

to be elongated parallel to the *b*-axis. One small crystal measuring .2 of an inch along the *b*-axis showed the orthopinacoid, basal pinacoid, a positive orthodome, a prism and a positive pyramid. Accurate measurements were not made, because of the roughness of the faces.

The crystals ranged from yellow brown through red brown to dark brown in color. The specific gravity of eight crystals taken all at once with the Jolly balance was 5.04. Qualitative tests in the wet way showed the mineral to be a phosphate of the cerium group.

This occurrence is interesting inasmuch as it is the first reported monazite from Arizona.

\* Published by permission of the Director, Arizona Bureau of Mines.

## NEW MINERAL NAMES

### Sturtite

T. HODGE-SMITH: Mineralogical Notes. *Record Australian Museum*, 27, 410-412, 1930.

NAME: In honor of Captain Charles Sturt, explorer and first white man to visit Broken Hill.

CHEMICAL PROPERTIES: A hydrous silicate of iron and manganese with other bases,  $\text{Fe}_2\text{O}_3 \cdot 6(\text{Mn, Ca, Mg})\text{O} \cdot 8\text{SiO}_2 \cdot 23\text{H}_2\text{O}$ . Analysis (by H. P. White):  $\text{SiO}_2$  (free) 0.79,  $\text{SiO}_2$  (combined) 32.35,  $\text{Fe}_2\text{O}_3$  10.22,  $\text{Al}_2\text{O}_3$  0.44,  $\text{MnO}$  25.18,  $\text{CaO}$  2.19,  $\text{MgO}$  0.65,  $\text{H}_2\text{O}$  28.16. Sum 99.98.

Soluble in acids with separation of granular silica. Before the blow-pipe it fuses with difficulty to a black magnetic mass. In a closed tube it gives off abundant water.

PHYSICAL PROPERTIES: Color jet black, streak yellowish brown. Luster vitreous inclining to greasy. Hardness over 3. Sp. Gr. = 2.054. Amorphous, fracture sub-conchoidal to uneven. Very brittle. In a thin section it is isotropic, transparent and is pale brown in color.

OCCURRENCE: Found associated with quartz, amethystine quartz, spessartite, rhodochrosite, calcite, galena, and sphalerite; also rhodonite and manganhedenbergite at the Zinc Corporation mine, Broken Hill, N. S. W.

W. F. FOSHAG

### Elbrussite

I. J. MICKEY: Ueber eine neue Mineralart aus der Gruppe Nontronit-Beidellit (A new mineral variety belonging to the nontronite-beidellite group). *Centr. Min. Geol.*, 1930, Abt. A, No. 7, p. 293-303, 1930.

NAME: From the mountain Elbruss near which it is found.

CHEMICAL PROPERTIES: A hydrous silicate of aluminum and ferric iron. Analysis (by G. M. Scherschever):  $\text{SiO}_2$  39.74;  $\text{Al}_2\text{O}_3$  14.44;  $\text{Fe}_2\text{O}_3$  7.44;  $\text{FeO}$  6.90;  $\text{CaO}$  0.55  $\text{MgO}$  5.11; alkalies (as  $\text{K}_2\text{O}$ ) 2.80;  $\text{H}_2\text{O}$  (110°) 17.69.

Fusible at 3 to a white, nonmagnetic bead.

PHYSICAL AND OPTICAL PROPERTIES: Color dark chocolate brown, on cut surface streaked white and dark brown. Streak dark lemon yellow.  $H=2$ , Sp. Gr. = 2.281. Adheres to the tongue. Uniaxial.  $n=1.56$ . Not pleochroic or very weakly so. In thin section shows a *moire* structure.

OCCURRENCE: As a small vein in the liparite-pumice tuffs at Tschuhtschur River, Karatschaev region, N. Caucasus.

W. F. F.

#### Bianchite

C. ANDREATTA: Bianchite, nuovo minerale (Bianchite, a new mineral). *Rend. Accad. Lincei*, (6), **41**, 760-769, 1930.

NAME: In honor of Prof. Angelo Bianchi, (Padova).

CHEMICAL PROPERTIES: A hydrated sulphate of zinc and iron,  $\text{FeZn}_2(\text{SO}_4)_3 \cdot 18\text{H}_2\text{O}$ . An analysis by Andreatta gave: FeO 8.84,  $\text{Fe}_2\text{O}_3$  n.d., CaO trace, ZnO 20.01, MgO trace,  $\text{SO}_3$  30.13,  $\text{H}_2\text{O}$  39.92, Insol. 1.02; Sum 99.93. Soluble in cold water. The dehydration was studied: at  $150^\circ$  the stable hydrate,  $\text{FeZn}_2(\text{SO}_4)_3 \cdot 2\text{H}_2\text{O}$ , is formed. All  $\text{H}_2\text{O}$  is lost at  $260^\circ$ .

CRYSTALLOGRAPHIC PROPERTIES: Probably monoclinic, confirmed by X-ray study. No crystal measurements were possible.

PHYSICAL AND OPTICAL PROPERTIES: White, "resembles goslarite." Under the microscope it shows minute aggregates. Optically negative;  $\alpha = 1.4652$ ,  $\beta = 1.4942$ ,  $\gamma = 1.4946$ ;  $\gamma - \alpha = .0294$ . Optic axial angle variable, always small; maximum, observed,  $2V = 10^\circ$ ; calculated,  $2V = 13^\circ 26'$ . Dispersion weak,  $\rho > v$ .

OCCURRENCE: Forms crusts in artificial caves at the mines at Raibl, Trentino.

H. S. WASHINGTON