

*Industrial and Engineering Chemistry* (February, 1920, page 166), the same system is referred to as "o-rhombic." In order that this shall not be suspected as being a bit of Irish propaganda, we may explain that in organic chemical compounds the prefix *ortho* is commonly abbreviated to "o"; and the use of the same abbreviation here was evidently an oversight.

The mineral collection of the painter Otto Vautier, of Geneva, Switzerland, recently deceased, is offered for sale. It comprizes about 1,200 specimens, including many choice and rare ones, especially from old European localities. It is valued at about 12,000 francs. Correspondence should be addressed to Dr. E. Joukowsky, Assistant in the Museum d'histoire naturelle, Bastions, Geneva, Switzerland.

## NEW MINERALS

### Bismutoplagonite

EARL V. SHANNON: Bismutoplagonite, a new mineral. *Am. J. Sci.* [4], 49 (3), 166-168, 1920.

NAME: from its composition, a plagonite with Sb replaced by Bi.

PHYSICAL PROPERTIES: Color, bluish lead gray; streak: dull dark brownish gray. Luster: metallic. Opaque. Form: small indistinctly fibrous masses with an ill-defined cleavage parallel to the elongation. H. = 2.8. Sp.gr. 5.35.

CHEMICAL PROPERTIES: Composition,  $5\text{PbS.4Bi}_2\text{S}_3$ ; a small proportion of Bi replaced by Sb.

Analysis showed: insoluble 18.88, PbS 30.21,  $\text{As}_2\text{S}_3$  tr., CuS tr.,  $\text{Ag}_2\text{S}$  tr.,  $\text{FeS}_2$  1.25,  $\text{Sb}_2\text{S}_3$  3.37,  $\text{Bi}_2\text{S}_3$  45.62, sum 99.33 per cent.

B.B. fuses to a brittle globule on charcoal, and yields a coating which is yellow near the assay and white on the outer portion. With sodium carbonate the mineral is reduced to a metallic button. In closed tube yields a copious sublimate of S, and in the open tube gives abundant  $\text{SO}_2$ .

OCCURRENCE: Found near Wickes, Jefferson County, Montana, with pyrite, galena, tetrahedrite, chalcopyrite and quartz. S. G. GORDON

### Brannerite

FRANK L. HESS and ROGER C. WELLS: Brannerite, a new uranium mineral. *J. Frank. Inst.*, 189 (2), 225-237, 1920.

NAME: After Dr. John C. Branner.

PHYSICAL PROPERTIES: Color, brilliant black, with a brownish yellow coating due to weathering. Streak: dark greenish brown. Opaque. Form: grains and rough prismatic crystals, probably paramorphs after a tetragonal or orthorhombic form. Fracture conchoidal. Isotropic;  $n_{\text{Li}}$   $2.26 \pm 0.02$ ;  $n_{\text{Na}}$   $2.30 \pm 0.02$  (Larsen). H = 4.5. Sp.gr. = 4.50-5.43. Radio-active, the radio activity increasing with the Sp. Gr.

COMPOSITION: A hydrated metatitanate of various bases: (Ca, Fe, UO, TiO)  $\text{TiO}_3$  + (Th, Zr, UO)  $\text{TiO}_3$  +  $\text{Yt}_2$  ( $\text{TiO}_3$ )<sub>3</sub> +  $\text{H}_2\text{O}$ .

An analysis by Wells gave:  $\text{SiO}_2$  0.6,  $\text{TiO}_2$  39.0, FeO 2.9, CaO 2.9,  $\text{UO}_2$  10.3,  $\text{UO}_3$  33.5,  $\text{ThO}_2$  4.1,  $\text{Ce}_2\text{O}_3$  none,  $\text{Y}_2\text{O}_3$  etc. 3.9,  $\text{ZrO}_2$  0.2, PbO 0.2, BaO 0.3, SrO 0.1,  $\text{H}_2\text{O}$  2.0,  $\text{CO}_2$  0.2,  $\text{Fe}_2\text{O}_3$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{P}_2\text{O}_5$  tr., sum 100.2%. The high uranium content is noteworthy. The mineral appears to be a metatitanate, essentially (UO, TiO,  $\text{UO}_2$ )  $\text{TiO}_3$  similar to delorenzite but differing from it in the high  $\text{UO}_3$  content.

OCCURRENCE: Found in gold placers near granites cut by pegmatite, near the head of Kelly Gulch, Stanley Basin, central Idaho. S. G. GORDON