

tract. We find, therefore, on the head a uniformly dense plumage, from which the two principal tracts issue. The latter are separated from each other by the two lateral neck-spaces, which extend high up, nearly to the head. The inferior tract is divided near the head, becomes of considerable breadth whilst still on the neck, and passes in this condition on to the breast, the surface of which is covered by each band in a rather broad, parallel-sided form, emitting no branch as far as the margin of the *musculus pectoralis major*. Here it is divided by a space starting from the knee-covert in such a manner that a short continuation of the tract, which is to be regarded as an outer branch, passes near the knee into the lateral space of the trunk, runs on over the thigh, and soon afterwards terminates. The other, inner branch, which represents the main band, then proceeds on the belly, turns in a somewhat arcuated form outwards, dilates considerably in the middle of the bow, and terminates near the anus. . . . The dorsal tract is at first broad, becomes narrower towards the middle of the neck, then expands at the shoulder, and divides at that point, or from the middle of the scapulæ, into two limbs. In most of the Tubinares these limbs pass uninterruptedly into the posterior half of the dorsal tract; and this circumstance forms their family character as distinguished from the Longipennes. In the present group the posterior half of the dorsal tract encloses a longitudinal space as far as the caudal pit, dilates a little outwardly on the pelvis, and thus usually becomes united with the very oblique lumbar tracts, and grows rather strong in the simple uropygial band, also covering the base of the oil-gland."

Nitzsch had no opportunity of examining the pterylosis of *Pelecanoïdes*, nor any of the Oceanitidæ. His remarks were based on examination of *Fulmarus glacialis*, *Daption capensis*, *Ossifraga gigantea*, *Procellaria pelagica*, *Halobæna cærulea*, *Puffinus obscurus*, and *Diomedea exulans* and *chlororhyncha*. Nitzsch points out certain peculiarities in the latter genus, the most important of these being the division of the dorsal tract into two quite separate parts—an anterior stronger part, ending in an interscapular fork, and a posterior, weaker, dilated part. The lumbar tracts he describes as weak and uniserial. I find this division of the dorsal tract to hold good in *Diomedea exulans* and *brachyura*, as well as in *Thalassiarche culminata*, though the break is not very obvious, and chiefly marked by the difference in strength of the feathers. In a nestling of *Phæbetria*, however, there is no such break apparent; though the dorsal tract anteriorly is stronger, it passes behind into the posterior part, and the same condition, as is pointed out by Nitzsch, obtains in *Ossifraga*. The lumbar tracts also can hardly be strictly described as uniserial, as they tend to coalesce, by rows of interposed contour-feathers, with the external borders of the dorsal tract, no very obvious demarcation separating the two.

Pelecanoïdes and the Oceanitidæ quite conform to the general type of the group, and indeed the only at all obvious difference in this, beyond those already mentioned, lies in the greater or less amount of the connection between the lumbar and dorsal tracts, this being almost *nil* in *Cymochorea* and *Procellaria*, and considerable in the larger forms,