# BOOK REVIEW

# ANNOTATED GEOLOGICAL BIBLIOGRAPHY OF VIRGINIA by JOSEPH K. ROBERTS. Published by the Alderman Library, Charlottesville, Virginia, 1942. xi+726 pages.

The author of this comprehensive work has been abstracting and assembling the geological literature of Virginia for a period of over twenty years. The results of this timeconsuming effort are now made available through the publication of this volume of 726 pages. All phases of Virginia's geology are covered with the exception of soils and climate. The length of the abstracts varies with the character and importance of the article, but in all cases they seem entirely adequate, and are recorded without critical comments. The references which number 2568 entries are given by authors, alphabetically arranged.

While the annotated references end with the calendar year 1940, an additional abstract is appended of an article of special interest that appeared while the manuscript was in press. This article discusses the "Geology of the Appalachian Valley in Virginia." Of more than passing interest to mineralogists is the inclusion of statistics on the mineral resources of Virginia, given on pages 418 to 445 of the report.

In addition to the titles of papers, references and abstracts, two quite unusual and interesting chapters are included. One discusses the "Rise and Development of Geological Thought in Virginia." Here the author distinguishes four periods: Colonial Period, up to 1835; Rogers Period, 1835–1880; Fontaine-Campbell Period, 1880–1910; and the Watson Period, 1910 to the present. The other chapter records biographical sketches of nine geologists who have made major contributions to Virginia's geology.

Dr. Roberts is to be congratulated on the completion of this splendid work. Students of Virginia geology will find it a great time-saver and therefore indispensable as the abstracts are given in sufficient detail as to make consultation of the original papers unnecessary, in most instances.

W. F. H.

## NEW MINERAL NAMES

## Hochschildite

ROBERTO HERZENBERG: Hochschildita, un nuevo mineral de estano descubierto en Bolivia. Reprint of abstract of paper given at the University of Oruro, Sept. 25, 1942.

NAME: For Dr. Mauricio Hochschild.

CHEMICAL PROPERTIES: Four complete analyses (not given) were made on selected material. The average of these analyses, after deduction of 0.7% S, 0.2% Sb, and 0.043% Ag, and recalculation to 100%, was: SnO<sub>2</sub> 47.75, PbO 28.6, Fe<sub>2</sub>O<sub>3</sub> 8.05, SiO<sub>2</sub> 4.37, H<sub>2</sub>O 11.23%. Thi sgives molecular ratios: SnO<sub>2</sub> 5.05, PbO 2.05, Fe<sub>2</sub>O<sub>3</sub> 1, SiO<sub>2</sub> 1.14, H<sub>2</sub>O 9.87. The formula suggested is  $5SnO_2 \cdot 2PbO \cdot Fe_2O_3 \cdot SiO_2 \cdot 10H_2O$  or  $2PbSnO_3 \cdot Fe_2(SnO_3)_3 \cdot H_2SiO_3 \cdot 9H_2O$ . As the material is visibly variable, it is suggested that the Fe<sub>2</sub>O<sub>3</sub> and SiO<sub>2</sub> are impurities and that the formula may be PbSnO<sub>3</sub>  $\cdot nH_2O$ , with n=5-6. The water content is variable and the mineral loses its water gradually on being heated, like a typical gel. It is infusible. The fresh mineral is soluble in HCl, leaving a small residue of cassiterite and quartz, and is partially soluble in acetic acid. All the tin and lead is dissolved by NaOH or KOH. Ignition renders the mineral insoluble in HCl; heating to 100° makes it partially insoluble. Heated on charcoal, the mineral gives a coating of lead and tin oxides.

PHYSICAL AND OPTIONAL PROPERTIES: Color yellow. Earthy. Under the microscope clear yellow, isotropic, n slightly higher than nitrobenzene (n=1.55). G. = 4.45-4.59. Hardness = 3, or slightly higher. Friable.

OCCURRENCE: Occurs as pseudomorphs after teallite in the oxidation zone of the Ichucolla mine, Callipampa, Bolivia. Sometimes contains unoxidized remnants of teallite. Associated minerals are cerussite and hydrated iron oxide.

RELATIONSHIPS: A relationship to bindheimite is suggested.

DISCUSSION: Further study, particularly x-ray examination, is needed.

MICHAEL FLEISCHER

#### Sampleite

C. S. HURLBUT, JR.: Am. Mineral., 27, 586-589 (1942).

#### Cryptomelane

W. E. RICHMOND AND M. FLEISCHER: Am. Mineral., 27, 607-610 (1942).
L. S. RAMSDELL: Am. Mineral., 27, 611-613 (1942).

#### DISCREDITED SPECIES

Berthonite (=Bournonite)

G. A. HARCOURT: Am. Mineral., 27, 109 (1942).

Ramdohrite (=Andorite)

G. A. HARCOURT: Am. Mineral., 27, 109 (1942).

### Beegerite (=Schirmerite+Matildite)

G. A. HARCOURT: Am. Mineral., 27, 109 (1942).

# Ascharite, $\beta$ -Ascharite, Camsellite (=Szaibelyite)

W. T. SCHALLER: Am. Mineral., 27, 467-486 (1942).

## Illite (=Bravaisite)

R. E. GRIM AND R. A. ROWLAND, Am. Mineral., 27, 810, 817 (1942).

### Dillnite, Severite (=Kaolinite)

R. E. GRIM AND R. A. ROWLAND: Am. Mineral., 27, 814 (1942).

M. F.

Dr. Albert B. Peck, professor of mineralogy at the University of Michigan, died suddenly at his home on Saturday, Feb. 13, at the age of fifty years. Dr. Peck was a charter fellow of the Mineralogical Society of America and served as treasurer from 1920–1923; 1929–1930; also as secretary of the Society from 1933–1934.

Dr. William S. Bayley, since 1931 professor emeritus of geology at the University of Illinois, died on Feb. 14, at the age of eighty-one years. From 1931–1934 Professor Bayley served on the Council and in 1936 was elected president of the Mineralogical Society of America.