## 12. Xiphosphæra ceres, n. sp.

Pores irregular, roundish, of different sizes, two to four times as broad as the bars. Sixteen to twenty pores on the half equator. Shell thin walled, with smooth surface. Pelar spines conical, about as long as the axis of the sphere, very thick at the base.

Dimensions.—Diameter of the sphere 0.15 to 0.2, pores 0.004 to 0.008, bars 0.002; polar spines 0.18 to 0.24 long, at the base 0.02 thick.

Habitat.—North Atlantic, Station 353, surface.

#### Xiphosphæra clavigera, n. sp.

Pores irregular, roundish, double contoured, of very unequal size, two to seven times as broad as the bars; ten to twelve on the half equator. Shell thick walled; surface a little rough. Polar spines club-shaped, with prominent edges, about half as long as the axis of the sphere; thinner at both ends than in the middle. (Differs from *Ellipsoviphus claviger*, Pl. 14, fig. 3, in the spherical shell and shorter spines.)

Dimensions.—Diameter of the sphere 0.2, pores 0.005 to 0.02, bars 0.003; polar spines 0.06 long, 0.02 broad.

Habitat.—Pacific, central area, Station 274, depth 2750 fathoms.

# Subgenus 4. Xiphosphæromma, Haeckel

Definition.—Pores of the spherical shell irregular, of different size or form; surface thorny or spiny (besides the two large polar spines).

# 14. Xiphosphæra vesta, n. sp. (Pl. 14, fig. 6).

Pores irregular, roundish, three to five times as broad as the bars; fourteen to sixteen on the half equator. Scattered on the surface of the thick-walled shell are from twenty to thirty strong three-sided pyramidal spines of unequal size, the largest twice as long as the largest pores. Polar spines very strong, nearly three-sided prismatic, with curved edges, nearly as long as the axis of the sphere and twice as broad as the largest pores.

Dimensions.—Diameter of the sphere 0.17, pores 0.01 to 0.02, bars 0.004; length of the polar spines 0.13, thickness 0.02 to 0.03.

Habitat.—Pacific, central area, Station 266, depth 2750 fathoms.

## 15. Xiphosphæra astræa, n. sp.

Pores irregular, roundish, one to two times as broad as the bars; ten to twelve on the half equator. Surface of the thick-walled shell covered with numerous short conical thorns. Polar spines cylindro-conical, one and a half to two times as long as the axis of the sphere.