

except on the ground of haste or carelessness, since they are duly recorded on unquestionable authority in the works referred to by the authors in their preface,—*e. g.*, *Picoides arcticus*, *Otocoris alpestris*, *Empidonax flaviventris*, *Quiscalus quiscula aeneus*, *Ammodramus henslowi*, *Melospiza lincolni*, *Dendroica palmarum hypochrysea*, *Seiurus motacilla*, *Anthus pennsylvanicus*, etc. *Larus argentatus* should of course be *L. argentatus smithsonianus*. The list is attractively gotten up, and is remarkably free from typographical errors; yet it is marred by a blemish one would hardly look for in a scientific publication of the present day, namely, the use of capital initial letters for *all* specific and subspecific names. Evidently the authors allowed their own good judgment to be swayed by the bad counsels of the printer.—J. A. A.

Merriam's List of Birds observed in Idaho.*—The ornithological results of Dr. Merriam's 'Biological Reconnaissance of south-central Idaho' during the season of 1890, consists of an annotated list of 158 species, 94 of them recorded for the first time for the State, and the discovery of a new Owl, allied to *Megascops flammeolus*, and named *M. flammeolus idahoensis*. This new form differs from *M. flammeolus* in being smaller and paler. A well-executed colored plate accompanies the description. Besides the general list there is a special 'List of Birds noted in the Saw Tooth Mountains, at or near Saw Tooth or Alturas Lake, September 25 to October 4, 1890' (pp. 19, 20), numbering 43 species, and various references to birds of particular localities in the general introduction.

As stated by Dr. Merriam, Idaho has thus far remained a veritable *terra incognita*, so far as detailed knowledge of its natural history is concerned, less being known of it than of any other State or Territory in the Union. The present report on the work done there during the season of 1890 occupies about 120 octavo pages (North American Fauna, No. 5), of which about 30 are devoted to an exposition of the physical characters and life zones of the region explored, and about 60 to a detailed report on the mammals obtained, of which 12 of the 67 species here enumerated are described as new. It is needless to say that much light is thrown upon the physical features of the region and their relation to its faunal and floral characteristics. Considering the limited time spent in field work and the small force of assistants employed, a surprisingly large amount of work was accomplished.—J. A. A.

Maynard's 'Contributions to Science.'†—The 'Contributions' contain articles relating to nearly all branches of natural history. Only the fol-

*Annotated List of Birds observed in Idaho during the Summer and Fall of 1890, with Notes on Species previously recorded from the State. By Dr. C. Hart Merriam. North American Fauna, No. 5, July 1890, pp. 89-108.

†Contributions to Science. By Charles J. Maynard. Illustrated with hand-colored plates, drawn on stone by the Author. Vol. I, "April, 1889-Jan. 1890." Newtonville, Mass.: Published by the Author. 8vo. pp. 204, pll. xvi. with numerous cuts in the text. [No. 3, dated "October, 1889," was received March 24, 1890; No. 4, dated "January, 1890," was received April 2, 1891.]

lowing are ornithological: (1) 'Description of an apparently New Species of Warbler from Jamaica' (No. 1, p. 30, pl. iii, fig. 1, head). This is named *Dendroeca ignota*, and is said to bear a general resemblance to *D. palmarum*. It is based on a single specimen in the Museum of the Institute of Jamaica, at Kingston, Jamaica, where the type remains, "labelled 'Hamstead, St. Andrews, April 4th, '79. J. Goodlet.'"

(2) 'The Sterno-trachealis as a Vocal Muscle' (*ibid.*, pp. 35-37, pl. iii, fig. 2-14). This muscle is claimed to be a true vocal muscle, and hence Mr. Maynard assigns six pairs of vocal muscles to the Oscines.

(3) 'Notes on Some Jamaican Birds' (*ibid.*, pp. 39, 40). Notes on five species. *Rallus coryi* is recorded from Jamaica, and *Helinaia swainsonii* is judged to be "a quite common winter bird in Jamaica," from the number of skins in the Museum of the Institute of Jamaica.

(4) 'Description of a supposed New Species of Gannet' (*ibid.*, pp. 40-48, and No. 2, pp. 51-57, pl. v, fig. 1 and 2, heads of adult and young). This, named *Sula coryi*, is the *Sula cyanops* of Cory from Cayman Brac and Little Cayman (*cf.* Auk, VI, 1889, pp. 31, 32). A detailed description is given of the various phases of plumage, from the nestling to the adult; also a very full account of the habits of the species. At least 10,000 of these Gannets were estimated to be breeding "in the gannetry at Little Cayman." It has the form and size of the Red-faced Gannet (*Sula piscator*), but differs from it in having the tail wholly white.

