A List of New Mineral Names.

By L. J. Spencer, M.A., F.G.S.

THE following is a list of recently published names, which are not to be found in the 6th edition (1892) of Dana's *System of Mineralogy*. Although it can scarcely be hoped to make such a list complete, it may still be useful for reference. Probably not more than a third of these are new minerals, which could, when completely determined, stand as distinct species.

Alexandrolite. S.M. Losanitsch, *Chem. News*, LXIX. 243, 1894; and *Ber. deutsch. chem. Ges.* XXVIII.(3), 2631, 1895.

A green, hydrated silicate of Al and Cr, resulting, with blue miloschine, from the decomposition of avalite. Servia.

Alexjejewite. A. Karnojitzky, *Zeits. Kryst. Min.* XXIV. 504, 1895 (V. Aleksyeev, *Verh. russ. min. Ges.* XXIX. 201, 1892). [This vol. p. 236.]

A wax-like hydrocarbon. Russia.

Andorite. J. A. Krenner, *Math. és term.-tud. Értesitö*, XI. 119, 1892. This vol. p. 286.

$2PbS.Ag_2S.3Sb_2S_3$. Rhombic. Hungary and Bolivia.

Ascharite. W. Feit, *Chemiker-Zeitung*, XV. 327, 1891.

$3Mg_2B_2O_5.2H_2O$. Ascherleben, Prussia.

Baddeleyite. L. Fletcher, *Nature*, XLVI. 620, 1892; XLVII. 283, 1892; *Min. Mag.* X. 148, 1893. E. Hussak, *Tsch. Min. Mitth.* XIV. 395, 1895. [This vol. p. 110.]

ZrO_2. Mono-symmetric. Ceylon and Brazil.

Bagotite. [T. Egleston, *Catalogue of Minerals*, (1887), 1889, p. 192; A. H. Chester, *Dictionary of the Names of Minerals*, 1896, p. 25; *Student's Index to the British Museum Collection of Minerals*, since 1885].

Green pebbles from Bagot, Ontario, have been in the British Museum since 1882; these are labelled bagotite, and are identified with the lintonite variety of thomsonite. Molybdenite comes from the same locality.

Barium anorthite. See celsian.

Barium heulandite (heulandite baritica). D. Lovisato, *Rend. R. Accad. Lincei*, VI.(1), 260, 1897.

Heulandite with 2·55 per cent. BaO. Sardinia.

Basiliite. L. J. Igelström, *Geol. För. Förh.* XIV. 307, 1892; and *Zeits. Kryst. Min.* XXII. 470, 1894.

Hydrated antimonate of manganese. Sjö mine, Sweden.

Batavite. E. Weinschenk, *Zeits. Kryst. Min.* XXVIII. 157-160, 1897.

A scaly decomposition product, perhaps related to the micas or chlorites. Bavaria.

Bismutosmaltine. A. Frenzel, *Tsch. Min. Mitth.* XVI. 524, 1897.

$Co(As,Bi)_3$. Cubic. Schneeberg, Saxony.

Bixbyite. S. L. Penfield and H. W. Foote, *Amer. Journ. Sci.* IV. 105, 1897.

Ferrous manganite. $FeO.MnO_2$. Cubic. Utah.

Bliabergite. L. J. Igelström, *Zeits. Kryst. Min.* XXVII. 603, 1897; spelt bliabergsite in *Geol. För. Förh.* XVIII. 41, 1896. M. Weibull, *Geol. För. Förh.* XVIII. 515, 1896.

Shown by Weibull to be a brittle mica near ottrelite. Bliaberg, Sweden.

Blueite. S. H. Emmens, *Journ. Amer. Chem. Soc.* XIV. 207, 1892; S. L. Penfield, *Amer. Journ. Sci.* XLV. 496, 1893.

Shown by Penfield to be nickeliferous pyrites. Sudbury, Canada.

Bouglisite. E. Cumenge [A. Lacroix, *Bull. Mus. d'Hist. Nat. Paris*, 1895, p. 42]. F. A. Genth, *Amer. Journ. Sci.* XLV. 32, 1893.

Described by Genth as a mixture of anglesite and gypsum. $2PbSO_4+CaSO_4+2H_2O$. Boleo, Lower California.

Brazilite. E. Hussak, *Neues Jahrb. Min.* II. 141, 1892; *Min. Mag.* X. 158; XI. 110.

Synonym of baddeleyite.

Burmite. F. Noetling, *Records Geol. Survey India*, XXVI. 31, 1893. O. Helm, *Ibid.* XXV. 180, 1892; XXVI. 61, 1893; and *Schriften Ges. Danzig*, VIII. 63, 1894.

An amber-like resin from Upper Burma.

