NEW MINERAL NAMES—

DOUBTFUL SPECIES, VARIETIES, ETC.

FAMILY 4. OXIDES, ETC.

Chromohercynite.

A. LACROIX: A new member of the spinel group, chromohercynite, from Madagascar. *Bull. soc. franc. min.*, **43**, 69–70, 1920.

NAME: From the composition, *chromite* plus *hercynite*.

PHYSICAL PROPERTIES: Color black; luster vitreous; sp. gr. 4.415.

CHEMICAL PROPERTIES: An isomorphous mixture of chromite and hercynite in equimolecular proportions, essentially $FeCr_2O_4.FeAl_2O_4$, with some replacement of the Fe by Mg. Analysis gave: Cr_2O_3 38.64, Al_2O_3 27.12, Fe_2O_3 0.61, FeO 27.00, MnO 1.10, MgO 5.33, SiO_2 0.28, H_2O 0.25, sum 100.33 per cent.

DISCUSSION. [May be classed as a subspecies or variety of hercynite or iron-spinel.] E. T. W.

FAMILY 5. CARBONATES, ETC.

Patagosite

STANISLAS MEUNIER: Observation on the mineralizing calcite of certain fossils. *Compt. rend. somm. soc. géol. France*, **1917**, April 2, 83–84.

NAME: From the Greek *patagos*, which means, rhetorically, an explosion.

PROPERTIES: Shows rhombohedral cleavage, and on solution in acid leaves a dark colored residue of organic nature. Characterized by exploding violently on heating.

DISCUSSION. [At least 50 other minerals are known to explode on heating, in occasional specimens. If some young mineralogist is looking for a job, he can work up a name for each of these instances. Whether this will lead to his becoming famous, or to violent explosions on the part of other mineralogists, we will not venture to predict.] E. T. W.

FAMILY 7. PHOSPHATES, ETC.

Acid aluminium phosphate.

B. DEC. MARCHAND: Occurrence of a peculiar phosphate of aluminium in a deposit of bat guano. *S. African J. Sci.*, **15**, 638–639, 1918; thru *Chem. Abstr.*, **14** (9), 1280, 1920.

PHYSICAL PROPERTIES: Color white to slightly yellowish; amorphous, soft.

CHEMICAL PROPERTIES: Insoluble in acids, but half the P_2O_5 is soluble in NH_4OH. Analysis of "selected samples" gave the ratio $Al_2O_3 : 2P_2O_5 : 8H_2O$.

DISCUSSION: [This is obviously a colloidal adsorption product of indefinite composition, and should not be given a species name or classed as a definite mineral.] E. T. W.

Duftite

O. PUFAHL: Mitteilungen über Mineralien und Erze von Südwestafrika, besonders solche von Tsumeb. (Notes on minerals and ores from Southwest Africa, especially those from Tsumeb.) *Centr. Min. Geol.*, **1920**, (17/18), 289–296; this mineral, 295–296.

NAME: In honor of Mining Councilor G. *Duft*, Director of the Otavi Mine and Railroad Co.

PHYSICAL PROPERTIES: Color olive green to grayish green; in aggregates of small crystals with curved, rough faces. Sp. gr. = 6.19; H = 3.

CHEMICAL PROPERTIES: Before the blowpipe decrepitates and gives tests for As and Pb. Readily soluble in acids. Analysis gave: PbO 50.10, CuO 19.32, ZnO 0.46, CaO 0.75, As_2O_5 26.01, H_2O − 0.08, H_2O + 2.65, SiO_2 0.44, sum 99.81 per cent. This is thought to correspond to $2Pb_3(AsO_4)_2 : Cu_3(AsO_4)_2 : 4Cu(OH)_2$.

OCCURRENCE. Occurs associated with azurite crystals and coated with bauxite-like material, on a specimen brought back from the Tsumeb region in 1911 by the late mining engineer Zeleny.

DISCUSSION: [This may be a member of the olivenite group, but until better data are obtained, it is to be retained in the doubtful class. At any rate the formula corresponding to the analysis is evidently simply $PbCu(OH)(AsO_4)$.] W. F. F.

ABSTRACTS—CRYSTALLOGRAPHY

THREE MINERALOGICAL NOTES—(CALCITE, QUARTZ, SPHALERITE). G. AMINOFF. *Geol. Fören. Förh.*, **38**, 201–211, 1916.

Comprises crystallographic descriptions of a parallel-growth of calcite from Garta, Arendal, with one new form $(19.1.\bar{2}0.0)$; a quartz hetero-twin after the Zinnwald law from Offerdalen, Jämtland; and colorless tetrahedrons of sphalerite from Slättberg, Dalarne, Sweden. E. T. W.

CALCITE TWINS FROM FÄRÖARNA. G. AMINOFF. *Geol. Fören. Förh.*, **38**, 339–348, 1916.

A detailed crystallographic description. Deviations from the theoretical twinning position are considered, and found to amount to up to 15′, there being proportionality between amount of deviation and number of observations. E. T. W.

TWO NEW OCCURRENCES OF WELL CRYSTALLIZED SWEDISH MINERALS. GUST. FLINK. *Geol. Fören. Förh.*, **38**, 463–472, 1916.

Inesite is described from Långban in tabular crystals with *a*, *b*, and *f* the dominant forms. Apophyllite from the Dannemora mines is in tabular crystals with a number of modifying forms. E. T. W.

CRYSTALLOGRAPHIC STUDIES OF PHENYL BENZOATE. MARIA STURA. *Riv. min. crist. Ital.*, **48**, 86–90, 1917.

The system is monoclinic; crystallographic data are given. E. T. W.

THE CRYSTAL STRUCTURE OF THE ALUMS AND THE RÔLE OF WATER OF CRYSTALLIZATION. C. SCHAEFER AND M. SCHUBERT. *Ann. Physik*, **55**, 397–400, 1918; **59**, 583–588, 1919; L. VEGARD, **58**, 291–296, 1919.

Continuation of discussion; compare *Am. Min.*, **4** (8), 103, and **5** (7), 139. E. T. W.

THE LAWS OF CURIE AND HAÜY. C. VIOLA. *Bull. soc. franc. min.*, **41**, 108–116, 1918; G. FRIEDEL, **41**, 196–198, 1918.

A mathematical discussion, in which the so-called law of Curie is questioned. E. T. W.