

INDEX TO VOLUME 13

PREPARED BY L. S. RAMSDELL

Leading articles are in **bold face type**; notes, abstracts and cross references are in ordinary type. Only minerals described in more or less detail are indexed. Titles of abstracted articles are not repeated when cross indexed under authors' names.

Acquisitions of the British museum (Spencer).....	239	Autunite (Megathlin).....	578
Adam, H. R.....	201	Autunites, base exchange in (Schaller).....	111
Ajkaite (Zechmeister, Vrabély) ..	72	Base exchange in artificial autunites (Schaller).....	111
<b>Allen, V. T. Anauxite from Ione formation, Calif.</b> .....	145	<b>Bauer, L. H. and Berman, H. Friedelite, Schallerite and related minerals</b> .....	113, 341
Alumohydrocalcite (Bilibine)....	569	—— see Larsen, E. S.....	349
Aminoff, G. and Parsons, A. L....	110	—— see Palache, C.....	142, 334
<b>Amphibole asbestos, nature and origin of (Peacock)</b> .....	113, 241	Bauxite, study of (Rao).....	69, 240
<b>Analcite, crystal structure of (Gruner)</b> .....	112, 174	Bentivoglio, M. Rate of growth of crystals [Review].....	31
<b>Analcite from Brewster Co., Tex. (Lonsdale)</b> .....	109, 449	Berman, H. See Bauer, L. H.....	113, 341
<b>Analcite, sedimentary, from Ariz. (Ross)</b> .....	111, 195	—— See Larsen, E. S.....	349
<b>Anauxite from Ione formation, Calif. (Allen)</b> .....	145	—— See Palache, C.....	142, 334
<b>Anauxite, mineral species from Czechoslovakia (Ross, Foshag)</b>	153	<b>Beryllonite and other phosphates from Newry, Me. (Palache, Shannon)</b> .....	392
Anhydrite.....	476	Bilibine, G.....	569
Ansheless, J. M.....	491	<b>Billings, M. P. Chemistry, optics, and genesis of hastingsite group of amphiboles</b> .....	287
Antamokite.....	491	Biotite bearing greenstones (Ghosh).....	70
Anten, J.....	593	<b>Black Hills mineral region (Schwartz)</b> .....	56
<b>Anthraxolite from northwest Canada (Rutherford)</b> .....	516	<b>Black sands, diamond-bearing from Portuguese West Africa (Poindexter)</b> .....	111, 236
Appendix to catalogue of meteorites, British museum (Prior) [Review].....	122	Blythite (Fermor).....	33
Arakawite (Ito).....	493	Boehmite (de Lapparent).....	72
Arsenolamprite (Jung).....	34	Boldereff, A.....	493
<b>Ashton, F. W. and Taylor, W. C. Precision method for measuring temperature of refractive index liquids</b> .....	411	<b>Boleite, crystal form (Gossner)</b> ...	580
Atomic volume relations in isomorphous series (Hallimond)	239, 488	<b>Boracite, chemical formula of (Gruner)</b> .....	481
<b>Arousseau, M. and Merwin, H. E. Olivine. I. From Hawaiian Islands. II. Pure forsterite</b> .....	559	<b>Bravo, J. J., memorial of (Garcia)</b>	103
		Brewer, F. M.....	490
		British Museum—recent mineral acquisitions (Spencer).....	239
		Brown, C. W., see Gedney, E. K.	111

