

communicating by tortuous tubes with the exterior, and being separated from the outermost cell-layers with unicellular glands by a special secondary and continuous, though thin basement layer (Pl. XIII. fig. 6). Below the latter, longitudinal and circular fibres proper to the integument are also present, corresponding, even in their more massive development, to those of *Carinoma*.

There appears to me to be no doubt that this same arrangement holds good for the great majority of *Linei* and *Cerebratulii*, and the only reason why the separation of the parts is often less marked is the stronger development of the outer longitudinal muscles of the body-wall, concordant with the disappearance of the connective tissue separating the integument and body musculature, and also the fusion to a smaller or larger extent of the longitudinal muscle-fibres proper to the integument with those of the body-wall. From this it inevitably results that the line of separation between the body-wall and the integument seems to be formed by the external, secondary basement membrane, the deeper glands having the appearance of being imbedded within the longitudinal muscles of the body (Pl. XI. figs. 10, 11; Pl. XII. figs. 2 and 10). That this is a secondary arrangement, and that the real and original line of separation was another one, has been demonstrated in the foregoing pages.

It is not necessary, after the detailed description of *Eupolia* given above, once more fully to discuss the same details for those Schizonemertea that wholly correspond to the same type of integument. In those species in which the more developed longitudinal muscular layer more or less effaces the boundary line between integument and muscles (*Cerebratulus macroren*, *Cerebratulus medullatus*, &c.), the characteristic and sometimes massive layer of vacuolated cells surrounding the deeper glands is considerably reduced. The other constituent parts have retained their original character, with the exception of the thin muscular strata of the integument, which are no longer separately recognisable (Pl. XII. fig. 10).

The integument is generally very completely preserved in the cephalic fissures; it may here be noted that there, too, the deeper gland-structures of the integument may be noticed, although they are much more sparingly set. In a few cases it would appear as if they are wholly absent, and as if only the outer integumentary cell-layer is preserved in the cephalic fissures; others, again (Pl. XIV. fig. 11), offer special differentiations in the region of the cephalic fissures of the glands, which may there be united in paired accumulations. I must also mention a somewhat aberrant type of integument, as we find it represented in a *Cerebratulus* sp. inc. (*medullatus?*), from Kerguelen Island. The integumentary layers offer more general resemblance to what obtains in the more primitive Palæonemertea (*Carinina*, *Cephalothrix*, &c.) than to *Eupolia*. Eventually it might be said to retain a more primitive embryonic condition. I have at least described a developmental phase of the integument very similar to what I am now about to describe for adult forms, as occurring in the ontogeny of *Lineus obscurus* (XIV). The integument in question may, however, also be looked upon in another light, *i.e.*, as in no way