Palæeudyptes for the reception of the bird of whose skeleton it formed a part. It apparently belonged to a bird closely allied to the genus *Eudyptes* of the present day, but evidently of much larger size than any living species of that genus. If the nature of the deposit (Eocene) from which this fragment was excavated has been correctly interpreted, it shows that the family of Spheniscidæ is one of great antiquity, and that it had even at that time deviated so far from the primitive avian stem as to present those modifications in structure which have remained unaltered down to the present time. This fact goes far to explain the difficulty which every one must acknowledge in attempting to allot to the Spheniscidæ their proper place in any classification of recent birds, a difficulty which will only disappear as the geological record is more fully deciphered, and the intermediate forms which at one time undoubtedly connected the Penguins with the primitive avian stem are brought to light. I have examined the following species of Penguins:—

Family.	Genus.	Species.	Variety.
SPHENISCIDÆ, . .	*Spheniscus*	*demersus*	*magellanicus.*
		mendiculus	
		minor	
	Eudyptes	*chrysocome*	*Eudyptes chrysocome*, from Tristan da Cunha.
			Eudyptes chrysocome, from the Falkland Islands.
			Eudyptes chrysocome, from Kerguelen Island.
		chrysolophus ?	
	Aptenodytes	*longirostris*	
		tæniatus	

"Of the various members of the genus *Spheniscus* enumerated above, it appears to me that *Spheniscus demersus* and *Spheniscus magellanicus* ought to be regarded as two varieties of one and the same species, while *Spheniscus mendiculus* and *Spheniscus minor* are undoubtedly distinct species. *Spheniscus minor* is moreover possessed of several cranial characters which approximate it to *Eudyptes*.

"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 Tristan da Cunha Group, the Falkland Islands, 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.[1]

[1] "To discuss the question of the comparative values of external appearance and anatomical structure as elements in the determination of species as distinguished from variety, would extend this abstract beyond reasonable dimensions. I would merely wish to direct the attention of naturalists to the fact that, as it seems to me, sufficient weight has not hitherto been allowed to structure in the determination of species.