(5) 'The Vocal Organs of the American Bittern, *Botaurus lentiginosus*' (No. 2, pp. 59-68, pl. vi, and 6 figs. in text). This is an attempt to explain, on anatomical grounds, the production of the singular pumping sounds this species emits. By a singular coincidence, Mr. Maynard's studies appear to have been based on the very individual which formed the basis of Mr. Bradford Torrey's paper on this species in 'The Auk' (VI, 1889, pp. 1-8); they tend to confirm Mr. Torrey's hypothesis there given.

(6) 'Notes on the Anatomical Structure of the Crowned Crane' (*ibid.*, pp. 80-82).

(7) 'On the probable Evolution of the Totipalmate Birds, Pelicans, Gannets, etc.' (*ibid.*, pp. 82-88). This is a paper of considerable interest, but not easy to summarize. The Pelicans are considered to be the central and oldest type, the Tropic Birds and the Frigate Birds the most specialized. The American Gannets are believed to be recent offshoots from two stocks, represented by *Sula sula* and *S. cyanops*.

(8) 'The Sound-producing Organs of Birds' (No. 3, pp. 101-106, figs. 16-19, and No. 4, pp. 164-167, figs. 40, 41). The species particularly considered are the Bohemian Waxwing, the American Woodcock, the Evening Grosbeak, the American Barn Owl, the Ani, and the American Flamingo.

(9) 'Notes on the Anatomical Structure of three Species of Gannets' (*ibid.*, pp. 116-123, figs. 21-27, and No. 4, pp. 151-153, figs. 36-39). These are *Sula sula*, *S. coryi*, and *S. bassana*.

(10) 'Singular Cause of the Death of a White-bellied Nuthatch' (*ibid.*, p. 124, fig. 28). An acorn shell transfixed by the bird's bill could not be dislodged, and caused the death of the bird through its worry and struggle to dislodge the obstruction.

(11) 'Diseased Feet of a Chipping Sparrow' (*ibid.*, p. 125, fig. 29). Both feet affected by a "cancerous growth."

(12) The Arrow-headed Warbler of Jamaica, *Dendroica pharetra* (*ibid.*, p. 136, pl. ix). Figured, with a short note on its history.

(13) 'The Nictitating Membrane and Crystalline Lens in the Mottled Owl' (*ibid.*, pp. 136, 137, figs. 34, 35).

(14) 'Notes on the Young of Certain Species of Birds' (*ibid.*, pp. 140-147, and No. 4, pp. 159-163, pls. xi-xiv, and 7 figs. in the text). The young of the following species are figured: Man-of-War Bird, young 2 days old, pl. xiv; Belted Kingfisher, newly hatched, fig. 36; Cory's Gannet, pl. xi, young, 2 days old; Common Gannet, pl. xii, 2 days old; Audubon's Shearwater, fig. 36*, 1 day old; Least Tern, fig. 36**, 1 day old; Bob-white and Ruffed Grouse, about 7 days old, pl. xiii; Rough-winged Swallow, few days old, fig. 38; Worm-eating Warbler, about one week old, fig. 39; Florida Mottled Owl, one week old, fig. 40. There is much interesting comment on the various species figured.

(15) 'Notes on West Indian Birds' (No. 4, pp. 171-181). This paper contains a long account of the habits of the Bahama Wood Star (*Doricha evelynæ*), and shorter accounts of the Lyre-tailed Hummingbird (*D. lyrura*), Ricord's Hummingbird (*Sporadinus ricordi*), the Plumbeous Thrush (*Mimocichla plumbea*), and the Red-legged Thrush (*M. rubripes*).

(16) 'Notes on the Southward Migration of the White-bellied Swallow, *Hirundo bicolor*' (*ibid.*, pp. 186, 187). Its gradual retreat southward from Woods Hole, Mass., to Florida, with the advancing cold weather of autumn, is noted.

These papers contain much original and interesting matter, as indicated by the above-given titles and comment.—J. A. A.

Minor Ornithological Publications.—Since last noted in these pages 'The American Field' (Vols. XXIX-XXXIV, 1888-1890) has contained the following articles and notes of interest to ornithologists (Nos. 2015-2112).

The American Field.

2015. *Game Destroying Hawks.* By W. C. A[very]. 'The American Field.' Vol. XXIX, Jan. 7, 1888, p. 7.

2016. *English Sparrow Catching.* By W. T. Hill. *Ibid.*, Jan. 14, 1888.

2017. *The Grouse Family.* By Crocus, W. A. DeForest, and Ranger. *Ibid.*, Jan. 21, 1888, p. 55. — Drumming of *Bonasa umbellus*.

2018. *The Woodcock.* By Killbuck. *Ibid.*, Jan. 28, 1888, pp. 79-80.

2019. *Snipes Wintering in the North.* By Clarence A. Farnum. *Ibid.*, Feb. 4, 1888, p. 104. — *Gallinago delicata*.