

line of the pyloric opening (*gy*, figs. 12, 13), into two distinct sections of equal height, a lower distal half, and an upper proximal half. The lower or distal half of the funnel (or the "central funnel," fig. 16, 17, *ic*) lies in the outer surface of the central stomach (*gc*); its inner or axial wall is formed by the obelisk plates (*yz*) of the central stomach, its outer or abaxial wall by the subumbrel wall of the coronal sinus (*cs*). The upper or proximal half of the funnel (or of the "basal funnel," fig. 14, *ib*) is encircled by the four niches of the basal stomach (*gn*), and is only joined to the inner wall of the gelatinous umbrella at the interradial line (fig. 14, *ug*). The four funnel cavities of the Peromedusæ are homologous with those of the Stauromedusæ and the Cubomedusæ, and may also be comparable to the subgenital cavities of the Discomedusæ, the respiratory cavities of older authors on the medusæ. In fact, they may serve both as means of respiration and locomotion, as they are emptied by each systole of the umbrella and filled with fresh water by each diastole; their wall is firm, but very thin.

The inner concave umbrella wall or subumbrella, shows a highly developed system of strong swimming muscles, evolved from the more simple muscles, which I distinguished in the Stauromedusæ as the distal coronal muscle and the proximal bell muscle (comp. my System der Medusæ, 1879, pp. 366, 382, 399, 456, taf. xxi. xxx., &c.). The coronal muscle ("musculus coronaris," *mc*) is improved into a powerful broad band, and more strongly developed than in all other Acraspedæ. It consists of powerful leaves of the circular muscle, whose thick supporting plate rises above the subumbrel surface in the form of 10 to 12 strong circular folds; the height of these circular folds (*mc*<sub>2</sub>) decreases from above to below, their breadth increases (Pl. XIX. fig. 6; Pl. XXI. fig. 8; Pl. XXII. fig. 22, *mc*). The upper or proximal margin of the coronal muscle (figs. 8, 22, *mc*<sub>1</sub>) forms a simple circular line, corresponding with the distal margin of the large circular sinus. The lower or distal margin of the coronal muscle (figs. 8, 22, *mc*<sub>4</sub>) forms sixteen triangular, subradially projecting points which run as far as the middle of the marginal lobes. The whole coronal muscle is therefore divided by sixteen selvages into sixteen quadrangular areas, the coronal plates ("tabulæ coronares"). The four interradial ("ocular") are somewhat narrower than the remaining twelve ("tentacular"). They are divided by the lobe clasps ("loboporpæ," *kl*), the longitudinal fused selvages, which divides each marginal lobe into two halves (comp. pp. 66, 67); they serve at the same time as firm cartilage-like selvages for the insertion of the circular muscular fibres. Each quadrangular coronal plate corresponds, therefore, to the adjacent halves of two marginal lobes, and connects them most closely. Four of the muscular areas correspond at the same time to the four interradial sense clubs, whilst the twelve others correspond to the tentacles. The two lateral margins of each muscular area (formed by the lobe clasps) are straight, and converge upwards; the lower or distal margin is the larger, and sinuated concavely; the upper or proximal margin is convex, and touches alternately the basis of the deltoid muscles and the distal end of the genitalia.