

collected from the current literature. In addition to the bibliographical reference, a brief description of the essential characters of the mineral and derivation of the name are given.

DR. J. DRUGMAN: *On different habits of fluorite crystals*. In fluorite the cube is usually the predominating form. Crystals of other habits—octahedral, rhombic-dodecahedral, and triakis-octahedral—are described. The temperature during the growth of the crystal has perhaps influenced its habit.

BOOK REVIEW

THE WORKING OF SEMI-PRECIOUS STONES, J. H. HOWARD. 37 pages, 12 figures, and 18 plates. Rocks and Minerals, Peekskill, N. Y. \$1.00.

This little booklet should furnish collectors with the inspiration for cutting and polishing some of our more common gem minerals. The author, an amateur lapidary, presents in detail the method used for cutting and polishing cabochon surfaces in such a simple and direct manner that one is convinced that the art is not so difficult as to be beyond the ability of the ordinary layman. One chapter is devoted to faceted cuts and another to the sawing of minerals. Complete directions are given for the construction of the necessary apparatus, the cost of which the author states should not exceed \$45.00.

C. B. SLAWSON

NEW MINERAL NAMES

Nicolayite

NAME: In honor of Rev. C. G. Nicolay, early mineral collector in Western Australia. Formerly called thorogummite.

CHEMICAL PROPERTIES: A hydrous silicate of lead, thorium and uranium, differing from maitlandite in the state of oxidation of the uranium, $2(\text{Pb}, \text{Ca})\text{O} \cdot 3\text{ThO}_2 \cdot 4\text{UO}_3 \cdot 8\text{SiO}_2 \cdot 21\text{H}_2\text{O}$. Analysis: UO_3 37.33, UO_2 nil, ThO_2 24.46, SiO_2 15.30, Ce_2O_3 .12, Y_2O_3 .32, PbO 7.78, MnO nil, CaO 1.62, MgO .16, $\text{H}_2\text{O} + 8.37$, $\text{H}_2\text{O} - 4.19$, $(\text{Ta}, \text{Cb})_2\text{O}_6$.40; total 100.05.

PHYSICAL AND OPTICAL PROPERTIES: Color yellow, luster vitreous. Amorphous. $n = 1.617$. $G = 4.13$.

OCCURRENCE: Like maitlandite.

W. F. FOSHAG

Montasite

H. L. KIRKMAN: Some notes on Crocidolite and Amosite Occurrences in the Union. *Trans. Geol. Soc. S. Africa*, **33**, 17, 1931.

A registered name for asbestos fiber from the Montana mine, Pietersburg-Lydenburg district, South Africa.

W. F. F.

NEW DATA

Cooperite

H. R. ADAMS: Notes on Platinum Minerals from Rustenburg and Potgietersrust District, Transvaal. *Trans. Geol. Soc. S. Africa*, **33**, 103-110, 1931. *Cf. Am. Mineral.*, **14**, 339, 1929.

CHEMICAL PROPERTIES: A sulfide of platinum, PtS₂. Analyses: (Potgietersrust) Pt 71.5, Pd 6.4, S 14.1, As 3.4, Ni 2.0, insol. 1.5; (Rustenburg) Pt 72.9, Pd 6.2, S 15.0, As 0.2, Ni 2.2, insol. 2.6. Relatively insoluble in aqua regia.

CRYSTALLOGRAPHIC PROPERTIES: Orthorhombic. Habit prismatic. $a:b:c = 0.4968:1:2.0025$. Forms $c(001)$, $b(010)$, $a(100)$, $e(101)$, $f(201)$, $g(221)$. Twinning polysynthetically (?) parallel to (010).

PHYSICAL PROPERTIES: Color silver white with yellowish tinge. Luster metallic. Cleavage none. Fracture conchoidal, very brittle. Magnetic susceptibility weak. Hd. 5.5. G. 9.0.

MINERALOGRAPHIC PROPERTIES: Practically unaffected by etching reagents. On heating at 800°-900°C for a few seconds particles become colored blue and bronze by oxidation films. Examinations of particles, especially those from Potgietersrust often reveals two constituents, the main one being a darker sulfide, the other (probably sperrylite) having a microcrystalline and more silvery appearance.

W. F. F.