

THURSDAY, APRIL 1, 1897.

*A DICTIONARY OF BIRDS.*

*A Dictionary of Birds.* By Alfred Newton, assisted by Hans Gadow, with contributions from Richard Lydekker, B.A., F.R.S., Charles S. Roy, M.A., F.R.S., and Robert W. Shufeldt, M.D., late United States Army. Pp. viii + 124 + 1088. (London: Adam and Charles Black, 1893-1896.)

THE publication of the fourth and concluding part of Prof. Newton's "Dictionary of Birds" places ornithologists in possession of a very useful and concise volume in which is to be found a vast amount of varied information concerning recent and fossil birds, and other matter of wider scope bearing upon variation and kindred subjects.

Many of the articles have already appeared in the ninth edition of the "Encyclopædia Britannica," which was commenced in 1875 and finished in 1888. These in the present volume have been collected together, corrected and expanded to date, and to them have been added a number of additional articles, arbitrarily selected, so the author tells us, but with the main object of supplying useful information on subjects concerning which inquiries are often made but not easily answered.

The articles relating to anatomical subjects are from the pen of Dr. Gadow, and we fully endorse Prof. Newton's appreciation of them. They give in a concise form a mass of information on these matters, and will doubtless prove of great value to future workers, not only from their intrinsic merit, but also for the many references to more extended works on the same subjects.

Mr. Lydekker contributes valuable articles on Fossil birds, which give the most recent account of the progress of this profoundly interesting subject. Ornithologists, as a rule, have not neglected to study the morphology of their subject from ancient as well as recent and existing forms, and in urging the necessity of pursuing this course Prof. Newton takes the opportunity, in a footnote (p. 288), of giving an extract from a speech of Huxley's, which it may not be out of place to repeat. "Palæontology," he said, "is simply the biology of the past; and a fossil animal differs only in this regard from a stuffed one, that one has been dead longer than the other, for ages instead of for days."

Prof. Roy's article on Flight sums up the recent theories on the subject, and Dr. Shufeldt's contributions on certain North American forms, concludes the list of matter additional to Prof. Newton's own work, which constitutes the great bulk of the volume, and throngs its pages with very various subjects relating to birds, which have been to him a life-long study from every point of view.

The book is a bulky one (it contains upwards of 1200 pages), yet one cannot help noticing that the exigencies of space must always have been present to the author, obliging him, as he himself declares, to compress his information into the smallest possible compass. That Prof. Newton should succeed in this difficult task no

one who knows his accurate and concise methods would doubt, and that he has succeeded must be admitted by every one.

The general arrangement of the articles is, of course, an alphabetical one, but cross references are freely given, which greatly assist in finding information placed under different headings. An initial note must not be lost sight of to the effect that where a word is introduced in small capitals, without apparent necessity, further information concerning it may be sought for under that word in its alphabetical place. The index at the end will also greatly help in finding the subjects; the introduction having an index of names of its own.

Should any article seem to fall short of supplying the most recent information concerning the subject treated of, as is the case in the account of the Birds of Paradise, where no mention is made of the marvellous forms recently brought to light, it must be remembered that it has taken several years to produce the four parts in which the work was issued, and that the sheets were passed for press from the year 1889 onwards.

It is not possible in this short notice to give detailed notes on any of the many valuable articles which abound all through the pages of the book, but interest will no doubt mainly centre on the introduction, which formed article "Ornithology" in the "Encyclopædia Britannica" (published in 1885). This has already been noticed in this journal (*NATURE*, vol. xxxiii. p. 121), but we may say concerning it that the subject has been since then modified in some respects, and enlarged to bring it up to date. As it stands it is the most comprehensive review of the subject of ornithology extant, and in it will be found a concise summary on most of the important works on ornithology from the earliest times. These are freely criticised, sometimes with favour, sometimes with disfavour, but always, except as some will think in respect to a few recent works, in a judicial spirit.

In this introduction the complex subject of classification is fully treated of, and the various suggested schemes analysed. Prof. Newton, though confirmed in his doubts whether a really valid systematic arrangement of birds has yet been put forth, has hopes that that object may ultimately be attained. We confess that we are not so sanguine, believing that from the nature of the evidence, most of which must long ago have been irretrievably lost, the arguments in favour of many relationships must always be hypothetical, and the resulting classification always liable to modification. Still this impression of ours must not be taken to indicate want of interest on our part in morphological studies in ornithology, for we certainly believe that persistent attempts to elaborate more perfect systems of classification will increase rather than diminish interest in the subject. And this, after all, is of more value than the attainment of any goal.

Prof. Newton tells us in his preface that to his regret he was obliged to omit noticing several interesting subjects bearing upon ornithology, as well as many names of birds beyond those included. He holds out a prospect that these additions may be supplied at some future time. We add our hope that his wishes may be fulfilled, and that they may be taken in hand by the same competent authority.

O. S.

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