

same three-jointed form as the inner, and is connected with it by a variable number of radial beams. From the similar *Tholodes* it differs in the possession of a medullary shell.

1. *Amphitholonium tricolonium*, n. sp. (Pl. 10, fig. 7).

Outer cortical shell smooth, of the same three-jointed form as the inner, at an equal distance from it throughout the whole circumference; central chamber higher-vaulted than both cupolas. Network of the outer shell delicate, with subregular, circular pores. Pores of the thick-walled inner shell subregular, circular, with hexagonal frames, three times as broad as the bars; eight to ten in the basal semicircle of one cupola.

*Dimensions*.—Major axis of the outer cortical shell 0.2, minor axis 0.15; major axis of the inner cortical shell 0.16, minor axis 0.11; pores 0.01, bars 0.0035.

*Habitat*.—South Pacific, Station 302, depth 1450 fathoms.

2. *Amphitholonium octostylium*, n. sp.

Outer cortical shell lentellectual, smooth, not articulated, at a varying distance from the three-jointed inner shell; central chamber of the latter twice as high as both hemispherical cupolas. Network of the outer shell very thin, cob-web like. Pores of the inner shell subregular, roundish, twice as broad as the bars; six to seven in the semicircle of one cupola. Eight thin and long, bristle-shaped, radial spines, opposite in pairs in two crossed diagonal planes.

*Dimensions*.—Major axis of the outer cortical shell 0.16, minor 0.12; major axis of the inner cortical shell 0.12, minor 0.09; pores 0.01, bars 0.005.

*Habitat*.—Pacific, central area, Station 273, depth 2350 fathoms.

3. *Amphitholonium acanthonium*, n. sp.

Outer cortical shell of the same three-jointed form as the inner, at a uniform distance from it; central chamber higher vaulted than both cupolas. Network of the outer shell irregular, delicate, of the inner regular, strong, with circular, hexagonally framed pores, three times as broad as the bars; eight to nine in the semicircle of one cupola. On the surface, quite symmetrically disposed, twenty long and strong, cylindrical, radial spines; eight in the sagittal plane, four in the transverse plane; eight in two diagonal planes between the former and the latter. The remarkable geometric disposition of the twenty spines is in this species quite the same as in *Amphitholus acanthometra*. It differs from this nearly allied species in the double cortical shell.

*Dimensions*.—Major axis of the outer cortical shell 0.18, minor 0.14; major axis of the inner cortical shell 0.14, minor 0.1; pores 0.012, bars 0.004.

*Habitat*.—South Pacific, Station 295, surface.