

insular and littoral peoples. These he divides into branches which are not very well defined, there being portions of a race separated geographically, linguistically, or otherwise, from other portions of the race. The branches are subdivided into linguistic stocks. This system is open to the same objection which must be made to Fr. Müller's: it is neither physical nor linguistic; and these two classifications, being based on entirely distinct phenomena, cannot be made to agree. The rest of the book is devoted to the discussion of the various races. The author sees the primal home of the Eurafian race in North Africa, whence he believes the Hamitic, Shemitic, and Aryan people derive their origin. The last he considers as a mixed race on account of the predominance of two distinct physical types. If we should apply this test to any of the better known peoples, we would have to class them among the mixed races. There is certainly no homogeneous variety of man in any part of the world. Therefore the reduction of the Aryan race to two prototypes seems somewhat doubtful. We cannot enter into the interesting sketch of the other races, but confine ourselves to the remark that the descriptions, though brief, are always striking and interesting. In a concluding chapter Dr. Brinton sums up a number of important problems,—those of acclimatization, race-mixture, and of the ultimate destiny of the races. The author emphasizes justly the close relations between ethnography and historical and political science. His work will undoubtedly greatly contribute to making this close connection better known and more thoroughly understood.

*The Trees of Northeastern America.* By CHARLES S. NEWHALL. New York, Putnam. 8°. \$2.50.

FOR its purpose, this book is admirable. The plan of the author was excellent, and he has carried it out well. There are defects in the book; but, as they are more of omission than of commission, they may be passed over with scarce a mention. In simple fashion and almost untechnical language, the author describes our trees, from their foliage, bark, and general appearance, so that they may be readily identified by persons without even a smattering of botanical knowledge. The trees described include all the native trees of the northern United States east of the Mississippi, as well as those of Canada. Mention is also made of the more important of the introduced and naturalized species. The work is so arranged that any given specimen can be readily found by help of a well-arranged guide. The author's chief authority for the geographical distribution of the different species is Sargent's report in the "Tenth Census;" and for the scientific nomenclature adopted, Mr. Newhall acknowledges his indebtedness to Professor N. L. Britton of Columbia College. The latter gentleman, in a brief prefatory note, says, "There is great need of such a popular work. It will do much good in supplying information to our people about some of the common things around them, and this in an attractive manner."

The method of using the book is as simple as can be desired. Provided with a leaf of the tree to be identified, the inquirer, by a brief inspection of the easily mastered guide, is referred to the pages containing a drawing of the leaf (and sometimes the fruit) and the name and description of the tree. Both the popular and the scientific names are given, together with some account of the uses of the tree, and its distribution. Photo-engravings of the leaves and fruit, instead of the somewhat crude outline drawings, would, we think, have been more in keeping with the excellent mechanical make-up of the book, and would have added much to its value.

*The Antiquities of Tennessee.* By GATES P. THRUSTON. Cincinnati, Robert Clarke, 1890.

THE present volume is an excellent *résumé* of the results of recent archæological investigations in Tennessee. It is amply illustrated by good photo-engravings and numerous sketches of well-selected specimens. Many of them do not differ essentially from the well-known types of this region; but others will be found to be of great interest; for instance, the tattooed face bowl (p. 94), and the image in clay showing an infant strapped to a cradle-board (p. 112). The descriptions of the finds are so full of new, valuable, and well-arranged matter, that they will repay a close study. The conclusions which the author draws from his studies

seem to be in the main well founded. He justly emphasizes the fact that the finds show no evidence whatever of a culture of a stamp different from that of the North American Indians, more particularly from that of the southern Indians as described by early travellers. He is also right in laying stress upon the dissemination of culture among the inhabitants of pre-Columbian America, which entails transmission not only of arts and industries, but also of manufactures. While in the introductory chapter of his book he does not consider the culture of the mound-builders as much higher than that of the Indians shortly before they came into contact with the whites, it seems, that, while studying the specimens, the culture of the mound-builders appeared to the author of increasing value; so that in his concluding chapter he is inclined to assume a decline of culture during the period following the "stone grave time." We believe that this decline may have been somewhat overestimated by the author, but we fully agree with his opinion that the mound-builders of Tennessee were Indians, and that the relics do not belong to any great antiquity. The author assumes that the decline in culture came about by an invasion from the north of a race which he believes he can recognize in a number of dolichocephalic crania taken from the stone graves. This proof must be rejected, as it is founded on the theory that a race is homogeneous, while actually, even in long-isolated races, we must expect to find a great variety of forms. Unfortunately archæologists do not yet duly appreciate the importance of osteological collections, a few well-preserved skulls being all that are deemed worthy of preservation. Broken skulls, and particularly skeletons, ought to be preserved as well, as only a thorough investigation of *all* the remains of a race will lead to reliable conclusions. Physical anthropology does not consist of a few cranial measurements, but is a detailed study in comparative osteology of man.

