

network (fig. D = fig. 27). This condition of the surface was most conspicuous about the anterior part of the body, but the body was much lacerated by the meshes of the trawl, and, therefore, I cannot say whether the whole integument is in this condition in the fresh state or not. The folds and plaits in the integument are so sharp that they give the appearance under the microscope of somewhat spindle-shaped bodies with sharply pointed extremities (fig. c, 1, 2, 3 = fig. 26). At first I supposed that these bodies were urticating organs, resembling those of *Bipalium*, but on carefully teasing up a portion of the integument with fine needles, and being unable to isolate a single one, I concluded that they were mere folds. They are, however, of remarkable appearance, from their extreme abundance and the manner in which they cross each other at all angles. They are well preserved in glycerine preparations of the skin hardened in picric acid.

“Beneath the integument is some granular glandular matter. Immediately beneath the integument, and in close adherence to it, is the muscular tunic, evidently the homologue of the cutaneous muscular system of *Bipalium* and other Planarians. As in these, the outermost fibres are circular in direction, the inner longitudinal.

“The muscular tunic encloses the entire body. It is thin, and in the fresh condition of the animal transparent and inconspicuous, but becomes opaque when the animal is hardened in picric acid. The inner longitudinal layer consists of stout bands of fibres running parallel to one another. The outer circular fibres are far less developed, and are not gathered into bundles, but cross one another slightly obliquely in their transverse course, forming a slight meshwork over the longitudinal fibres.

“Beneath the muscular tunic and between its meshes the body mass is filled up with a gelatinous, hyaline, structureless matter, imbedded in which lie the viscera and the muscles attached about the orifice of the sheath of the proboscis. Internal muscles, except those referred to, were not observed.

“No eyes or other sense-organs were found, and ciliated sacs were not seen.

“From the circumstance of the only specimen of *Pelagonemertes* having been much lacerated, and from the animal not having been dissected, it will of course require further examination. In the specimen as procured there was a deep constriction of the body at about the junction of the first with the second fourth of its length. This, it appeared pretty evident, had been caused by the meshes of the net. The posterior extremity was somewhat injured, and its form may not be quite correctly given. Ciliated sacs may be present, and the structure of the proboscis might throw light on the affinities of the animal.

“The form of the digestive system is the most remarkable feature about *Pelagonemertes* in its close resemblance to that of *Dendrocœla*. In other respects *Pelagonemertes* is thoroughly Nemertine in structure, being merely modified for pelagic existence. It is remarkable that the gelatinous hyaline mass of the body is not tegumental in character, but apparently homogeneous with internal structures.