mostly to distribution and habits, with occasionally descriptions of bill feet, iris, etc., from fresh specimens, and of plumage, with frequently explanations and comment on the native names, and notes on the uses of the birds made by the natives. The remarks on the breeding habits of many of the species contain much that is new and important. plates, drawn by Messrs. Robert and John L. Ridgway, add greatly to the interest of the work. The species figured, some of them for the first time, are the following: (1) Whiskered Auklet (Simorhynchus pygmæus: (2) Kittlitz's Guillemot (Brachyramphus kittlitzii; (3) Turner's Ptarmigan (Lagopus rupestris atkhensis, & and Q); (4) Lapp Owl (Ulula cinerea lapponica): (5) Hawk Owl (Surnia ulula): (6) White-winged Crossbill (Loxia leucoptera, juv., first plumage); (7) Cassin's Bullfinch (Pyrrhula cassini); (8) Aleutian Leucosticte (Leucosticte griseinucha); (9) Swinhoe's Wagtail (Motacilla ocularis); (10) Meadow Pipit (Anthus cervinus); (11) Alaskan Wren (Troglodytes alascensis); (12) Siberian Chickadee (Parus cinctus obtectus); (13) Hudsonian Chickadee (Parus hudsonicus).

Although the report was transmitted for publication in 1882, in nomenclature and other technical points it appears to have been brought down to the date of printing (1886) given on the title page, the nomenclature and classification of the A. O. U. Check-List* having been adopted for the birds. Obligations for assistance and facilities in the preparation of this part of the report are made to Mr. R. Ridgway, Dr. L. Stejneger, and the late Professor Baird.

In closing this notice of Mr. Turner's important contribution to North American ornithology, it gives us pleasure to announce that other belated reports on ornithological work done under the auspices of the U. S. Signal Servce Bureau may yet be expected, the volume before us announcing as "in course of preparation" a 'Report upon Natural History Collections made in Alaska in 1887-1881,' by Mr. E. W. Nelson; a 'Report of the Expedition to Lady Franklin Bay,' by Lieut. (now Gen.) A. W. Greely; and a 'Report of Observations made in Ungava and Labrador,' by Mr. L. M. Turner, author of the Report now under notice. While it is to be regretted that these reports become so largely shorn of their freshness and interest by these long delays in making them public, it is gratifying to know that the work of these intrepid explorers is not to be wholly lost to science.—J. A. A.

Sharpe's Catalogue of the Family Fringillidæ.†—In a thick volume

^{*}The numbering of the 'Check-List' is also preserved. On this point we beg to suggest that a continuous serial numbering would in all similar cases be preferable, since it shows at a glance, and without the labor of counting, the number of species treated, while the statement that the A. O. U. nomenclature is followed renders the use of the A. O. U. numbers superfluous.

[†]Catalogue | of the | Passeriformes, | or | Perching Birds, in the | Collection | of the | British Museum. | — | Fringilliformes: Part III. | Containing the Family | Fringillidae. | By | R. Bowdler Sharpe. | London: | Printed by order of the Trustees. | 1888. 8vo. pp. xv + 871, pll. xvi. Forming Vol. XII of 'Catalogue of the Birds in the British Museum.'

of nearly 900 pages, with 16 colored plates, Mr. R. Bowdler Sharpe, the indefatigable custodian of the unrivalled collection of birds in the British Museum, has attempted the herculean task of describing and arranging in due systematic sequence the species of the immense family Fringillidæ, numbering, according to Mr. Sharpe's reckoning, 559 species. All but 30 of these are represented in the collection under his charge, which includes "the types of no less than 125 species," and 9443 specimens. With such rich material at his command, including many additional specimens loaned to him for use in the preparation of his great work, he still expresses himself as unable to arrive at satisfactory conclusions respecting "the value of the various subspecies and varietal forms found in North America." With the acquisition of the Henshaw Collection of North American birds, recently purchased by the British Museum, doubtless Mr. Sharpe will be able to settle, at least to his own satisfaction, many of these doubtful points, on which it is to be hoped he will soon give us his revised opinions, whatever they may prove to be.

