

The hyaline cuticle invests the body with an almost gelatinous coating. It is abundantly studded with granules, and numerous elongated glands, which are filled with minute cells and granules. The glands probably furnish a secretion, as in others of the group.

The muscular body-wall beneath the latter is tinted of a brownish hue.

The mouth leads into a dark brownish thickly walled pharynx, which in the preparation is somewhat moniliform. The latter terminates in a firm, white, and nearly cylindrical region, somewhat narrowed posteriorly, where it merges into a longitudinally furrowed glandular part continuous with the intestinal canal. The latter shows by and by a change in colour.

The nervous system (Pl. XLV. fig. 2) is beautifully shown on the ventral surface as a double cord, with two ganglia placed antero-posteriorly in each segment, the larger being in front and the smaller behind.

The condition of the specimens is unfortunately unfavourable for the examination of their minute anatomy, so that this must for the present be postponed. Sufficient was seen, however, to indicate that this will prove a most interesting and productive inquiry.

It is remarkable to find this peculiar type stretching over so vast an area in mid-ocean, and at such a depth.

#### Family CHÆTOPTERIDÆ.

Representatives of this family are present in most collections, though none occur in the Philippine series of Prof. Grube. The latter mentions two in his account of the Annelids of the "Gazelle"; while Kinberg and Schmarda each describe the same number. It is noteworthy that no example comes from the Strait of Magellan, from which two species have already been procured, in addition to an undescribed ringed tube in the British Museum from the same locality.

Both forms found by the Challenger come from comparatively shallow water, for little weight can at present be placed on the empty tubes dredged in deep water off the American coast. *Spiochætopterus typicus* of Sars, however, was obtained at a depth of 557 fathoms in the "Porcupine," and there is no reason why this and others should not descend to a much greater depth.

The distribution of the family is extensive, since it ranges from the extreme north to the extreme south.

#### *Phyllochætopterus*, Grube.

*Phyllochætopterus claparedii*, n. sp. (Pl. XLV. figs. 9, 10, 10 $\alpha$ , 11; Pl. XLVI. fig. 1; Pl. XXIV $\alpha$ . figs. 1-5).

*Habitat*.—Dredged in considerable abundance from the two following Stations:—  
Station 233 (off Kōbē, Japan), May 17, 1875; lat. 34° 39' N., long. 135° 14' E.; depth, 8 fathoms; surface temperature, 62°·3; sea-bottom, mud.