

BOOK REVIEW

FIELD BOOK OF COMMON ROCKS AND MINERALS. FREDERIC BREWSTER LOOMIS. 278 pages with 32 colored plates and 100 illustrations. G. P. Putnam's Sons, *New York*, 1923.

The purpose of this field book as stated by the author "is first of all to provide a means of identifying minerals and rocks by such methods as are practical without elaborate equipment or previous training: and second to suggest the conditions under which the various minerals and rocks were formed. . . ."

Naturally, in a book of this type, designed "to make the study of minerals and rocks so direct and simple that everyone can get a start," the treatment and presentation must be quite different from that of a text book on the subject and judgment should be tempered accordingly. The author has attempted to arouse an interest in minerals by a very liberal use of colored plates and illustrations: in fact, 32 colored plates and over 100 other illustrations from photographs are distributed throughout the 278 pages. Many of the plates are of exceptional character and vividly portray the true color of the mineral represented. Some of the line drawings, however, are not so well executed and quite a few are not properly oriented.

About two-thirds of the book is devoted to descriptive mineralogy and the scheme pursued is that of grouping together all minerals with a common element. Like many first editions the book contains its full quota of typographical errors. There are in addition, however, certain errors which could hardly be classified under this heading. A few illustrations will be noted: the ruby owes its color to iron oxide while cobalt is responsible for the blue of sapphire (p. 24); the formula of limonite is given as $2 \text{Fe}_2\text{O}_3 \cdot 3\text{H}_2\text{O}$ (p. 49); the color of rose quartz is said to be due to titanium (p. 104); the formula of opal is given as $\text{SiO}_2 \cdot \text{H}_2\text{O}$ with about 10% of "water of crystallization" (p. 108); calcium sulphate, we read is precipitated from sea water when 37% of the sea water is evaporated (p. 150); while among the uses of gypsum the following sentence is encountered, "the gypsum is first heated to about 400° C, which drives off the water of crystallization and causes it to crumble to a powder which is plaster of Paris."

Seventy-seven pages are devoted to a discussion of rocks. The material presented in this section is well chosen and quite adequate for the purposes intended. Miscellaneous subjects as concretions, geodes, meteorites and fossils are briefly described in 20 pages.

A bibliography is appended but not one that is up-to-date, as evidenced by the following reference to THE AMERICAN MINERALOGIST, "a monthly magazine for minerals, H. W. Trumbell, Philadelphia."

The book in spite of its minor imperfections should, largely by virtue of its numerous illustrations, be of considerable assistance to a beginner.

W. F. H.

NOTES AND NEWS

Dr. George Otis Smith, director of the Geological Survey, Rear Admiral Hilary P. Jones, president of the General Board and Commander-in-chief of the United States Fleet, and Professor R. D. Bush of the Bureau of Mineralogy of the State of California, have been appointed by President Coolidge as a special commission to

study the problem of conserving fuel oil for the navy and providing facilities for storing fuel.

Recent experiments conducted at the U. S. Bureau of Standards show that by saturating a sandstone for several hours in melted sulphur and then cooling it the strength of the stone is increased from 200 to 300 per cent. The crushing strength of the ordinary sandstone is about 8000 pounds per square inch, but after the sulphur immersion the crushing strength reaches approximately 30,000 pounds, or equal to that of the best granite. Investigations are still in progress to determine the weathering qualities of the treated sandstone.

Dr. Grubenmann, professor of geology and mineralogy at the University of Zurich and at the Federal Polytechnic Institute, has died at the age of seventy-four years.

Dr. William Nicol, professor of mineralogy at Queen's University, Kingston, Ontario, from 1893 to 1915, died at his home in Kingston, February 24th.

A new method for the production of phosphoric acid has been perfected by the Bureau of Soils of the U. S. Department of Agriculture. It consists in smelting phosphate rock after it has been briquetted with silica and carbon. The phosphorus is volatilized as phosphoric anhydride and then condensed. This concentrated product can be shipped in lead-lined or wooden containers and upon reaching its destination can be diluted and reduced in strength to that required for utilization by crops.

Dr. W. Ch. Brögger, professor of mineralogy in the University of Christiania, has been elected corresponding member of the Prussian Academy of Sciences in the physical-mathematical section.

Due to some error in the mailing of the March issue, a number of subscribers have been overlooked. If those who have not received the March number will kindly make this fact known to the editor copies of this issue will be forwarded at once.

Mineral collectors and dealers will be interested in a pamphlet recently published by Frederick A. Canfield of Dover, New Jersey, entitled "The Final Disposition of some American Collections of Minerals." The pamphlet contains in concise form statements concerning 172 collections.

Dr. R. C. Wallace, professor of geology in the University of Manitoba, has been elected president of the Canadian Institute of Mining and Metallurgy.

ABSTRACTS

A NEW OCCURRENCE OF VANADINITE IN THE MARICO DISTRICT, TRANSVAAL. P. A. WAGNER. *Trans. Geol. Soc. S. Africa*, **23**, 59-63, (1921); thru *Chem. Abstr.*, **16**, 2653.

Vanadinite is associated with galena and cerussite in an ore deposit near Otsohoop. The crystals of vanadinite are tabular on (0001). An analysis is given.

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