

muscles present a feature not unfrequently seen in the great muscles of the Nemertean, viz., they are cut into fasciculi by radiate bands, which pass somewhat regularly from the circular coat through the longitudinal ventral to the oblique, and at intervals upward to the longitudinal dorsal muscles. This arrangement and the dense cuticle are probably in connection with the peculiarly flattened body, for the vertical muscular bands conduce greatly to the strength laterally. The proboscis shows a fan-like arrangement of folds which radiate outward from the hypodermic lining. The wall of the succeeding region of the canal is peculiarly spongy, a condition probably due to the arrangement of the muscular fibres and glands.

The great size and flattened form of the body, the elevations on the head, and the comparatively small frontal lobes, are all characteristic features in this species. The pharyngeal region presents the usual chitinous structure internally, with a crown of horny papillæ in front, while externally a series of large glands are arranged longitudinally. The elongated proventriculus has a thick wall composed chiefly of radiate fibres and glands over an inner lining.

Syllis setubalensis, n. sp. (Pl. XXX. figs. 5, 6; Pl. XXXIII. fig. 6; Pl. XVA. figs. 16, 17).

Habitat.—Dredged at Station II. (off the coast of Portugal), January 13, 1873; lat. $38^{\circ} 10' N.$, long. $9^{\circ} 14' W.$; depth, 470 fathoms; surface temperature, $57^{\circ} 0$; sea-bottom, green mud.

A small species in a fragmentary state. It measures about 4 mm. in length and 1 mm. in breadth.

The body is tinged pale brown in spirit, is convex dorsally and flattened ventrally. It is characterised by the peculiar rasp-like appearance given to a considerable portion of the anterior third of the dorsum by the proventriculus, which seems to attain a large size in this form.

The head (Pl. XXX. fig. 5) is short in its antero-posterior diameter, wide transversely. The eyes are comparatively large, situated close together on each side, and in the arms of a very wide V. As usual, the anterior pair are the larger, and from the width of the head the pairs on the respective sides are separated by a long interval. The median tentacle arises from the centre of the head, between the eyes; and on each side in a line with the latter is the antenna. These processes are all long, slender, and moniliform (from segmentation). The anterior border of the snout is occupied by two large bluntly conical flattened frontal lobes (palpi), which exceed those of most forms in size. They project beyond the extruded horny pharyngeal region, which forms a brownish trumpet-like