the days of Aristotle, Pliny, and Ælian to the present time. All separate 1 works of any importance, whether general, faunal, or monographic, are noticed at greater or less length, according to their merits or importance. except that the faunal works noticed are limited, in consequence of their being so numerous, "to those countries alone which form the homes of English people, or are commonly visited by them in ordinary travel." We miss, therefore, all reference to such important works as Tschudi's 'Fauna Peruana,' Burmeister's 'Thiere Brasiliens,' Salvin and Godman's 'Biologia Centrali-Americana,' etc. Furthermore, it was found necessary to leave unmentioned all "treatises which have appeared in the publications of learned societies, or in other scientific periodicals." While a bibliography of ornithology is here neither attempted, nor is to be properly looked for in such a connection, all works which have had important bearing upon the progress of the science are duly noted, and their influence critically weighed. The various prominent systems of classification are also set forth, and the "rise of the present more advanced school of ornithologists" is traced in considerable detail. Its origin is attributed to the 'few scattered hints' contained in Nitzsch's 'Pterographische Fragmente,' published in 1806. But the attempt made by Merrem, in his 'Tentamen Systematis naturalis Avium' (1812), "must be regarded as the virtual starting-point of the latest efforts in Systematic Ornithology." In chronological order are discussed the labors of De Blainville (1815), Jacobson (1820), Nitzsch (1820-40), L'Herminier (1827), Berthold (1831), Cuvier and Geoffrey (1832), Gloger (1834), Macgillivray (1837), Blyth 1838), Brandt (1836-39). Müller (1845-47), Cabanis (1847), Parker (1860 and later), Lilljeborg (1866), Huxley (1867), A. Milne-Edwards (1867-71), Marsh (1870), Sundevall (1872-74), Garrod and Forbes (1873-83), Sclater (1880), and others less prominently identified with the subject. classification of birds is finally discussed from the author's own standpoint, but he presents no formal system, considering it evident that our knowledge of the class is too imperfect to enable systematists to construct a phylogenetic scheme. Finally, after passing the ordinal groups in review, he deals with the supposed high rank of the Turdidæ, which he claims is not "borne out by their alliances, nor by the size of their brain, nor by character of plumage." On the other hand, he claims, with Macgillivray and Parker, "that at the head of the Class Aves must stand the Family Corvidæ, of which family no one will dispute the superiority of the genus Corvus, nor in that genus the pre-eminence of Corvus corax—the widelyranging Raven of the Northern Hemisphere, the Bird perhaps best known from the most ancient times, and, as it happens, that to which belongs the earliest historical association with man."-I. A. A.

Ridgway on the American Red Crossbills.*—In his 'Review' of the American Red Crossbills (Loxia curvirostra group) Mr. Ridgway is

^{*} A Review of the American Crossbills (Loxia) of the L. curvirostra type. By Robert Ridgway. Proc. Biolog. Soc. of Washington, II, 1883, pp. 84-107. (Separates issued April 30, 1884.)

"inclined to consider all the Red Crossbills that I [he] has seen, from whatever country, as races of Loxia curvirostra Linn." He recognizes three races of American Red Crossbills, one of which (L. curvirostra bendirei) is described as new. In size it is larger than L. c. americana proper and smaller than L. c. mexicana, "between which it may be considered as being about intermediate, so far as size is concerned." Its habitat is given as "Chiefly the western mountain regions of the United States, from Colorado to Oregon and California; in winter not uncommon in Eastern United States (Massachusetts, Maryland, etc.)." In North America the Red Crossbills decrease in size from the north southward, from the small northern subsp. americana to the large, heavy-billed subsp. mexicana of the southern border of the United States and Mexico. The Japanese Red Crossbill, from the middle or main island of Japan, which has been referred to L. albiventris Swinhoe, is renamed L. c. japonica, the name albiventris being preoccupied for a species of Munia. There are also remarks on other races of Red Crossbills, particularly the L. curvirostra and L. pityopsittacus of Europe. - J. A. A.

Ridgway on Various American Birds.—Mr. Ridgway states that while Mr. Cassin was right in separating the smaller North American Snow Geese from the larger, he erred in giving a new name (albatus) to the smaller form. which is identical with the Anas nivalis of Forster, "and may therefore be called Chen (or Anser) hyperboreus nivalis (Forst.)."*

Mr. Ridgway, in giving the results of a reëxamination of the types of Muscicapa fulvifrons and Coues's Mitrephorus pallescens, recognizes three species of the fulvifrons group of Flycatchers, as follows: (1) Empidonax fulvifrons (Giraud), from east of the Rocky Mountains (2) E. f. pallescens (Coues), from west of the Rocky Mountain; (Arizona, New Mexico, and probably portions of Mexico); and (3) E. f. rubicundus (Cab.), from Southern Mexico.†

He also claims that the earliest name of the Mexican House Finch (Carpodacus hamorrhous) is Fringilla mexicana Müller and that the species should be called Carpodacus mexicanus (Müll.), or, should intergradation with C. frontalis be proven, C. frontalis mexicanus (Müll.).

As new subspecies are described§ (1) Parus atricapillus turneri (St. Michael's, Alaska), (2) Psaltriparus minimus californicus (California), (3) Colaptes mexicanus saturatior (Northwest coast, Columbia River to Sitka), (4) Myiarchus mexicanus magister (Western Mexico, north to

^{*} Note on the Anas hyperboreus, Pall., and Anser albatus, Cass. Proc. Biolog. Soc. Washington, II, pp. 107, 108. (Separates issued April 30, 1884.)

[†] Remarks on the type specimens of Muscicapa fulvifrons, Giraud, and Mitrephorus pallescens, Coues. *Ibid.*, pp. 108-110. (Separates issued April 30, 1884.)

[†] Note regarding the Earliest Name for Carpodacus hæmorrhous (Wagler). *Ibid.*, pp. 110, 111. (Separates issued April 30, 1884.)

[§] Descriptions of some New North American Birds. *Ibid.*, pp. 89-95. (Separates of this and the following issued April 10, 1884.)