Respecting the relation of the Finches and Tanagers, Mr. Sharpe ob serves: "The line of demarcation between the families Fringillida and Tanagridæ seems to be an extremely arbitrary one, and many genera included by me as Finches are just as likely Tanagers, if there is really a definable character for the separation of the two families. tinctive characters may ultimately be discovered in the anatomy of the Fringillida and Tanagrida which will serve to separate them; but at present the whole classification of these birds is highly unsatisfactory"an opinion we believe to be widely shared by other ornithologists. Respecting genera and higher divisions Mr. Sharpe says: "No one as yet has propounded a satisfactory classification of the Fringillidæ, the difficulty consisting in the complete connection which exists between the various Finches and Buntings. Any one who has worked upon a large fragment of the family must acknowledge that the definition of the genera is difficult and the recognition of subfamilies almost impossible. Fringillidæ naturally group themselves into three divisions — Grosbeaks, Finches, and Buntings; but numerous forms connect them, being referable to the confines of any of the three groups." He deems it possible, however, that their osteology and general anatomy, when fully examined, may afford additional generic characters.

In general character the present volume, in respect to methods of treatment and principles of nomenclature, is so strictly similar to other volumes of this series by Mr. Sharpe, already noticed at length in this journal, that nothing further on these points need be said. We notice that 4 genera, 13 species, and 11 subspecies are characterized as new or renamed, as follows: Genera: (1) Rhodospiza, gen. nov; type and sole species Fringilla obsoleta Licht. (2) Pseudochloris = Orospiza Cab., 1883, nec Kaup. 1829. (3) Schistospiza, gen. nov.; type Emberiza griseocristata D'Orb. & Lafr. (4) Rhodospingus, gen. nov.; type Tiaris cruenta Less.—Species: (1) Spermophila albitorquis, sp. nov., ex Mexico—"similar to S. torqueola." (2) Amaurospiza æquatorialis, sp.

nov., ex Ecuador, and (3) A. axillaris, sp. nov., ex Brazil, both similar to (4) Fringilla maderensis, sp. nov., ex Madeira. (5) Chrv-A. concolor. somitris sclateri, sp. nov. = C. icterica pt. Scl. (6) C. stejnegeri = C. xanthogastra Scl. & Salv., nec Du Bus. (7) Sycalis taczanowskii = Gnathospiza raimondi Tacz., nec Sycalis raimondi Tacz. (8) Carpodacus roseipectus = C. frontalis Bp. & Schl. (nec Say) and C. hæmorrhous Scl. (nec Wagl.) (9) Zonotrichia whitii = Z. strigicebs White nec (10) Porphyrospiza pulchra = Cyanospiza cyanella Pelz. =? Emberiza cyanella Sparrm. (11) Poospiza boliviana, sp. nov., ex Bolivia. (12) Pseudochloris mendozæ, sp. nov., ex Mendoza-" similar to P. aureiventris." (13) Rhodospingus mentalis, sp. nov., ex Puna Islandsimilar to R. cruentus.—Subspecies: (1) Guiraca argentina, sub G. cyanea. (2) Spermophila whiteleyana, and (3) S. colombiana, both sub S. plumbea. (4) S. polionota, sub S. cucullata. (5) Chrysomitris boliviana = C. magellanica D'Orb. & Lafr., nec Vieill. (6) C. longirostris = Fringilla magellanica Vieill.!-" merely a connecting link between C. icterica [Licht. = C. magellanica auct. pl.] and C. siemiradzkii." (7) Passer griseigularis, sub. Passer domesticus. (8) Sycalis jamaica, = Crithagra [= Sycalis] brasiliensis Gosse, nec Gm. (a) Pyrrhospiza humii = P. punicea Bidd., nec Hodg. (10) Peucæa homochlamys (= P. ruficeps var. boucardi Hensh. nec Scl. = P. r. scottii Sennett, Jan. 1888, ex "Southern New Mexico and Arizona." Phrygilus saturatus, sub P. aldunatii-" a form of P. punensis [Ridg.]," connecting the latter with P. atriceps.

