Dimensions.—Diameter of the outer shell 0.2, middle 0.075, inner 0.003; cortical pores 0.01, bars 0.005; length of the spines 0.01.

Habitat.—Central Pacific, Station 271, surface.

## 4. Actinomma castanomma, n. sp.

Cortical shell as well as both medullary shells thick walled, with regular, circular pores, twice as broad as the bars; between them at each nodal-point one bristle-shaped radial spine, one-third as long as the radius, with conical base. Radial proportion of the three spheres = 2:3:8; only six radial beams between them (opposed in pairs in the three dimensive axes).

Dimensions.—Diameter of the outer shell 0.15, middle 0.06, inner 0.04; cortical pores 0.008, bars 0.004; length of the spines 0.025.

Habitat.—South Atlantic, Station 333, surface.

## 5. Actinomma entactinia, Stöhr.

Actinomma entactinia, Stöhr, 1880, Palæontogr., vol. xxvi. p. 93, Taf. ii. fig. 12.

Cortical shell as well as both medullary shells thick walled, with regular, circular pores, of the same breadth as the bars. Radial proportion of the three spheres = 1:3:8; radial beams between them very numerous (thirty to fifty or more?). Entire surface covered with short thick conical spines, only one-fifth as long as the radius.

Dimensions.—Diameter of the outer shell 0.16, middle 0.06, inner 0.02; cortical pores and bars 0.007; length of the spines 0.015.

Habitat .- Fossil in the Tertiary rocks of Sicily, Grotte, Caltanisetta.

## Subgenus 2. Actinommetta, Haeckel.

Definition.—Pores of the outer shell regular, of nearly equal size and similar form; spines not over the entire surface, but scattered at intervals (their number smaller than that of the nodal-points).

## 6. Actinomma japonicum, n. sp.

Cortical shell thick walled, with regular, circular, hexagonally framed pores, three times as broad as the bars. Both medullary shells with simple, circular, regular pores, of the same breadth as the bars. Radial proportion of the three spheres = 2:5:9; radial beams between them twenty, prolonged outside into twenty symmetrically disposed, three-sided pyramidal spines, as long as the radius.

Dimensions.—Diameter of the outer shell 0.18, middle 0.01, inner 0.04; cortical pores 0.01, bars 0.003; length of the spines 0.1, basal breadth 0.012.

Habitat.-North Pacific, Station 240, east of Japan, surface.