

## ABSTRACTS—MINERALOGY

SOME OF THE RELATIONS OF MAGNETITE AND HEMATITE. T. M. BRODERICK. *Econ. Geol.*, 14, 353-366, 1919.

The view of Sosman and Hostetter (abstd. in *Am. Min.*, 3, 187, 1918) that solid solution of magnetite in hematite is of wide occurrence in natural minerals is criticized. When some of the specimens thought to be good illustrations of this phenomenon are examined on polished surfaces, admixed magnetite can be detected. Solid solution may occur, but not so frequently as has been supposed. E. T. W.

THE DEPOSITS OF ORPIMENT AND REALGAR AT LUCERAM AND DURANUS, MARITIME ALPS. J. ORCEL. *Bull. soc. franc. min.*, 41, 176-180, 1918.

The occurrences of these minerals are described in detail, with brief crystallographic data. E. T. W.

NEW METHOD OF ANALYSIS OF PLATINUM ORES AND COMPOSITION OF THE NATIVE PLATINUMS OF THE URALS. LOUIS DUPARC. *Helvetica Chim. Acta*, 2, 324-337, 1919; thru *Chem. Abstr.*, 13 (20), 2495, 1919.

Includes discussions of the occurrence of platinum in the Urals, and analyses of some 12 samples, showing considerable amounts of associated metals such as osmium, iridium, rhodium, iron, etc. E. T. W.

MAGNESITE AS RAW MATERIAL. THOMAS CROOK. *Trans. Ceramic Soc.*, 18, 67-147, 1919; *Mining Mag.*, 20, 115, 1919; thru *Min. Abstr.*, 1, 15, 1920.

A review of the economic occurrence and uses of magnesite, breunnerite, and hydromagnesite for refractory purposes. Magnesium and iron carbonates form a continuous isomorphous series and definite compounds do not exist. W. F. H.

THE NITRATE OCCURRENCES IN THE DISTRICTS OF PRIESKA AND HAY, CAPE PROVINCE. G. E. B. FROOD AND A. L. HALL. Union of S. Africa, Geol. Survey, *Mem.* 14, 1-51, 1919; thru *Min. Abstr.* 1, 16, 1920.

Irregular deposits of  $\text{KNO}_3$  are found in many places along faces of cliffs, in caves, or as veins and pockets in shale. Thru bacterial action the nitrogenous matter of organic remains has been oxidized to the nitrate, the shale supplying the potash. W. F. H.

CORUNDUM OF THE ZOUTPANSBERG FIELDS AND ITS MATRIX. P. A. WAGNER. *Trans. Geol. Soc. South Africa*, 21, 37-42, 1918; thru *Min. Abstr.* 1, 15, 1920.

Loose crystals of corundum measuring up to 25 cm. in length and 13 cm. in diameter, and fragments, are found on the surface in the Zoutpansberg and Pietersburg districts of northern Transvaal. Analyses show  $\text{Al}_2\text{O}_3$  80.68-87.13;  $\text{SiO}_2$  7.35-10.05;  $\text{Fe}_2\text{O}_3$  2.46-2.71. The matrix is in some cases a corundum-bearing diorite pegmatite, while in others it appears to be a quartz rock or a mica schist. W. F. H.