#### AMONG THE PUBLISHERS.

THE *Jenness-Miller Magazine* for November contains another article on "Physical Culture," by Miss Mabel Jenness; and "Temperance in Food," by Burcham Harding.

—Among the interesting exhibits at the American Institute Fair in this city is a handsome showcase filled with samples of the books published by E. & F. N. Spon of this city and London.

—A new edition of No. 57 of Van Nostrand's Science Series ("Incandescent Electric Lighting") has just been issued. New papers, by L. H. Latimer and C. J. Field, take the place of those by Du Moncel and Preece in the former edition, bringing the work more nearly to date.

—Vol. IV. No. 7 of the "Studies from the Biological Laboratory" of Johns Hopkins University, Baltimore, contains two articles,—one, "Notes on the Anatomy of *Sipunculus Gouldii* Pourtales," by E. A. Andrews (with plates); and the other, "The Relationships of Arthropods," by H. T. Fernald (with plates).

—The Leonard Scott Publication Company, New York, announce that beginning with the November number they will in the future furnish their subscribers with the original Edinburgh edition of *Blackwood's Magazine*, printed in Edinburgh, and published by them here under authority of Messrs. William Blackwood & Son.

—The *Illustrated American* makes an offer in our advertising columns which may prove attractive to some of our readers. This weekly has certainly contained much interesting matter, unusually well illustrated, concerning the goings-on in the world, in which intelligent people are interested, and it is only to be regretted that in the recent numbers certain criminal affairs have been made prominent and served up in a style likely to entrap the unsuspecting reader into their perusal. The periodical is a new one, and deserves a careful examination at the hands of the reading public.

—Messrs. Houghton, Mifflin, & Co. have published a small volume entitled "Thoreau's Thoughts," consisting of brief passages selected from Thoreau's various writings by H. G. O. Blake. The selections seem to have been made with good judgment, except that they are too short. The editor has not included many of those passages descriptive of natural objects that so abound in

his author's works, but has confined himself in the main to thoughts on moral topics, such as study, society and solitude, friendship, and others of the like nature; and in this we think he has done wisely, for such ethical sayings are the most likely to do good. We cannot say, however, that we find much depth or originality in Thoreau's thinking, and we doubt if he has had much real influence even over his admirers.

—A neat and useful pocket manual for army officers is "Notes on Military Hygiene," by Lieut.-Col. Alfred A. Woodhull, which has recently been published by John Wiley & Sons. The little volume contains what may be called the essence of a series of lectures on military hygiene, delivered by the author at the Infantry and Cavalry School at Fort Leavenworth. Though originally prepared for the convenience of students, the work will no doubt prove acceptable to officers of the line generally. Among the topics discussed are the selection of soldiers, military clothing, food, habitations, camps and marches, sewers and waste, water, and preventable diseases.

—Messrs. Houghton, Mifflin, & Co. have just issued another volume (Vol. 34) of their Modern Classics,—a series which Dr. William T. Harris, United States commissioner of education, has called an "unrivalled list of excellent works." This new volume, entitled "Thackeray's Lighter Hours," contains "Dr. Birch and his Young Friends," "Selections from the Book of Snobs and the Roundabout Papers," and "The Curate's Walk." Modern Classics has a very extensive sale as a school library, for which it is well suited, as it contains many of the best complete stories, essays, sketches, and poems in modern literature, including selections from the celebrated authors of England and America, and translations of masterpieces by continental writers.

—William M. Goldthwaite, New York, has published a "Driving Road Chart of the Country surrounding New York City." This chart covers every place within twenty miles radius of the City

Hall, and in parts extends out to nearly forty. This map will be specially useful to all living in or near the city, or contemplating removing to it.

