

## PART II.

# CLASSIFICATION OF THE PINNIPEDIA.

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In the course of the study of the species of Seals described in the preceding part of this Report, I have been led to examine and compare, so far as the material at my disposal would admit, the skeletons of other species of Seals, belonging both to the Earless and Eared families, and also that of the Walrus. This examination and comparison have enabled me to recognise several anatomical characters, which either have had too little attention paid to them, or have been altogether overlooked, and which are of undoubted value in assisting one to discriminate between the different genera and species. I propose in this part of the Report to give a classification of the Pinnipedia, and to introduce into it, along with the characters usually recognised, those additional ones which seem to me to be of value in taxonomy.

Starting from the usually accepted position that the Pinnipedia are a suborder of the Carnivora, which suborder is divided into three families, Phocidæ, Trichechidæ or Odobænidæ, and Otariidæ or Arctocephalidæ,<sup>1</sup> I shall first state briefly the distinguishing characters of these families, and then subdivide them into their subfamilies, genera, and species.

### PHOCIDÆ.

Without pinna of ear and scrotum; postorbital processes either wanting or rudimentary; no alisphenoid canal; mastoid moderate and not entirely discontinuous from the tympanic bulla; nasal bones elongated backwards between the two halves of the frontal. Inner wall of orbit complete or almost complete. Hard palate the widest opposite or a little behind the last pair of molars and almost in line with the hinder

<sup>1</sup> See as authorities on the subdivision of the Pinnipedia, H. N. Turner, *Proc. Zool. Soc. Lond.*, 1848; Gill, *Proc. Essex Inst.*, vol. v., 1866, and *Families of Mammalia*, 1872; J. E. Gray, *Cat. Seals and Whales*, 1866 and Supplement; W. H. Flower, *Proc. Zool. Soc. Lond.*, January 14, 1869, and article *Mammalia* in *Ency. Brit.*, 9th Ed.; J. A. Allen, *North American Pinnipeds*, 1880; and St. George Mivart, *Proc. Zool. Soc. Lond.*, May 19, 1885.