Canfieldite. S. L. Penfield, *Amer. Journ. Sci.* XLVII. 451, 1894; XLVI. 107, 1893. [*Min. Mag.* X. 336; XI. 40.]

$4Ag_2S.(Sn,Ge)S_2$. Cubic. Bolivia.

Caswellite. A. H. Chester, *Trans. N.Y. Acad. Sci.* XIII. 181, 1894. [This vol. p. 243.]

An altered biotite, allied to clintonite. New Jersey.

Celsian. H. Sjögren, *Geol. För. Förh.* XVII. 578, 1895.

Barium anorthite. $BaO.Al_2O_3.2SiO_2$. Anorthic. Sweden.

Chloroarsenian. L. J. Igelström, *Geol. För. Föhr.* XV. 471, 1893; and *Zeits. Kryst. Min.* XXII. 468, 1894.

Arsenate of manganese? Sjö mine, Sweden.

Chondrostibian. L. J. Igelström, *Geol. För. Föhr.* XV. 343, 1893; and *Zeits. Kryst. Min.* XXII. 43, 1893.

Hydrated antimonate of manganese and iron. Sjö mine, Sweden.

Clinozoisite. See klinozoisite.

Cosmochlore. See kosmochlor.

Crossite. C. Palache, *Bull. Dept. Geol. Univ. Calif.* I. 181, 1894. [This vol. p. 35].

A soda amphibole between riebeckite and glaucophane. California.

Cubaite. F. Vidal y Careta, *Cronica Cientifica, Barcelona*, XIII. 497, 1890; L. F. Navarro, *Anal. Soc. Espan. Hist. Nat.* XXI. *Actas*, p. 120, 1893.

A supposed cubic form of silica; shown by Navarro to be rhombohedra of quartz. See guanabaquite.

Cumengeite. E. Mallard, *Bull. Soc. fran. Min.* XVI. 184, 1893; E. Cumenge, *Compt. Rend.* CXVI. 898, 1893; A. Lacroix, *Bull. Mus. d'Hist. Nat. Paris*, 1895, p. 39. This vol. p. 164.

$PbCl_2.CuO.H_2O$. Tetragonal. Boleo, Lower California.

Cuprocassiterite. T. Ulke, *Trans. Amer. Inst. Mining Engineers*, XXI. 240, 1892; W. P. Headden, *Amer. Journ. Sci.* XLV. 108, 1893.

"$4SnO_2 + Cu_2Sn(OH)_6$." Shown by Headden to be a decomposition product of stannite. S. Dakota.

Cuproiodargyrite (Cupro-Jodargyrit). H. Schulze, *Chemiker-Zeitung*, XVI. 1952, 1892.

CuI.AgI. Chili.

Derbylite. E. Hussak and G. T. Prior, *Min. Mag.* XI. 176, 1897; XI. 85, 1895.

$FeO.Sb_2O_5+5(FeO.TiO_2)$. Rhombic. Brazil.

Dicksbergite. L. J. Igelström, *Geol. För. Förh.* XVIII. 231, 1896.

Shown by M. Weibull and A. Upmark (*Ibid.* XVIII. 523, 1896) to be rutile. Dicksberg, Sweden.

Dietzeite. A. Osann, *Zeits. Kryst. Min.* XXIII. 588, 1894. To replace Dietze's name jodchromate (*Ibid.* XIX. 449, 1891).

$7Ca(IO_3)_2.8CaCrO_4$. Monosymmetric. Chili.

Dundasite. W. F. Petterd, *Catalogue of Minerals of Tasmania*, 1893, p. 26; and *Papers and Proc. Roy. Soc. Tasmania*, for 1893, 26, 1894.

"Hydrous carbono-phosphate of lead and alumina."

Elfstorpite. L. J. Igelström, *Geol. För. Förh.* XV. 472, 1893, and *Zeits. Kryst. Min.* XXII. 468, 1894.

Hydrated arsenate of manganese? "Rhombic." Sjö mine, Sweden.

Elpidite. G. Lindström, *Geol. För. Förh.* XVI. 330, 1894; G. Nordenskiöld, *Ibid.* p. 343.

$Na_2O.ZrO_2.6SiO_2.3H_2O$. Rhombic. Greenland.

Epididymite. G. Flink, *Geol. För. Förh.* XV. 201, 1893; and *Zeits. Kryst. Min.* XXIII. 353, 1894. [This vol. p. 100.]

$BeNaHSi_3O_8$. Rhombic. Greenland.

Fluor-adelite. See tilasite.

Folgerite. S. H. Emmens, *Journ. Amer. Chem. Soc* XIV. 205, 1892; S. L. Penfield, *Amer. Jour. Sci.* XLV. 491, 1893.

Shown by Penfield to be identical with pentlandite. Sudbury, Canada.

