

body of the hook in a direction parallel to the dorsal line. The sinus beneath the great fang is somewhat larger than in the type formerly described. The posterior uncini show a much more elevated crown, a more distinct inflection of the dorsal line, and about eight teeth above the great fang.

The food of this species consists of mud, containing numerous Diatoms, several fine varieties of *Challengeria*, small bivalves, minute ova, and other structures.

The tubes have less of the free habit noticeable in the former type of *Serpula narconensis*, being attached to shells, sea-weeds, and sponges; several tubes, moreover, being frequently connected together by their sides. The trumpet-like expansion of the terminal portion of each tube is well developed, and the rings thus formed, by apparently alternate stationary intervals and periods of active growth, occur toward the anterior ends, but they are fewer in number than in the much larger form from Kerguelen. Some of the tubes are tinted of a pinkish hue, as in *Serpula vermicularis*, and there is a greater tendency to form coils on shells and other organisms than in the previous type, the anterior portion of the tube projecting upward in a more or less erect condition, as in *Serpula vermicularis*.

The body-wall of this form is slow in assuming the typical arrangement, since section at a corresponding point in the anterior third shows a more delicate arrangement of the hypoderm, the thicker ventral belt diminishing toward the middle line. The massive dorsal longitudinal muscles are separated by a wide median interval, and they pass toward the wall of the alimentary canal inferiorly. The longitudinal ventral muscles are lateral in position, the large nerve-cord being below them. Moreover, no neural canal is visible. The very long ventral hiatus has from the nerve-cord inward the following structures, viz., a band of fibres from the inferior edge of the longitudinal dorsal muscle, a series of fibres connected with the sheath of the alimentary canal, and which pass from the median hiatus of the dorsum to form a loop over the ventral median line, lastly a thin plate of longitudinal fibres within the circular coat on each side of the central region.

The relation of Kinberg's *Zephyrus loveni*, from the same locality, to this species is uncertain.

*Serpula philippensis*, n. sp. (Pl. LIV. fig. 7; Pl. XXIXA. fig. 28).

*Habitat*.—Trawled at Station 205 (off the Philippine Islands), November 13, 1874; lat. 16° 42' N., long. 119° 22' E.; depth, 1050 fathoms; bottom temperature 37°·0, surface temperature 82°·0; sea-bottom, blue mud.

This small form is fragmentary, its tube being attached to what appears to be a piece of wood. The tube (Pl. LIV. fig. 7) is coiled in various ways, the smaller end being marked by two longitudinal furrows, while the larger anterior end exhibits these