times the length of the vertebral column as in *Aptenodytes tæniatus*, to eight or ten times that length in *Aptenodytes longirostris;* in the absence of any differentiation of the syringeal from the adjoining tracheal rings; in the mobility of the syringeal rings upon one another; in the cartilaginous condition of the syringeal rings; in the amount of displacement downwards of the vibrating membrane of the syrinx beyond the point of bifurcation of the trachea; and in the presence of a tracheal septum, which varies in length from one-half in *Aptenodytes tæniatus* to three-fourths of that of the trachea in *Aptenodytes longirostris.*

If now we enquire whether any one of the characters above enumerated can, *per se*, be regarded as distinctive of the genus *Aptenodytes*, as compared with other genera, I reply that there are three which may be so regarded. These three generic characteristics are to be found—*firstly*, in the form of the skull as a whole; *secondly*, in the absence of a complete coracoidal foramen; and *thirdly*, in the form and structure of the syrinx. Given any one of the parts to which these remarks refer, and the identification of the Penguin possessed thereof as a member of the genus *Aptenodytes* may at once be accepted as proved.

In the possession of every one of the above-mentioned characteristics, the two species *Aptenodytes longirostris* and *Aptenodytes tæniatus* agree. At the same time the anatomical investigation of these two birds shows that in their anatomy, as in their external configuration, each is possessed of individual peculiarities which at once justifies us in considering them to be distinct species, but species which belong to one and the same genus.

Turning now to the consideration of the characteristics of the genus *Eudyptes*, we find that these are to be found in the oval form of the upper jaw, which is widest transversely about the middle of its length, and tapers forwards and backwards; in the relative tenuity of the central bar of the upper jaw, which does not fill up the interval between the lateral bars; in the elongated form of the anterior narial apertures, and the relation which their posterior extremities bear to the lachrymo-nasal fossæ; in the stoutness and lozenge-like form of the rami of the lower jaw bone; in the great breadth of the supra-orbital grooves, due to the presence of a supra-orbital ledge of bone which does not exist in *Aptenodytes*, and is developed to a much less extent in *Spheniscus;* in the moderate development of the transverse temporal crest, which is more pronounced in *Spheniscus* but scarcely exists in *Aptenodytes;* in the coalescence of the upper end of that crest with the cerebral portion of the cranium, and not with the cerebellar as in *Spheniscus;* in the vertical direction and intermediate size of the post-orbital process, as compared with that of *Spheniscus* and of *Aptenodytes;* in the strongly-pronounced curvature of the zygomatic arch; in the form of the scapula; in the presence of a complete coracoidal foramen; in the divergence of the lower end of the second from that of the third metatarsal bone; in the relatively greater breadth and shortness of the tongue, as com-