Therefore the wings or lattice-plates have quadrangular meshes and lie in one meridian plane of the spine, not in a tangential plane (as in the *Acanthophracta*). Commonly the lateral ends of the four broad equatorial wings are so crossed that one lateral corner of each wing lies on the upper, the other corner on the under side of both its neighbours; but sometimes the meeting corners have grown together.

Subgenus 1. Lithopteranna, Haeckel.

Definition.—Four equatorial spines with transverse apophyses; sixteen others (eight tropical and eight polar spines) simple, without apophyses.

1. Lithoptera tetraptera, n. sp. (Pl. 131, fig. 9).

Four equatorial spines spindle-shaped, with latticed apophyses, each crossed by two transverse beams which are connected at equal distances by four rods parallel to the spine (therefore each wing with four square meshes in a single row). Lateral corners of the neighbouring wings not meeting. Sixteen smaller spines (eight tropical and eight polar) simple, conical, without apophyses.

Dimensions.—Diagonal of the square body 0.24; length of the inner square 0.16.

Habitat.—Tropical Atlantic, Station 348, surface.

2. Lithoptera mülleri, Haeckel.

Lithoptera mülleri, Haeckel, 1862, Monogr. d. Radiol., p. 398, Taf. xx. figs. 1, 2.

Four equatorial spines four-edged, with large latticed apophyses, each crossed by three transverse beams, which are connected at irregular distances by eight to twelve rods parallel to the spine (therefore each wing with two rows of rectangular meshes). The wings are placed not perfectly in the equatorial plane, but a little obliquely, so that each wing lies with one lateral corner on the upper, with the other corner on the under side of its neighbours. Sixteen smaller spines simple, thin, cylindrical, without apophyses.

Dimensions.—Diagonal of the square body 0.3; length of the inner square 0.17.

Habitat.-Mediterranean (Messina), surface.

3. Lithoptera lamarckii, n. sp.

Four equatorial spines four-edged, with large latticed apophyses; each crossed by three transverse beams, which are connected at short distances by twelve to sixteen rods parallel to the spine (therefore each wing with two rows of hexagonal or nearly elliptical meshes). Wings placed as in Lithoptera mulleri. Sixteen smaller spines simple, thin, prismatic, without apophyses.

Dimensions.—Diagonal of the square body 0.35; length of the inner square 0.2.

Habitat.—Central Pacific, Station 271, surface.