

appendage, and a crenate shorter one. The smooth branchial processes (second and third) are absent.

The feet differ in shape from those of the species mentioned. Thus at the fourth the outline of the superior lamella is more convex externally, and the inferior lamella is smaller. The bristles are also considerably shorter and stouter, both dorsally and ventrally, in the new form. The differences become more pronounced at the tenth foot, in which the long ventral bristles are much more delicate than those of the dorsal division, and the lamella of the setigerous region is less prominent. In the Challenger form, moreover, the tenth foot has hooks, whereas none occur in that of *Prionospio steenstrupi*. The shorter and stiffer dorsal bristles are also characteristic.

In regard to the minute structure of the hooks of the new species it is found that there are several denticulations above the great fang (Pl. XXIVA. figs. 7, 8), the smaller hooks, perhaps, showing these structures somewhat better than the larger, as they are more readily seen in profile.

The structure of the body-wall is nearly the same as in *Prionospio steenstrupi*, though the longitudinal dorsal muscles form a thinner layer on each side. The hypoderm is thicker laterally and ventrally. In both the neural canals are large. The pharyngeal wall has externally a circular layer, then the basement tissue upon which the folded glandular coat rests. In this region (anterior third) it also presents a muscular sheath of external circular and internal longitudinal fibres, while various strong muscular fasciculi, apparently connected with protrusion and retraction, are attached to the sheath superficially. A large blood-vessel occurs over the insertions of the oblique muscles inferiorly, and another between the longitudinal dorsal muscles superiorly. Numerous minute ova existed in the perivisceral chamber.

In his remarks on *Prionospio steenstrupi* from Madeira, Langerhans<sup>1</sup> describes and figures the great "Leydig'schen Fasern" of the ventral nerve-cord. As this species possesses two large neural canals towards the upper surface of the nerve-cord, some discrepancy appears to be present, for Langerhans shows only a single median dark band under the action of osmic acid.

#### Family CIRRATULIDÆ.

The two divisions of the Cirratulidæ represented in the collection are separated by a wide interval in regard to habitat. Thus the genus *Cirratulus* is almost entirely a littoral form, abounding under stones in muddy and even odoriferous localities; while *Chatozone* frequents the deeper water, descending in the present case to 1250 fathoms, and apparently being partial to the blue mud, in which it probably burrows. This genus,

<sup>1</sup> *Zeitschr. f. wiss. Zool.*, Bd. xxxiv. p. 91, Taf. iv. fig. 3 1880.