on the base of the shell (an odd posterior caudal tube and two paired anterior pectoral tubes). The two lateral buccal lobes are twice as large as the two anterior frontal lobes, and half as large as the posterior odd occipital lobe. The four tubes in this and the following species correspond probably to the four spines of *Cortina* (p. 950).

Dimensions.—Length of the shell 0.07, basal breadth 0.06.

Habitat.—Central Pacific, Stations 263 to 274, depth 2350 to 2925 fathoms.

## 6. Cannobotrys tetracanna, n. sp.

Cephalis multilobate, with four cylindrical curved tubes conical at their wider base, corresponding to those of the preceding species and to the four spines of *Cortina*. The odd occipital lobe is of about the same size as the anterior part of the shell, which is cleft into three pairs of roundish lobes, one pair of anterior larger frontal lobes, and two pairs of smaller lateral buccal lobes. Pores very few and minute.

Dimensions.—Length of the shell 0.11, basal breadth 0.07.

Habitat.—North Pacific, Station 253, depth 3125 fathoms.

## 7. Cannobotrys pentacanna, n. sp.

Cephalis quinquelobate, with five cylindrical slender curved tubes, three of which are placed in the sagittal plane (a superior apical, a posterior caudal, and an anterior sternal), whilst the other two are paired and diverge laterally (two pectoral tubes). The five tubes correspond exactly to the five typical spines of *Stephanium* (p. 952). The helmet-shaped occipital lobe of the shell is twice as large as each of the two anterior frontal lobes, and three times as large as each of the two lateral buccal lobes. Pores numerous.

Dimensions.—Length of the shell 0.07, basal breadth 0.04.

Habitat.—Western Tropical Pacific, Station 225, depth 4475 fathoms.

## Family LVII. LITHOBOTRYIDA, n. fam.

Definition.—Botryodea dithalamia, the shell of which is composed of a lobate cephalis and a simple thorax, without abdomen.

The family Lithobotryida comprises those Botryodea in which the shell is divided by a transverse annular constriction into a lobate cephalis and a simple thorax. They correspond therefore to the Dicyrtida among the Cyrtoidea, and to the Phormospyrida among the Spyroidea. The thorax, or the second shell-joint, is in all these three families a secondary production, arising from the base of the cephalis; therefore the Lithobotryida must be phylogenetically derived from the Cannobotryida.

Several species of Lithobotrys were first described by Ehrenberg as Lithobotrys and Lithocorythium. These two genera are, however, identical, as has been