

himself and which were originally based almost entirely upon scale structure, certain others of his genera suffer from the application of this class of characters. The main objection to the palpal characters is their difficulty to the student, and, if possible, for convenient use tables for the separation of species should be based upon characters which can be studied without mutilating the specimens. This plea Mr. Theobald makes for the retention of his scale characters, since they can be made out with any compound microscope, and even with a high-power hand lens. Mr. Theobald deserves great credit for the work which he has done with scale characters, but there can be no doubt that the rational classification depends to a greater extent for its generic characters upon such distinctions as have been pointed out by Neveu-Lemaire. It will be rather difficult to draw the line, for example, between the 'narrow curved scales' and the 'broad curved scales' found upon the heads of certain mosquitoes, since there are curved scales which it would be difficult to distinguish as narrow or broad. There is a gradation, in other words, which makes it difficult in some cases to accept them as generic characters.

Mr. Theobald has done a great and lasting service to the medical profession and to the students of biology in producing this elaborate monograph, and deserves the thanks of all classes. The authorities of the British Museum should also be included in this vote of thanks, since they have published the results of his labor in very beautiful form.

L. O. HOWARD.

International Catalogue of Scientific Literature. G, Mineralogy including Petrology and Crystallography. First Annual Issue. Published for the International Council by the Royal Society of London. Vol. XI., 1903 (January). Pp. xiii + 208.

The general character and scope of this international catalogue have already been sketched in this magazine (Vol. XVI., 1902, p. 861). This volume embracing mineralogy, petrology and crystallography is of the same high quality that has characterized the earlier

appearing volumes on other subjects. The scheme of classification of the subject catalogue is as follows, the numbers given being the so-called registration numbers by which each section is designated: 0000 to 0070, general, including philosophy, history and biography, periodicals, text-books, addresses, institutions and nomenclature; 10 to 19, general mineralogy, including chemistry, mode of occurrence, economic mineralogy and artificial minerals, etc.; 30 to 32, determinative mineralogy; 40, new mineral names; 50, descriptive mineralogy with alphabetical list of mineral names; 60, geographical distribution; 70 to 73, meteorites; 80 to 87, petrology, including igneous, sedimentary and metamorphic rocks, unclassified rocks and chemical analysis of rocks; 100 to 750, crystallography, including geometrical and mathematical crystallography (105 to 150), crystal structure and growth (200 to 240), physical and optical crystallography (300 to 440), chemical crystallography (500 to 540) and determinative crystallography (600 to 750).

This scheme and a topographic classification of localities is printed in four languages. The catalogue proper is introduced by an authors' catalogue containing 1,072 entries, comprising 53 pages. The remaining 120 pages contain the subject catalogue as above outlined. The catalogue fills a want much felt by all workers in science, and while alterations in the scheme, especially in the subject classification, may suggest themselves later as advisable, there can be only praise for the work accomplished. The fact that larger funds and more complete equipment of the several bureaus will in the future make it possible to keep the catalogue more nearly concurrent with the period whose work it records insures a still greater usefulness for the work.

CHARLES PALACHE.

SCIENTIFIC JOURNALS AND ARTICLES.

The Popular Science Monthly for February has for frontispiece a portrait of Professor W. G. Farlow, president of the American Association for the Advancement of Science, while the first article is the address of the late president, Ira Remsen, on 'Scientific Investigation

and Progress.' This is followed by the address of David Starr Jordan, entitled 'Comrades in Zeal,' before the Sigma Xi Society. Edward S. Holden discusses 'The Predecessors of Copernicus,' giving much information about the early astronomers, and J. Madison Taylor considers 'The Conservation of Energy in those of Advancing Years.' Oliver C. Farrington treats of 'The Geographical Distribution of Meteorites' and Charles P. Pettus describes the origin and progress of 'Washington University,' whose fine and harmonious buildings will be a surprise to many. The final article is by G. A. Miller, on 'What is Group Theory?'

Bird-Lore for January-February opens with an illustrated article on 'The Black Tern at Home,' by Ernest Thompson Seton and Frank M. Chapman, and this is followed by 'Horned Larks in Colorado Springs,' by E. R. Warren. 'The Christmas Bird Census' comprises records by 78 observers scattered well over the country. There is a second paper, with colored plates, on 'The Migration of Warblers,' by W. W. Cooke, and an interesting prize essay in the department 'For Young Observers.' In the editorial section is a protest against 'humanizing the birds,' and under 'The Audubon Society' there is much of interest.

The Museums Journal of Great Britain for January has an article by Benjamin Ives Gilman, 'On the Distinctive Purpose of Museums of Art,' in which the writer takes the ground that there is a marked difference between museums of art and other museums. The function of the art museum is not primarily that of popular instruction, this being of secondary importance to its esthetic influence. The notices of art forgeries contained in the notes should put collectors of paintings and bric-à-brac on their guard.

PROFESSOR R. KRAUSE and Dr. M. Mosse, of Berlin, announce the foundation of a new *Centralblatt f. normale und pathologische Anatomie mit Einschluss der Mikrotechnik*.

SOCIETIES AND ACADEMIES.

NEW YORK ACADEMY OF SCIENCES. SECTION OF ANTHROPOLOGY AND PSYCHOLOGY.

THE regular meeting of the section was held on January 25 at the American Museum of Natural History in conjunction with the New York Branch of the American Psychological Association. Afternoon and evening sessions were held, the members dining together between sessions. The program was as follows:

Primary and Secondary Presentations: Dr. HENRY RUTGERS MARSHALL.

Dr. Marshall in his paper aimed to present evidence that presentations are always new presentations, and that, therefore, images can not be properly said to be copies of impressions, nor can what we call representations be properly said to be duplications of any presentations which have previously existed. His paper was a summary of an article which is presently to appear in *Mind*.

The Generic Relation of Organic Sensation and Simple Feeling: Professor MARGARET E. WASHBURN.

The Universe's Place in Man: Dr. FRANCIS BURKE BRANDT.

The paper emphasized the necessity for a fresh start in modern empirical investigation through a critical restatement of the postulates of experience. The starting point of every empirical science, it was contended, is individual conscious experience. The primary datum of individual experience is a perceptive and a conceptive consciousness combined organically in the unity of a personal life existent in a universe of persons. The material universe thus primarily takes its place in man rather than man his place in the material universe, for scientific philosophy has demonstrated beyond criticism, first, that the visible universe always exists primarily in and for a momentary perceptive consciousness limited in space, and second, that the unseen universe is always primarily a conceptive construction whose validity is always verifiable within the realm of momentary perceptive experience. The material universe, whether conceived