NEW MINERALS

Eakleite

Eakleite, a new mineral from California. E. S. Larsen, U.S. Geol. Survey. *Am. J. Sci.* [4], **43**, (6), 464–465, 1917.

Name: after Prof. Arthur S. Eakle, University of California. Pronounced ak-el-ite.

PHYSICAL AND OPTICAL PROPERTIES

Color: pale pink; luster: vitreous to silky. Form: compact, tough layers of fibers. H: about 6½. Sp. Gr. 2.685-2.705. The fibers give parallel extinction, and are elongated parallel to Z. Optically +, with a small axial angle. Refractive indices: α and $\beta = 1.583$, $\gamma = 1.593$, all $\pm$ 0.001.

CHEMICAL PROPERTIES

Composition: $5CaO.5SiO_2.H_2O$. It may be a calcium-pectolite. Analysis by Prof. Eakle gave: SiO_2, 50.43; Fe_2O_3, 0.98; CaO, 45.51; MgO tr., Na_2O and K_2O none, H_2O, 3.25, sum 100.17.

Fuses at about 2.5 with slight boiling to a glassy, somewhat vesicular globule; easily soluble in acid with separation of flaky silica without gelatinization.

Found in the Museum of the University of California, labeled "Wollastonite, St. Inez, Calif." S. G. G.

Gilpinite

Gilpinite, a new uranium mineral from Colorado. Esper S. Larsen and Glenn V. Brown. *American Mineralogist*, **2**, (6), 75–79, 1917.

ABSTRACTS OF MINERALOGICAL LITERATURE

ANALYSES OF WESTERN AUSTRALIA ROCKS, METEORITES AND NATURAL WATERS. EDWARD S. SIMPSON, Geological Survey, Western Australia; *Bull*, **67**, 196 pp., 10 pl., 1916.

NOTE ON GOYAZITE. OLIVER C. FARRINGTON. *Am. J. Sci.*, [4], **43**, (5), 420, 1917. Reply to SCHALLER (see *Am. Min.*, **2**, (5), 70, 1917). Dr. Farrington points out the difference in the P_2O_5 percentage of govazite and hamlinite, and concludes that their identity has not yet been proved. W. G. L.

NEW MINERAL NAMES [Third List]. W. E. FORD, Yale University. *Am. J. Sci.*, [4], **43**, (6), 493-494, 1917.

A descriptive alfabetical list of six new mineral names which have appeared in the literature since the publication of the previous list (December, 1916). All have been noted in *Am. Min.* S. G. G.

NOTES ON THE WHITFIELD COUNTY, GEORGIA, METEORIC IRONS, WITH NEW ANALYSES. GEORGE P. MERRILL. *Proc. U. S Nat. Mus.*, **51**, 447-449, 1916.

An examination of the *Whitfield County* iron of Hidden and the *Dalton* iron of Shepard showed the two to differ radically in their structure and etching peculiarities altho there is a close chemical resemblance, and it is believed that they represent two distinct falls. The identity of the *Dalton* iron and the *Cleveland* iron, as suggested by Kunz, is also questioned, the *Dalton* iron lacking the Reichenbach figures, and differing further in chemical composition. S. G. G.

THE THEORETICAL NUMBER OF ORTHO-AXIAL PLAGIOCLASES. G. CESARO. *Bull. soc. franc. min.* **39**, 95–148, 1916.

A TITANIFEROUS AUGITE FROM ICE RIVER, BRITISH COLUMBIA. C. H. WARREN, JOHN A. ALLAN; analysis by M. F. CONNER. *Am. J. Sci.* [4], **43**, (1), 75-78, 1917.

The augite occurs in a nepheline-syenite; associated with brown barkevikitic hornblende, biotite, nephelite, apatite, titanite, and ilmenite. Analysis by M. F. C. gave: SiO_2, 41.80; Al_2O_3, 9.30; Fe_2O_3, 5.44; FeO, 3.30; MgO, 10.82; CaO, 22.89; H_2O-, 0.16; H_2O+, 1.10; TiO_2, 4.84; MnO, 0.10; sum 99.75; Sp. Gr. 3.39.

The augite is black, and fine-grained, containing abundant minute rod-like black inclusions, believed to be ilmenite, arranged in two distinct series, parallel to the vertical axis, and to the edge 001-010. The mineral exhibits striking optical properties and is compared with one from Rio de Janeiro, which it nearest approaches.

S. G. G.

LEVERRIERITE FROM COLORADO. ESPER S. LARSEN, U. S. Geol. Survey, and EDGAR T. WHERRY, U. S. Nat. Museum. *J. Wash. Acad. Sci.* **7**, (8), 208-217, 1917.

Leverrierite occurs in the veins of quartz and manganese oxides at Beidell, Saguache County, Colo., in cleavage plates up to several inches across. It has a very perfect basal cleavage. It becomes plastic when wet. Optically—; practically uniaxial, the optic axis emerging sensibly normal to the cleavage $\alpha = 1.558$, β and $\gamma = 1.602$. A chemical analysis of the mineral by E. T. W. is given, and the loss of H_2O at different temperatures. This analysis and analyses of rectorite, leverrierite, batchelorite, kryptotile, and delanouite are compared, and show some variation in the water content and more especially in the SiO_2:Al_2O_3 ratio, which varies from 1.86 in batchelorite to 3.95 in delanouite. However, optical study of the six minerals indicates that they belong to a single group, probably related to the micas. Analyses of muscovite show almost as wide a range in the SiO_2:Al_2O_3 ratio. The formula of the leverrierite group may be written $Al_2O_3.2 \pm SiO_2.2\frac{1}{2} \pm H_2O$.

S. G. G.

THE CONSTITUTION OF MELILITE AND GEHLENITE. F. W. CLARKE, U. S. Geol. Survey. *Am. J. Sci.*, [4], **43**, (6), 476-484, 1917.

A study of the analyses of melilite and gehlenite with a discussion of their empirical and structural formulas. S. G. G.

RADIOACTIVE MINERALS IN SOUTH AFRICA. P. D. HAHN. *S. African J. Sci.* **12**, 494-452, 1916. Abstract by W. H. Ross, reprinted by permission from *Chem. Abstr.*, **11**, (1), 11, 1917.

The following 6 South African minerals have been observed to be radioactive: monazite, aeschynite, euxenite, fergusonite, carnotite with uranium ocher, and pitchblende. In none of the minerals analyzed were U and Th found together.

EXCHANGE NOTICES.

Edgar T. Wherry, U. S. National Museum, Washington, D. C. Wanted, specimens of the following native element minerals (small fragments will answer). seleniferous tellurium ("selentellurium"); tellurifercous sulfur ("tellursulfur"); monoclinic sulfur; selenium; monoclinic arsenic ("arsenolamprite"); amorphous sulfur; and amorphous selenium on lava.

Good study specimens of almost any minerals except the most excessively rare ones can be sent in exchange.