

1. *Xiphatractus armadillo*, n. sp. (Pl. 17, fig. 11).

Cortical shell thick walled, smooth, with regular, circular pores, about as broad as the bars; fifteen to sixteen on the half equator. Polar spines three-sided pyramidal, with thick, prominent edges, of irregular form; the longer about as long as the main axis, the shorter scarcely one-third as long; their basal breadth equals the diameter of the inner medullary shell.

*Dimensions*.—Major axis of the cortical shell 0·13, minor axis 0·1, thickness of its wall 0·01; pores and bars 0·005; main axes of the two medullary shells 0·07 and 0·03; length of the major polar spine 0·12, of the minor 0·04, basal thickness 0·04.

*Habitat*.—Pacific, central area, Station 272, depth 2600 fathoms.

2. *Xiphatractus euphractus*, n. sp.

Cortical shell thick walled, smooth, with regular, circular pores, twice as broad as the bars; eight to nine on the half equator. Each pore has six to nine excisions (commonly eight), elegantly lobed, flower-like (as in *Xiphostylus phasianus*, Pl. 13, fig. 9). Polar spines strong, angulate; the major pyramidal, longer than the main axis, the shorter elegantly pommel-like, scarcely one-third as long.

*Dimensions*.—Major axis 0·15, minor 0·12; pores 0·014, bars 0·007; main axes of the two medullary shells 0·09 and 0·05; length of the larger polar spine 0·16, of the shorter 0·05, greatest thickness 0·03.

*Habitat*.—South Atlantic, Station 332, depth 2200 fathoms.

Subgenus 2. *Xiphatractylis*, Haeckel.

*Definition*.—Network of the cortical shell regular or subregular, with meshes of nearly equal size and similar form; surface thorny or papillose.

3. *Xiphatractus spinulosus*, Haeckel.

*Stylosphaera spinulosa*, Ehrenberg, 1875, Abhandl. d. k. Akad. d. Wiss. Berlin, p. 84, Taf. xxv. fig. 8.

Cortical shell thin walled, with spiny surface, and large, regular, circular pores, four times as broad as the bars; seven to eight on the half equator. Spines between the pores of the same size, conical. Polar spines also conical, but much larger; the major about as long as the main axis, the minor scarcely half as long; their basal thickness equals the largest pores.

*Dimensions*.—Major axis 0·1, minor 0·08; pores 0·012, bars 0·003; diameter of the spherical Medullary shells 0·06 and 0·03; length of the major polar spine 0·09, of the minor 0·04, basal thickness 0·02.

*Habitat*.—Fossil in the Tertiary rocks of Barbados.