

of the muscles described by these authors, and the fact that at the time their monograph appeared I had almost completed my myological observations on all the species in my hands, justify me in adhering to my original plan.

I have therefore chosen as my type *Eudyptes chrysocome* from Tristan d'Acunha, a full account of the muscular anatomy of which appears in the following pages. The designation of each muscle is accompanied by a list of synonyms employed by the various standard writers on avian anatomy. After the description of each muscle, I have added only such "relations" as appear to me to be necessary to enable future workers to identify without difficulty the muscle to which they refer. Under the heading "variations" are given the results of a comparison of the muscle in question of *Eudyptes chrysocome* with that of other species which I have examined. In the case of those muscles in which no "variations" are recorded, the reader will understand that the muscle presented a similar arrangement in every species. Lastly, the "remarks" contain a summary of the observations of other authors who have previously examined one or other species of Penguin.

The subjoined list contains the names and papers of the authors by whom the synonyms appended to each muscle have been employed:—

1. CUVIER, Leçons d'Anatomie Comparée, 1800.
2. GARROD, On certain muscles of the thigh of birds and their value in classification. *Proc. Zool. Soc. Lond.*, 1873, p. 626.
3. GERVAIS and ALIX, Ostéologie et Myologie des Manchots. *Journal de Zoologie*, tom vi., 1877.
4. HERISSANT, Observations anatomiques sur les mouvements du bec des oiseaux. *Mémoires de l'Académie des Sciences, Paris*, 1748, p. 345.
5. HEUSINGER, Zootomische Analekten, Ueber einige Besonderheiten des Eulenflügels. *Meckel's Deutsches Archiv für die Physiologie*, vol. vii., 1822.
6. MECKEL, J. F., Traité général d'Anatomie Comparée. Traduit par Reister et Sanson, Paris, 1828.
7. MERREM, BLASIUS, Flügelmuskeln des weissköpfigen Adlers. *Vermischte Abhandlungen aus der Thiergeschichte*, 1781.
8. OWEN, On the Apteryx Australis. *Proc. Zool. Soc. Lond.*, 1842, p. 22.
9. REID, Anatomical description of the Patagonian Penguin (*Aptenodytes patachonica*, Forst). *Proc. Zool. Soc. Lond.*, 1835, part 3, p. 132.
10. ROLLESTON, On the homologies of certain muscles connected with the shoulder joint. *Trans. Linn. Soc.*, vol. xxvi. p. 609.
11. SELENKA, Bronn's Classen und Ordnungen des Thierreichs, Bd. vi., "Aves."
12. SCHOEPSS, Beschreibung der Flügelmuskeln der Vögel. *Meckel's Archiv für Anatomie und Physiologie*, 1829.
13. TIEDEMANN, Anatomie und Naturgeschichte der Vögel. *Zoologie*, Bd. ii.
14. VICQ D'AZYR, Mémoires pour servir à l'anatomie des Oiseaux. *Histoire de l'Académie royale des Sciences, Paris*, 1772-73-74.
15. WIEDEMANN, Von den Muskeln des Schwans. *Archiv für Zoologie und Zootomie*, Bd. ii., Stück 2.