—Herbert Ward, in the preface to his "Five Years with the Congo Cannibals," tells his story of the rear-guard of the Stanley expedition for the relief of Emin Pacha. The trials of those left behind by Mr. Stanley when he pushed forward, the fate of Major Barttelot and Mr. Jameson, and Mr. Ward's own part in the transactions of that trying period, form an interesting chapter in the history of Mr. Stanley's great enterprise.

—A map of the valley of Virginia, showing the location of all the industrial towns, battle-fields, mountain-passes, and Luray caverns (10 cents), is published by Alex. Y. Lee, C.E., Luray, Va.

—Volume II. of the "Bulletin of the Illinois State Laboratory of Natural History, Champaign, Ill.," contains the following articles: "Descriptive Catalogue of the North American Hepaticæ, North of Mexico," by Lucien M. Underwood; "Description of New Illinois Fishes," by S. A. Forbes; "Parasitic Fungi of Illinois," Part I., by T. J. Burrill; "Studies on the Contagious Diseases of Insects," I., by S. A. Forbes; "List of the Described Species of Fresh Water Crustacea from America, North of Mexico," by Lucien M. Underwood; "Parasitic Fungi of Illinois," Part II., by T. J. Burrill and F. S. Earle; "Studies of the Food of Fresh-Water Fishes," by S. A. Forbes; and "On the Food Relations of Fresh-Water Fishes," by S. A. Forbes. Vol. III. of the same publication contains, among others, the following articles: "A Descriptive Catalogue of the Phalangiinae of Illinois," by Clarence M. Weed; "A Partial Bibliography of the Phalangiinae of North America," by Clarence M. Weed; "On an American Earthworm of the Family Phreoryctidae," by S. A. Forbes; "An American Terrestrial Leech," by S. A. Forbes; "A Preliminary Report on the Animals of the Mississippi Bottoms near Quincy, Ill., in August, 1888," Part I., by H. Garman; and "Notes on Illinois Reptiles and Amphibians,"

Publications received at Editor's Office,  
Oct. 20-Nov. 8.

- ABBOTT, C. C. Outings at Odd Times. New York, Appleton. 282 p. 16°. \$1.50.
- BALL, W. P. Are the Effects of Use and Disuse inherited? (Nature Series.) London and New York, Macmillan. 156 p. 12°. \$1.
- BELDING, L. Land Birds of the Pacific District. (Occasional Papers of the California Academy of Sciences, II.) San Francisco, Cal. Acad. Sci. 274 p. 8°. \$2.50.
- COPE, R. The Distribution of Wealth; or, The Economic Laws by which Wages and Profits are determined. Philadelphia, Lippincott. 364 p. 8°. \$2.
- DURHAM, W. Astronomy. Sun, Moon, Stars, etc. (Science in Plain Language.) Edinburgh, Black. 133 p. 12°. (New York, Macmillan, 50 cents.)
- EIGENMANN, C. H. and Rosa S. A Revision of the South American Nematognathi or Cat-Fishes. (Occasional Papers of the California Academy of Sciences, I.) San Francisco, Cal. Acad. Sci. 508 p. 8°. \$3.
- ELDERTON, W. A. Maps and Map Drawing. London and New York, Macmillan. 129 p. 24°. 35 cents.
- ELECTRIC Railway Advertiser. Vol. I. No. 2. f. Boston, Mass., G. L. Austin. 44 p. f°. \$1 per year.
- GAME Laws, Book of the. Vol. I. No. 1. New York, Forest and Stream Publ. Co. 228 p. 8°. 50 cents.
- LATIMER, L. H. Incandescent Electric Lighting. A Practical Description of the Edison System. (Van Nostrand's Science Series, No. 57.) New York, Van Nostrand. 140 p. 18°. 50 cents.
- LINDSAY, T. B., ed. The Satires of Juvenal. New York, Cincinnati, and Chicago, American Book Co. 226 p. 16°.
- MCLENNAN, E. Cosmical Evolution: A New Theory of the Mechanism of Nature. Chicago, Donohue, Henneberry, & Co. 399 p. 12°.
- MUSICK, T. H. The Genesis of Nature considered in the Light of Mr. Spencer's Philosophy, as based upon the Persistence of Energy. New York, J. B. Alden. 377 p. 12°.
- ROSA, D. Le Nov Latin International Scientific Lingua Super Natural Bases. (Bollettino dei Musei di Zoologia ed Anatomia comparata della R. Università di Torino, vol. v. No. 89.) Torino, Libreria Carlo Clausen. 10 p. 8°.
- SHEPHERD, H. A. The Antiquities of the State of Ohio. Cincinnati, Robert Clarke & Co. 139 p. 4°. \$2.

