and some an unlimited number; the former appear to me to be the most specialised forms. The Myzostomida Caudata with the caudal appendages have originated from discoid forms (see p. 8), in which some of the cirri have taken on a special development, whereas the Myzostomida Cysticola would seem to be retrograde forms, from the absence of suckers and the rudimentary radially arranged parapodia, as well as from the presence of muscular septa and the central convergence of the parapodial muscles. They have probably originated partly from the stout sessile species and partly from the more delicate free living species, as shown by the fact that the cirri are sometimes entirely absent (Myzostoma cysticolum), and sometimes, on the other hand, highly developed (Myzostoma willemoesii) in both sexes. The last-mentioned species is also remarkable from the fact that both sexes possess well-developed suckers, and shows therefore a less degree of degeneration than the other cysticolous forms; also the male has the typical ramified form of the testis found in the free living species, and not the compact rounded organ of the other Myzostomida Cysticola.