Franckeite. A. W. Stelzner, *Neues. Jahrb. Min.* II. 114, 1893.

$5PbS.2SnS_2.Sb_2S_3$. Bolivia.

Fuggerite. E. Weinschenk, *Zeits. Kryst. Min.* XXVII. 577, 1897.

Tetragonal? Between åkermanite and gehlenite in composition, but dimorphous with this group. Tyrol.

Geikielite. A. B. Dick, *Min. Mag.* X. 145, 1893; L. Fletcher, *Nature*, XLVI. 620, 1892.

$MgO.TiO_2$. Ceylon.

Gersbyite. L. J. Igelström, *Zeits. Kryst. Min.* XXVIII. 310, 1897.
Near lazulite. Sweden.

Gonnardite. A. Lacroix, *Bull. Soc. fran. Min.* XIX. 426, 1896.
F. Gonnard, *Compt. Rend.* LXXIII. 1147, 1871.

A zeolite. $(Ca,Na_2)_2Al_2Si_3O_{15}+5\frac{1}{2}H_2O$? Rhombic. Described by Gonnard as mesolite, but it differs from this optically. Puy-de-Dôme.

Graphitite. W. Luzi, *Zeits. f. Naturwiss.* LXIV. 257, 1891, and *Ber. deutsch. chem. Ges.* XXIV.(2), 4093, 1891 (1892); E. Weinschenk, *Zeits. Kryst. Min.* XXVIII. 291, 1897.

A variety of graphite which does not swell up when moistened with nitric acid and ignited. Weinschenk considers it to be merely graphite.

Guanabacoite. See guanabaquite.

Guanabaquite. F. Vidal y Careta, *Crónica Científica, Barcelona*, XIV. 268, 1891.

Given to replace the name cubaite (*q. v.*) for the "cubical quartz" of Guanabacoa, Cuba.

Also includes the "cubical chalcedony" of the same locality (*Ibid.* XIV. 268, 273, 1891; XIII. 293, 1890); this is shown by L. F. Navarro (*Anal. Soc. Espan. Hist. Nat.* XXI. *Actas*, p. 120, 1893,) to be pseudomorphous, possibly after fluorite.

Hainite. J. Blumrich, *Tsch. Min. Mitth.* XIII. 472, 1893.

Silicate of Na,Ca,Ti,Zr. Anorthic. Related to rosenbuschite, &c. Phonolites of N. Bohemia.

Hamelite. T. S. Hunt, *Mineral Physiology and Physiography*, 1886, pp. 194, 334; *Trans. Roy. Soc. Canada*, IV.(3), 9, (1886), 1887.

Hydrated silicate of Al,Fe,Mg. New Brunswick.

Hastingsite. F. D. Adams and B. J. Harrington, *Amer. Journ. Sci.* I. 212, 1896; and *Canadian Record Sci.* VII. 81, 1896. [This vol. p. 244.]

A soda hornblende with the orthosilicate formula $(R_2',R'')_3R_2'''Si_3O_{12}$. Monosymmetric. Hastings Co., Ontario.

Hauchecornite. R. Scheibe, *Jahrb. preuss. geol. Landesanst. u. Bergakad.*, for 1892, XII. 91, 1893; H. Laspeyres, *Verh. naturhist. Ver. Bonn*, L. 177, 1893. [*Min. Mag.* X. 339.]

$Ni_{11}SbBi_2S_{13}$ or $(Ni,Co,Fe)_7(S,Bi,As,Sb)_8$. Tetragonal. Rhenish Prussia.

Hautefeuillite. L. Michel, *Compt. Rend.* CXVI. 898, 1893; and *Bull. Soc. fran. Min.* XVI. 38, 1893. [This vol. p. 162.]

$(Mg,Ca)_3(PO_4)_2+8H_2O$. Monosymmetric. Norway.

Heazlewoodite. W. F. Petterd, *Catalogue of Minerals of Tasmania*, 1896.

Sulphide of Ni and Fe, related to pentlandite.

Hemiopal. H. H. A. Francke, *Min. Nomenklatur*, 1890, p. 81.

Syn. of halbopal and semiopal.

Heulandite baritica. See barium heulandite.

Hoeferite. F. Katzer, *Tsch. Min. Mitth.* XIV. 519, 1895. [This vol. p. 161.]

$2Fe_2O_3.4SiO_2.7H_2O$. Related to the chloropals. Bohemia.

Hydrocalcite. H. B. Kosmann, *Zeits. deutsch. geol. Ges.* XLIV. 155, 1892.

$CaCO_3.2H_2O$. Silesia.

