spherical lattice-shell, enclosing the central capsule, arise two equal, free, radial spines, opposite to each other on the poles of one axis.

Subgerus 1. Xiphosphærantha, Haeckel.

Definition.—Pores of the spherical shell regular, of nearly equal size and form; surface smooth or a little rough, without spines or thorns (other than the two polar spines).

1. Xiphosphæra planeta, n. sp.

Pores regular, hexagonal, eight to nine times as broad as the thin bars. Ten to twelve pores on the half equator. Shell very thin walled; surface smooth. Polar spines three-sided pyramidal, about as long as the axis of the sphere, as broad at the base as one pore.

Dimensions.—Diameter of the sphere 0.12 to 0.13, pores 0.016 to 0.018, bars 0.002; length of the polar spines 0.1 to 0.15, basal thickness 0.02.

Habitat.—Pacific, central area, surface; Stations 271 to 274, depths 2425 to 2750 fathoms.

2. Xiphosphæra gæa, n. sp. (Pl. 14, fig. 5).

Pores regular, circular, with prominent hexagonal crests between them. On the half equator ten to twelve pores, of the same breadth as the crested bars. Shell thin walled; surface smooth. Polar spines three-sided prismatic, about twice as long as the axis of the sphere, twice as broad at the base as one pore.

Dimensions.—Diameter of the sphere 0.07 to 0.09, pores and bars 0.005; length of the polar spines 0.15 to 0.2, basal thickness 0.01.

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

3. Xiphosphæra venus, n. sp. (Pl. 14, fig. 2).

Pores regular, circular, with prominent hexagonal frames. On the half equator fifteen to eighteen pores, of the same breadth as the bars. Shell very thick walled; surface smooth, honeycomb-like. Polar spines conical, smooth, about as long as the axis of the shell, twice as broad at the base as one pore.

Dimensions.—Diameter of the sphere 0.12 to 0.13, peres and bars 0.005; thickness of the shell wall 0.013; length of the polar spines 0.12 to 0.15, basal breadth 0.01.

Haitat.—Pacific, central area, Station 272, depth 2600 fathoms.

4. Xiphosphæra luna, n. sp.

Pores regular, circular, hexagonally lobed or rosette-shaped, three times as broad as the bars. Ten to twelve pores on the half equator. Shell thick walled; surface smooth. Polar spines three-sided pyramidal, one to two times as long as the axis of the shell, as broad at the base as one pore