

## GENERAL MORPHOLOGY OF THE BODY.

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### *Form of the Body.*

All the Myzostomida hitherto known are characterised by the peculiar radial arrangement of the organs of the body. Corresponding to its disk-like form, we find the ten parapodia situated at pretty equal distances from each other, so that the whole body is divided into ten regular "parapodial sectors"; on the boundary lines between each of these are the eight suckers, the oral and the cloacal apertures. The sectors are separated inside the body by an equal number of radially arranged muscular septa, which thus form a number of similar compartments. The same radial arrangement is seen in the muscles of the hooks, especially in the strong muscoli centrales, which unite in the middle of the body in a large muscular mass. In certain species where the axis of the body becomes lengthened, and so disturbs the circular arrangement of the suckers and parapodia, the radial character is nevertheless retained by the compartments, each corresponding to a single parapodium.

In the present Report several species will be described in which this radial arrangement is entirely lost; in some cases (*Myzostoma folium*) the body is greatly lengthened and the parapodia and suckers are situated in two parallel lines, while in the new genus *Stelechopus* not only has the external radial symmetry disappeared, but the muscular septa and the muscles of the parapodia are no longer convergent. In *Stelechopus* the septa are situated one behind the other at right angles to the axis of the body, running from the body-wall to the intestine, and the parapodia show the same bilateral symmetry, and their muscles are not united into a central muscular mass (Pl. XVI. fig. 1). If, as I have already<sup>1</sup> tried to prove, the radial arrangement of the musculature is indeed an adaptation to the mechanism of fixation, the want of this radial arrangement in *Stelechopus*, which undoubtedly moves about freely, must be regarded as the primitive arrangement.

*Myzostoma glabrum* has been until now the only exception to the general rule that the apertures of the body, as well as the parapodia and suckers, are situated upon its ventral surface; in this species the cloacal aperture is dorsal. I shall have in the present Report to describe two new species (*Myzostoma pulvinar* and *Myzostoma calycotyle*) in which the oral and cloacal apertures are upon one side of the body, while the parapodia and suckers are upon the other. If the parapodia alone be not sufficient to determine that

<sup>1</sup> *Loc. cit.*, p. 44.