Iddingsite. A. C. Lawson, *Bull. Dept. Geol. Univ. Calif.* I. 31, 1893. F. L. Ransome, *Ibid.* I. 90, 1893. H. H. Arnold-Bemrose, *Quart. Journ. Geol. Soc.* L. 617, 1894. [*Min. Mag.* X. 264.]

Hydrated silicate of Fe,Ca,Mg and Na. Rhombic. Possibly a pseudomorph after olivine. California.

Idrizite. A. Schrauf, *Jahrb. k. k. geol. Reichsanst.* XLI. 379, 1892.

$(Mg_6,Fe)SO_4+(Al_5,Fe_3)_2S_2O_9+16H_2O$. Nearer to quetenite and botryogen than to pickeringite and halotrichite. Idria, Carniola.

Jarrowite. [G. A. Lebour, *57th Rept. Brit. Assoc.* for 1887, 700, 1888]. *British Museum Student's Index*, since 1886. H. A. Miers, this vol. p. 264.

Syn. of thinolite. Jarrow, Durham.

Jodchromate. See dietzeite.

Josephinite. W. H. Melville, *Amer. Journ. Sci.* XLIII. 509, 1892.

A nickel iron, Fe_2Ni_5, possibly meteoric. Josephine Co. Oregon.

Kaliastrakanite. A. Naupert and W. Wense, *Ber. deutsch. chem. Ges.* XXVI.(1), 873, 1893; C. A. Tenne, *Zeits. deutsch. geol. Ges.* XLVIII. 632, 1896. The name kalium-astrakanite had previously been used by J. K. van der Heide (*Ber. deutsch. chem. Ges.* XXVI.(1), 414, 1893) for the artificial salt. See leonite.

$MgSO_4.K_2SO_4+4H_2O$. Monosymmetric. Prussian salt deposits.

Kaliblödite. Mentioned by C. A. Tenne, *Zeits. deutsch. geol. Ges.* XLVIII. 632, 1896.

Syn. of kaliastrakanite.

Kamarezite. K. Busz, *Verh. naturhist. Ver. Bonn*, L. *Sitz.-ber.* p. 83, 1893; and *Neues Jahrb. Min.* I. 115, 1895. [This vol. p. 108.]

$3CuO.SO_3.8H_2O$. Rhombic. Kamareza, Greece.

Kauaiite. E. Goldsmith, *Proc. Acad. Nat. Sci. Philadelphia*, 105, 1894. [This vol. p. 166.]

$2Al_2O_3.3(K,Na,H)_2O.SO_3$. Hawaii.

Kehoeite. W. P. Headden, *Amer. Journ. Sci.* XLVI. 22, 1893.

$(Zn_{\frac{3}{4}}+Ca_{\frac{1}{4}})_3P_2O_8+2Al_2(OH)_6+21H_2O$. S. Dakota.

Keramite. T. S. Hunt, *Mineral Physiology and Physiography*, 1886, p. 371; and *Trans. Roy. Soc. Canada*, III.(3), 76, (1885) 1886

A clay resulting from the alteration of scapolite. Bavaria.

Klinozoisite. E. Weinschenk, *Zeits. Kryst. Min.* XXVI. 161, 1896. [This vol. p. 237.]

Epidote containing only a little iron, and so agreeing with zoisite in composition. $H_2Ca_4Al_6Si_6O_{26}$. Monosymmetric. Tyrol.

Knopite. P. J. Holmqvist, *Geol. För. Förh.* XVI. 73, 1894. [This vol. p. 158.]

$CaO.TiO_2$ with some Ce_2O_3. Pseudo-cubic. Alnö, Sweden.

Kosmochlor. H. Laspeyres, *Zeits. Kryst. Min.* XXVII. 592, 1897.

Silicate of Cr &c. Probably monosymmetric. From the Toluca meteoric iron.

Kylindrite. A. Frenzel, *Neues Jahrb. Min.* II. 125, 1893.

$6PbS.Sb_2S_3.6SnS_2$ Bolivia.

Lamprostibian. L. J. Igelström, *Geol. För. Förh.* XV. 471, 1893; and *Zeits. Kryst. Min.* XX. 467, 1894.

Antimonate of Fe and Mn. Sjö mine, Sweden.

Langbeinite. S. Zuckschwerdt, *Zeits. angewandte Chem.* 356, 1891. O. Lüdecke, *Chemiker-Zeitung*, XXI. 264, 1897.

$K_2SO_4.2MgSO_4$. Cubic, tetartohedral (Lüdecke). Prussian salt deposits.

Lawsonite. F. L. Ransome, *Bull. Dept. Geol. Univ. Calif.* I. 301, 1895; and F. L. Ransome and C. Palache, *Zeits. Kryst. Min* XXV. 531, 1896. [This vol. p. 157.]

