

The segments resemble those of the common *Ephesia gracilis*. Dorsally is the large globular appendage, which exhibits a much more minute papilla than in the latter form. Internally the globular processes have the elongated granular structures. The skin of the foot is likewise covered with many papillæ. A single spine supports the foot, the bristles in which differ from those of *Ephesia gracilis* in having the terminal piece less hooked as well as distinctly differentiated from the end of the shaft (Pl. XXIIA. figs. 22, 23). The terminal piece forms a somewhat conical process with an oblique base, the dorsal margin being slightly convex, the ventral slightly concave. The shaft is somewhat curved, and is dilated at the tip below the bevelled articular surface. The bristles are very translucent, and approach those of *Ephesia canadensis*, a species, however, which differs in other respects from this form.

Ephesia antarctica is a very large example of the genus, and yet it inhabits uncongenial waters.

The muscular intestine contains a central whitish mass of minute Diatoms and other organisms composing the ooze. The muscularity and elasticity of the alimentary canal are remarkable.

The cuticle in this form is tough and hyaline, but the hypoderm and the circular muscular coat are feebly developed. The longitudinal muscles have about the same proportional thickness as in *Ephesia gracilis*. The ventral longitudinal muscles are divided into two distinct regions by oblique fibres which pierce them in a direction from above inward and downward. In the interganglionic regions the oblique muscular fibres form a well-marked cross beneath the isolated nerve-cords, which are nearly round, with a central granular area and a pale firm investment. Towards the anterior third the proboscis fills up the entire space within the body-wall. Externally (in retraction) is a dense longitudinal coat, the fasciculi of which are somewhat radiate. A thick circular layer, the fibres of which are interwoven, follows on the inner side, then a slightly developed hypoderm, and internally a dense cuticular layer elevated into many prominent frills, each having a central axis of hypoderm.

Family CHLORÆMIDÆ.

The distribution of this family is in some respects noteworthy, both as regards area and depth. Thus most of the specimens described by former voyagers come from shallow water or between tide-marks, but the explorations of the Challenger have carried these peculiar forms to a depth of 2500 fathoms, or nearly twice the depth at which the naturalists on board the "Porcupine" had found *Trophonia glauca*, Malmgren. Moreover, the wide distribution of the remarkable intermediate type, *Buskiella abyssorum*, is interesting in connection with the view that the ancient forms have been gradually driven into the great depths by the more recent types attaining supremacy in the shallower water.