

disk are fewer, and the conical apices are longer and more acute. Thus, for instance, a British example of *Serpula vermicularis* has forty-six complete radii, one or two having double apices; whereas in the form from Kerguelen there are thirty-five radii, one having the apex double.

The anterior bristles, which occupy seven pairs of setigerous processes, are stronger and larger than in *Serpula vermicularis*, with the tip very finely tapered (Pl. XXXIA. fig. 23). The wing is comparatively narrow. The usual shorter and more slender series occur in each tuft.

The hook shown in the previous publication (Transit of Venus Exped., Phil. Trans., vol. 168, pl. xv. fig. 16) is less broadly triangular than usual.

The food of those from Station 151 (off Heard Island) consisted of Diatom ooze, a considerable number of sponge-spicules and Radiolarians, however, being present amongst the Diatoms. Those from Marion Island (Station 144A) had likewise Diatom ooze containing different forms of Diatoms, a few minute Foraminifera, Radiolarians, and sponge-spicules.

The tubes of those from Marion Island present many prominent rings from the widely expanded apertures, showing that growth had apparently taken place to some extent by fits and starts, or at least that periods of quiescence had occurred. This condition has been descanted on by Claparède¹ in the case of Delle Chiaje's *Serpula crater* from the Bay of Naples. The tube is much longer and more slender than in *Serpula vermicularis*, and instead of the recumbent and attached condition of the latter it forms free masses, to which are fixed various organisms, e.g., Polyzoa. When the masses are uninjured it is found that the tubes are slender inferiorly, and that they dilate gradually toward the anterior end. In the interstices of one mass of tubes is a tunnel of *Neottis antarctica*; while Compound Ascidiæ, Polyzoa, and other structures show by their condition that the tubes are comparatively free. Many of the tubes are soldered together longitudinally. None are straight; all are more or less sinuous.

In transverse section, toward the termination of the anterior third, the hypoderm and its basement-tissue are thicker ventrally than in *Serpula vermicularis*. The longitudinal dorsal muscles are also more extended, and are connate in the median line. The longitudinal ventral muscles are proportionally smaller, but the nerves and neural canals have the same relative position, that is, the latter lie near the muscles. In both a line of longitudinal muscular fibres passes between the nerve-cords. The fasciculi of the great longitudinal muscles are pennate in transverse section. The changes which ensue in the appearances of the body-wall of the Serpulidæ in full maturity are well shown in a transverse section of *Serpula uncinata*, Grube, given by Prof. Schenk² in his paper on the development of the eggs in the group. The present species appears to be the *Serpula narconensis* of Dr. Baird, one example of which,

¹ Annél. Chétop. (Supplement), p. 160.

² Sitzungsab. d. k. k. Akad. d. Wiss. Wien, Bd. lxx., 1874.