.—Diameter of the spongy shell 0·3, of its inner cavity 0·15, of the central cube 0·02; length of the spines 0·5 to 0·6, breadth 0·01.

Habitat.—Central Pacific, Station 272, surface.

4. *Octodendron araucaria*, n. sp.

Radial spines eight, three-sided prismatic, with three spirally contorted edges, eight to ten times as long as the diameter of the inner shell-cavity (the free distal portion twice to three times as long). From each spine arise at equal distances thirty to thirty-five verticils of branches, which decrease in size towards the distal end. Each verticil is composed of six forked branches (two from each spine-edge); the inferior are richly ramified, and form by their connection the loose spongy framework; the distal branches bear on the free end elegant spathillæ (as in the following species). Surface covered with innumerable straight bristles, as long as the cavity radius, and ending with a spathilla. Diameter of the central capsule about equal to the radius of the spongy sphere, its membrane is double-edged.

Dimensions.—Diameter of the spongy shell 1·4 mm., of its inner cavity 0·14, of the central cube 0·02, of the central capsule 0·5 to 0·6; length of the spines 0·9 to 1·2, breadth 0·02.

Habitat.—South Pacific, Station 288, surface.

5. *Octodendron spathillatum*, n. sp. (Pl. 18, figs. 2, 4).

Radial spines eight, three-sided prismatic, with contorted edges, five to eight times as long as the diameter of the shell-cavity (the free part twice as long). From each spine arise ten to twelve verticils of lateral branches; each verticil composed of three forked branches. The proximal larger branches ramify richly, and form by their connection the loose spongy framework of the spherical shell; the distal smaller branches are simple or bifurcated, and the ramules are provided with an elegant spathillum at the end (fig. 4). Entire surface of the spongy sphere covered with innumerable bristle-shaped radial spines (half as long as the cavity radius), zig-zag, bent, with beards, and with a spathillum at the end.