

BOOK REVIEWS

DETERMINATIVE MINERALOGY. Second edition. CHARLES H. WARREN. 163 pages. McGraw-Hill Book Company, New York, 1922.

This "edition" is, more strictly speaking, a second impression of the first edition which appeared in 1921, (*Am. Min.*, 7, 14, 1922) with many of the errors and inconsistencies of the former work rectified. The preface of the new "edition" contains four additional tests not previously referred to:—a flame test for manganese, and reactions for cerium, caesium and cassiterite. In the case of the test for cassiterite the gray, metallic coating on the mineral is not *tin* but *zinc*, as the SnO_2 acts as the cathode and causes the deposition of the Zn which was dissolved by the action of the acid upon the metal which serves as the anode (*Chem. Ztg.*, 44, 797-8, 1920).

The book in the present form with its convenient size and flexible cover is a vast improvement over the earlier edition and no doubt will appeal to some instructors of blowpipe analysis. One still looks in vain, however, for a number of well-established tests which are of service in mineral identification; such as, the Cassius purple test for gold, observations through the Merwin flame color screen, and distinguishing tests for calcite, aragonite and dolomite (Meigen, Lemberg, and Cornu).
W. F. H.

MIKROSKOPISCHE PHYSIOGRAPHIE DER MINERALIEN UND GESTEINE. ROSENBUSCH-WÜLFING, 5th edition, fully revised. Vol. I, First Half, 800, XVI+252 pages, with 192 text figures. E. Schweizerbart'sche Verlagsbuchhandlung, Stuttgart, 1921.

The publication of this revision of this widely known reference work, the first edition of which was published in 1873, was delayed on account of the world war. At present only one-half of the volume has been printed. The order of treatment has been changed radically and it is to be seriously questioned as to whether the new arrangement is an improvement over the old one.

Following a short introduction, there is a discussion of the methods of preparation of thin sections. This is called part one. Part two deals with optical methods of investigation and consists of chapters on the fundamental conceptions of crystal optics, including discussions of isotropic and anisotropic crystals without circular polarization, interference phenomena, absorption phenomena, and changes of optic properties through external influence. There are also two chapters on the production of polarized and monochromatic light.

When completed, this book, like the earlier editions will unquestionably prove to be of great value to advanced students of crystal optics and petrography.

E. H. KRAUS

NOTES AND NEWS

Dr. Henri Buttgenbach has succeeded G. Cesàro as Professor of Crystallography and Mineralogy at the University of Liège, Belgium.

Professor James R. Withrow of Ohio State University has returned from an extensive trip on the Continent where he visited many famous mineral localities.

Mr. Albert J. Walcott, a graduate of the University of Michigan, and for the past three years engaged in research work in optical glass with the Bausch & Lomb Optical Company, has been appointed lecturer in mineralogy at Northwestern University.

Dr. Oliver Bowles of the United States Bureau of Mines has been admitted as an honorary member of the Institution of Quarry Managers of Great Britain.

Two extensive lists of new mineral names have recently appeared: Neue Mineralien, by Arthur Schwantke, *Fortsch. Min. Krist. Petr.*, 7, 154-174, 1922, and Ninth list of new mineral names, by L. J. Spencer, *Mineralog. Mag.*, 19 (98), 334-354, 1922. Many of the new species referred to in these lists have been abstracted in THE AMERICAN MINERALOGIST, others will appear in the near future.

Bulletin 724 of the U. S. Geological Survey contains an interesting account of the nitrate deposits in the Amargosa region of southeastern California. The nitrate-bearing material (caliche) resembles in character and mode of occurrence the caliche of Chile, but the quantity of nitrate that could be produced would be very small and the cost high. Though these deposits are the most promising in the United States the development from a commercial standpoint was found to be impracticable.

CORRECTION

I regret that in my article on the plagioclase feldspars I misquoted Dr. Alling; the following corrections will serve to make the references to his work more accurate: Page 115, line 7, after 'Alling' delete the words 'suggested that this is the case.' Line 8, for 'but' read 'and'; delete 'no'; line 10, for 'really' read 'not'; line 11, delete 'on the contrary.' Footnote, for page 193 read 237. Page 116, line 6, delete 'as for instance in the monograph on the feldspars by Alling.' E. T. W.

NEW MINERALS: NEW SPECIES

FAMILY: SILICATES. DIVISION: R': R'': R''': Si=1:3:1:5

Torendrikite.

A. LACROIX: A series of potassic alkaline-syenite rocks with sodium minerals from Madagascar. *Compt. rend.*, 171, 594-600, 1920; this mineral, pp. 595-596; also, *Minéralogie de Madagascar*, vol. 1, p. 541, 1922.

NAME: From the locality, *Torendrika* (or *Itorendrika*) in the valley of the Imorona, Madagascar.

CHEMICAL PROPERTIES: Formula, approximately $\text{Na}_2\text{O} \cdot 0.4\text{MgO} \cdot \text{CaO} \cdot \text{FeO} \cdot \text{Fe}_2\text{O}_3 \cdot 10\text{SiO}_2$. Theory Na_2O 5.6, MgO 14.5, CaO 5.0, FeO 6.5, Fe_2O_3 14.4, SiO_2 54.0. Analyses by Raoult of material from two distinct localities gave: SiO_2 52.52, 54.10; TiO_2 0.57, 0.42; Al_2O_3 2.59, 1.00; Fe_2O_3 12.95, 13.02; FeO 5.51, 8.09; MnO 0.73, n.d.; MgO 14.74, 12.81; CaO 3.86, 3.82; Na_2O 4.51, 5.24; K_2O 1.43, 0.94; F 0.09, 0.12; H_2O 0.41, 0.12, X—, 0.31, sums 99.91, 99.99%.

This is regarded as the first member of a distinct group of amphiboles, intermediate between those of richterite, imerinite, and glaucophane.