$CaO.Al_2O_3.2SiO_2.2H_2O$. Rhombic. California. Piedmont (*Bull. Soc. fran. Min.* XX. 5. 1897). Corsica (*Ibid.* p. 110).

Lembergite. A. Lagorio, *Trav. Soc. Natural. Varsovie, Ann.* VI. *Livr.* XI. 7, 1895. [Abstract in *Zeits. Kryst. Min.* XXVIII. 526, 1897.] J. Lemberg, *Zeits. deutsch. geol. Ges.* XXXIX. 562, 1887. [This vol. p 111.]

Given to Lemberg's artificial "Natronnephelinhydrat."

$4Na_2Al_2Si_2O_8+5H_2O$. Rhombic.

Leonite. C. A. Tenne, *Zeits. deutsch. geol. Ges.* XLVIII. 632, 1896.

To replace kalistrakanite (*q.v.*).

Lewisite. E. Hussak and G. T. Prior, *Min. Mag.* XI. 80, 1895.

$5(Ca,Fe)O.3Sb_2O_5.2TiO_2$. Cubic. Brazil.

Lindesite. L. J. Igelström, *Zeits. Kryst. Min.* XXIII. 590, 1894. H. Sjögren, *Bull. Geol. Inst. Upsala*, II. 84, 132, 1895. [This vol. pp. 105, 168.]

Shown by Sjögren to be identical with urbanite.

Lorandite. J. A. Krenner, *Math. és term.-tud. Értesitö*, XII. 473, 1894; XIII. 258, 1895; Abstract in *Zeits. Kryst. Min.* XXVII. 98, 1896. [This vol. pp. 32, 168.]

$Tl_2S.As_2S_3$. Monosymmetric. Macedonia.

Lossenite. L. Milch, *Zeits. Kryst. Min.* XXIV. 100, 1894. [This vol. p. 106.]

$2PbSO_4+6(FeOH)_3As_2O_8+27H_2O$. Rhombic. Laurion, Greece.

Lutecite. A. Michel-Lévy and Munier-Chalmas, *Bull. Soc. fran. Min.* XV. 174, 1892. F. Wallerant, *ibid.* XX. 57, 1897. [*Min. Mag.* X. 256].

A fibrous form of silica.

Mackintoshite. W. E. Hidden and W. F. Hillebrand, *Amer. Journ. Sci.* XLVI. 98, 1893. [*Min. Mag.* X. 341].

$UO_2.3ThO_2.3SiO_2.3H_2O$. Tetragonal. Llano Co., Texas.

Magnetostibian L. J. Igelström, *Zeits. Kryst. Min.* XXIII. 212, 1894.

Antimonate of Mn and Fe. Sjö mine, Sweden.

Magnofranklinite. *Geol. Survey, New Jersey, Final Rept.* II. (1), 14, 1892. A. H. Chester. *Dictionary of the Names of Minerals*, 1896, p. 164.

A local name for the franklinite of Sterling Hill, N.J., which contains little zinc and is highly magnetic.

Maltesite. J. J. Sederholm, *Geol. För. Förh.* XVIII. 390, 1896.

A variety of andalusite resembling chiastolite. Finland.

Manganandalusite. H. Bäckström, *Geol. För. Förh.* XVIII. 386, 1896.

A variety of andalusite containing 6·91 per cent. Mn_2O_3. Sweden.

Mangankiesel. F. Klockmann, *Jahrb. k. preuss. geol. Landesanst. u. Bergakad.* for 1894, XV. p. xxxii. 1895.

A quartz-schist containing much $MnCO_3$. Harz.

Marshite. A Liversidge, *Journ. and Proc. Roy. Soc. N.S. Wales*, XXVI. 328, 1892; abstract by H. A. Miers, *Zeits. Kryst. Min.* XXIV. 207, 1894. [This vol. p. 236.]

Copper iodide. Cubic (Miers). Broken Hill, N.S.W.

Masrite. H. D. Richmond and H. Off, *Journ. Chem. Soc. Trans.* LXI. 491, 1892.

A fibrous alum containing "the element masrium." Egypt.

Mauzeliite. H. Sjögren, *Geol. För. Förh.* XVII. 313, 1895. [This vol. pp. 82, 229.]

$4(Ca,Pb)O.2Sb_2O_5.TiO_2$. Cubic. Sweden.

Melanostibian. L. J. Igelström, *Geol. För. Förh.* XIV. 583, 1892; and *Zeits. Kryst. Min.* XXI. 246, 1893.

Antimonite of Mn and Fe. Sjö mine, Sweden.

Mesabite. H. V. Winchell, *Trans. Amer. Inst. Mining Engineers*, XXI. 660, 1893.

The ochreous göthite abundant at Mesabi, Minnesota.

Metadesmine. F. Rinne, *Neues Jahrb. Min.* I. 57, 1897. [This vol. p. 343.]

