Genus 468. *Dictyospyris*, Ehrenberg, 1847, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 54.

Definition.—Zygospyrida without basal feet, and without coryphal horns.

The genus *Dictyospyris*, the last and simplest of the twenty-eight genera of Zygocyrtida, may be regarded either as a primordial ancestral form of this large family, or more probably as the last and most reduced form of it. In the former case the total absence of coryphal horns and basal feet is primary, in the latter case secondary, effected by phylogenetic reduction and loss. But it is also possible that in one part of the numerous species of this genus the former case, and in another the latter takes place, and that one part of *Dictyospyris* may be directly developed from the Semantida or Coronida (the lattice shell becoming complete), another part arising from the Tripospyrida or Dipospyrida (the horns and feet becoming lost).

Subgenus 1. Dictyospyrantha, Haeckel.

Definition.—Basal plate with two large pores only (the primary jugular pores of Semantis).

1. Dictyospyris distoma, n. sp. (Pl. 89, figs. 11, 12).

Shell nut-shaped, smooth, or somewhat tuberculate, with deep sagittal stricture. Pores not numerous, large, roundish-polygonal; three pairs of large annular pores on each side of the ring. Basal plate with two very large pentagonal roundish collar pores.

Dimensions.—Shell 0.06 long, 0.08 broad.

Habitat.—Central Pacific, Stations 265 to 268, depth 2700 to 2900 fathoms.

2. Dictyospyris stalactites, n. sp. (Pl. 89, fig. 7).

Shell nut-shaped, covered with irregular ramified tubercles (like stalactites), with deep sagittal stricture. Pores not numerous, large, irregular, roundish. Two pairs of large triangular pores on each side of the ring (the inferior larger). Basal plate with two very large semicircular collar pores.

Dimensions.—Shell 0.07 long, 0.09 broad.

Habitat.—Central Pacific, Station 272, depth 2600 fathoms; also fossil in Barbados.

1 Dictyospyris = Net-basket; dixtuos, oxuels.