

allied genera may exhibit great differences in this respect. Hence, the types of canals bear no relation to different modes of locomotion, and have also no taxonomic value. Five different types are described and figured; but "in type 2 occurs *Catharista*, one of the best flyers, and in the same group *Geococcyx*; which seldom flies but is one of the ablest runners." This appears to be the first attempt to investigate the relation of the bony canals in birds' ears to locomotion, or to genetic affinity, and are thus of special interest, since the relative size and structure of these canals has been supposed to have some relation to power and manner of flight. Presumably a knowledge of these structures would be of some use in taxonomy, but it proves to have such importance only within narrow limits.—J. A. A.

A Twenty-five Year Index to 'The Auk' and 'Nuttall Bulletin.'¹—In November, 1899, the Council of the American Ornithologists' Union appointed a Committee to prepare for publication an Index to 'The Auk' and its predecessor, the 'Bulletin of the Nuttall Ornithological Club,' to cover the twenty-five year period from 1876 to 1900.

The Committee was a large one, and proceeded at once to its work. Each volume was indexed by two persons independently; their work was collated by a third member of the Committee, and verified by Dr. Jonathan Dwight, Jr., the Chairman of the Committee and Editor of the Index. The work was thus very laborious and time-taking, some 34,000 cards having been turned in in duplicate by the indexers to the editor for revision and preparation for the press. This, with unexpected delays in the printing, has deferred the appearance of the volume beyond the anticipated date of publication, but the final results are eminently satisfactory, and form a well-printed volume of nearly 450 pages. As stated by the editor, it forms "a guide to a large part of the ornithological literature of the last quarter of the nineteenth century." The references are classified and arranged in a way to facilitate finding any information required. The titles include papers and works reviewed as well as the papers and notes here first published, arranged in chronological sequence under the names of the authors. Under localities (as States and countries) are entered all geographical references, alphabetically by the names of the authors, followed by citation of volume and page. Species are entered primarily under their respective genera, under their A. U. O. Check-List names, 1895 to 1900, when North American, or their current names in Sharpe's 'Hand-list' or Ridgway's 'Birds of North and Middle America when extralimital, with cross-references to their synonyms. (For index convenience subspecies are treated

¹ Index | to the | Bulletin | of the Nuttall Ornithological Club, Volumes I–VIII — 1876–1883 | and to its continuation | The Auk, Volumes I–XVII — 1884–1900 | Compiled by a Committee of the American Ornithologists' Union | Edited by | Jonathan Dwight, Jr., M. D. | [vignette] New York, | Published by the American Ornithologists' Union | 1907 — 8vo, pp. viii + 426. Price in paper covers, \$3.25 net; bound in cloth, \$3.75 net. Orders should be addressed to Jonathan Dwight, Jr., Treasurer, 134 West 71st St., New York, N. Y.

as species.) They also are given alphabetically with a cross-reference to the main entry. The species references are classified to indicate the nature of the information conveyed, whether relating to distribution, habits, measurements, migration, moult, nomenclature, plumage, etc. This is secured by the use of special type, and abbreviations preceding the references, etc.

For this admirable piece of work the members of the American Ornithologists' Union and ornithologists at large are indebted primarily and mainly to the labors of Dr. Dwight, who has devoted a vast amount of energy and time to the work, with no other recompense than the consciousness of accomplishing a great and much needed task in an exceptionally satisfactory manner. For we know of no index to scientific literature comparable with this in point of detail and utility. Sets of the publications to which it relates will be incomplete without this index volume, and it will be an invaluable reference book for those who wish to know the contents of the volumes they do not possess.— J. A. A.

'**Dan Beard's Animal Book.**' — "This book," says the author, "is not a Natural History, neither is it a so styled Nature Book.¹ It is simply a book of animals and is made up from the Author's personal notes and sketches made in the fields and forests for his own amusement and not with a view to publication; . . ." "This book," he says again, "was not written for scientific reasons or even for profit. As the boys would say, it was written 'for the fun of it,' or as their parents might say, it was written 'for the love of it!'" This is evident from every page, and it is for this reason all the more interesting, both the illustrations and the text. It is replete with humor, with original information about our native mammals, birds, newts, frogs and toads, lizards, etc., by a born artist, a humorist, and a devoted lover of nature. As to the motive, "If this book succeeds in awakening a love for wild Nature in even a small portion of the American youth it will be counted as a success. Well barbered and manicured Nature, closely shaven lawns and neatly trimmed hedges are perfectly proper in yards to suburban houses, but contact with Nature without a hair-cut and unshaven is what gives strength to one's muscles, brightness to one's eyes, and makes the red blood dance in one's veins." "What we need and what is coming is an unselfish, passionate love of Nature, not for Nature's sake, but for humanity's sake; such a love is wholesome, manly, invigorating and uplifting."

The last fifty pages relate wholly to birds, and the last chapter (pp. 510-538) is interestingly ornithological, with many apt original renderings of bird songs, and field notes.— J. A. A.

¹Dan Beard's | Animal Book | and Camp-fire Stories. | By |Dan Beard | Author of "The American Boys' Handy Book," "Jack of all Trades," etc. | Illustrated by the Author | New York | Moffat, Yard and Company | 1907— 8vo, pp. vii + 538, with over 100 illustrations (plates and text figures, several of the former colored). Price \$1.60.