- Brown, L. S.** Occurrence of leucoxene in Permian sediments 115, 233
- Burger, M. J.** Plastic deformation of ore minerals. . . . . 1, 35
- Burt, F. A.** Pronunciation of pyroxene. . . . . 199
- [Book review]. . . . . 489
- Calcite group classification (Bilibine). . . . . 569
- Calcium-larsenate (Palache, Bauer, Berman). . . . . 334
- Calderite (Fermor). . . . . 33
- Camsellite and szaibelyite, probable identity of (Schaller)** 230, 111
- Carrollite (Shannon). . . . . 34
- Casts and pseudomorphs of soluble minerals in Triassic shales of New Jersey (Hawkins). . . . . 114
- Césaro, G. . . . . 492
- Chevkinite (Boldereff). . . . . 493
- Chlorite, notes on (Winchell)** . . . . . 161
- Chlorophaeite, sideromelane and palagonite from Columbia River plateau (Peacock, Fuller)** . . . . . 360
- Chromrutile, a new mineral (Gordon, Shannon). . . . . 69
- Clay minerals, optical and X-ray research on (Ross, Kerr). . . . . 110
- Cobaltsmithsonite. . . . . 569
- Codazzi, R. L. . . . . 492, 570
- Codazzite (Codazzi). . . . . 570
- Collingridge, H. . . . . 488
- Collinsite (Poitevin). . . . . 201
- Crystal classes, tabulation of (Rogers)** . . . . . 571
- Crystal structure and X-ray studies: analcite. . . . . 112, 174  
boracite. . . . . 481  
clay minerals. . . . . 110  
cuprous sulfide. . . . . 115  
sperrylite. . . . . 110
- Crystallographic tables for determination of minerals (Goldschmidt, Gordon). . . . . 114, 240
- Cuprous sulfide, crystal structure of (Ramsdell). . . . . 115
- Cyrtolite intergrowth with thucholite (Ellsworth). . . . . 439
- de Lapparent, J. . . . . 72
- Diamond-bearing black sands from Portuguese W. Africa (Poindexter)**. . . . . 111, 236
- Diatomaceous earth [Review]. . . . . 566
- Discredited species. . . . . 34
- Double dispersion method of mineral determination (Emmons)**. . . . . 504
- Dumortierite, identification and occurrence (Groves). . . . . 240
- Dumortierite (Univ. of Nevada Bulletin) [Review]. . . . . 532
- Duparc, L. and Gypsin, M. . . . . 158
- Dyscrasite and the Ag-Sb constitution diagram (Schwartz)** 495
- Eakle, A. S. Mineral names** . . . . . 533
- Edelmann, F. . . . . 592
- Elements of Optical Mineralogy, Part I, 3rd ed. (Winchell, A. N.) [Book review]. . . . . 532
- Elements of Optical Mineralogy, Part II, 2nd ed. (Winchell, N. H. and Winchell, A. N.) [Book review]. . . . . 156
- Ellsworth, H. V. Euxenite from Nipissing district, Ont.** . . . . . 484
- Mineral related to samarskite, Hybla, Ont. . . . . 63
- Mineral related to samarskite, Parry Sound, Ont. . . . . 66
- I. Thucholite, a primary carbon mineral. . . . . 419
- II. Cyrtolite intergrowths with thucholite. . . . . 419
- Thucholite and uraninite from Buckingham, Quebec. . . . . 442
- see Palache, C. . . . . 384
- . . . . . 158
- Emmons, R. C. Double dispersion method of mineral determination** . . . . . 504

Etch figures, nature and origin, on crystals (Hones) [Book review].....	157	Goldschmidt, V. and Gordon, S. G. Crystallographic tables for determination of minerals [Book review].....	114, 240
<b>Euxenite from Ontario (Ellsworth)</b>	484	Gonyer, F. A., see Ross, C. S.....	110
Experimentelle Mineralogie. (Gross) [Book review].....	566	<b>Gordon, S. G. Memorial of George Vaux, Jr.</b> .....	97
<b>Fairbanks, E. E. Importance of pollucite</b> .....	21	—— Rotating table for two circle goniometer.....	114, 117
—— [Review].....	490	—— see Goldschmidt, V.....	114, 240
<b>Famous mineral localities: Wodgina, Australia (Simpson)</b> .....	457	Gosseletite (Anten).....	593
Feldspar determination, new method (Gedney).....	111	<b>Gossner, B. The crystal form of boleite</b> .....	560
Fermor, L. L.....	32, 33	Granite pegmatites, Fitchburg, Mass., paragenesis of (Lewis)	113
Ferro-calderite (Fermor).....	33	Gross, R. Experimentelle Mineralogie [Book review].....	566
Forsterite (Arousseau, Merwin)	559	Groves, A. W.....	240
Foshag, W. F., Hess, F. L.....	160	<b>Gruner, J. W. Chemical formula of boracite</b> .....	481
—— see Ross, C. S.....	153	—— Crystal structure of analcrite.....	112, 174
Fraiponite (Césaro).....	492	—— Oscillation method applied to structure of analcrite	174
Franklin Furnace, mineralogical notes on (Palache).....	113, 297	—— Oscillation method of X-ray crystal analysis.....	123
<b>Franklinite crystal</b> .....	112, 171	Grutterink, J. A.....	202
<b>French Creek, Pa., Mines (George Vaux, Jr.)</b> .....	25	Gudmundite (Johansson).....	592
<b>Friedelite, schallerite and related minerals (Bauer, Berman)</b> .....	113, 341	Gypsin, M., see Duparc, L.....	158
Fuller, R. E., see Peacock, M. A.	360	<b>Gypsum and anhydrite (Wilder)</b>	476
Gallium. I. Arc spectrographic detection and estimation.....	490	Haematophanite (Johansson).....	593
II. Extraction from lepidolite (Papish, Holt) [Review]	490	Halite and glauberite cavities from N. J. (Hawkins).....	238
<b>Garcia, L. Memorial of J. J. Bravo</b> .....	103	Hallimond, A. F. Formula of glauconite.....	589
Gedney, E. K.....	111	—— Studies in the mica group	451
—— and Brown, C. W.....	111	——	239, 488
Geijer, P.....	34	Harbort, E.....	592
Genevite (Duparc, Gypsin).....	158	Harwood, H. F.....	240
Germanium: Arc spectrographic detection and estimation. Occurrence in tin minerals and enargite (Papish, Brewer, Holt) [Review].....	490	<b>Hastingsite group of amphiboles, chemistry, optics, and genesis of (Billings)</b> .....	287
Ghosh, P. K.....	70	Hawkins, A. C. Halite and glauberite cavities from N. J.	238
Gillson, J. L.....	114	——	114
Glauconite, formula of (Hallimond).....	589	Henderson, E. P.....	114
		Hess, F. L., see Foshag, W. F.....	160

