

polygonal pores and very thin thread-like bars, connected with the former by nine similar thin radial beams, which are prolonged outside into nine pyramidal main spines, as long as the radius. From each corner of the surface hexagon arises a bristle-shaped by-spine, half as long as the main spine.

Dimensions.—Diameter of the outer shell 0.16, inner 0.04; outer pores 0.008, bars 0.004; length of the main spines 0.08, basal breadth 0.01.

Habitat.—Mediterranean (Messina), surface.

4. *Heliosoma duodecilla*, n. sp.

Cortical shell thick walled, with regular, circular pores, of the same breadth as the bars; sixteen to eighteen on the radius. Medullary shell one-third as large, of the same structure. Twelve radial main spines, regularly disposed, cylindro-conical, longer than the shell diameter, as broad as two pores. Whole surface covered with short conical by-spines.

Dimensions.—Diameter of the outer shell 0.15, inner 0.05; outer pores and bars 0.007; length of the main spines 0.2, breadth 0.02.

Habitat.—South Atlantic, Station 333, surface.

Subgenus 2. *Heliosomura*, Haeckel.

Definition.—Pores of the cortical shell irregular, of different size and form.

5. *Heliosoma hastatum*, n. sp. (Pl. 28, fig. 4).

Cortical shell very thin walled, with large, irregular, polygonal meshes, three to six times as broad as the bars; four to six on the radius. Medullary shell one-third as large, with small, regular, circular pores. The two shells connected by twelve regularly disposed radial beams, which are prolonged outside into twelve very stout three-sided pyramidal main spines, somewhat longer than the radius, spear-shaped; each of the three wings in the middle part with one tooth. Scattered on the surface numerous by-spines of the same form, half as long and only one-fourth as broad.

Dimensions.—Diameter of the outer shell 0.1, inner 0.033; outer pores 0.06 to 0.013, inner pores 0.002, bars 0.002; length of the main spines 0.06, breadth 0.015.

Habitat.—Central Pacific, Station 271, depth 2425 fathoms.

6. *Heliosoma indicum*, n. sp.

Cortical shell thick walled, with irregular, roundish pores, twice to five times as broad as the bars. Medullary shell of the same structure, only one-fourth as large. Thirty to forty conical main spines, as long as the radius; between them numerous bristle-shaped by-spines, only half as long.

Dimensions.—Diameter of the outer shell 0.2, inner 0.05; outer pores 0.004 to 0.1, bars 0.002; length of the main spines 0.1, breadth 0.01.

Habitat.—Indian Ocean, between Aden and Socotora, surface, Haeckel.