Given to the substances of definite chemical composition and optical properties produced when water is artifically expelled from stilbite (=desmine).

Metanocerite. F. v. Sandberger, *Neues Jahrb. Min.* I. 221, 1892.

A mineral resembling nocerite. Arendal, Norway.

Metascolezite. F. Rinne, *Neues Jahrb. Min.* II. 60, 1894.

A dehydrated form of scolecite. $CaAl_2Si_3O_{10}+2H_2O$. Monosymmetric.

Minervite. A. Gautier, *Compt. Rend.* CXVI. 1173, 1893.

$Al_2O_3.P_2O_5.7H_2O$. A. Carnot (*Ann. des Mines*, VIII. 311, 1895) gives it as a phosphate of Al and K Grotte de Minerve, France.

Munkforssite. L. J. Igelström. *Zeits. Kryst. Min.* XXVII. 601. 1897. Spelt munkforsite, *Ibid.* XXVIII. 310, 1897.

Phosphate and sulphate of Ca and Al; resembles svanbergite. Sweden.

Munkrudite. L. J. Igelström. *Zeits. Kryst. Min.* XXVIII. 310, 1897.

Phosphate and sulphate of Fe and Ca; resembles svanbergite. Munkerud, Sweden.

Natron-berzeliite. H. Bäckström, *Zeits. Kryst. Min.* XXVI. 102, 1896 (abstract of H. Sjögren's paper).

Syn. of soda-berzeliite (*q. v.*).

Natronrichterite. H. Sjögren, *Geol. För. Förh.* XIV. 253, 1892.

See soda-richterite.

Neptunite. G. Flink, *Geol. För. Förh.* XV. 196, 1893; and *Zeits. Kryst. Min.* XXIII. 346, 1894. O. Sjöström, *Geol. För. Förh.* XV. 393, 1893. [This vol. p. 100.]

$(Fe,Mn)O,(Na,K)_2O.4SiO_2.TiO_2$. Monosymmetric. Greenland.

Nickel-skutterudite. E. Waller and A. J. Moses, *School of Mines Quart.* XIV. 49, 1892.

(Ni,Co,Fe)As_3. New Mexico.

Northupite. W. M. Foote, *Proc. Acad. Nat. Sci. Philadelphia*, 1895, 408, 1896; and *Amer. Journ. Sci.* L. 480, 1895. J. H. Pratt, *Amer. Journ. Sci.* II. 124, 1896; and *Zeits. Kryst. Min.* XXVII. 418, 1896. [This vol. pp. 159, 226.]

$MgCO_3.Na_2CO_3.NaCl$. Cubic. California.

Pearceite. S. L. Penfield, *Amer. Journ. Sci.* II. 17, 1896; and *Zeits. Kryst. Min.* XXVII. 65, 1896. [This vol. p. 224.]

A name for the arsenical varieties of polybasite. $9Ag_2S.As_2S_3$. Monosymmetric.

Penfieldite. F. A. Genth, *Amer. Journ. Sci.* XLIV. 260, 1892. S. L. Penfield, *Ibid.* XLVIII. 114, 1894. [This vol. p. 43.]

$PbO.2PbCl_2$. Hexagonal. Laurion, Greece.

Pirssonite. J. H. Pratt, *Amer. Journ. Sci.* II. 126, 1896; and *Zeits. Kryst. Min.* XXVII. 420, 1896. [This vol. p. 226.]

$CaCO_3.Na_2CO_3.2H_2O$. Rhombic. California.

Potash-richterite. H. Sjögren, *Bull. Geol. Inst. Upsala*, II. 77, 1895.

The original richterite analysed by Michaelson in 1863.

Prolectite. H. Sjögren, *Bull. Geol. Inst. Upsala*, II. 99, 1895. [This vol. pp. 139, 161.]

Probably $Mg[Mg(F,OH)]_2\,SiO_4$. Monosymmetric. Sweden.

Pseudoboleite. A. Lacroix, *Bull. Mus. d'Hist. Nat. Paris*, p. 39, 1895.

Between boleite and cumengeite. Boleo, Lower California.

Pseudopyrophyllite. F. Löwinson-Lessing, *Verh. russ. min. Ges.* XXXIII. 283, 1895.

$3MgO.4Al_2O_3.9SiO_2.8H_2O$. Rhombic. Urals.

Quartzine. A. Michel-Lévy and Munier-Chalmas, *Bull. Soc. fran. Min.* XV. 166, 1892; F. Wallerant, *Ibid.* XX. 52, 1897. [*Min. Mag.* X. 254.]

A fibrous form of silica.

