

remarkably elongated base. A single hook appears above the great fang in profile, and a series of striæ on the body of the organ. The anterior inferior angle of the hook is greatly produced.

The intestine is filled with coral sand containing Foraminifera, sponge-spicules, Ostracoda, fragments of Polyzoa, and a few ova of Nematoids.

*Terebella grubei*, n. sp. (Pl. XLIX. fig. 2; Pl. XXVIIA. fig. 20).

*Habitat*.—Trawled in 120 fathoms, off Twofold Bay, Australia, April 1874.

A fragment of the anterior region of a small specimen, measuring 17 mm. in length by 1.5 mm. in breadth.

In general appearance this form somewhat resembles the *Terebella nesidensis*, D. Ch. (*Terebella danielsseni*, Mgrn.), of northern waters. The folds about the mouth are similar, and a well-marked series of ocular specks exists behind the frontal collar. These madder-brown points are in two rows, an anterior of larger and a posterior of smaller specks. Moreover, in the middle line four eyes occur in a hiatus in the row, viz., two large anterior, separated by an interval, and two smaller posterior, further apart, and therefore somewhat exterior to the former. The arrangement, which is irregular, quite differs in *Terebella nesidensis*, D. Ch., the anterior, however, being the larger. The stalks of the branchiæ are longer than in the European form, and their branches less numerous, but they show the same disparity in size between the first and the third. The stem in the first splits up into two main divisions which branch into others ending in very short ramuscles. The ultimate branches are longer in *Terebella nesidensis*, D. Ch. The ventral scutes are fifteen (the last being sunk in the ventral groove), so that there is little difference between the two forms in this respect. The same may be said of the structure of the bristles, which, however, are fewer in each tuft in the Challenger form.

The uncini, again (Pl. XXVIIA. fig. 20), while approaching those of *Terebella nesidensis*, D. Ch. in general form and even in the curves and processes, differ in possessing only a single hook above the great fang, and in minor details.

The greyish sand in the alimentary canal shows no Diatoms and only a few Foraminifera. Grains of sand and fragments of sponge-spicules are the most conspicuous structures.

The hypoderm in the ventral region is greatly developed, thus forming a thick covering for the nerve-cords. Whether this condition of the hypoderm be partly due to the mode of preservation is a moot point. The cords are rounded and closely approximated. The circular muscular coat bounds them internally, and the oblique muscles are inserted just beyond their outer borders.