THE AMERICAN MINERALOGIST

Academy of Natural Sciences of Philadelphia, March 3, 1927.

A stated meeting of the Philadelphia Mineralogical Society was held on the above date with the president, Mr. Vaux, in the chair. Twenty-three members and six visitors were present.

Dr. W. F. Foshag of the U. S. National Museum addressed the society on "Some mineral localities of northern Mexico." After a description of the geology and mode of occurrence of the ore bodies in the plateau region of northern Mexico, the speaker described the mineral localities and mines which he visited during a recent trip to this region. Of particular interest are the mines at Los Lamentos, yielding lead minerals; the Potosi mine; Place de Guadalupe where native gold in pitchblende occurs; the gypsum caves at Naica in which are clusters of huge selenite crystals, some four to six feet long; Sierra Mojada; Ojuela; the Velardeña region and the Durango iron mountain, Sierra Mercado.

The address was profusely illustrated with lantern slides of the regions discussed. The speaker exhibited specimens of gypsum, wulfenite, pyromorphite, willemite, spurrite, hillebrandite and calcite.

Dr. Foshag was tendered a rising vote of thanks for his very interesting address. Mr. Cienkowski reported on a trip to the Wood's chrome mine. Dr. Egee exhibited a Manebach twin of amazon stone and Mr. Boyle a specimen of euxenitepolycrase from Mattawan township, Ontario.

F. A. CAJORI, Secretary

BOOK REVIEWS

SUPPLEMENT TO AN INTRODUCTION TO SEDIMENTARY PETRO-GRAPHY. Henry B. Milner. 156 pages, 12 plates. Thomas Murby & Co., 1, Fleet Lane, E. C. 4, *London*, 1926; D. Van Nostrand Co., 8 Warren St., *New York*.

Since the publication of the original text in 1922 (review in Am. Mineral., vol. 8, p. 75) a considerable amount of new material has been collected which is now made available to students of petroleum geology thru the present supplement of 156 pages. This supplement includes further instructions in the methods of treatment and analysis of sediments. The properties of 20 additional detrital minerals are recorded and 28 species are represented by figures; making a total of over 50 minerals illustrated in the text and supplement, while 74 species are described. (Under normal conditions 25 are considered a fair average of mineral species occurring in sediments.)

In order to explain more clearly the technique involved 12 examples are given of correlation and differentiation by petrographic methods. The materials selected, including both subsurface and surface stratigraphical correlations, were taken from sands of southern California, Texas, Oklahoma, Rumania, Galicia and from the Cretaceous and Tertiary rocks of England. The concluding pages are devoted to 9 detrital mineral determination tables and a bibliography of over 100 references to the literature published during the period 1922 to 1926.

The descriptions, as in the earlier text, are brief and to the point while the illustrations are of unusual merit. The bibliography is very complete and should be of great assistance to those seeking further information. The supplement no doubt will receive the same favorable reception accorded the original text. It is to be hoped, however, that in the near future the combined subject matter of both text and supplement, properly coordinated, will be published in a *single* work of reference.

W. F. H.

A GUIDE TO THE COLLECTION OF METEORITES. G. T. Prior. Printed by order of the Trustees of The British Museum and sold at The British Museum, Cromwell Road, S. W. 7, *London*, 1926. Price sixpence.

This forty page guide to the collection of meteorites in The British Museum has been prepared to replace Sir Lazarus Fletcher's "Introduction to the Study of Meteorites," the last edition of which was issued in 1914. Much of the original text has been retained but condensed and new material concerning methods of classification and the mutual relations of meteorites has been added.

A brief description of the composition and structure of meteorites is included and the interesting rule noted that "the richer in nickel is the nickel-iron, the richer in ferrous oxide are the magnesian silicates," suggestive of a derivation of the meteorites from a common magma by progressive oxidation. The list of meteorites exhibited in the Museum is given alphabetically and represents 680 falls.

W. F. H.

UEBER DIE SYNTHESE DER FELDSPATVERTRETER. (THE SYNTHESIS OF THE FELDSPATHOIDS). W. EITEL. Preisschriften gekrönt und herausgeigeben von der Fürstlich Jablonowskischen Gesellschaft zu Leipzig. LII. vii+258 pp.+50 Figs. 4 plates. Akademische Verlagsgesellschaft m. b. H., *Leipzig*, 1925, 25 Marks.

This comprehensive work from Dr. Eitel's pen includes both the simpler and the more complex related minerals of the feldspathoid group. The book is divided into three main parts. The first deals with the older qualitative attempts at syntheses of various feldspathoids. Some of the simpler ones considered are leucite, kaliophilite, nephelite, carnegieite, gehlenite, and melilite. The more complex menerals include sodalite, noselite and haüyne, cancrinite, davyne, and scapolite. The second part discusses the modern physical-chemical methods of investigation and reviews first the equilibrium relations of the various three and four component systems of K2O, Na2O, CaO, and MgO, with Al2O3 and SiO2, in which feldspathoid minerals have been developed. This is followed by a section devoted to the correlation of experimental results with natural paragenesis, such, for example, as the incongruent melting of orthoclase and the formation of leucite rocks. In a similar manner, the nephelite, melilite, sodalite-cancrinite, and scapolite rocks are also considered. The third part takes up new syntheses in the system Na₂CO₃-CaCO₃nephelite-anorthite, many of them being carried out under controlled pressures. Details of the methods and apparatus are given.

Complete references are cited throughout the text and a full index is given at the end of the book, including authors, mineral names, systems, and localities. Line drawings and plates are freely used. It is a very thorough compilation and should prove of value to anyone interested in this type of synthesis. The large number of references to the results of American investigators is a tribute to those who have been active in this field.

Albert B. Peck

231