Quiroguite. L. F. Navarro, *Anal. Soc. Españ. Hist. Nat.* XXIV. *Actas*, p. 96, 1895. Spelt quirogite in abstracts in *Zeits. Kryst. Min.* XXVIII. 202, 1897; *Neues Jahrb. Min.* I. 452, Ref. 1897; *Bull. Soc. fran. Min.* XX. 163, 1897. [This vol. p. 241]

$23PbS.3Sb_2S_3$. Tetragonal. Spain. Probably only galena.]

Ransätite. L. J. Igelström, *Geol. För. Förh.* XVIII. 43, 1896; and *Zeits. Kryst. Min.* XXVII. 604, 1897.

"$3(Mn,Ca,Mg)SiO_3+(Fe,Al)_4Si_3O_{12}$." "Cubic." Sweden.

Raphite. H. How. [T. Egleston, *Catalogue of Minerals*, (1887), 1889, p. 144. A. H. Chester, *Dictionary of the Names of Minerals*, 1896, p. 227. In the British Museum since 1879.]

Synonym of ulexite.

Rathite. H. Baumhauer, *Zeits. Kryst. Min.* XXVI. 593, 1896. [This vol. p. 225.]

A sulpho-salt of Pb,As (and Sb). Rhombic. Binnenthal, Switzerland.

Retzian. H. Sjögren, *Bull. Geol. Inst. Upsala*, II. 54, 1895; *Geol. För. Förh.* XIX. 106, 1897. [This vol. p. 167.]

Hydrated basic arsenate of Mn and Ca; near flinkite. Rhombic. Sweden.

Rhodoarsenian. L. J. Igelström, *Zeits. Kryst. Min.* XXII. 469, 1892.

Hydrated basic arsenate of Mn,Ca and Mg. Sjö mine, Sweden.

Rhodophosphite. L. J. Igelström, *Zeits. Kryst. Min.* XXV. 433, 1895.

Phosphate of Ca, (Mn and Fe) with chloride and sulphate. Sweden. [Part of the analysis given for this has been published (*Bull. Soc. fran. Min.* V. 303, 1882) for manganapatite.]

Rhodusite. H. v. Foullon, *Ber. Akad. Wien*, C. (1), 144, 1891.

Asbestiform glaucophane. Island of Rhodes.

Rœblingite. S. L. Penfield and H. W. Foote, *Amer. Journ. Sci.* III. 413, 1897. [This vol. p. 343.]

$5(H_2CaSiO_4)+2(CaO.PbSO_3)$. New Jersey.

Salvadorite. W. Herz, *Zeits. Kryst. Min.* XXVI. 16, 1896. [This vol. p. 240.]

$FeCu_2(SO_4)_3+21H_2O$. Monosymmetric. Chili.

Schulzenite. P. Martens, *Actes Soc. Sci. Chili*, V. 87, 1895.

$CuO.2CoO.Co_2O_3.4H_2O$. Resembles wad. Chili ?

Seelandite. A. Brunlechner, *Jahrb. naturh. Landes-Museums, Klagenfurt*, XXII. 192, 1893; "*Carinthia*," *Klagenfurt*, No. 2, 1891.

$MgO.Al_2O_3.4SO_3.27H_2O$. Near pickeringite. Carinthia.

Siderotil. A. Schrauf, *Jahrb. k. k. geol. Reichsanst.* XLI. 380, 1892.

$FeSO_4+5H_2O$. Idria, Carniola.

Sjögrufvite. L. J. Igelström, *Geol. För. Förh.* XIV. 309, 1892; *Zeits. Kryst. Min.* XXII. 471, 1894.

Hydrated arsenate of Mn and Fe. Sjö mine, Sweden.

Soda-berzeliite. H. Sjögren, *Bull. Geol. Inst. Upsala*, II. 92, 1895. [This vol. p. 163.]

$10RO.3As_2O_5$ or $3RO.As_2O_5$. Cubic. Sweden.

Soda-richterite. H. Sjögren, *Bull. Geol. Inst. Upsala*, II. 71, 1895.

To replace the name astochite (*Geol. För. Förh.* XIII. 604, 1891). See natronrichterite.

Stevensite. A. R. Leeds. [A. H. Chester, *Dictionary of the Names of Minerals*, 1896, p. 257.]

Talc pseudomorphous after pectolite.

Stiberite. H. How. [T. Egleston, *Catalogue of Minerals*, 3rd edit. 1892, p. 328. A. H. Chester, *Dictionary of the Names of Minerals*, 1896, p. 257. In the British Museum since 1879.]

Syn. of ulexite.

Stibiotantalite. G. A. Goyder, *Journ. Chem. Soc. Trans.* LXIII. 1076, 1893.

$(Ta,Nb)_2O_5.Sb_2O_3$[?] Rhombic ? Western Australia.

