

The branchiæ in the British examples of *Hyalinæcia tubicola* commence on the twenty-fourth or twenty-fifth foot, while in this variety they begin on the twenty-fifth or twenty-sixth, occasionally on the twenty-seventh. The organs are proportionally larger, but of similar structure.

The bristles of the first foot are simple and smooth. The wide end of the tube has thin walls. At the narrow end are several diaphragms which are fixed to the sides.

In the anterior region the general aspect in transverse section corresponds with that in *Hyalinæcia tubicola*, though there are certain minor distinctions which, however, may be due to the greater size and development of all the parts. Thus the nerve-area, instead of resting for the most part freely on the commissure of the oblique muscles, is enveloped by a dense series of fibres, chiefly vertical and superior oblique, but also of fibres from the inferior border of the alimentary canal, which enclose a large blood-vessel. As in most large forms the nerve-area is proportionally smaller and more flattened than in the British species (the size of which is much less), but the neural canal occupies a similar position. The circular muscular coat, the hypoderm, and the cuticle have about the same bulk. A large blood-vessel occupies the intermuscular area dorsally, where two are conspicuous in the common form, and the great vascularity of the muscular and other tissues within the hypoderm is evident. Posteriorly the chief changes consist in the flattening of both dorsal and ventral muscles in accordance with the shape of the body, and the appearance of the reproductive elements at the bases of the feet. The nerve-area is much widened, but the cords are flattened.

*Hyalinæcia tubicola*, O. F. Müller, var. *longibranchiata*.

*Habitat*.—This variety was trawled at Station 167 (near Cape Farewell, southern island of New Zealand), June 24, 1874; lat. 39° 32' S., long. 171° 48' E.; depth, 150 fathoms; surface temperature, 58°·5; sea-bottom, blue mud.

It presents well-marked eyes, which have a whitish opacity in the centre. The branchiæ are proportionally longer than in the normal form, a feature which may have some relation to its surroundings. They commence on the twenty-sixth foot.

The left great dental plate shows from fifteen to eighteen teeth, the right from eleven to fourteen; seven denticulations are visible in the left lateral paired plate, besides some indistinct crenations posteriorly. The unpaired plate has fifteen teeth. The right lateral paired plate presents nine evident and some indistinct teeth. The mandibles have broad shafts and pointed dental processes directed obliquely outward. They are not ankylosed. The right mandible is as usual somewhat broader than the left.