

## EDITORIAL NOTE

Upon the taking over of this magazine by the Mineralogical Society of America, Mr. Harry W. Trudell has asked to be relieved of the duties of business manager. Mr. Trudell has held this position for three years, and it has been largely due to his self-sacrificing efforts in its behalf that the magazine has been able to survive during these trying times. Altho the necessary correspondence took practically all of his spare time, he handled it promptly, efficiently, and cheerfully. The editor is sure that all readers of the magazine will join him in extending herewith the heartiest thanks to Mr. Trudell.

## NEW MINERALS

Under this heading we have endeavored to record all minerals described as new since the beginning of 1916. It is probable that a few have been missed, because of publication in out-of-the-way places, or in foreign journals the receipt of which has been delayed or prevented by the world war. Every effort will be made to bring the list up to date as soon as possible.

In a recent publication, "Eighth list of new mineral names" (*Mineralog. Mag.*, 18 (87), 373-390, 1919) Mr. L. J. Spencer has assembled a large number of names proposed during the past few years (together with some prior to 1916, which are not further noted here) some of which have not been definitely included heretofore in this department. An alphabetical list of these is given here, with a brief statement of synonymy, etc., names we prefer following the = sign. Such as represent rocks, coals, obvious mixtures of minerals, hypothetical isomorphous molecules, artificial products, variant spellings or unnecessary synonyms of accepted names, etc., will receive no further attention. Following the list, however, details are given for all important species or varieties included.

## LIST OF NEW NAMES

- Ambatoarinite (dated 1915, tho perhaps not published until 1916).  
 Amosite—see description below.  
 Auxite = lucianite, which see.  
 Arsenobismite—abstracted in *Am. Min.*, 1, 13, 1916.  
 Bariohitchcockite—chemical name for gorceixite—abstracted in *Am. Min.*, 2, 120, 1917.  
 Basobismutite—see note below.  
 Belgite = willemite.  
 Caldasite—an ore or rock.  
 Carbonate-apatite = carbapatite = dahllite = podolite.  
 Carbonate-sodalite—a hypothetical isomorph.  
 Clarain—a coal.  
 Cochranite—an artificial furnace product.  
 Cornetite—see description below.  
 Cornuite, the amorphous equivalent of chrysocolla—abstracted in *Am. Min.*, 3, 158, 1918.  
 Durain—a coal.  
 Ektropite = ectropite (Greek κ = English c).

- Ferroludwigite—chemical name for ludwigite—abstracted in *Am. Min.*, 2, 69, 1917.
- Fornacite, correct spelling of furnacite.
- Framesite—a variety of bort; seems hardly deserving of a special name.
- Fusain—a coal.
- Hematogelite, a simplified spelling of haematogelite.
- Högbomite = hoegbomite (Swedish ö = English oe).
- Hydrowollastonite = crestmoreite + riversideite.
- Iron-sarcolite—a hypothetical isomorph.
- Kalioalunite—chemical name for alunite—abstracted in *Am. Min.*, 2, 120, 1917.
- Kaliohitchockite—a hypothetical isomorph—abstracted in *Am. Min.*, 2, 120, 1917.
- Katoptrite = catoptrite (Greek κ = English c).
- Lithargite, the correct form of the chemical name litharge when applied to a mineral. *Am. Min.*, 2, 19, 1917.
- Lucianite—see description below.
- Lusitanite = spencerite.
- Manganalmandine = manganiferous almandite.
- Natrohitchockite—a hypothetical isomorph—abstracted in *Am. Min.*, 2, 120, 1917.
- Paredrite = impure rutile—abstracted in *Am. Min.*, 1, 53, 1916.
- Soda-sarcolite—a hypothetical isomorph.
- Strontiohitchockite—chemical name for hamlinite or goyazite—abstracted in *Am. Min.*, 2, 120, 1917.
- Sulphate-apatite = sulfate-apatite—a hypothetical isomorph—abstracted in *Am. Min.*, 3, 178, 1918.
- Sulphatic cancrinite = sulfatic cancrinite—a member of an isomorphous series—abstracted in *Am. Min.*, 2, 13, 1917.
- Sulphurite = sulfurite (Latin *f* is not English *ph*).
- Trainite—a mixture of vashegyite and colloidal laubanite—abstracted in *Am. Min.*, 1, 15, 1916.
- Turite = turyite—see note below.
- Vitrain—a coal.
- Xanthochroite—the amorphous equivalent of greenockite—abstracted in *Am. Min.*, 3, 158, 1918.
- Zirkite—trade name for an ore or rock.

#### Amosite

A. I. Hall: The mode of occurrence of asbestos in the Transvaal. *Trans. Geol. Soc. S. Africa*, 21, 1–36, 1918.

NAME: After the initial letters of the company, "Asbestos Mines of South Africa."

PHYSICAL PROPERTIES: Color gray to white; structure fibrous; system monoclinic.

CHEMICAL PROPERTIES: An iron amphibole; represents either crocidolite lacking the usual blue color, or cummingtonite—gruenerite.

OCCURRENCE: Mined for asbestos in the Lydenburg and Pietersburg districts. S. G. G.

Basobismutite

K. A. Nenadkevich: The bismuth minerals of the Transbaikalia. *Bull. acad. sci. Petrograd*, 7, 447-454, 1917. [Original not seen.] Abstracted, from *Chem. Abstr.*, in *Am. Min.*, 4 (3), 29, 1919; this mineral was mentioned without name in the abstract, but Mr. Spencer (paper above cited) notes that the above name was applied to it.