Sulfoborite. A. Naupert and W. Wense, *Ber. deutsch. chem. Ges.* XXVI.(1), 874, 1893. H. Bücking, *Ber. Akad. Berlin*, 967, 1893. K. Thaddéeff, *Zeits. Kryst. Min.* XXVIII. 264, 1897. [This vol. p. 103.]

$3MgSO_4.2Mg_3B_4O_9.12H_2O$. According to Thaddéeff—

$MgSO_4.Mg_2B_2O_5.4\frac{1}{2}H_2O=4MgHBO_3+2MgSO_4+7H_2O$.

Rhombic (Bücking). Prussian salt deposits.

Sundtite. W. C. Brögger, *Forh. Vid.-Selsk. Christiania*, for 1892, No. 18, 1893. This vol. p. 286.

Syn. of andorite.

Talc-knebelite. See talkknebelite.

Talkknebelite. L. J. Igelström, *Neues Jahrb. Min.* I. 248, 1890.

Knebelite with 4·7 per cent. MgO. Sweden.

Taraspite. C. v. John. *Verh. k. k. geol. Reichsanst.* p. 67, 1891.

Syn. of miemite (var. of dolomite). Tarasp, Switzerland.

Tetragophosphite. L. J. Igelström, *Zeits. Kryst. Min.* XXV. 433, 1895.

Slightly more basic than lazulite. Sweden.

Tiffanyite. G. F. Kunz, *Trans. N. Y. Acad. Sci.* XIV. 260, 1895. [This vol. p. 241.]

A hydrocarbon to which is attributed the phosphorescence of diamonds.

Tilasite. H. Sjögren, *Geol. För. Förh.* XVII. 291, 1895. [This vol. p. 229.]

Fluor-adelite. $2CaO.MgO.MgF_2.As_2O_5$. Anorthic. Sweden.

Tripuhyite. E. Hussak and G. T. Prior, *Min. Mag.* XI. 302, 1897.

$2FeO.Sb_2O_5$. Tripuhy, Brazil.

Urbanite. H. Sjögren, *Geol. För. Förh.* XIV. 251, 1892; and *Bull. Geol. Inst. Upsala*, II. 77, 106, 1895. [This vol. p. 167.]

A monosymmetric pyroxene. $(Ca,Mg)O.SiO_2+Na_2O.Fe_2O_3.4SiO_2$.

Utahlite. G. F. Kunz, *16th Ann. Rept. U. S. Geol. Survey*, for 1894-5, Pt. IV. 602, 1895.

The compact nodular variscite from Cedar Valley, Utah.

Valleite. G. Cesàro, *Bull. Acad. Belg.* XXXII. 536, 1896; XXIX. 508, 1895. [This vol. p. 228.]

A rhombic amphibole near anthophyllite. $(Mg,Ca)O.SiO_2$. New York.

Wardite. J. M. Davison, *Amer. Journ. Sci.* II. 154, 1896. [This vol. p. 226.]

$P_2O_5.2Al_2O_3.4H_2O$. Utah.

Webnerite. A. W. Stelzner, *Zeits. Kryst. Min.* XXIV. 125, 1894. This vol. p. 286.

Syn. of andorite.

Weldite. W. F. Petterd, *Catalogue of Minerals of Tasmania*, 1896.

Silicate of Al and Na.

Wellsite. J. H. Pratt and H. W. Foote, *Amer. Journ. Sci.* III. 443. 1897.

$(Ba,Ca,K_2)O.Al_2O_3.3SiO_2+3H_2O$. Monosymmetric. Related to phillipsite. North Carolina.

Whartonite. S. H. Emmens, *Journ. Amer. Chem. Soc.* XIV. 209, 1892. S. L. Penfield, *Amer. Journ. Sci.* XLV. 496, 1893.

Shown by Penfield to be nickeliferous pyrites. Sudbury, Canada.

Willyamite. E. F. Pittman, *Journ. and Proc. Roy. Soc. N. S. Wales*, XXVII. 366, 1893. [This vol. p. 236.]

$CoS_2.NiS_2.CoSb_2.NiSb_2$. Cubic. Broken Hill, N.S.W.

Xiphonite. G. Platania, *Atti Accad. Sci. Acireale*, V. 55, 1893. [This vol. p. 168.]

A variety of amphibole. Monosymmetric. Etna.

Zinkmanganerz. A. Brunlechner, *Jahrb. naturh. Landes-Museums, Klagenfurt*, XXII. 194, 1893.

Hydrated manganate of zinc. Carinthia.

Zirkelite. E. Hussak and G. T. Prior, *Min. Mag.* XI. 86, 1895; XI. 180, 1897.

$(Ca,Fe)O.2(Zr,Ti,Th)O_2$. Cubic. Brazil.

August, 1897.