

to be the ventral surface of the body, the presence of the central nervous system conclusively proves it to be so, since this structure, as already stated, lies between the ventral muscular mass and the ventral wall of the body; in this way the opposite side of the body bearing the mouth and cloacal aperture must be regarded as the dorsal surface, since the intestine never lies below but always above the central muscular mass.

The two European species—*Myzostoma glabrum* and *Myzostoma cirriferum*—though they by no means represent the two extremes of the series, exemplify two groups which differ from each other in another respect. In the one the body is stout and massive and of a solid consistence; the back is usually vaulted; as a rule there are no cirri, or they are, if present, represented by short inconspicuous processes; the ventral surface is bulged out by the strongly developed muscular mass, and from this central elevation a number of smaller ridges run to the bases of the parapodia, and between them still smaller ridges connect the central elevation with the suckers. These ridges appear to be produced by the muscles of the parapodia—especially the *musculus centralis*—and the suckers; two other ridges, one running forwards and the other backwards, correspond to the pharynx and cloaca. On the dorsal surface one sees very often five pairs of feeble elevations, which mark the position of the base of the hook-apparatus, and in *Myzostoma testudo* become very much enlarged. Sometimes (*Myzostoma costatum*) the whole intestine shows itself on the outside, in the form of a series of elevated ridges.

In the other group the body is thin, flat, membranous, and somewhat transparent, with a more highly transparent marginal border, which is owing not merely to the slighter development of the muscles, but to the fact that the ramifications of the intestines and genital glands do not quite extend to the periphery of the animal (fig. 1). The greater delicacy of the body in this group is owing to the slighter development of the muscles of the body, especially of the ventral muscular mass; but the presence of a more transparent marginal border is not confined to these forms. The second group is also characterised by the possession of long cirri or cirrus-like processes of the margin of the body. The number of these is not limited to twenty, but occasionally exceeds that number.

There are, it is hardly necessary to say, numerous transitional forms, which unite the two groups, and can be with difficulty assigned to either; among these are the very remarkable forms distinguished by the possession of two, four, or six finger-like caudal appendages such as *Myzostoma lobatum* and *Myzostoma fissum*.

Colour and Sculpturing of the Skin.

As might be expected, the group containing the larger and stouter forms displays most variety in colour and sculpturing, though only on the dorsal surface—the ventral surface being always of a uniform dull yellow or brown. The second group are nearly all yellow or brown—the prevailing colour of the *Myzostomida*—with a somewhat lighter coloured