necting radial beams. Entire surface densely covered with small conical spines, not larger than the pores.

Dimensions.—Diameter of the outer shell 0.17, middle 0.07, inner 0.023; cortical pores 0.006 to 0.012, bars 0.003; length of the spines 0.01.

Habitat.—Fossil in Tertiary rocks of Sicily, Grotte, Stöhr.

11. Actinomma hirsutum, n. sp.

Cortical shell thick walled, with irregular, roundish pores, about the same breadth as the bars. Radial proportion of the three spheres = 1:2:8; between them numerous (twenty to thirty or more) cylindrical connecting beams. Entire surface densely covered with innumerable small bristle-shaped spines, as long as the diameter of the inner shell.

Dimensions.—Diameter of the outer shell 0.25, middle 0.06, inner 0.03; cortical pores and bars 0.004 to 0.008; length of the spines 0.03.

Habitat.—Central Pacific, Station 265, depth 2900 fathoms.

Subgenus 4. Actinommura, Haeckel.

Definition.—Pores of the cortical shell irregular, of different size and form; spines not over the entire surface, but scattered at intervals (their number smaller than that of the nodal-points).

12. Actinomma capillaceum, n. sp. (Pl. 29, fig. 6).

Cortical shell very thin walled, with irregular, polygonal meshes (sixteen to eighteen on the radius), three to six times as broad as the bars. Both medullary shells with smaller pores of the same structure. Radial proportion of the three spheres = 1:2.5:7; radial connecting beams between them very thin and numerous (one hundred and twenty to one hundred and fifty or more), each prolonged outside into a short three-sided pyramidal spine, as long as the radius of the inner shell. (Similar to Haliomma capillaceum.)

Dimensions.—Diameter of the outer shell 0.27, middle 0.1, inner 0.04; cortical pores 0.01 to 0.02, bars 0.003; length of the spines 0.02, basal breadth 0.005.

Habitat.—Central Pacific, Stations 266 to 274, surface.

13. Actinomma arcadophorum, n. sp. (Pl. 29, figs. 7, 8).

Cortical shell very thin walled, with irregular, polygonal meshes, ten to twenty times as broad as the bars; twelve to sixteen on the radius. Both medullary shells with similar delicate network. Radial proportion of the three spheres = 1:2:6; numerous thin radial beams (forty to eighty or more) connect both medullary shells and alternate with other beams, which arise from arcade-shaped