

same of course holds good of the coronal pouches whose subumbral wall forms the folded muscular areae. In the middle of the lower or distal margin of each coronal pouch, just where its two lobe pouches opens into it, a canal also runs out from it between the two lobe pouches which leads into the tentacle inserted in the coronal pouch. The four interradianal sense canals ("bursae sensillares," *bo*) which provide for the four sense clubs, are short and simple, and swell into a spheroidal vesicle ("ampulla rhopalaris," *oa*; Pl. XIX. figs. 2-3; Pl. XXII. fig. 22; Pl. XXIII. figs. 31, 32, *oa*) at the basis of each sense club (on the axial side). The formation of the twelve tentacle canals (of which four are perradianal and eight adradial) is more complicated. At the tentacle basis, below the two tentacle roots, these canals can be closed by the peculiar double valvular vent-hole already described (comp. p. 68, and Pl. XXII. fig. 22, *yk'*, *cx*).

These complicated anatomical conditions of the peripheric pouch corona are more difficult to understand, inasmuch as each of the twelve tentacular coronal pouches (but not the four ocular coronal pouches) are divided into two pouches by an imperfect tangential septum (Pl. XXII. fig. 22; Pl. XXIII. fig. 29). These two pouches, the inner or axial velar pouch (*bc'*), and the outer or abaxial avelar pouch (*bc''*), communicate by a longitudinal cleft in the middle of the septum which divides them ("fissura septalis," *bc'''*). This peculiar complication arises from each tentacle sending out above at its insertion (between two marginal lobes) two diverging centripetal muscles, the root muscles of the tentacles (*mk*) already described. These invaginate the lower or distal margin of the coronal pouch in such a way that each tentacle root is surrounded by a conical ectodermal hollow space, the funnel cavity of the tentacle root (*it*). The caecal end of this funnel cavity extends to the upper or proximal margin of the coronal muscle where the point of the tentacle root is inserted. The septal fissure, by which the axial velar pouch communicates with the abaxial avelar pouch, remains between the two bifurcate diverging tentacle roots (*mk*). The "septum velare" (*wm*), which itself is hollow and separates the two pouches, has consequently a very complicated formation. It is formed by two parallel lamellae of the velar fold, which only pass into one another above at the proximal margin of the coronal pouches and at the two margins of the septal fissure. The space between the two lamellae, the funnel cavity of the coronal pouch ("infundibulum coronare," *ic*) is lined by the ectoderm of the subumbrella, and divided into a distal simple "funnel cavity of the tentacle base," and two diverging caecal horns running proximally from it, the two "funnel cavities of the tentacle roots" (*it*). The muscular wall of the delicate membranes which separate these cavities forms part of the invaginated coronal muscle, and is laid in delicate folds, as is best seen from the figure of the partially-opened coronal muscle in Plate XXIV. fig. 1.

Genitalia ("sexualia," *s*; Pl. XIX. fig. 6; Pl. XX. fig. 8; Pl. XXI. figs. 17 18; Pl. XXII. figs. 38-40). The single specimen examined of *Periphylla mirabilis* was a mature male, whose testes had shed most of the spermatozoa. The testes