

ABSTRACTS—MINERALOGY

THE LIMITS OF MIX-CRYSTAL FORMATION BETWEEN POTASSIUM CHLORIDE AND SODIUM CHLORIDE. R. NACKEN. *Tübingen. Sitzb. preuss. Akad.*, 1918, 192-200.

There being some uncertainty as to the exact relation between these salts, a new series of observations was made, using the determination of the refractive index by the immersion method for obtaining the composition of the mixtures. The concentration-temperature diagram was found to show a maximum at slightly less than 500° and 65 molecular per cent. NaCl.

E.T.W.

THE TELLURIDES OF BISMUTH. M. AMADORI. *Gazz. chim. ital.*, 48, II, 42-53, 1918; *Atti accad. Lincei*, 27, I, 131-133, 1918.

Fusions of Bi<sub>2</sub>S<sub>3</sub> with Bi<sub>2</sub>Te<sub>3</sub> have been studied, but only one compound was found, containing equal molecular amounts of these. No substances corresponding to the minerals tetradymite, "joseite," "grünlingite," etc., were obtained.

E.T.W.

THE COMPOUNDS OF THE FLUORIDE AND THE CHLORIDE WITH THE PHOSPHATE OF LEAD. M. AMADORI. *Atti accad. Lincei*, 27, I, 143-148, 1918.

Fusions yielding pyromorphite and the corresponding fluo-pyromorphite, not known in nature, have been studied. Detailed thermal data are given.

E.T.W.

ANHYDROUS PHOSPHATES, ARSENATES, AND VANADATES OF LEAD. M. AMADORI. *Atti ist. Veneto*, 76, 419-433, 1917; thru *Chem. Abstr.*, 13 (14), 1568, 1919.

A description of thermal studies of the systems PbO-P<sub>2</sub>O<sub>5</sub>, PbO-As<sub>2</sub>O<sub>5</sub> and PbO-V<sub>2</sub>O<sub>5</sub>. Several compounds were found to exist in each system.

E.T.W.

ALLOYS OF IRON AND NICKEL DEPOSITED ELECTROLYTICALLY. P. BENVENUTI. *Atti ist. Veneto*, 76, 453-477, 1916; thru *Chem. Abstr.* 13 (15), 1675, 1919.

In the course of the chemical studies alloys corresponding to the meteoritic varieties taenite and kamacite were obtained.

E.T.W.

THE PRESENCE OF BORON IN CERTAIN NATURAL BASIC SILICO-ALUMINATES. A. LACROIX AND A. DE GRAMONT. *Compt. rend.*, 168, 857-861, 1919.

Spectroscopic examination having shown the presence of boron in Madagascar occurrences of several basic aluminosilicate minerals in which it has not been heretofore recognized, analyses were made by Dr. Raoult, giving: sapphirine, 0.75, grandidiérite 2.81 and kornerupine, 3.59, per cent. of B<sub>2</sub>O<sub>3</sub>. It is suggested that the B occurs as an isomorphous replacement of aluminium and ferric iron. B was also found in variable amounts in dumortierite and vesuvianite.

E.T.W.

MINERALS FROM RHODESIA. IMPERIAL INSTITUTE. *Bull. Imp. Inst.*, 16 (4), 456-476, 1918.