NEW MINERALS

CHUBUTITE


NAME: From the locality, Chubut, Argentina.

PHYSICAL PROPERTIES

Color: yellow, sometimes reddish or greenish; structure, lamellar; H. = 2.5; brittle; D. = 7.952.

OPTICAL PROPERTIES

Under the microscope greenish yellow, with n “not high” and birefringence slight. Crystal system indicated to be tetragonal.

CHEMICAL PROPERTIES

Essentially 7PbO·PbCl₂, analysis showing: PbO 83.30 and PbCl₂ 14.83 per cent., with minor amounts of SiO₂, Al₂O₃, Fe₂O₃ and Sb₂O₅. Similar material was made by fusing the constituents together in these proportions. Insoluble in water, but readily soluble in dilute HNO₃ and in hot 30 per cent. KOH solution.

(The above features suggest that this mineral is practically the same as loretoite of Wells and Larsen, J. Wash. Acad. Sci., 6 (20), 669–672, 1916; Am. Min., 2 (2), 26, 1917. See: Chubutite, E. Rimann, Anales soc. quim Argentina, 6, 323–328, 1918; Chem. Abstr.)

ABSTRACTS OF MINERALOGIC LITERATURE


Includes many articles on mineralogy.


From studies made of heulandite, scolecite, natrolite, harmotome, chabazite, analcrite, and apophyllite, it is concluded that the water in all of them is chemically combined.


X-ray measurements on the alums are described. The structures derived are too complicated for brief abstracting.

A PEGMATITE ORIGIN FOR MOLYBDENITE ORES. E. THOMSON. Econ. Geol., 13, 302–313, 1918.

Study of several deposits in Quebec shows that the molybdenite always occurs in or near pegmatite dikes, or in rocks formed by pneumatolytic action.

From determinations of the water lost at different temperatures and the amounts of silica and alumina extractable from the residues it is concluded that the kaolinite molecule is broken down into its constituent oxides at 800°.

E. T. W.


This article includes data on the occurrence of the rock zirkite (erroneously called a mineral), noting that it contains 3 minerals, “brazilite,” zircon, and an unknown silicate of zirconium. Refers to Meyer, Wileman’s Brazilian Review, 1916, p. 826.

E. T. W.


From metallographic studies of titaniferous iron oxide minerals it is concluded that there is partial solid solution between magnetite and ilmenite, and complete solid solution between hematite and ilmenite. In some cases also rutile appears to enter into solid solution as such. E. T. W.


Analytical data given for this mineral indicate it to be a variety of ilmenite. E. T. W.


Some crystals of nephelite in a rock were found to be altered superficially and in cavities to minute leucite crystals. Some sanidine was admixed, and the material is thought to be the result of the action of solutions containing K$_2$SiO$_3$ on nephelite at moderately high temperatures. E. T. W.


An elaborate account of the conditions of formation of wollastonite, augite, tridymite, quartz, feldspar, magnetite, biotite, melilite, corundum, and sillimanite. E. T. W.


It is pointed out that the results obtained by treating clays with strong reagents are practically impossible to interpret correctly, and the method used with igneous rocks, of making an accurate ultimate analysis and calculating norms, is preferable. E. T. W.

A record of observations on calcite from Franklin Furnace, N. J. It shows a red-yellow phosphorescence of short duration, and the rate of decay of the phosphorescence and the spectrum of the light are described.

E. T. W.


The red luminescence of Franklin Furnace calcite appears to be due to the presence of limited amounts of manganese. By adding a salt of this element to pure calcium carbonate and heating, material showing similar effects could be prepared. The physical features of the luminescence are described at length.

E. T. W.


Hollandite crystals up to 2 inches (5 cm.) long from the Kajlidongri mine, Jhabus State, Central India, were examined and found to be tetragonal-pyramidal; c = 0.2039, with the principal forms m (110), a (100), k (210), p (111) and q (331), and about 57 more or less indefinite forms. Hollandite is considered to be a crystalline form of psilomelane, and a manganate corresponding to the formula H₂MnO₄, probably a member of the scheelite group. Romanéchite of Lacroix and possibly coronadite are identical with hollandite. Fermor suggests that the letter X be prefixed to indicate crystalline phases of amorphous minerals, and the prefix κ to indicate colloidal phases of crystalline minerals.

E. T. W.


S. G. G.


The value of index β being always between the two observed on any grain, it is possible to determine it approximately by immersing successively in liquids with indexes differing by 0.003 and observing the relations of the indexes of the grains with that of each liquid on a considerable number of grains.

S. G. G.


Epsomite and thenardite occur in lakes on Kruger mountain. These salts are thought to have formed by the action of sulfuric acid from decomposing pyrite in adjacent rocks on other rocks containing Mg, Ca, and Na.

E. T. W.
THE PROBABLE IDENTITY OF PEGANITE WITH VARISCITE.

A specimen of alleged peganite was analyzed and found to have the composition AlPO₄·2H₂O, and because of this and other features it is suggested that peganite is nothing but variscite. [Not the slightest optical or crystallographic data are given, so little weight can be attached to this conclusion. Abstr.] E. T. W.


A detailed description of the mineral association, occurrence, origin, etc., of the barite.


The composition and origin of the material are discussed.


Monazite, euxenite and fergusonite occur in gravels, with cassiterite, corundum, scheelite, magnetite, and garnet, in Embaaba Swaziland, supposedly derived from the gneissic rocks of the region. Euxenite occurs in pegmatites at Kénhardt. Tantalite and columbite occur in lumps and crystals (one group weighed 16 pounds (7 kg.) in pegmatite with feldspars, quartz, muscovite, lepidolite, garnet, beryl, and spodumene in Little Namaqualand. Analyses of euxenite, columbite, and tantalite are given.


The properties and compositions of specimens consisting of anthraxolite and schungite are described.


The occurrence of orthoclase, epidote, calcite, wernerite, actinolite, and apatite are noted, developed by contact metamorphism at Manton and South Foster. Tiny brilliant white crystals of apatite on biotite showed the forms: a (0001), c (1121), g (2021), x (1011), y (1012), z (3031), a (1010) and (6.6.12.1).


Lead hydroxide and phosgene in excess under pressure were heated in a sealed tube at a number of temperatures from 95° to 250° C., from 1 to 4 hours. The best results were obtained at 175°. The phosgenite crystals were small, but well defined.