

The food of the Annelid consists of the reddish mud amongst which it dwells. Sir Wyville terms this red clay—mud containing a number of gritty particles, though on the whole comparatively smooth, and with scarcely a trace of carbonate of lime. A minute examination of the contents of the alimentary canal shows that the sand-grains are rare and small, and that a few Diatoms (chiefly circular) and occasionally a beautifully reticulated Radiolarian are present.

Further insight, however, is obtained into the nature of the sea-bottom by an investigation of the tubes, which are composed of a somewhat tough, pale, chitinous secretion internally, and externally coated with sand-grains and other structures. Conspicuous amongst the latter are numerous globular or rarely moniliform arenaceous Foraminifera of an ochreous colour, while the microscope shows a large number of more minute arenaceous forms, some apparently divided into chambers, innumerable fragments of sponge-spicules, curious circular stellate disks, and tips of peculiar spines (hollow at the base). Few or no Diatoms are visible on the tubes.

There can be no doubt, therefore, that living arenaceous Foraminifera abound on this sea-bottom of reddish clay, and with the Diatoms and Radiolarians contribute to the support of such higher forms as *Myriochele*.

*Myriochele heeri*, Malmgren, var. (Pl. XXVIA. fig. 5d).

*Habitat*.—A fragmentary and minute specimen was dredged at Station 47 (off the American coast, near New York), May 7, 1873; lat. 41° 14' N., long. 65° 45' W.; depth, 1340 fathoms; surface temperature, 42°; sea-bottom, blue mud.

The hooks of this form (Pl. XXVIA. fig. 5d) are of course much smaller than in the previous species, and appear to conform more closely to Malmgren's figure. There is, however, no satisfactory evidence that the forms are distinct. The chief difference is in the curvature of the neck of the hook, which is more decided in the present form, and there is less of the shoulder usually visible below the teeth.

The tube, like the animal, is fragmentary, measuring in diameter about 0.5 mm. It is composed of sponge-spicules and transparent grains of sand, the former beautifully arranged in parallel series, bound here and there by cross-bars. In some parts of the tube sand-particles predominate, in others the sponge-spicules are most prominent.

Some of the hooks in the ordinary *Owenia*, towards the end of the row, show two short and rounded processes at the tip. The rest seem to have a single tooth. In Hebridean, English, and Spanish examples the double tip occurs on the hooks. *Myriochele*, therefore, can hardly be distinguished from *Owenia* for this reason.