The book is up-to-date containing numerous cuts not generally found in a text of this type. The photographs are clearly recorded on the good quality of paper selected and very few typographical errors were noted. The clear style of presentation, the numerous illustrations and the popular interest in this phase of mineralogy should all combine to create a demand for this handy volume. W. F. H.

NOTES AND NEWS

Virgil W. Field, a charter member of the Mineralogical Society of America, died at his home in Salt Lake City, Utah, August 14, at the age of fifty years. Mr. Field died leaving a collection of two thousand specimens which he had been gathering since 1888. His first interest in mineralogy was awakened when a mere lad by a descent into a cave in the famous Hot Pots region, Midway, Utah. From that time on he pursued his study of mineralogy diligently, striving against tremendous odds, as his knowledge of minerals was acquired through his own efforts after his daily carpentry work had been finished.

Shortly before his death Mr. Field had housed his collection in a special laboratory at his home and had finished a complete catalogue of his specimens. It was his desire to have his collection moved to a place of learning, there to be used for educational and display purposes.

NEW MINERALS: NEW SPECIES

CLASS: SILICATES.

Afwillite.


NAME: In honor of Alpheus F. Williams, General Manager of the De Beers Consolidated Mines, Kimberly, South Africa.

CHEMICAL PROPERTIES: A hydrous silicate of calcium. Formula: 3CaO.2SiO₃.3H₂O. Several analyses are given. One by H. S. Washington, as follows: SiO₃ 35.10, Al₂O₃ 0.05, MgO 0.02, CaO 49.00, BaO none, H₂O+110° 15.81, H₂O–110° 0.01; sum 99.99. Soluble in hydrochloric acid.

CRYSTALLOGRAPHIC PROPERTIES: Monoclinic. a : b : c = 2.097 : 1 : 2.381. $\beta = 98^\circ 26'$. $p_0 = 1.335$, $q_0 = 2.355$, $\mu = 81^\circ 34'$. Crystals prismatic elongated parallel to the b axis. Forms: (001), (100), (110), (310), (102), (101), (102) and a number of doubtful ones.

PHYSICAL AND OPTICAL PROPERTIES: Color white or colorless. Luster vitreous; cleavage basal, perfect; orthopinacoidal, imperfect. Fracture conchoidal. Biaxial positive, $2V, \alpha = 1^\circ 6169$, $\beta = 1^\circ 6204$, $\gamma = 1^\circ 6336$. $b = Y$, $X \wedge c = 30.6^\circ$. Plane of the optic axes $\perp$ to the elongation of the crystals. Dispersion inclined. H=4. Sp. Gr. 2.630.

OCCURRENCE: Found in a large dolerite inclusion in the kimberlite at the Dutoitspan Mine, Kimberly, associated with apophyllite, calcite and natrolite in crystals up to 11 cm in length. W. F. Foshag.
Kossmatite


NAME: In honor of the geologist, Fr. Kossmat.

CHEMICAL PROPERTIES: A hydrous silicate of magnesia and alumina. Formula: H₂Mg₃Al₅Si₃O₁₄F. Analysis (by Werner Fisher): SiO₂ 28.47, TiO₂ tr., Al₂O₃ 22.84, Fe₂O₃ 0.26, MgO 8.16, CaO 27.10, Na₂O 0.51, K₂O 0.07, P₂O₅ 0.04, F 1.14, H₂O + 11.69, H₂O - 0.82; sum 101.10.

Fusible to a white blebby glass.

PHYSICAL AND OPTICAL PROPERTIES: Colorless, luster vitreous to pearly. Cleavage basal, eminent, not elastic. 2Eₙ₂ = 14° 15'. a = 1.560. β - α = .004.

OCCURRENCE: Found as colorless scales in limestone near Prilep, West Macedonia, associated with corundum, pyrite, and another brittle mica.

DISCUSSION: This mineral is quite different in its ratios from the other members of the brittle mica group and can well be classed as a new member of this group.

W. F. F.

NEW DATA

CLASS: PHOSPHATES, ETC.

Merrillite.


CHEMICAL PROPERTIES: A calcium sodium phosphate. Formula: 3CaO. Na₂O. P₂O₅. Analysis (on 0.0702 gm. material): Insol. 6.69, CaO 43.45, Na₂O 14.67, P₂O₅ 36.47, Cl 0.85, MgO tr, F none, CO₂ none; sum 102.13.


W. F. F.

CLASS: SILICATES.

Iddingsite.


CHEMICAL PROPERTIES: A hydrous silicate of ferric iron and magnesia. Formula: MgO. Fe₂O₃. 3SiO₂. 4H₂O. Analyses of nine different samples given. Average composition from five crystalline samples: SiO₂ 39.11, TiO₂ 0.18, Al₂O₃ 3.29, Fe₂O₃ 31.49, FeO 0.96, CaO 2.28, MgO 8.05, H₂O + 8.49, H₂O- 7.78; sum 101.63.

OPTICAL AND PHYSICAL PROPERTIES: Color pale to deep reddish brown. Pleochroic. Biaxial, generally negative but sometimes positive. 2V varies from medium small to large. Dispersion strong, ρ < ν. Indices of refraction variable. a = 1.608-1.730, β = 1.650-1.725, γ = 1.655-1.765. Cleavage perfect, (100), (001), (101). X = a, Y = b, Z = c. H. about 3. Optical data is given in detail for 8 localities.

W. F. F.