

sand, cemented by the usual secretion. Moreover, the spirit-preparations of the animals are often more or less fixed to the tube, so that it is impossible to remove them without laceration. The same secretion, therefore, is probably exuded, and fixes the body of the animal to the tube before death. The tubes are of moderate length and firmness, and some have here and there a fragment of a minute shell or tube of *Spirorbis*. They are on the whole more slender than the average examples of *Sabella pavonina*, and, besides, so far as observed, are almost entirely composed of sand. The tube is somewhat brittle, and the cement is quite transparent, so that the shapes and colours of the sand-grains are quite apparent from the internal surface. Stimpson mentions that his *Sabella pavonina* possessed such tubes.

The hypoderm in section forms a comparatively thin coating, except in the median ventral region. The circular muscular coat is also thin. It appears to touch the nerve-cords at intervals, and again to be separated by a considerable depth of hypodermic tissue, which extends between the longitudinal ventral muscles. The nerve-cords are situated at the inner edges of the latter, and have a small neural canal superiorly. The ventral blood-vessel lies in the median line above them, and a few longitudinal fibres occur in the intermediate space. A firm investment of the ventral longitudinal muscles passes down over each nerve-cord to the median line. The longitudinal dorsal muscles are clavate, with the bulbous and often prominent end inferior, while superiorly the suspensory fibres of the alimentary canal arise from the hyaline basement-tissue in the middle line. Inferiorly a strong band fixes it to the central line between the nerves.

Posteriorly (about a quarter of an inch from the tip of the tail) the longitudinal ventral muscles are greatly diminished, the dorsal are considerably increased in size, and the oblique muscles become more evident. The neural canals are indistinct, and the intestine is much reduced in size. The hypodermic pad on the ventral surface shows a median fissure.

This species seems to have a wide range, stretching from the northern shores of Europe to America, and southward to Madeira, where it was found by Langerhans.

Hansen describes a *Potamilla* (*Potamilla malmgreni*) from the North Atlantic, in which the hooks have a peculiar elongated stem. One of his figures¹ certainly deviates from anything hitherto seen in the group.

A common American species is *Potamilla oculifera*, Leidy, readily distinguished from the foregoing by its pigment-spots on the radioles. Verrill, indeed, following Malmgren, thinks it may be identical with the European *Potamilla reniformis*, O. F. Müller, a form near *Sabella saxicava*.² The *Potamilla tortuosa*, Webster,³ which was found living in colonies in tortuous galleries excavated in compact shells,

¹ *Op. cit.*, Tab. vii. fig. 26.

² Grube, Bemerkungen über Annel. des Pariser Museums, *Archiv f. Naturgesch.*, Bd. xxxvi., 1870, p. 350.

³ *Trans. Albany Institute*, vol. ix., 1879 (advance copy), p. 65, pl. x. figs. 149-153.