- SHUFELDT, R. W. The Myology of the Raven (*Corvus corax sinuatus*). London and New York, Macmillan. 343 p. 8°. \$4.
- TEACHERS' Manual. Public Schools of the District of Columbia. Washington, Linotype Print. 84 p. 8°.
- THOREAU's Thoughts: Selections from the Writings of Henry David Thoreau. Ed. by H. G. O. Blake. Boston and New York, Houghton, Mifflin, & Co. 153 p. 16°. \$1.
- TUCKERMAN, A. Index to the Literature of Thermodynamics. Washington, Smithsonian Inst. 239 p. 8°.
- VELSCHOW, F. A. The Natural Law of Relation between Rainfall and Vegetable Life, and its Application to Australia. London, Edward Stanford. 40 p. 8°. 25 cents.
- WALLACE, W. Life of Arthur Schopenhauer. London, Walter Scott; New York, A. Lovell & Co. 217 p. 12°. 40 cents.
- WOODHULL, A. A. Notes on Military Hygiene, for Officers of the Line: A Syllabus of Lectures at the U. S. Infantry and Cavalry School. New York, Wiley. 150 p. 16°.

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including Several Species not before recorded from the Northern States," by H. Garman.

—The annual of the Office of Naval Intelligence (United States Navy Department), bearing date of June, 1890, has just appeared. It is No. IX. of the General Information Series, and is intended to bring to the attention of naval officers and others interested in naval matters the year's progress in naval development abroad, and to preserve a record of it in permanent form for reference. The volume exhibits the progress of foreign nations rather than that of our own; and the information conveyed in the "Notes," which occupy the most prominent place in the volume, is compiled from professional papers and journals, almost all of it having already appeared in print. Among the contents are notes on ships and torpedo-boats and on machinery, ordnance, and armor; on the application of electricity in the navy; and on the naval manœuvres of 1889. There are also papers on "The Ministries of Marine and Personnel of Several European Navies," "Administration of the Merchant Marine in Foreign Countries," "The Development of Rapid-Fire Guns for Naval Use," "The Year's Development of Home Resources for the Production of War Material," "Liquid Fuel for Torpedo-Boats," "The Manœuvring Distances of Steamers," and "Automobile Torpedoes." Twelve plates add to the value of the work.

—The *Popular Science Monthly* will make a new departure in 1891 by publishing a series of comprehensive and fully illustrated articles on "The Development of American Industries since Columbus," in which the progress of iron and steel making, of the cotton manufacture, and of the woollen, glass, leather, and other leading industries, will be described by writers of long practical

acquaintance with their respective subjects. It has been announced that one of the features of the coming world's fair is to be a comparison of the great manufactures of to-day with the condition of the same industries at the discovery of America, and it is the design of these papers to describe the successive steps by which the distance between those two stages has been passed over. The series begins in the issue for December, 1890 (the second number of Volume XXXVIII.), with an account of the first steps in iron-making in the Colonies, written by Mr. W. F. Durfee of Pennsylvania. The full prospectus of the *Monthly* for the coming year will be printed in the same number. Hon. David A. Wells will also begin during the coming year a series of papers on "The Principles of Taxation;" Dr. Andrew D. White's "New Chapters in the Warfare of Science" will be continued; and other articles bearing upon the advances of science, and upon questions of the day, are promised. What shall we do with the "Dago"?—a puzzling question that seems likely to take rank with the Chinese problem—will be discussed by Mr. Appleton Morgan in the December number. Among the greatest achievements of science are the discoveries that sound, heat, and light are vibratory movements, each in its proper medium. The nature of electricity, however, has long remained unknown; but at last Dr. Henri Hertz of Heidelberg has reached a result that has been widely accepted by the most eminent physicists. A translation of his own account of his discoveries, under the title "The Identity of Light and Electricity," will be printed in the same number. The bore of the Amazon will also be described by Mr. John C. Branner, State geologist of Arkansas. The "bore," which is one of the most impressive phenomena of nature, occurs only in narrow estuaries where high tides prevail.

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