

1. *Eudyptes chrysocome*, from Tristan d'Acunha.¹
2. *chrysocome*, from the Falkland Islands.
3. *chrysocome*, from Kerguelen Island.
4. *chrysolophus*, from Kerguelen Island.
5. *Spheniscus demersus*, from the Cape of Good Hope.
6. *magellanicus*, from the Falkland Islands.
7. *mendiculus*, from the Galapagos Islands.
8. *minor*, from Australia.
9. *Pygosceles tæniatus*, from Kerguelen Island.
10. *Aptenodytes longirostris*, from Kerguelen Island.

besides heads, with the soft parts attached, of nearly every one of these species.

In drawing up this Report two courses were open to me. Either I might confine myself to a simple enumeration of the distinctive anatomical features of the Penguins as compared with those of other birds, or, with the expenditure of considerably more time and labour, I might give an exhaustive account of the anatomy of every member of the group which was placed in my hands. The adoption of the first plan would certainly have led to the production of a more readable memoir, and one adapted to the requirements of those whose object is to arrive at cut and dry conclusions, without the labour of minute investigation.

On the other hand, it appeared, in view of the difficulty of procuring fresh specimens of so many species of Penguin, that it would be well to make the most of the material at my command. To accomplish this, it would be necessary to carry out an exhaustive anatomical examination of every species, and to compare the results obtained from the dissection of one with those obtained from the dissection of all. If this plan were adopted, I might hope to put on record a complete description of the anatomy of every species at my disposal, and thus exhaust the subject so far as these were concerned, leaving it to other anatomists to supplement my observations by the examination of species, examples of which I did not possess.

After due consideration I adopted the latter course, and in following it out have selected *Eudyptes chrysocome* from Tristan d'Acunha as a standard with the anatomy of which to compare that of other species. In every section I have in the first place described the anatomy of that species, and thereafter appended the variations met with in such others as I have had an opportunity of examining. In those cases in which no variations are reported, it will be understood that such did not exist, and that the anatomy of these forms is identical with that of the species selected as a standard. In every instance I dissected the birds systematically, beginning with the bones and ending with the nerves, and in every instance I have been careful to institute a

¹ Professor Watson had for the purposes of this investigation: one adult specimen of *Spheniscus minor*, presented to the Expedition at Sydney by Dr. George Bennet; two adult specimens of *Spheniscus mendiculus*, presented by Professor Alexander Agassiz, and four or five adult specimens of each of the other species.—J. M.