insufficient diagnosis *Dictyocoryne* was identical with his *Spongaster* (compare my Monograph, p. 467); but as the type of this latter genus (*Spongaster tetras*) figured by him, 1872, had four crossed arms, we retain this genus here separate.

Subgenus 1. Dictyocorynula, Haeckel.

Definition.—Triangular shell regular, with three arms of equal size and equal distance.

1. Dictyocoryne profunda, Ehrenberg.

Dictyocoryne profunda, Ehrenberg, 1872, Abhandl. d. k. Akad. d. Wiss. Berlin, p. 307, Taf. vii. fig. 23.

Arms of equal size and equidistant, club-shaped, in the outer circular half three times as broad as in the inner cylindrical half, and much larger than the small triangular central disk. Patagium complete, forming an equilateral triangle with rounded corners.

Dimensions.—Radius of the arms 0.14, basal breadth 0.025, distal breadth 0.07.

Habitat.—Pacific, Philippine Sea, depth 3300 fathoms, Ehrenberg; Station 198, depth 2150 fathoms; Station 274, depth 2750 fathoms.

2. Dictyocoryne tetradiscus, n. sp.

Arms of equal size and equidistant, club-shaped, their outer circular half is quite as large as the circular central disk, and is connected with it by the thin cylindrical inner half, which is scarcely one-fourth as broad. Patagium complete, forming an equilateral triangle with rounded corners and convex sides.

Dimensions.—Radius of the arms 0.16, basal breadth 0.02, distal breadth 0.08. Habitat.—Pacific, central area, Stations 271 to 274, in 2350 to 2750 fathoms.

3. Dictyocoryne euchitonia, Haeckel.

Dictyocoryne euchitonia, Haeckel, 1862, Monogr. d. Radiol., p. 468.

Arms of equal size and equidistant, lanceolate, twice as long as broad in the distal part, and three times as long as the small circular central disk. Patagium complete, forming an equilateral triangle with pointed corners. (Very similar to *Euchitonia köllikeri*, Monograph, 1862, p. 511, Taf. xxxi. fig. 6, but quite spongy, not concentric.)

Dimensions.—Radius of the arms 0.15, basal breadth 0.03, distal breadth 0.06.

Habitat.—Mediterranean (Messina), Haeckel.