book is a valuable contribution to the scientific literature of the subject. It can be well recommended to students of physiological science. Teachers will find in the practical arrangement of the book and in the summaries of views only to be found in widely scattered publications, a welcome guide for arranging their lectures on this subject. Investigators, however, will always prefer to consult original contributions rather than text-books or handbooks.

OSCAR LOEW.

U. S. DEPARTMENT OF AGRICULTURE.

Annals of the South African Museum. Volume I. Part 2. March, 1899.

The first of the papers (V. in the series) in this volume is 'On the Species of Opisthophthalamus in the Collection of the South African Museum, with Descriptions of Some New Forms,' by W. F. Purcell. The treatment of the genus is brought to a conclusion, three new forms are described, and the localities and local peculiarities of the specimens, numerous in the collection, are given at some length. In conclusion, the synopsis of all species known to the author, begun in a previous paper, is brought to completion. Article VI. is a 'Descriptive List of the Rodents of South Africa,' by W. L. Sclater, and is published as preliminary to a greater work on South African mammals. The genera are arranged according to the list published by Oldfield Thomas in the Proc. Zool. Soc. for 1896, and 62 species are mentioned, one Malacothrix pentonyx being new.

Article VII.—'Fifth Contribution to the South African Coleopterous Fauna,' by L. Péringuey, is devoted to the description of new Coleoptera, mostly in the collection of the museum.

Article VIII.—'On the South African Species of Peripatidæ in the Collection of the South African Museum,' by W. F. Purcell, gives full descriptions of the external systematic characters of three out of the four previously described species, with descriptions of four new species. These are Peripatopsis leonina, P. sedgwicki, P. clavigera and Opisthopatus cinctipes.

Article IX.—(by a misprint given as X.), 'A Contribution to the Knowledge of South African Mutillidæ,' by F. Péringuey, describes 26 new

species. This brings the number of South African species of this family to 169, but the number of which both sexes are definitely known is only 16.

The final paper X.—'Description of a New Genus of Perciform Fishes from the Cape of Good Hope,' by G. A. Boulenger, describes and figures Atyposoma gurneyi.

F. A. LUCAS.

A Catalogue of Scientific and Technical Periodicals, 1665-1895. Henry Carrington Bolton. City of Washington, Smithsonian Institution, 1897. Second edition, pp. vii + 1247.

The first edition of Dr. Bolton's catalogue, issued in 1885, has been a great aid to scientific men and to scientific research, and a second edition, with many additional titles and much revision, is very welcome. The former edition contained the titles of 4,954 periodicals, and the present edition adds about 3,600 new titles, and gives further information in regard to many of the periodicals described in the first edition. Regarding all these journals full details are given—the date of establishment, the number of volumes issued, the place of publication, the editors, etc., including a history of the vicissitudes undergone by so many scientific journals. Over 200 pages are added, giving chronological tables, a subject index, and a check-list, showing in what American libraries the more important periodicals may be found.

The first part of the alphabetical catalogue is reprinted from the plates of the first edition with certain corrections. Then in the second part are the additions that could not be inserted in the plates and the new titles. This double alphabetical index is very inconvenient. It may indeed be reasonably claimed on various grounds that stereotyping is an invention for the retardation of science. The volume appears to be remarkably free from typographical errors in spite of the difficult proof reading, but it is not free from errors in compilation. Thus if we take the three leading American journals of general science, we find it said (referring to 1895), that the American Journal of Science is edited by 'James D. and E. S. Dana and B. Sillimann.' The American Naturalist is said to be edited by 'A. S. Packard, Jr., and Edward D. Cope.' SCIENCE is said to be edited by a committee consisting of 'S. Newcomb, I. Remsen, O. C. Marsh, C. H. Merriam, J. W. Powell.' There are also serious omissions, e. g., The Bulletin of the American Mathematical Society and the Bulletin of the Torrey Botanical Club.

The value of this compilation to the scientific worker is so great that the destruction by fire of the plates and sheets would not be regretted if this should lead to a new edition.

J. McKeen Cattell.

GENERAL.

THE newly formed Harper-McClure combination of New York City announces the publication of an encyclopædia which is intended to surpass even the Encyclopædia Britannica in range. It is to be hoped that the scientific articles will be entrusted to men of science as competent as the writers for the *Britannica*.

MESSRS. D. APPLETON & Co. announce for early publication the 'Comparative Physiology and Morphology of Animals,' by Professor Joseph Le Conte, and 'The International Geography' by Nansen, Markham, Bryce, Davis and others.

Messrs. Harper & Brothers have in press the 'Elements of Physics,' by Professors J. S. Ames and H. A. Rowland of the Johns Hopkins University.

BOOKS RECEIVED.

A Manual of Psychology. G. F. STOUT. London, W. B. Clive; New York, Hinds & Noble. 1899. Pp. xvi + 643.

Text-book of Vertebrate Zoology. J. S. KINGSLEY. New York, Henry Holt & Company. 1899. Pp. viii + 439.

The Teaching Botanist. WILLIAM F. GANONG. New York and London, The Macmillan Company. 1899_{\bullet} Pp. xi + 270.

The Elements of Blowpipe Analysis. FREDERICK HUTTON GETMAN. New York and London; The Macmillan Company. 1899. Pp. ix + 77. 60 cts.

SCIENTIFIC JOURNALS AND ARTICLES.

The Journal of Geology. May-June, 1899. Vol. VII., No. 4. The number opens with a symposium of three papers dealing with the Permian of the states west of the Mississippi.

C. R. Keyes writes of the 'American Homotaxial Equivalents of the Original Permian,' pp. 321-342. A comparison is drawn between the American Permian and that of Russia as seen by the author during a recent Russian trip. S. Prosser follows with a paper on 'Correlation of Carboniferous Rocks of Nebraska with those of Kansas,' pp. 342-357. The author determines the relations of the Nebraska Carboniferous with the horizons which had been previously established by his careful, faunal studies in Kansas. W. C. Knight, 'The Nebraska Permian,' pp. 357-375. The writer's conclusions are that the Kansas Permian extends as a triangular area northward into Nebraska. Some tablesof fossils are given W. H. Hobbs, 'The Diamond Fields of the Great Lakes,' pp. 375-389. All the known finds of diamonds in the drift of the region of the Great Lakes are recorded and plotted with the intention of locating their probable source and home, and of arousing interest in the subject. W. H. Turner, 'Replacement Ore Deposits in the Sierra Nevada,' pp. 389-401. A number of gold-bearing deposits in California are described, which are in contrast with the usual quartz veins and which give ground for an explanation by replacement. Editorials. reviews, and a valuable summary of current North American Pre-Cambrian literature by C. K. Leith conclude the number.

THE Educational Review for September opens with an address given by Dr. W. T. Harris before the recent meeting of the National Educational Association, outlining an education policy for our new possessions, and an article on the educational progress of the year by Professor Nicholas Murray Butler, presented to the National Council of Education. The number also contains articles on the educational system in Chicago, women in the public schools, English in Regents' schools and the teaching of German in Germany.

DISCUSSION AND CORRESPONDENCE.

THE PROPER NAME OF THE POLAR BEAR.

TO THE EDITOR OF SCIENCE: Under this heading in SCIENCE for August 15, 1899, Mr. James A. G. Rehn states that the name of the Polar Bear should be *Thalarctos marinus* (Pal-