

Of the so-called species associated together by ornithologists under the genus *Eudyptes*, I have examined two, *Eudyptes chrysocome* and *Eudyptes chrysolophus*. Of these two species, *Eudyptes chrysocome* presents three varieties, which are met with at the island of Tristan d'Acunha, the Falkland Isles, and Kerguelen Island respectively. That *Eudyptes chrysolophus* ought to be regarded as a species distinct from *Eudyptes chrysocome* is not doubted by any ornithologist, but an examination of the entire anatomy both of *Eudyptes chrysolophus* and of *Eudyptes chrysocome* appears to me rather to lend support to the view that they are simply two well-marked varieties of one and the same species of *Eudyptes*. The decision of this point must depend on the relative value attached by various ornithologists to difference in size and similarity of anatomical structure as elements in the determination of species as distinguished from variety.

The genus *Aptenodytes* includes the two species which I have examined,—*Aptenodytes longirostris*, and *Aptenodytes taniatus*. The last named has been accepted by ornithologists as a type of another genus, *Pygosceles*; but I see no reason on anatomical grounds why it should not be included along with *Aptenodytes longirostris* as another species of one and the same genus.

I regret that I have not had an opportunity of dissecting a specimen belonging to the genus *Dasyrampus* of Gray, and am therefore unable to refer that genus to its proper place with reference to the other birds which I have examined.

Lastly, in respect of their affinities the Penguins appear to be more closely allied to the Palmipede than to any other group of birds, but the numerous important deviations which they present from every one of the various groups included within that very heterogeneous assemblage appear to show that the Spheniscidæ must have diverged at an early period from the primitive avian stem from which both groups were derived, and the connecting links having been lost, it seems at present hopeless to attempt to establish the exact affinities of the Penguins to other birds. At first sight, indeed, it appears that the nearest allies of the so-called wingless birds of the southern are to be found in the wingless birds of the northern hemisphere, but the researches of Prof. Owen¹ on the osteology of the Great Auk (*Alca impennis*), abundantly show that the two groups have but little in common. We are compelled therefore to postpone the accurate determination of the affinities of the Spheniscidæ till the progress of Palæontology shall have made us acquainted with the intermediate forms which connect the Spheniscidæ with the primitive avian stem from which both they and the other Palmipedes were originally derived.

¹ Description of the skeleton of the Great Auk or Garfowl (*Alca impennis*). Trans. Zool. Soc., vol v. p. 317.