

*Stelechopus*, n. gen.

The body is flat and long, the mouth at the anterior margin, the cloaca at the posterior; alimentary canal with no ramified cæca. Five parapodia on each side on the margin of the ventral surface, each one of which contains a fine long hook, and a supporting seta. The parapodia are entirely independent of each other, the parapodial muscles being very simple, and the radial muscoli centrales, connected in the genus *Myzostoma* with a central muscular mass, are here absent. Instead of the radial muscular bundles (septa), there are numerous parallel muscular bundles joining the intestine to the body-wall. Suckers are wanting.

68. *Stelechopus hyocrini*, n. sp. (Pl. XVI. figs. 1-7).

The principal features in the organisation of this, the only species of *Stelechopus*, are stated in the generic definition. It appears to be undoubtedly the lowest form of Myzostomida, and ought therefore to decide the question concerning the affinities of the group with certain lowly organised Arthropoda (Tardigrada, Linguatulida). This affinity was formerly brought forward by me (Genus *Myzostoma*, p. 71), and I there proposed to unite the three groups into a single Class—*Stelechopoda*. It is therefore greatly to be regretted that the only specimens (nine individuals mounted in Canada balsam by v. Willemoes Suhm) which I received from Mr. Murray in November 1882, do not permit of an accurate study of the anatomy of this form. Any one having at his disposal abundant fresh material could undoubtedly render a great service to science.

Fig. 1 is a drawing which shows all that could be made out from all the different specimens; it is a combination figure. The specimen, however, from which the contour was drawn had been greatly squeezed, and the figure therefore does not give a right idea of the external form, and must be supplemented by a comparison with figs. 2-4.

The body when extended has a general similarity to a Tardigrade; the lateral margins are nearly parallel, and become somewhat narrowed at either end of the body. The anterior extremity is sometimes conical in form and highly prominent (fig. 1), sometimes retracted, and then looking as if truncated; the posterior extremity always projects as a conical caudal appendage (CA) between the last pair of parapodia. The largest specimen measured 3.5 mm. long with a greatest diameter of .9 mm., the smallest was 1 mm. long and .34 mm. broad. The caudal appendage of the former had a length of .07 mm., of the latter .06 mm. The body is flattened, and covered by a chitinous cuticle, reaching a thickness here and there of .006 mm. in the largest specimen, highly refracting and yellowish in colour. Towards the mouth and cloaca, and at the end of the parapodia