of the writer's personal experience with them, these biographies being, moreover, very pleasantly written. The immature and other special plumages of many of the species are also described at length. The twelve plates, drawn by Messrs. R. and J. L. Ridgway, are not satisfactory productions, the original colored drawings having been very faultily rendered by the lithographer.

Besides the extended bird matter, the work contains a very important report on the mammals, with the identifications and technical notes by Mr. F. W. True; another on the fishes, with notes by Dr. T. H. Bean; and a third on the Diurnal Lepidoptera, in conjunction with Mr. Harry Edwards.—J. A. A.

Jordan's New Manual of Vertebrates.*—The fifth edition of President Jordan's 'Manual of the Vertebrates' of the northeastern United States is practically a new work, not only being entirely rewritten and greatly enlarged, but so far extended in scope as to take in not only a considerably enlarged area (Missouri, Iowa, Minnesota, and the Provinces of Canada), but the marine species of the Eastern Coast from North Carolina to Nova Scotia. While presenting the same size and appearance externally as former editions, it contains probably double the amount of text, through the use of smaller type and a much larger type bed. The plan of the work is also essentially modified, and its general character greatly improved, through the fuller diagnoses given, and the analytical keys being based on structural characters instead of on artificial distinctions. The order of arrangement is also inverted, the fishes being treated first and the mammals last. The latest conclusions seem to be given in respect to questions of classification and nomenclature, and the work thus authoritatively brought down to date. For birds the arrangement and nomenclature of the A. O. U. Check-List is adopted. The reception given former editions shows that the work meets a want, which the new edition must fill to a much greater degree than has been the case heretofore, thus rendering the 'Manual' still more worthy of the large patronage it is sure to receive. The bird part is especially to be commended, in so far as such limited space can give salient and distinctive characters, it being indeed a multum in parvo.—I. A. A.

Sharpe's Birds in Nature.+—The present volume is elegantly gotten up, as regards typography, paper, and exterior, with elaborate designs in

^{*}A Manual of the Vertebrate Animals of the United States, including the District north and east of the Ozark Mountains, south of the Laurentian Hills, north of the southern boundary of Virginia, and east of the Missouri River, inclusive of Marine Species. By David Starr Jordan, President of the University of Indiana. Fifth Edition, entirely rewritten and enlarged. Chicago: A.C. McClurg and Company. 1888. 8vo, pp. iii + 375.

[†]Birds in Nature. By R. Bowdler Sharpe, F. L. S., F. Z. S., Zoölogical Department, British Museum, etc., etc., etc. With Thirty-nine Colored Plates, and other Illustrations, by P. Robert. Boston: Estes & Lauriat. 1888. 4to.pp. v + 78.