BOOK REVIEW

THE GEOLOGY AND ORE DEPOSITS OF SIERRA COUNTY, NEW MEXICO. GEORGE TOWNSEND HARLEY. Bulletin No. 10 of the State Bureau of Mines and Mineral Resources of the New Mexico School of Mines. Socorro, New Mexico. Price 60¢.

While Sierra County is one of the smaller counties of New Mexico it has been its third largest producer of mineral wealth. The production of ores, concentrates and bullion has totaled approximately $21,000,000. Silver and gold being the chief metals mined. The period of greatest mining activity was from 1877 to 1901, but with the recent rise in the price of gold interest in the ore deposits of the county has increased greatly, and mining and prospecting have had a marked revival.

The bulletin has been prepared primarily for the use of prospectors and operators of mining property in Sierra County, and for non-residents interested in the development of the resources of the region. The first part of the report includes a description of the rocks and geological history of the county, a discussion of the ore bodies and a brief review of some practical points involved in the search for and economical exploitation of the ore. The second part is devoted to a detailed description of the vein systems and other modes of occurrence of the ore in each of the mining districts within the county. The bulletin consists of 220 pages and 30 illustrations, including a detailed geologic and topographic map of the Hillsboro district.

W. F. H.

NEW MINERAL NAMES

Ferruccite


NAME: In honor of Ferruccio Zambonini.

CHEMICAL PROPERTIES: A sodium fluoroborate NaBF₄. Soluble in water. An analysis is given of the water soluble and insoluble portions of the mineral mixture.

CRYSTALLOGRAPHICAL PROPERTIES: (On artificial crystals) Orthorhombic, with \( b, a, c, m \). Habits, Tabular to \( b \) and to \( c \), \( a:b=0.9169:1. a:m=42°31' \).

OPTICAL AND PHYSICAL PROPERTIES: (On artificial crystals) Biaxial, positive, \( 2V=11°25' \). \( a=1.301, \beta=1.3012, \gamma=1.3068 \). \( X=c, Y=b, Z=a \).

Plane of optic axes \((010)\), Sp. Gr. 2.496.

Occurrence: Found with other fluorobrates and fluosilicates as a fumarolic product at Vesuvius. Fractional crystallization gave (1) Insoluble 71%, (Fluosilicate of aluminum and iron), (2) \( K_2SiF_6 \), (3) potassium fluoroborate, (4) boric acid and sodium fluosilicate, (5) sodium fluoroborate.

W. F. F.
Glaucocerinite


**NAME:** From the Greek words for blue and waxy.

**CHEMICAL PROPERTIES:** A hydrous basic sulfate of zinc, aluminum and copper: \( \text{Zn}_2\text{Al}_4\text{Cu}_5(\text{SO}_4)_2\text{O}_{36} \cdot 34\text{H}_2\text{O} \). Analysis: ZnO 37.95, Al₂O₃ 15.49, CuO 19.26, SO₄ 5.79, H₂O + 5.69, H₂O – 16.31; Sum 100.40. Soluble in hydrochloric acid.

**PHYSICAL AND OPTICAL PROPERTIES:** Color sky blue to turquoise blue, at times greenish, and gray or brownish through impurities. Soft, waxy to radial fibrous. Sp. Gr. 2.749.

Extinction parallel. \( \gamma = 1.542 \pm 0.001 \). Birefringence is high.

**OCCURRENCE:** Found as a fine botryoidal coating on adamite or with gypsum in vugs in smithsonite at Laurion.

**DISCUSSION:** Differs from zinkaluminite chiefly in its content of copper.

W. F. F.

DISCREDITED SPECIES

Zamboninite


This mineral (Cl. Am. Mineral., vol. 15, p. 275, 1930) is shown by x-ray examination to be a mixture of fluorite and sellaite.

W. F. F.