the form of a groove, rendering the hooks visible along their whole length (*Myzostoma wyville-thomsoni*, Pl. VI. fig. 1). The parapodium is thus divisible into two parts,—a larger basal portion, completely enclosing the hook-apparatus, and a grooved terminal portion. This form of parapodium is the extreme of a series which commences as a single wart-like prolongation, and then in correspondence with the development of the ventral muscular mass, shows a more or less distinct division into two parts, which becomes more and more marked.

In the description of species the distance of the parapodia from the margin of the body is given; this distance varies greatly, inasmuch as the parapodia are sometimes on the very edge of the body and sometimes crowded together at its centre; the point of insertion is often difficult to fix, since it is only marked distinctly on the external side of the parapodium, and ends on the inside in a centripetal elevation formed by the musculus centralis.

Hook-apparatus.—The two portions of this apparatus—the pointed hook (*uncinus*) and the supporting rod (*manubrium*) provided with a terminal end plate to direct the movements of the first—I have shown (*loc. cit.*, pp. 32, 33) to vary considerably in form according both to the species and the age of the individual examined. My recent investigations lend additional support to this statement, and I have not therefore paid much attention to these structures in fixing the species, especially as I was unable of course to mutilate unique specimens in order to examine them closely enough. The manubrium and the other parts of the hook-apparatus may fluctuate very widely in respect of structure and proportions in the parapodia of one and the same individual (*e.g.*, *Myzostoma horologium* and *Myzostoma gigas*).

The parapodia of the Myzostomida Cysticola become insignificant wart-like structures, and in the female of those species in which the sexes are separate there is no trace of the parapodia remaining, save a very feeble hook-apparatus, the muscles of which are very much reduced. It appears also that the column of the hook and manubrium are not, as I formerly thought, hollow, but in many species at least solid. When the hooks of *Myzostoma horologium* are treated with strong potash, the manubrial plate loses its refractive power, and nothing remains but a finely granular organic basis (Pl. I. fig. 17); then the column begins to flake, peels off in concentric layers, and there remains at length a central rod of a firmer consistency, which is only destroyed after being subjected for a longer time to the influence of the reagent. The same phenomena were observed in the large hooks of *Myzostoma gigas* (Pl. II. fig. 4).

Suckers.

It is interesting to find that there are some forms entirely unprovided with suckers, as, for instance, *Stelechopus* and many species of *Myzostoma* (*Myzostoma pulvinar*, *Myzostoma folium*, *Myzostoma coronatum*, *Myzostoma carinatum*, and all the encysted