

arrangement of the feathers surrounding the head, but *Eudypptes chrysolophus* is altogether a larger and heavier bird than *Eudypptes chrysocome*. Moreover, an examination of the skeleton of *Eudypptes chrysolophus* shows that its vertebral column as a whole is not only about 2 inches longer than that of *Eudypptes chrysocome*, but that every bone both of the trunk and limbs is larger and stouter than the corresponding bones of *Eudypptes chrysocome*. A consideration of these points by themselves would at once have led me to agree with the authors mentioned, and to have concluded that *Eudypptes chrysolophus* was specifically distinct from *Eudypptes chrysocome*.

On the other hand, a comparison of the internal anatomy of the two birds shows that in every essential point that of *Eudypptes chrysolophus* agrees with that of *Eudypptes chrysocome*, and we look in vain for any anatomical feature in respect of the osseous, digestive, or respiratory organs which will enable us to decide definitely that any portion of these organs belongs to the one rather than to the other of these so-called species. The stomach in both presents a proventricular gland of the same form; in both the small intestine varies in length from twelve to thirteen times the length of the vertebral column; in both the length of the septum tracheæ relatively to that of the trachea itself is the same; and in both the structure and relations of the syrinx are similar. The bones of *Eudypptes chrysolophus*, as I have said, are larger than those of *Eudypptes chrysocome*, and the bulk of the whole bird exceeds that of *Eudypptes chrysocome* by one-eighth, and if we place the skulls of *Eudypptes chrysolophus* alongside of that of *Eudypptes chrysocome*, the large size of the skull of the former is strikingly apparent. At the same time, I failed to distinguish any specific character in the skull, apart from mere size, which would serve to distinguish the one from the other. Lastly, I have observed, when comparing the skulls of the three varieties of *Eudypptes chrysocome* with that of *Eudypptes chrysolophus*, that in respect of size there is a remarkable gradation from the smallest skull of *Eudypptes chrysocome*, through the larger skulls of the same species, to that of *Eudypptes chrysolophus*. The skull of *Eudypptes chrysocome* from Kerguelen is the smallest, and is exceeded slightly in size by that of *Eudypptes chrysocome* from Tristan, while the skull of *Eudypptes chrysocome* from the Falklands is the larger of the three. When the skull of *Eudypptes chrysolophus* is placed alongside that of the latter, although the disproportion in size is rather greater than that which obtains between the skulls of any of the three varieties of *Eudypptes chrysocome*, yet the skull of *Eudypptes chrysolophus* presents no more specific distinctive feature which would serve to distinguish it from the largest skull of *Eudypptes chrysocome* than is possessed by the largest skull of *Eudypptes chrysocome*, as compared with the smallest skull of the same species.

To sum up. I believe that if difference in size and colour of a few feathers of the head, combined with larger size of one of the birds as a whole, justifies us in asserting specific distinction between two birds, then, undoubtedly, *Eudypptes chrysolophus* is specifically distinct from *Eudypptes chrysocome*. On the other hand, the striking similarity