

by a distinct enlargement posteriorly, the tip then diminishing to a very delicate point. The edge of the extremity on the ventral aspect (that is, on the side opposite the enlargement) is roughened by fine serrations. The twist described by Dr. Macdonald is probably due to position, and the more slender ones certainly simulate this condition.

The hooks again (Pl. XVIII.A. fig. 21) diverge from Dr. Macdonald's in regard to the comparative length of the terminal region, so that in all probability his bristle was from the anterior region of the body, where the terminal region is longer.

In transverse sections of specimens from Samoa, kindly procured for me some years ago by Prof. Busk, the body-wall in both males and females is largely distended with the reproductive elements. In the males a line of dark brownish pigment runs inside the muscular layers, thus surrounding the mass of sperm-cells or spermatozoa which fills up the entire cavity. The alimentary canal is atrophied, and forms a median vertical streak. The nerve-area is ovoid and comparatively large, no neural canal being evident, though it must be remembered that the preservation of the preparations is indifferent. The oblique fibres pass down by the sides of the cords, and a band on each side goes upward to the alimentary canal, apparently enclosing the vessel.

In the female the stretching of the layers of the body-wall is equally conspicuous, but no layer of pigment occurs internally. The nerve-cords, however, have externally a deep blackish-brown band. The ova are large and greenish.

The first scientific account of the *Palolo* is that of Dr. Gray, who communicated his remarks to the Zoological Society of London in February 1847. His description was drawn up from numerous specimens (all headless and incomplete) presented to the British Museum by the Rev. J. B. Stair. Dr. Gray considered it allied to *Arenicola* (which it really diverges from). He described it as *Palola*¹—"Body cylindrical, separated into equal joints, each joint with a small tuft of three or four spicula on the middle of each side. Head? Last joint ending in a couple of tentacles. Eyes globular.

"*Palola viridis*, n. sp.

"Green with a row of round black spots down the middle of the dorsal (?) surface; one spot on the middle of each joint.

"*Habitat*.—Navigator Islands."

In forwarding the specimens from Samoa, Mr. Stair stated that the Annelids appear regularly in the months of October and November, during portions of two days in each month, viz., the day before and the day on which the moon is in her last quarter. They occur in much greater numbers on the second than on the first day of their rising, and are only observed for two or three hours in the early morning. At the dawn of day they may be felt by the hand swimming on the surface of the water; and as the day advances their numbers increase, so that by the time the sun has risen thousands may be

¹ *Ann. and Mag. Nat. Hist.*, vol. xix, p. 409, 1847.