

Only fragments of this form are attainable, as they had been imperfectly preserved in their tubes of fine mud with the impermeable chitinous lining. Sufficient of the anterior region remains, however, to show that in general characters the animal agrees with the preceding. The branchiæ, however, are much smaller; moreover, the proportions which the pairs have to each other would seem to point to such as the normal condition. The anterior pair are subulate, and attached on each side of the middle line. Their length is about a third the diameter of the body. The posterior pair occur immediately behind on the third segment, and consist of shorter and stouter processes than the first pair, with filiform tips. The bristles are shorter and somewhat more robust than in *Eupista darwini*, and their extremities are less attenuate. The hooks, again (Pl. XXVIII A. fig. 1), very closely resemble those of *Eupista darwini*, from Station 63. Indeed, all the three so nearly approach each other in the structure of the hooks that it is difficult to detect the differences.

Posteriorly the anus has a fringe of sixteen conical papillæ (Pl. XLIX. fig. 6).

The dark greyish mud in the intestine contains Diatoms, fragments of sponge-spicules, some spinose, a few minute Foraminifera, and rather coarse sand-grains.

The tubes are formed of dark greyish sandy mud, enlivened here and there with the large ochreous arenaceous Foraminifera formerly mentioned, and the globular wall of which is composed of minute sand-grains, with or without the addition of sponge-spicules. The muddy part of the tube shows traces of a few Diatoms, fragments of sponge-spicules, and Foraminifera. The internal lining is tenacious.

Leæna, Malmgren.

Leæna neo-zealandiæ, n. sp. (Pl. LI. fig. 3; Pl. XXVIII A. figs. 2, 3).

Habitat.—Dredged at Station 168 (off the east coast of the North Island, New Zealand), July 8, 1874; lat. 40° 28' S., long. 177° 43' E.; depth, 1100 fathoms; bottom temperature 37°·2, surface temperature 57°·2; sea-bottom, blue mud.

An imperfect example of a comparatively small species inhabiting a tube composed of soft greyish mud externally, and internally of a tough hyaline membrane. The length seems to be about 23 mm., and the diameter at the thickest part anteriorly is somewhat more than 1 mm.

The specimen is softened and injured, but it appears to have a truncated snout, with a projecting collar at the margin. Dorsally in a space behind the collar four transverse rings are visible, the sides of this area being overhung by two lateral lamellæ, and the posterior boundary completed by another smaller pair.

The state of the specimen forbids a calculation of the bristle-bundles. Each of the longer bristles (Pl. XXVIII A. fig. 2) has a finely tapered, though short, tip, with a some-