

wide ocean but a slight chance that infected intermediate hosts become the prey of the final victims.

The Acanthocephala, Gordiacea, and Trematoda are altogether unrepresented in the Challenger collection. The absence of the first is perhaps only accidental; while the Gordiacea are entirely fresh-water forms, and the Trematodes are, as free-swimming larvæ, too delicate to withstand the pressure of a deep-sea life, and are restricted either to quiet fresh-water basins or to sheltered littoral regions.¹

A. NEMATODA.

1. *Ascaris simplex*, Rudolphi (*non* Dujardin) (Pl. I. figs. 1-4).

Specimen labelled: "Ascaris from stomach of *Otaria jubata*, January 27, 1874. Kerguelen Island."

The vessel contained thirteen specimens, of which the largest was 79 mm. long and 2.2 mm. broad. The upper lip is semicircular, with an anterior protrusion; the pulp sends two cylindrical protrusions into the latter, and these are rounded off anteriorly; the anterior end bears a dentigerous ridge with pointed teeth; there are no accessory lips; the upper lip (0.12 mm. across) is much smaller than the two under lips (0.30 mm.). The cuticle exhibits transverse wrinkles (0.023 mm. in breadth), between which there are again finer markings about eight times as narrow. The lateral areas are 0.23 mm. in breadth, the dorsal and ventral regions measure 0.035 mm. The male is 37 mm. in length, and 0.9 mm. in breadth; the tail bears on each side of the very extremity four conical papillæ; two or three others of a round form occur just in front of the cloaca; at each side of these six others shortly stalked, and again in front an inconstant row of fifty or more. Krabbe has given a good representation of the posterior end of the male, in which the long cirri (1.68 mm. in length) are seen to exhibit a sabre-shaped curvature. In the female, which measures 79 mm. in length, and 2.2 mm. in breadth, the anus is situated at a distance of 0.48 mm. from the tail end; the latter is rounded, and bears embedded in the cuticle a small styliiform process. The vulva lies somewhat in front of the middle of the body, and the anterior region thus defined bears to the posterior the proportion of three to four. The ova are spherical. The hyaline sheath, separated by a considerable interspace from the large yolk (0.036 mm.) which it surrounds, bears small roundish elevations, and measures 0.052 mm.

Ascaris simplex was first described in a few words by Rudolphi,² who discovered it in *Delphinus phocæna* and *Delphinus gangeticus*.

¹ Notices of one Acanthocephalan, two Trematodes (one of which comes from deep water), and some *Gordii* will however, be found in the Appendix.

² Entoz. Hist. Nat., Amstelædami, 1808-1810, ii. p. 170; Synopsis, Berolini, 1819, pp. 49, 54, 296.