Respecting nomenclatural matters, relating more especially to North American birds, the following points may be noted: Hesperiphona and Passerculus, treated as subgenera in the A. O. U. Check-List, are ranked as full genera: Hedymeles is preferred to Habia, Phonipara to Euethia. and Cyanospiza to Passerina; Leucosticte is treated as a synonym of Montifringillai Pipilo chlorurus is referred to the genus Atalaptes Wagl. : Spermophila morelleti is restricted to Yucatan, Guatemala, Honduras, and Costa Rica, and the Texan and Mexican birds, separated as a distinct species, under the name Spermophila parva Lawr. From the material we have examined we should consider the Rio Grande form as at best only a subspecies of S. morelletti, under the name S. morelleti parva (Lawr.). No reference is made, even in the synonymy, to Guiraca cærulea var. euryncha Coues, now, and as we believe properly, recognized by Ridgway as a tenable subspecies. Spinus notatus, of our Check-List (Carduelis magellanicus Aud.) is referred to Chrysomitris icterica (Licht.) Scl. (= C. magellanicus, auct. pl.), a South American species, not found north of Brazil, Mr. Sharpe stating (p. 218, footnote) that the bird figured by Audubon is "undoubtedly C. icterica or C. capitalis [a subspecies of C. icterica, and not the black-winged C. notata, which at present is not known to occur within North American limits."

In respect to subspecies of North American birds, Mr. Sharpe, admittedly in some instances, follows American writers, not having sufficient material to reach an independent conclusion; in others he ignores them,

agreeing with them, however, frequently, but often differing from them, with the result of admitting some of our weakest claimants to recognition, while some of those best entitled to such treatment are reduced to pure synonyms! In not a few instances, however, he has exercised his conservatism with excellent discrimination. As in former volumes, binomials are applied alike to species and subspecies, the latter being distinguished by the prefix "Subsp." and a Greek letter. This is the case when the latter are recognized only provisionally, even as "races," and affirmed to be merely "connecting-links."

Here and there are to be noticed some singular rulings involving the principle of priority, as for example, at p. 175, where Fringilla maderensis is described as a new species, to be followed on the next pages by "subspecies," described thirty to sixty years earlier, of this new "species," namely: "Subsp. σ. Fringilla morelleti [Pusch. 1859,"], and "Subsp. β. Fringilla canariensis [Vieill. 1817]," all being insular forms of a common stock. We have also Acanthis exilipes (Coues, 1861), with a subspecies of it, hornnemannii (Holbœll, 1834), described nearly thirty years earlier! The volume, however, like its long series of predecessors, is too valuable a hand-book, and in general too excellently done, to render criticism a gracious task.—J. A. A.

Shufeldt on the Osteology of the Icteridæ and Corvidæ.-In a memoir of some 40 pages, illustrated with two beautiful plates, Dr. Shufeldt describes in detail the skeleton of our Western Meadowlark (Sturnella magna neglecta) and compares its osteology with that of other forms of the Icteridae and Corvidæ.* Selecting the genus Sturnella as a standard. he extends his comparison to not only various other forms of the Icteridae but to the leading types of the Corvidæ, as represented in North America. The "most useful and essential characters" of some half-dozen species in each family, and also of the Fringilline genus Calamospiza, are tabulated. and a series of 'conclusions' are given based on the data thus provided. He expressly states that these conclusions are based wholly on osteological characters, but is careful to record his conviction that the "true affinity of forms can only be arrived at through a correct appreciation of the entire structure after proper comparisons have been made." He considers that Xanthocephalus is the nearest ally of Sturnella, and Icterus spurius the most remote, among strictly Icterine birds, while outside of the family Sturnella "finds its nearest relation probably in Cyanocophalus cyanocephalus." Icterus finds, as would be expected, "its nearest allies in the genus Agelaius." "Molothrus." he says, "is a genus of Finches, and as such should be placed in the family Fringillidæ, where it more properly belongs," and where he has "no doubt Dolichonyx also belongs

^{*}On the Skeleton in the Genus *Sturnella*, with Osteological Notes upon other North American *Icteridæ*, and the *Corvidæ*. By R. W. Shufeldt, M. D., C. M. Z. S., M. A O. U., Memb. Am. Soc. Naturalists, etc. Journ. Anat. & Phys., Vol. XXII, pp. 309-350, pll. xiv, xv.