

with which Mr. Thompson illustrates his theme and proves his thesis; and it is equally true that no artist could have drawn them without a knowledge of the anatomical details upon which they are based. Mr. Thompson's plea is for scientific exactness as well as for artistic excellence. He rightly claims that no result can be correct which is fundamentally wrong, and he presents his fellow artists with a series of original studies of the visible form of mammals and birds as it is governed by bones and muscles, tendons, veins and nerves, hair, feathers, which they will do well to consider.

We are here concerned only with that part of the work relating to birds. Plates are given illustrating the pterylosis of a typical passerine bird (*Passer domesticus*), a Kestrel (*Falco alaudarius*), and a Quail (*Coturnix communis*). Special attention is paid to the intricate arrangement of the feathers of the wing, and to the effect produced by the feathers of certain pteryllæ when in proper position. This is further shown by a remarkable drawing of the Peacock's spread train, which, when in good condition, is found to present a perfect half circle, the ocelli being bisected by the radii and equidistant concentric circles.

Mr. Thompson has rendered a service to science and to art for which all lovers of truth and beauty cannot be too grateful.—F. M. C.

Miss Merriam's 'A-Birding on a Bronco'.¹—'A-Birding on a Bronco' consists of a series of nineteen chapters or studies, mostly here printed for the first time, illustrated with numerous 'half-tones' from photographs of some of the scenes described and by spirited drawings of birds and birds' nests by Mr. Fuertes. The scene of Miss Merriam's studies is the vicinity of Twin Oaks, in southern California, "thirty-four miles north of San Diego, and twelve miles from the Pacific," where parts of two summers were spent a-field with the birds. About sixty species are referred to at greater or less length, while a score or more are made the subject of special study. Some twenty pages are devoted to 'The Little Lover,' in other words, the Western House Wren, and as many more to the Western Gnatcatcher. The chief characters of another chapter are some young California Woodpeckers, while Bush-tits, Orioles, Chewinks, Humming-birds, the Valley Quail, the Road-runner, and others come in for a liberal share of attention. Miss Merriam is a sympathetic as well as a keen observer of birds in their native haunts, and relates in minute detail the vicissitudes of bird-life as seen in her numerous excursions to their favorite haunts. As may be inferred from the title of the book, two trusty broncos—one during the season of 1889 and the other in 1894—afforded her not only means of easy travel during her daily excursions but also pleasant

¹ A-Birding on a Bronco | By Miss Florence A. Merriam | . . . [= Motto, 3 lines] | Illustrated | [Vignette] | Boston and New York | Houghton, Mifflin and Company | The Riverside Press, Cambridge | 1896.—16mo, pp. x + 227. (Price \$1.25.)

companionship. While Mrs. Miller and other well known writers have made us familiar with the domestic trials and housekeeping methods of many of our eastern birds, Miss Merriam here enters a new field, and tells us in a charming way of the nest-building and brood-rearing ways of a score or more of interesting types of western bird-life. The work is of course non-technical, as it should be, being a popular contribution to bird-lore, yet, abounds with interesting observations of permanent value.—J. A. A.

'Papers presented to the World's Congress of Ornithology.'¹—From the 'Publisher's note,' we learn that the few weeks intervening between the appointment of the Committee of the World's Congress of Ornithology (see Auk, X, 1893, 386) and the session of the Congress, did not enable the Committee to do all it wished to secure the co-operation of ornithologists living at a distance from Chicago, "but they had reason to be much gratified at the measure of success attained, as witnessed by the large and interested audiences which attended every session, and the many papers which were read in person or by proxy." The Congress was held Oct. 18-21, 1893, the sessions occupying four days.

This Congress differed from other World's Congresses of Ornithology that have been held in that it was not, and was not intended to be, to any large extent a scientific congress; the subject of Ornithology being approached mainly from its economic, æsthetic, and humanitarian sides. Indeed, the motto chosen to grace the titlepage—"Birds must and shall be protected"—is the key-note to the volume. Of the 27 papers contained in the work, not one can be considered as technical; all are written in a popular vein, and nearly all, from the 'Presidential Address,' by Dr. Coues, to almost the last paper in the volume, approach the subject of birds from the side of the humanitarian. Many of the papers are charmingly written, and there is less repetition and less of the commonplace than the nature of the subject would naturally lead one to expect. The papers here gathered are well worthy of the permanency now secured for them, and of their attractive typographical setting. Their perusal should tend not only to stimulate interest in bird protection, but in the popular study of birds for the pleasure it brings. The list of contributors includes a number of well known ornithologists, as well as many popular writers of distinction on ornithological subjects. The edition is limited to 600 numbered copies.—J. A. A.

¹Papers | presented to the | World's Congress | on | Ornithology | Edited by | Mrs. E. Irene Rood | Chairman Woman's Committee of the Congress | under the direction of | Dr. Elliott Coues | President of the Congress, Ex-President of the American Ornithologist's Union. | — "Birds must and shall be protected." | — | Chicago | Charles H. Sergel Company | 1896.—8vo, pp. 208. (Price, \$5.00, net.)