Cooke's Birds of Colorado.<sup>1</sup>—In this Bulletin of 143 pages, Prof. Cooke, attempts "to set forth our present knowledge of the distribution and migration of Colorado birds. There is also included a bibliography of the subject and an historical review of the progress of ornithological investigation in this State." The total number of species and subspecies thus far known from the State is 363 (see p. 128), of which 230 have been found breeding within the State. The records given "are based first of all on all the printed matter that has appeared dealing with the birds of Colorado. This mass of material has been supplemented by much manuscript matter, and by personal observations of the author during a four years' residence in the State. . . . The only claim for completeness made by the present list is that it is complete so far as work done up to this time is concerned. Experience in this State as well as in others teaches that additions will be made for many years to come." As the writer says, many parts of the State have never been visited by an ornithologist, including many areas of large extent; the work thus far done has been limited to "the region along the eastern base of the foothills," "thirty miles wide and one hundred and fifty miles in length," to which "four-fifths of all the records of Colorado pertain." There is thus, as Prof. Cooke emphasizes, inviting fields here for further ornithological research.

A few pages are given to the topography and climatology of the State, followed by acknowledgments to collaborators for valued assistance. Next follows a series of twelve lists classifying the birds in accordance with the nature of their occurrence, as residents, winter visitants, etc., A tabular statement of dates of arrival (pp. 18, 19) is then given for four points, - St. Louis, Mo.; Fort Lyon, Loveland, and Idaho Springs, Col. An annotated 'Bibliography of Colorado Ornithology' occupies pp. 20-39, numbering 182 titles, beginning with Pike, 1807. Then follows 'The History of Colorado Birds' (pp. 40-48), in which the more important of the papers listed in the 'Bibliography' are taken up chronologically and further summarized, followed by a tabular recapitulation of the species added to the State by the successive authors. The annotated list of 'The Birds of Colorado' occupies pp. 49-128, entered under the A. O. U. numbers and names. The annotations indicate quite fully the nature of the occurrence of each species within the State, including relative abundance, dates of imigration, and the portions of the State it frequents, and where it breeds. No species is apparently included without good evidence. A few additional species are given (in brackets in small type) that have been taken on the borders of the State, under circumstances that indicate their probable occurrence within the limits of Colorado. A very full index (pp. 129-143) concludes the paper, which has evidently been prepared with great care and thoroughness, and with the expenditure of

<sup>1</sup>The Birds of Colorado. By W. W. Cooke. Bulletin No. 37, State Agricultural College, Fort Collins, Colorado, March 17, 1897. 8vo, pp. 143. much time and labor. Indeed it may well be taken as a model for a State list. We note, however, that the Wheatear (*Saxicola ananthe*) is referred to as "A European species, straggling to New England, and once taken at Boulder," Colorado, whereas it is a not uncommon bird in Greenland, Labrador, and other parts of Arctic America. We regret to see, however, that in the section devoted to the history of Colorado Ornithology, generic names are printed with a lower case initial letter, which is not only unusual and unsightly, but renders it much more difficult to individualize quickly the names of the species in a running glance through the paragraphs. For this it is hoped the author is not responsible. Typographical errors are scarce, particularly in technical names, and the paper as a whole is very creditably printed.

The announcement is made that copies may be had gratuitously on application to the Director of the Agricultural Experiment Station, Fort Collins, Colorado. -J. A. A.

Miller on Construction of Scientific Names.<sup>1</sup>—This paper is designed. as stated in a note by the publication committee of the California Academy of Sciences, as "a comprehensive, and at the same time readily accessible and reliable, treatise on the rules that should govern the selection and formation of scientific names derived from Greek and Latin," the committee believing that such a treatise would prove useful to local botanists and zoölogists of Western North America for many years to come; and they might well have added, of Eastern North America as well. Says the author: "Various scientific writers have arbitrarily departed from the philologically correct method of nomenclature established by Linnæus; moreover some difference of opinion now prevails in regard to the formation, gender and inflection of certain New Latin words derived from the Greek. Definite rules have been wanting, or at least not readily available. Accordingly, at Dr. Jordan's request, and with his kind assistance, I have undertaken to formulate a set of rules based upon philological principles and at the same time agreeing with the practice of consistent nomenclators. Ultra-purism, however, as the writing of ai and oi for the Greek at and ot or of k for Greek  $\kappa$ , shall have no more consideration than the philological monstrosities produced by a Rafinesque or a Swainson."

The rules given by Prof. Miller are clear and concise, and will certainly be welcome to a large proportion of at least the younger systematists who find themselves called upon now and then to provide names for new genera and species or even higher groups. The rules are intended to give directions as to how to construct properly names derived from Greek and Latin, in future work; they are not intended to be retroactive, for

<sup>&</sup>lt;sup>1</sup>Scientific Names of Latin and Greek Derivation. By Walter Miller, Professor of Classical Philology, Leland Stanford Jr. University. Proc. California Academy of Sciences, 3d. Ser., Vol. I, No. 3, pp. 115–143.