

RECENT LITERATURE.

'The Standard Natural History'—'Birds.'*—The 'bird volume' of the well-known 'Standard Natural History,' published by S. E. Casino and Company of Boston, well maintains the high degree of excellence characterizing this important treatise on Zöology, now about completed in six beautifully illustrated imperial octavo volumes, mostly by the leading American authorities on the various subjects treated. The bird volume is mainly by Dr. Leonhard Stejneger, who is doubtless responsible for its general style and character, he having written the admirable 'Introduction' (pp. 1-20), and nearly two-thirds of the general text, as follows: Subclass I, Saururæ (the Archæopteryx), pp. 21-23; Subclass II, Odontotormæ (toothed birds having the teeth in sockets), pp. 23-26; Subclass III, Odontoholcæ (toothed birds with the teeth in grooves), pp. 27-30; Subclass IV, orders Struthiones (Ostriches, Cassowaries, Moas, Dodo, etc.), pp. 31-47; Æpiornithes, pp. 47, 48; Apteryges (Kiwis), pp. 48-51; Crypturi (Tinamous), pp. 51-54; Gastornithes (the extinct *Gastornis* and allies), pp. 54, 55; Ptilopteri (Penguins), pp. 56-63; Cecomorphæ (Grebes, Auks, Guillemots, Puffins, Skuas, Gulls, Terns, Skimmers, Albatrosses, and Petrels), pp. 64-91; Grallæ (Plovers, Sandpipers, Cranes, Rails, etc.), pp. 91-132; Chenomorphæ (Screamers, Ducks, Geese, Swans, Flamingoes, etc.), pp. 132-157; Herodii (Ibises, Storks, Herons, Boatbills, etc.), pp. 157-179; Steganopodes (Tropic-birds, Frigate-birds, Pelicans, Cormorants, Darters, etc.), pp. 179-195; Picariæ (except the Hummingbirds), pp. 368-441; Passeres, pp. 458-547. In more general terms, Dr. Stejneger has written the three subclasses of extinct birds, the Struthious birds, the wading and swimming birds, the so-called Picarian groups except the Hummingbirds, and the great group of Passeres.

Of the other groups Mr. Daniel G. Elliot has written the Opisthocomi (pp. 196, 197), the Gallinæ (pp. 197-237), the Columbæ (pp. 237-259), and the Hummingbirds (pp. 441-457),—groups to which he is well known to have given special attention.

Mr. Walter B. Barrows is responsible for the Accipitres (pp. 260-348), and Mr. J. S. Kingsley for the Psittaci (pp. 349-367).

The work as a whole is deserving of high praise. While to a large degree 'popular' in treatment, it presents a fair reflection of our present knowledge of the structure and classification of the class Aves. As an authoritative reviewer of the volume has already well said, "No work issued in Europe contains such a good general account of the Class of Birds according to the most recent researches of naturalists, and brings one into acquaintance with the newest discoveries in this group of vertebrates."

* The Standard | Natural History, | Edited by John Sterling Kingsley. | Vol. IV. | Birds. | Illustrated | by two hundred and seventy-three wood-cuts and twenty-five | full-page plates. | Boston: | S. E. Casino and Company. | 1885. Imp. 8vo, pp. viii + 558.

The classification presents a few innovations as regards the relative rank and limitations of certain of the higher groups, where a few new names are introduced, and a few changes are made in the nomenclature of genera and species. The class Aves is divided into four subclasses, as already indicated, three of them consisting entirely of extinct types, while the fourth (*Eurhipiduræ*) includes all the living representatives of the class and their more closely allied extinct forms. This latter subclass is divided into three 'super-orders' and eighteen 'orders.' The work begins with the 'lower' or more generalized forms, as the *Archæopteryx* and Toothed Birds, and closes with the *Passeres*. It is illustrated with 25 full-page plates and 273 cuts in the text, not a few of the latter being anatomical.

Lack of space forbids a detailed review, quotations, or extended criticism.

In the matter of editorship, we may remark that the passage from one group to another is often obscurely indicated, which a more formal use of subheadings would have obviated. While the names of the authors are given on a leaf preceding the title page, there is nothing there or elsewhere to indicate the share of each author's work, except the signatures to the articles, the discovery of which entails a laborious search, as they seem to be inserted on no easily discoverable system. The index, occupying only eight pages, could easily have been considerable extended with profitable results to the reader. On the whole, however, the defects are slight, while the excellences are manifold, and the general plan and execution are admirable. To the general reader the work must long prove a boon, and to the specialist will be hardly less valuable.—J. A. A.

Brewster on 'Bird Migration.'—Mr. Brewster's important memoir* of 22 pages, forming No. I of the 'Memoirs of the Nuttall Ornithological Club,' consists of two papers relating to the subject of bird migration. The first (read at the last meeting of the American Ornithologists' Union, and here first published) is a detailed account of the author's observations made at the Point Lepreaux Lighthouse, where he spent the interval from Aug. 13 till Sept. 26, 1885, for the purpose of studying the movements of the birds on their autumnal journey southward. The locality and other circumstances proved exceedingly favorable for observing the behavior of birds under the fascination of a powerful light, and their manner of 'striking' these fatally alluring objects is well detailed, the narrative adding much to our knowledge of a matter previously little understood. The second part of the memoir deals with the general

* *Memoirs of the Nuttall Ornithological Club.* | — | No. I. | — | *Bird Migration.* | By William Brewster. | Contributed by courtesy of the American Ornithologists' Union's Committee on the | Migration and Geographical Distribution of North American Birds. | Part I.—Observations on Nocturnal Bird Flights at | the Lighthouse at Point Lepreaux, Bay of | Fundy, New Brunswick. | Part II.—Facts and Theories respecting the general | subject of Bird Migration. | — | Cambridge, Mass. | Published by the Club. | March, 1886. Imp. 8vo, pp. 22.