Holmes, A. ....	240	Larsenite, calcium-larsenite and associated minerals at Franklin, N. J. (Palache, Bauer, Berman) .....	334
Holt, D. A. ....	490	Larsenite and calcium-larsenite, members of chrysolite group (Palache, Bauer, Berman) ....	142
Honess, A. P. Nature, origin, and interpretation of etch figures on crystals [Book review] .....	157	Lausen, C. Hydrous sulphates formed under fumerolic conditions .....	203
<b>Humite group, optical properties of (Larsen)</b> .....	112, 354	Leucoxene, occurrence in Permian sediments (Brown) .....	233
Hunt, W. F. [Book reviews] 122, 156, 240, 532, 566		Lewis, L. W. ....	113
Hydrothorite (Simpson) .....	570	Lonsdale, J. T. Analcite from Texas .....	109, 449
<b>Hydrous sulphates formed under fumerolic conditions (Lausen)</b>	203	Lohestite (Anten) .....	593
Interfacial angles, calculation of (Lewis) .....	113	MacCarthy, G. R. Tourmaline-bearing quartz from Va. ....	531
<b>Isomorphous relations of MgSiO<sub>3</sub> and AlAlO<sub>3</sub> (Winchell)</b> .....	52, 109	Magnesioblythite (Fermor) .....	33
Ito, T. ....	493	<b>Magnetite and franklinite crystals from Franklin Furnace (Van Horn)</b> .....	112, 171
Jakob, J. ....	202	<b>Megathlin, G. R. Spodumene and autunite from N. Hampshire</b>	578
Jirkovsky, R. ....	492	Mellahite (Nicolli) .....	201
Johansson, K. ....	592	Merwin, H. E., see Auroousseau, M. ....	559
Jung, H. ....	34	Metamillarite (Rinne) .....	33
Keeleyite, status of (Wherry) .....	29	Metamorphic stages in Pend Oreille district, Idaho (Gillson) .....	114
Kernite and associated borates (Schaller) .....	111	Metarossite (Foshag, Hess) .....	160
Kerr, P. F., see Ross, C. S. ....	110	<b>Meteorite, Washington Co., Col. (Palache, Shannon)</b> .....	406
Kerr-Lawson, D. E. ....	110	Mica group, a discussion (Hallimond) .....	451
Kolbeckite (Edelmann) .....	592	Microchemical determination of ore minerals (Short) .....	115
<b>Kraus, E. H. Memorial of P. H. von Groth</b> .....	93	<b>Miargyrite and tetrahedrite, Idaho (Shannon)</b> .....	18
— [Book review] .....	157	<b>Mineral names (Eakle)</b> .....	533
Kutnohorrite .....	569	<b>Mineralogical notes on Franklin and Sterling Hill, N. J. (Palache)</b> .....	297
Labradorite, optical orientation of (Smith) .....	158	Mineralogical Society of America: — 8th annual meeting .....	105
<b>Landes, K. K. Sequence of mineralization in Keystone, S. Dak., pegmatites</b> .....	109, 519, 537	— officers for 1928 .....	105
<b>Larsen, E. S. Optical properties of the Humite group</b> .....	112, 354		
—, Bauer, L. H. and Berman, H. <b>Norbergite from Franklin, N. J.</b> .....	349		
— .....	494		

