

BOOK REVIEW

MINERALOGY, AN INTRODUCTION TO THE STUDY OF MINERALS AND CRYSTALS. EDWARD H. KRAUS and WALTER F. HUNT. 561 pages. McGraw Hill Book Co., Inc., New York, 1920.

Of late years the number of textbooks on mineralogy has increased to such an extent that with the appearance of each addition to the list we naturally look for some new and improved features to commend it over its predecessors. The work of Doctors Kraus and Hunt shows a number of these innovations distributed thruout its 561 pages, of which 371 are devoted to subject matter and 176 to determinative tables. In the matter of half tone text cuts the authors have been fortunate both in the selection of illustrative matter and in the excellence with which this has been reproduced.

The chapters on Crystallography are well planned and clearly presented, altho one misses the exposition of crystal structure as a logical basis of the mathematical crystallography which is so fully dealt with. These chapters are exceptionally well illustrated with line cuts of great clearness as well as some excellent half tones of crystal models, the latter being a distinct innovation. As it is to be expected in a student text book the chapter on optical mineralogy is brief, but here the important facts have been well chosen and emphasized, and again the illustrative cuts are beyond criticism. The same may be said for the short chapter on Formation and Occurrence. The chapter on Qualitative Blowpipe Methods is better than anything that has as yet appeared in a similar text book, and is eminently practical and comprehensive.

The descriptive portion of the book is confined to the discussion of 150 important mineral species and follows the Groth classification. In the choice of these 150 species the authors have attempted a somewhat difficult task and there will possibly be some objectors to certain inclusions and omissions but on the whole the selection has been well and fairly done. A feature which will commend itself to any one who has used a book of this type is the Classification of Minerals according to Elements (chapter XVI). This arrangement is extremely useful and the economic data and production statistics in the text are both up to date and accurate.

The determinative tables which take up the concluding pages are comprehensive and very usable, giving as they do at a glance the salient characters under each species. Thruout the work are inserted small half tone portraits of the men who have earned distinction in every department of the science. This portrait gallery of worthies is another of those unique features for which the authors should be congratulated.

H. P. W.

NOTES AND NEWS

In the *Annual Report of the U. S. National Museum for 1918-19*, the following noteworthy accessions of minerals are recorded: A remarkably large and perfect bi-pyramidal crystal of scheelite, 8 cm. in maximum diameter and weighing 529 grams, from Korea, presented by Dr. J. Morgan Clements; realgar and arsenolite from China; chlorite with ankerite and with siderite; the new or rare minerals hodgkinsonite, riversideite, and ferrierite; and aguilrite, previously unrepresented in the collection.

Thru the Frances Lea Chamberlain Fund, the following were added to the Isaac Lea collection of gems: 5 opals from Australia; a cut zircon weighing 51 carats; 2 turquoises, one kunzite, one black opal, two benitoites, carvings of nephrite and of chalcedony, some fresh-water pearls from Tennessee, and 30 gems cut from minerals in the Museum collection.

In a reprint from the *Proceedings of the U. S. National Museum* (58, 303-305, 3 plates, 1920), Mr. William F. Foshag, Assistant Curator in charge of the mineralogical collections, describes some recent accessions to those collections, mostly gifts from individuals, especially from Mr. C. S. Bement. These comprise in addition to some of those listed in the preceding note, an exceptionally fine group of twinned cinnabar crystals from Hunan, China (a photograph of which is reproduced); a remarkable danburite crystal from Japan; vesuvianite and achtaragdite from Siberia (photo), a good specimen of crystallized zincite (photo), one of friedelite, one of leucophoenicite, and two crystals and an 11-carat cut stone of yellow willemite, all from Franklin Furnace; nesquehonite from Pa.; inyoite from Nova Scotia; and a large Japanese twinned quartz.

The Yonkers museum, which we have previously mentioned in this column, is making progress. The New York State Board of Regents has acted favorably upon the application for a charter. Donations of mineral specimens have been received from several individuals, and a collection of 83 specimens was presented by the U. S. National Museum.

New Books.—The following books which have appeared during the past few years have not been heretofore noted in this magazine:

Cristalografica Fisica Elemental. Lucas Fernandez-Navarro. 329 pages, 223 figures, 1 colored plate. Madrid, 1917.

La genèse de la science des cristaux. Hélène Metzger. 248 pages. Paris, 1918. (Published by F. Alcan; price 5 fr. 50c.)

Tableaux des constantes des minéraux. Henri Buttgenbach. 86 pages, 4 figures. Liège, 1918. (Published by Imprimerie Vaillant-Carmanne).

The rare-earth industry. . . . Sydney J. Johnstone (with A. S. Russell). 136 pages, 42 figs. London, 1918. (Published by Crosby, Lockwood, and Son; price 9 s.)

Analyse espectral applicada a mineralogia. Alberto Betim-Paes-Leme. 138 pages, 20 figs. Rio de Janeiro, 1918.

Les minéraux et les roches. Etudes pratiques de cristallographie, pétrographie, et minéralogie. Second edition. Henri Buttgenbach. 552 pages, 498 figs. Liège, 1919. (Published by Imprimerie Vaillant-Carmanne).

Mineral resources of Georgia and Caucasia; manganese industry of Georgia. D. Ghambashidze. 182 pages, map, and 8 plates. London and N. Y., 1919. (Published by Macmillan Co.; price about \$3.00).

Les gîtes minéraux. Stanislas Meunier. 384 pages. Paris, 1919. (Published by Dunod).

Annuaire des mines et minerais métalliques de France et d'Algérie. I. Auguste Pawlowski. 216 4to pages, 3 maps. Paris, 1919. (Published by *Annales Industriels Heudelot*; price 20 fr.)

Compendio de Mineralogia y Litologia. I. Pedro Ferrando-Mas. 216 pages, 99 figs. Zaragoza, Spain, 1919.