

Some old errors in formulas of minerals are repeated, as Ag_6Bi for chilenite, $\text{Cu}_8\text{Sb}_2\text{S}_7$ for tetrahedrite, and a carbonate-free composition for hydrocalcite.

Appendix A, on crystal drawing, is greatly improved by the introduction of Penfield's and Goldschmidt's methods. Appendix B now includes a table of "minerals arranged according to chemical composition" in which are given lists of minerals containing each basic element, arranged in the order used in the body of the work. It is rather difficult to find any particular mineral in these lists, and horizontal lines separating oxides from carbonates, carbonates from silicates, anhydrous from hydrous silicates, etc., might well be added to help out in this respect.

The make-up of the book is good. There are a few compositors' errors, but mostly of an inconspicuous nature, as for instance phrenacite (p. 211), itano-silicates (583) and rutite (676). This journal is not indicated as continuing on page 4 (a dash should follow the date). On the whole this new edition of Dana's Text-Book is a decided improvement on the preceding one. W.

PROCEEDINGS OF SOCIETIES

NEW YORK MINERALOGICAL CLUB

Regular Monthly Meeting of January 18, 1922

The regular monthly meeting of the New York Mineralogical Club was held in the American Museum of Natural History on the evening of January 18th, at 8:15 p. m. The President, Dr. George F. Kunz, presided and there was an attendance of 20 members. The name of Mr. Rodney B. Miller of Newark was submitted to the Committee on Membership by Mr. Broadwell. The committee on summer excursions reported progress.

Madam Arctwski, of the University of London, was introduced by the President and spoke on the vital educational needs of Poland since the War. She spoke on the scarcity of laboratory platinum, of the lack of reference literature and collections, and appealed to the Club for collections of minerals for Lemberg University. Contributions of mineral specimens from members of the Club may be sent through the Secretary to the Society of Science in care of Prof. Twbett, Warsaw, Poland.

Dr. Kunz showed several new publications including the new edition of Dana's Text-Book. He also exhibited some quartz crystals showing inclusions and embedded in sand rock.

The program for the evening consisted of "A symposium on the zeolitic and associated minerals of New Jersey." Mr. Manchester showed a number of fine lantern slides of the excavations of the Erie cut and some exceptional specimens obtained from that locality. Pectolite, cemented and pseudomorphed by quartz, also chabazite and analcite from Weehawken were exhibited by Mr. Ashby. Mr. Wintringham called attention to the recent work on the Microscopic Determination of Nonopaque Minerals, by Dr. Esper S. Larsen of Washington. Mr. Broadwell showed polished pectolite from Paterson and calcite coated on the rhombohedral planes (02 $\bar{1}$). Mr. Maynard exhibited zeolites from Golden, Colo. and compared them with the New Jersey zeolites.

Mr. F. I. Allen called attention to the ditetragonal prisms on apophyllite from Paterson and stated that the interest of this crystal form was often disregarded. He also mentioned the "build up edges" around the termination of the West

Paterson calcite crystals and the twinning of natrolite on the vertical axis as a twinning axis.

On the matter of a subject for the next meeting being brought up by the Chair, it was decided to invite Dr. Larsen to speak on "The Microscopic Determination of Nonopaque Minerals" at the February or March Meeting.

Dr. Kunz read a letter from Professor Dana appealing for funds for the relief of Professor Tschermak and Mm. Bermuth. On the question of a joint meeting with the Newark Club being introduced by Mr. Broadwell, the Secretary moved that the Newark Club be invited to meet with the New York Club on the occasion of Dr. Larsen's address. The meeting then adjourned.

HERBERT P. WHITLOCK, *Recording Secretary.*

PHILADELPHIA MINERALOGICAL SOCIETY

Academy of Natural Sciences, February 9, 1922

A stated meeting of the Philadelphia Mineralogical Society was held on the above date with the president, Mr. Trudell, in the chair. Nineteen members and ten visitors were present. Mr. John Frankenfield was appointed secretary pro tem.

Mr. Samuel G. Gordon gave an interesting account of his trip to South America in 1921, in which the principal localities of Ecuador, Peru, Bolivia, and Chile were visited. The talk was illustrated with 125 lantern slides among which were many splendid photographs of magnificent mountain scenery showing immense glaciers, snow-capped peaks, and some of the loftiest volcanoes in South America. Views of interesting cities, Inca ruins, palm shaded plazas, and Indians, and a large collection of rare and beautiful mineral specimens raised the enthusiasm of all present. A vote of thanks was extended to the speaker.

During the discussion which followed, Mr. George Vaux, Jr. gave some interesting facts concerning the new use of germanium in medicine as an erythropoietic, and Mr. H. R. Blank gave an account of his investigations of this element.

Messrs. Bernard McQue and Horace R. Blank were proposed for active membership.

JOHN FRANKENFIELD, *Secretary pro tem.*

NEW MINERALS

ABSTRACTOR'S NOTE: In recording the data upon new minerals we have stressed heretofore the color and other physical properties, since these are the ones that first attract attention upon examining a specimen. It has seemed, however, that as the primary use of these records will be for purposes of classification, it may be preferable to make chemical properties the primary basis of all mineral classification, and crystallographic properties the secondary basis. By way of experiment this will be tried during the coming year, and comments by readers as to the relative desirability of these or of other possible plans will be looked for.

To further extend the classificatory usefulness of the records, it is proposed also to add after the "family" heading (i.e., oxides, silicates, phosphates, etc.) the "division" ratio of essential constituents of each mineral. This will be given in the form $R':R''\cdot R'''\cdot R''''$, the R standing for any element other than oxygen, the introduction of the appropriate number of O's each time seeming an unnecessary complication. The superscript accents (') refer to the "positive valence" usually exhibited by the elements concerned, as determined in solutions; the number of attraction directions shown by the same elements as they exist in the crystal structure may be from two to twelve times as great.

E. T. W.