

more primitive, but rather as a special differentiation of the normal type of the Schizonemertean integument, the result being an apparent simplification. This simplification (Pl. X. fig. 7) consists in the absence of the deeper layer of gland-cells below the superficial secondary basement membrane *b*. The whole integument of this species would thus only seem to correspond to the very outermost layer (the layer of the unicellular flask glands) of the other Schizonemertea. I have, indeed, the conviction, that far from being more primitive, this condition may be linked with what obtains in other Schizonemertea and in *Eupolia* by such transitional forms as *Cerebratulus medullatus*, &c. (Pl. XII. figs. 10 and 2; Pl. XI. figs. 10, 11). These species have evidently well-developed glands belonging to the deeper layer; and whilst the glands are on all sides surrounded by the longitudinal muscles, they at the same time penetrate more deeply into this layer, even at a few points touching the nervous stratum, which is superposed upon the layer of circular muscular fibres (Pl. XII. fig. 10). The special character of the integument of *Cerebratulus* sp. inc. (*medullatus*?), and the deceptive reminiscences it evokes of the more primitive stages of the integument may well be said to be due to the strong secondary basement membrane. Thus in this species the layer of the deeper glands seems to have altogether disappeared.

Before passing to another paragraph, I cannot refrain from pointing out the many points of resemblance that may be noticed between the integument of the Polyclada, now so well known, thanks to A. Lang's beautiful monograph, and of certain Nemertea, viz., those in which the integument is secondarily simplified as in those last discussed. Our external layer of unicellular glands is evidently comparable to what Lang and Gräff call the "Schleimstäbchenzellen" or "pseudorhabdites," and these in their turn are compared by Lang, on very plausible grounds, with the "Rhabditenzellen," in which the peculiar rod-like enclosures of the integument are found. The highly refractive, uniform contents of what I have called the unicellular glands, their general shape and properties, wholly coincide in their semi-viscous nature with what are described by Lang as the "Schleimkörper," and looked upon by him as merging into true glandular structures.

The Nemertean layer of deep glands is also found in the Polyclada, below the (also secondary?) basement membrane. So is the layer of nuclei regarded by Lang as belonging to a continuous stroma, by which both sense-cells and gland-cells are sustained and which was recognised by me in all the subdivisions of Nemertea. The figure given by Lang (XVIII; Pl. XI. fig. 11) would fit very well for different genera of Nemertea; only in Nemertea the rod-like viscous bodies are not subdivided into superposed blocks. Moreover, the tactile and sensory cells in the integument, as Lang describes and figures them, more especially for the tentacular integument, offer without doubt a close analogy to that outermost layer of the Nemertean integument, with its triangular cells (tip downwards), which is also found in the vast majority of species where the skin is uninjured, which is uniformly distributed over the body, and which, if indeed sensory, as appears