

divided in two by the longitudinal muscles are turned over outside (like the brim of a hat). The very powerful muscles of the mouth and of the stomach lie in numerous folds projecting internally (figs. 2, 12).

The eight narrow radial canals (fig. 3, *cr*) which run at equal distances from the fundus of the stomach (fig. 3, *go*) to the periphery, are there opened into a narrow annular canal (fig. 3, *cc*; figs. 5–8, *cc*). In the transverse section these walls show numerous thick folds and tufts (*dp*), which proceed from the distal margin of the canal, and project freely into its lumen. As usual, the outer or umbral wall of the annular canal, which lies close to the marginal portion of the gelatinous substance of the umbrella (*n*), is covered by a flat, tabular epithelium (*dn*), whilst, on the other hand, the remaining portion or the subumbral wall is covered by high, cylindrical epithelium (*dw*). The latter also lines the tufts or folds of the lower wall of the canal. At their basal end (which is turned from the lumen of the canal), the very high cylindrical cells of the tufts contain granules of black pigment, enclosing a nucleus. These pigmented tufts (which resemble the intestinal tufts of the vertebrata) have probably secretive or excretive functions. (Comp. Pl. IV. figs. 5–8, and explanation.)

The eight genitalia or reproductive glands (figs. 2–3, *sc*) hang in the proximal halves of the eight radial canals, as visible sacculations from it (four perradial and four inter-radial). These appear as wide, fluted, thick-walled, egg-shaped, or fusiform sacs. A radial mesogonium (or genital mesentery) rises in the middle of the subumbral wall of each sac, as a thick vertical fold of the subumbrella, which passes from the basis of the stomach to the umbrella margin (fig. 3, *wr*). These eight mesogonia attach the corners of the stomach, halve the eight genitalia, and divide the space of the umbrella cavity into the eight above-mentioned umbrella funnels, or the peripheric niches of the umbrella cavity.

Pectis,¹ Hæckel, 1879.

Trachynemidæ with eight genitalia in the course of the eight radial canals, between which blind centripetal canals run from the annular canal. Genitalia connected with the basis of the stomach by eight radial mesogonia or leaf-shaped mesenterial bands. Oral cavity with eight invaginated oral funnels, and sixteen evaginated side pouches. Tentacles with sucking-cups very numerous, closely crowded together in several rows above each other on the umbrella margin. Numerous (8 or 16 ?) auditory clubs.

The genus *Pectis* is strikingly distinguished from both other genera of Pectyllidæ by its blind centripetal canals, which run out in large numbers from the annular canal (as in *Olindias* among Petasidæ, *Glossoconus* and *Glossocodon* among the Liriopidæ, *Carmaris*

¹ Πηκτις, hardened, stiffened.