

THIRD APPENDIX
TO THE
SIXTH EDITION
OF
DANA'S SYSTEM OF MINERALOGY

BY
WILLIAM E. FORD
ASSISTANT PROFESSOR OF MINERALOGY, SHEFFIELD SCIENTIFIC SCHOOL OF
YALE UNIVERSITY

Yale University Library

COMPLETING THE WORK TO 1915

NEW YORK
JOHN WILEY & SONS, INC.
LONDON: CHAPMAN & HALL, LIMITED

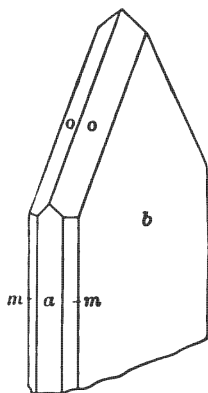
1915

I.

Mean specific heat; Schulz, Centralbl. Min., 632, 1911. Fusion point and optical and physical changes on heating; Endell and Rieke, Zs. Anorg. Chem., **74**, 33, 1912; Brun, *ibid.*, **75**, 68, 1912. Artif. formation and thermal relations; Balló and Dittler, *ibid.*, **76**, 39, 1912.

Sporogelinite. *M. Křípatič*, N. Jb. Min., Beil.-Bd., **34**, 513; *Tučan*, *ibid.*, 401; *C. Doeller* and *E. Dittler*, Centralbl. Min., 193, 1913. Name given to the colloidal form of $\text{Al}_2\text{O}_3 \cdot \text{H}_2\text{O}$ which occurs as a constituent of *baurite*. Named because it is the gel corresponding to the crystallized material *diaspore*. *Cliachite*, *Kliachite*, and *Kljakite* are names which have also been given to the same substance. See also under *Baurite*.

STAUROLITE, Min., p. 558; App. I, p. 64; II, p. 97. — Large crystals from the Ducktown District, Tenn.; Van Horn, Am. J. Sc., **38**, 46, 1914.



Stellerite.

Stellerite. *J. Morozewics*, Bull. Ac. Sc. Cracovie, **344**, July, 1909. Orthorhombic. Axes $a : b : c = 0.98 : 1 : 0.76$ (approx). Forms: $a(100)$, $b(010)$, $m(110)$, $l(210)$, $o(111)$. Crystals tabular with dull faces. Cleavage, b perfect, a less so, c poor. $H. = 3.5-4$. $G. = 2.124$.

Optical orientation, $a = c$, $b = b$, $c = a$. Indices, $\alpha = 1.484$; $\gamma = 1.495$. $2V = 43^\circ 30'$. Dispersion $\rho > \nu$.

Comp. — $\text{CaAl}_2\text{Si}_7\text{O}_{18} \cdot 7\text{H}_2\text{O}$.

Anal. —

	SiO_2	Al_2O_3	Fe_2O_3	CaO	Na_2O	H_2O	Total
$\frac{1}{2}$	59.23	14.41	0.22	8.23	tr.	18.15	100.24

Obs. — Found in cavity in diabase tuff on the N. W. cape of Copper Island, Commander Islands, associated with *calcite*, *quartz*, *analcite*, and *native copper*.

Name. — Named in honor of Wilhelm Steller, the explorer.

STELZNERITE, App. II, p. 97. — Identity with *anilerite*; Schaller, Am. J. Sc., **30**, 311, 1910; Zs. Kr., **49**, 9, 1910; U. S. G. S., Bull., **509**, 114, 1912.

STEPHANITE, Min., pp. 143, 1025, 1048; App. I, p. 64; II, p. 97. — Crystals from La Luz, Guanajuato and from Sonora, Mexico, with new forms; Ungemach, Bull. Soc. Min., **33**, 375, 1910; from Příbram, Bohemia; *idem*, Ann. Soc. Geol. Belgique, Mem., **39**, 421, 1912.

Stewartite. *W. T. Schaller*, J. Wash. Ac. Sc., **2**, 143, 1912; (also priv. contr.; complete description to be published in U. S. G. S., Prof. Paper, **92**.)

Triclinic? In fibers or minute crystals. $G. = 2.94$. Refractive indices: $\alpha = 1.63$, $\beta = 1.65$, $\gamma = 1.69$. Pleochroic; a = colorless, b = pale yellow, c = yellow. Inclined extinction on all crystal edges. Axial angle large. Optically —. Strong dispersion.

Comp. — A hydrous manganese phosphate. Formula suggested as $3\text{MnO} \cdot \text{P}_2\text{O}_5 \cdot 4\text{H}_2\text{O}$.

Obs. — Found as an alteration product of *lithiophilite* at Stewart mine, Pala, San Diego Co., Cal. Probably same as unknown mineral "A" described by Lacroix, Min. de la France, **4**, 506, 1910.

Stibiocolumbite. *W. T. Schaller*, (priv. contr.; to be published in U. S. G. S., Prof. Paper, **92**).

Name proposed for the *stibiotantalite* from Mesa Grande described by Penfield and Ford, (App. II, p. 98) because the amount of niobium present is greatly in excess of the tantalum.

STIBIOTANTALITE, App. I, p. 64; II, p. 98. — Ungemach, Bull. Soc. Min., **32**, 92, 1909, objects to the theory advanced by Penfield and Ford, (see App. II) that there is an isomorphous relation between *columbite* and *stibiotantalite*. He considers the composition to be that of a complex oxide. He gives a new orientation in which the form (100) of Penfield and Ford becomes (001), and (001) becomes (010) and (4-12-9) becomes (111). The hemimorphic axis is made the vertical axis and the perfect cleavage becomes parallel to the base. The new axial ratio is $a : b : c = 0.8879 : 1 : 2.1299$. New crystals are described with several new forms.

Anal. of material from Mesa Grande, Cal.; Foote and Langley, Am. J. Sc., **30**, 393, 1910. Correction of anal. given in App. II, p. 98; Ford, Am. J. Sc., **32**, 287, 1911.

STIBNITE, Min., pp. 36, 1048; App. I, p. 64; II, p. 99. — Crystals from Milešov and Příbram, Bohemia, studied with new forms from the latter locality; Jaroš, ["Rospravy" Böhm. Ak., **16**, No. 14, 1907], Zs. Kr., **48**, 541, 1910. Pseudomorphs from Charcas, San Luis Potosi, Mexico; Ford, Am. J. Sc., **34**, 184, 1912.