

coronal furrow of the exumbrella (figs. 1-3, 6). The twenty-five tentacles of our *Polycolpa forskalii* are $1\frac{1}{2}$ to 2 times as long as the diameter of the umbrella, and are sometimes curved upwards like a crown (as in *Pegantha pantheon*, Pl. XI. fig. 1), sometimes turned downwards under the umbrella (Pl. X. fig. 2); they are cylindrical, cartilage-like filaments, somewhat thickened at the bases, becoming gradually pointed finely towards the end, and combining a high amount of stiffness and firmness with considerable elasticity. The solid chordal axis resembles the chorda dorsalis of the vertebrata, and consists of large, clear, thick-walled endoderm cells, which have a firm elastic membrane, transparent contents, and a large nucleus. The chordal axis of each filament forms a single row or column of such coin-shaped chordal cells (comp. Pl. XII. figs. 10, 11). Its exodermal epithelium contains numerous spheroid nematocysts, especially in the abaxial side of the filament. The clear conical tentacle root is also composed of thicker chordal cells, it penetrates radially (centripetally) some way from the insertion of the tentacles into the gelatinous substance of the disk, and often lies, bent like a hook, with its lower oral side on the periphery of the stomach (Pl. X. fig. 3, *tr*; fig. 7). A net of branched protoplasmic filaments radiating from the layer surrounding the nucleus is visible in each chordal cell of the root (fig. 7). The endodermal supporting plate, which encloses the chordal axis of the tentacles like a tube, also surrounds the root up to the point, which, on the other hand, the layer of longitudinal muscular filaments (lying outside the endodermal supporting plate) does not. "Umbrella clasps" or peronia, which appear so strongly developed in *Cunarcha* and *Æginura*, are only rudimentary in *Polycolpa* and *Pegantha* as in most Peganthidæ. As the deep indentations of the umbrella margin extend between each two lobes almost to the base of the tentacle, the peronia are naturally so much shortened that they almost disappear. By their retrograde formation the insertion of the tentacle remains in continuous direct connection with the urticating ring as it passes immediately into the former at the base of the lobes. The interlobar points of the velum, therefore, also extend to the tentacle root between each two lobes (fig. 6).

Polycolpa forskalii has 130 to 170 auditory clubs, 5 to 7 on each of the twenty-five lobes (fig. 6). One of them is placed on the point of the lobe, the others (in pairs opposite each other) on its lower lateral margin. Their structure is the same as those previously described in *Cunarcha*. Here, however, each of the 3 to 4 endodermal axial cells usually contains an otolite (fig. 8, *ol*). The otoporpæ or "auditory clasps" at their bases (fig. 8, *oo*) are club-shaped urticating streaks of the exumbrella covered with ciliated sense-epithelium with larger and smaller nematocysts (fig. 8, *n*). Their other functions are the same as in *Pegantha pantheon* (comp. Pl. XI. fig. 4).

The gastrovascular system (figs. 1, 3, 6, 8) has the special formation, peculiar to all Peganthidæ, which distinguishes this family of the Medusæ from all the rest. It consists of two principal sections, the central stomach and the peripheric festoon canal (fig.