NAME: From the composition, basic bismuth carbonate.

PHYSICAL PROPERTIES: Apparently not specially described.

CHEMICAL PROPERTIES: Analysis shows the formula to be  $2\text{Bi}_2\text{O}_3 \cdot \text{CO}_2 \cdot \text{H}_2\text{O}$ .

OCCURRENCE: As a cement between beryl crystals from the Sherlov Mountains. E. T. W.

Cornetite

G. Césaro: (Preliminary announcement, without name) A new mineral from Katanga. *Ann. Soc. Geol. Belg.*, 39, B 241, 1912. (Description, also without name.) *Ann. Soc. Geol. Belg.*, 39, *Annexe rel. Congo Belge*, 41-48, 1912. H. Buttgenbach: In "Les Minéraux et les Roches" (Liege, 1916), p. 452; cited by Spencer, *Min. Mag.*, 18 (87), 376, 1919. [Original not seen.]

NAME: After Jules Cornet, who presumably first collected the mineral.

CRYSTALLOGRAPHIC PROPERTIES

System: Rhombic;  $a : b : c = 0.9844 : 1 : 0.7679$ ; or  $0.9771 : 1 : 0.7872$  in another orientation, to bring out relationships with certain other minerals.

Forms: first orientation, (110), (102), (111), (221).

PHYSICAL AND OPTICAL PROPERTIES

Color: blue, somewhat greenish; hardness = 5.5; mean refractive index around 1.7; double refraction very strong, around 0.120; extinction straight;  $2E = 55^\circ$ ; sign—; optic axial plane (001), with  $Bx_\alpha \perp (100)$ .

CHEMICAL PROPERTIES

Amount of material available too small for quantitative analysis, but qualitative tests show it to be essentially a phosphate of copper and cobalt, with a little arsenic but no vanadium. From the similarity of the crystallization and optical properties to those of libethenite, olivenite, herderite, etc., its formula is probably:  $(\text{Cu}, \text{Co}) (\text{OH})\text{PO}_4$ .

OCCURRENCE

On limestone, etc., from Katanga, Belgian Congo.

E. T. W.

Echellite

See *American Mineralogist*, 5, 1-3, 1920.

Lambertite

S. C. Lind and C. W. Davis: A new deposit of uranium ore. *Science*, 49, 441-443, May 9, 1919.

NAME: After the discoverer of the deposit, Mr. Ross Lambert.

PHYSICAL PROPERTIES: Not specially described.

CHEMICAL PROPERTIES: Composition stated to be  $UO_3$ .

OCCURRENCE: Admixed with uraninite and uranophane in a quartzite lying between mica schist and granite at Silver Cliff Hill, 1.5 km. north of Lusk, Wyoming. S. G. G.

#### Lucianite

E. W. Hilgard: A peculiar clay from near the city of Mexico. *Proc. Nat. Acad. Sci.*, 2, 8-12, 1916.

NAME: After the locality, Hacienda Santa Lucia.

PHYSICAL PROPERTIES: A clay; swells up enormously when wet.

CHEMICAL PROPERTIES: Shown by analysis to have the composition of a hydrated talc. [Probably a form of stevensite, A. F. Rogers. See *Am. Min.*, 3, 158, 1918.]

OCCURRENCE: A weathering product of magnesian igneous rocks.

S. G. G.

#### Turyite

This mineral name has been usually spelled *turgite*, in accordance with the rule of priority. The original author of it, Hermann, subsequently discovered that this spelling was incorrect, and changed it [in German] to *turjit*; the exact English equivalent of this is *turyite*. Much later Samoilov used for it a Russian word the English transliteration of which is *turite*. Spencer in the paper above cited adopts the last. We prefer to use the *earliest correct spelling: turyite*.

E. T. W.

### ABSTRACTS—CRYSTALLOGRAPHY

A METHOD OF GROWING LARGE PERFECT CRYSTALS FROM SOLUTION. R. W. MOORE. *J. Am. Chem. Soc.*, 41 (7), 1060-1066, 1919.

The method consists of placing seed crystals in a nearly saturated solution of the salt, cooling the solution until it is very slightly supersaturated, and maintaining a state of slight supersaturation by slowly cooling the solution about  $0.1^\circ$  per day by means of a thermostat, with greater decreases as the crystal grows larger. A clear perfectly developed crystal of Rochelle salt 8 cm long can be produced in a month. S. G. G.

THE USE OF THE GNOMONIC PROJECTION IN THE CALCULATION OF CRYSTALS. G. F. HERBERT SMITH. *Min. Mag.*, 18 (86), 317-323, 1919.

THE POSSIBLE AXES OF CRYSTAL SYMMETRY. JOHN W. EVANS. *Min. Mag.*, 18 (86), 324-326, 1919.

A simple general proof is given, on the hypothesis that crystals have a homogeneous cellular structure, that the only possible axes of symmetry are those with cyclic numbers 2, 3, 4, or 6. S. G. G.

COÖRDINATE TRANSFORMATION IN REGULAR POINT SYSTEMS. A. JOHNSON. *Centr. Min. Geol.*, 1918, 46-49.

A series of mathematical formulas for this purpose.

E. T. W.