

The election of officers resulted as follows:—President, H. W. Trudell; Vice Presidents, J. M. Poley and H. W. Arndt; Treasurer, M. G. Biernbaum; Secretary, W. H. Flack; and Councillor, John Vanartsdalen.

Mr. Toothaker addressed the society on "Czechoslovak Minerals." He described in detail his trip of the past summer to Europe. He visited the silver mines at Příbram, the former silver mines at Joachimsthal which now produce only pitchblende, and the Carlsbad hot springs. He described the method of mining Bohemian garnets. Photographs were shown of basaltic columns measuring 6 inches in diameter and 40 feet in length.

Mr. S. G. Gordon described a trip to Ontario, Canada, visiting the French River district, Sudbury, Cobalt, Timmins, and the Lake Shore Mines.

W. H. FLACK, *Secretary*

NEW MINERAL NAMES

Bultfonteinite

JOHN PARRY, ALPHEUS F. WILLIAMS, AND F. E. WRIGHT: On bultfonteinite, a new fluorine-bearing hydrous calcium silicate from South Africa. *Mineral. Mag.*, 23, 145-162, 1932.

NAME: Presumably from the Bultfontein mine at Kimberley.

CHEMICAL PROPERTIES: A fluorine bearing hydrous silicate: $2 \text{Ca}(\text{OH},\text{F})_2 \cdot \text{SiO}_2$. Analysis: SiO_2 26.50, $(\text{Al},\text{Fe})_2\text{O}_3$ 0.72, CaO 54.20, H_2O 13.36, F. 8.81. Sum 103.59, less O=3.71, 99.88. Easily soluble in HCl, yielding a clear jelly. Water extracts calcium hydroxide and yields an alkaline solution. Heated in closed tube, yields water and becomes white and porcelain-like. Before the blowpipe, glows intensely and becomes white and enamel-like, but does not fuse.

CRYSTALLOGRAPHICAL PROPERTIES: Triclinic. Habit acicular. Completely twinned. $a=0.6756$, $c=0.6873$. $\alpha=94^\circ 17'$, $\beta=91^\circ 59'$, $\gamma=90^\circ 44'$ $\rho_0=1.0145$, $q_0=0.6869$, $\lambda=85^\circ 41'$, $\mu=87^\circ 57'$ $\nu=89^\circ 07'$. Cleavages (010), (100), fairly good. Twinning planes (010), (100).

PHYSICAL AND OPTICAL PROPERTIES: Colorless to pink. $G.=2.73$. $\text{Hd.}=4\frac{1}{2}$. Fusibility difficult. Biaxial positive. $2V=70^\circ$, $2E=132^\circ$. $\alpha=1.587$, $\beta=1.590$, $\gamma=1.597$. Dispersion weak. Under the microscope shows fine polysynthetic twinning lamellae with high extinction angles. Extinction on (010) is $c:\gamma'=27^\circ$ to 29° , on (100) $c:\gamma'=46^\circ$ to 48° .

OCCURRENCE: First found at the Bultfontein mine, Kimberley, associated with calcite, apophyllite and natrolite, in a large 'horse' of dolerite and shale fragments in kimberlite. Later found in Dutoitspan mine, and still later in Jagersfontein mine. Occurs as radiated spherulitic masses or as radiated acicular needles.

DISCUSSION: Closely related to custerite and hillebrandite as shown by the following comparison.

Hillebrandite	$\text{CaO} \cdot \text{Ca}(\text{OH})_2 \cdot \text{SiO}_2$
Custerite	$\text{CaO} \cdot \text{Ca}(\text{OH},\text{F})_2 \cdot \text{SiO}_2$
Bultfonteinite	$2\text{Ca}(\text{OH},\text{F})_2 \cdot \text{SiO}_2$

W. F. FOSHAG