The genus Acrosphæra differs from its ancestral genus Collosphæra by the development of spines on the outer surface of the shell. These are either short, straight, radial spines, or oblique and often curved; their base is often inflated; they are irregularly scattered on the whole surface between the pores.

1. Acrosphæra erinacea, n. sp.

Shell a regular sphere, everywhere covered with small, very numerous, straight radial spines, regularly scattered between the pores. In the half meridian of the shell ten to twelve circular pores, all of the same form and size, double as broad as the bars. Spines bristle-shaped, very thin, solid, about as long as the diameter of the pores.

Dimensions.—Diameter of the shell 0.1 to 0.12, of the pores 0.008 to 0.012; length of the spines 0.01.

Habitat.—Tropical zone of the Atlantic, coast of Brazil, Rabbe, surface.

2. Acrosphæra echinoides, n. sp. (Pl. 8, fig. 1).

Shell a regular sphere, covered with numerous, straight, radial spines, irregularly scattered over the whole surface. In the half meridian of the shell twenty to thirty irregular roundish pores of variable size, one to four times as broad as the bars. Spines conical, strong, quite radial, at the top of small conical elevations, which are perforated by from three to six pores.

Dimensions.—Diameter of the shell 0.12 to 0.15, of the pores 0.002 to 0.008; length of the spines 0.015, of their basal zones 0.01.

Habitat.—South-east corner of the Pacific, Valparaiso, Station 298, surface.

3. Acrosphæra setosa, Haeckel.

Polysolenia setosa, Ehrenberg, 1872, Abhandl. d. k. Akad. d. Wiss. Berlin, p. 299, Taf. viii. fig. 10.

Shell a regular sphere, covered with numerous bristle-shaped radial spines, irregularly scattered between the pores. In the half meridian of the shell two to four very large circular pores (equal to one-third the radius), and between them numerous very small, point-like pores.

Dimensions.—Diameter of the shell 0.05 to 0.08, of the large pores 0.01, of the small 0.001; length of the spines 0.01 to 0.02

Habitat.—West Tropical Pacific, Philippine Sea, Station 206, depth 2100 fathoms.

4. Acrosphæra spinosa, Haeckel.

Collosphæra spinosa, Haeckel, 1862, Monogr. d. Radiol., p. 536, Taf. xxxiv. figs. 12, 13. Collosphæra spinosa, Cienkowsky, 1871, Archiv f. mikrosk. Anat., vii. p. 374, Taf. xxix. figs. 7-17.

Shell a regular or subregular sphere, covered with numerous, obliquely standing spines, irregularly scattered over the surface. In the half meridian of the shell fifteen to twenty irregular