— former officers.....	116	<b>Oscillation method of X-ray crystal analysis (Gruner).....</b>	123
— nominations for 1929....	489	<b>Palache, C. Mineralogical notes on Franklin and Sterling Hill, N. J.....</b>	113, 297
Mineralogical Society (England).....	69, 158, 239, 488	— Phosphorescence and fluorescence of Franklin minerals	330
Minerals of Lockport, New York (Monahan).....	70	— Seligmannite from Bingham, Utah.....	402
<b>Minerals related to samarskite (Ellsworth).....</b>	63, 66	— [Review].....	565
Monahan, J. W. Minerals of the Lockport in N. Y.....	70	— Bauer, L. H. and Berman, H. Larsenite, calcium-larsenite, new members of chrysolite group.....	142
Monheimite.....	569	— Larsenite, calcium-larsenite and associated minerals at Franklin, N. J.....	334
Muntzenite (Spencer).....	201	— and Ellsworth, H. V. Zircon from North Burgess, Ont.	384
Muscovite, composition of (Winchell).....	567	— and Shannon, E. V. Beryl-lonite and other phosphates from Newry, Me.....	392
<b>Natural history of silica minerals (Rogers).....</b>	73	— New meteorite from Washington Co., Col.....	406
Newark Mineralogical Society....	456	Palagonite (Peacock, Fuller).....	360
<b>Newberyite and other phosphates (Richards).....</b>	397	Palladium mineral, new (Adam)	201
New minerals, additional data	202, 493	Papish, J.....	490
New mineral names.....	32, 72, 158, 201, 491, 569	Parsons, A. L., see Aminoff, G....	110
New mineral names, list of (Spencer).....	488	<b>Peacock, M. A. Nature and origin of amphibole asbestos of south Africa.....</b>	113, 241
New minerals, redefinition of species.....	33, 494	— see Palache, C.....	113
New York Mineralogical Club	119, 120, 200, 452	— and Fuller, R. E. Chlorophaeite, sideromelane and palagonite from Columbia river plateau.....	360
Niccoli, E.....	201	<b>Pegau, A. A. Rutherford Mines, Amelia Co., Va.....</b>	583
Nickel silicates, formation by base exchange (Ross, Shannon, Gonyer).....	110	Petrographische Untersuchung über die Eignung von Graniten als Strassenbaumaterial (Zelter) [Book review].....	121
Nontronite (Larsen, Steiger).....	494	Petrushkevich, O. A.....	493
<b>Norbergite from Franklin, N. J. (Larsen, Bauer, Berman).....</b>	349	Philadelphia Mineralogical Society.....	32, 69, 118, 157, 200, 454, 565, 591
Notes on iron and zinc industry in Sussex Co., N. J. (Shuster) [Review].....	565		
Oligonite.....	569		
<b>Olivine. I. From Hawaiian Islands. II. Pure forsterite (Aurousseau, Merwin).....</b>	559		
Optic and Microscopic Character of Artificial Minerals (Winchell) [Book review].....	156		
Optic axial angle determination in thin sections (Collingridge)	488		

Phosphoferrite (Steinmetz) . . . . .	33	Richarz, S. . . . .	115
Phosphophyllite (Steinmetz) . . . . .	34	Rinne, F. . . . .	33
<b>Phosphorescence and fluorescence of Franklin minerals (Palache)</b> . . . . .	330	Roepperite . . . . .	569
Pistomesite . . . . .	569	<b>Rogers, A. F. Natural history of silica minerals</b> . . . . .	73
Place names of mineral localities in central Europe (Slavik, Spencer) . . . . .	488	——— <b>Tabulation of the crystal classes</b> . . . . .	571
<b>Plastic deformation of ore minerals (Buerger)</b> . . . . .	1, 35	Rolle Kolloider Vorgänge bei der Erz- und Mineralbildung, insbesondere auf den Lagerstätten der Hydrosilikatischen Nickelerze (Schornstein) [Book review] . . . . .	122
Pleochroic haloes in biotite (Kerr-Lawson) . . . . .	110	<b>Ross, C. S. Sedimentary analcite</b> . . . . .	111, 195
<b>Poindexter, O. F. Diamond-bearing black sands from Portuguese W. Africa</b> . . . . .	111, 236	——— and Foshag, W. F. <b>Anauxite from Czechoslovakia</b> . . . . .	153
Poitevin, E. . . . .	201	——— and Kerr, P. F. . . . .	110
<b>Pollucite, importance of (Fairbanks)</b> . . . . .	21	——— Shannon, E. V. and Gonyer, F. A. . . . .	110
Potarite, a new mineral (Spencer) . . . . .	158, 201, 494	Rossite (Foshag, Hess) . . . . .	160
Potash minerals, Texas, N. Mex. (Schaller) . . . . .	111	Rotating table for use with two circle goniometer (Gordon) . . . . .	114, 117
Prior, G. T. Appendix to catalogue of meteorites [Book review] . . . . .	122	<b>Rutherford, R. L. Anthraxolite from northwest Canada</b> . . . . .	516
Proectite (Geijer) . . . . .	34	<b>Rutherford mines, Amelia Co., Va. (Pegau)</b> . . . . .	583
Pycnometer, constant volume, for specific gravity determinations (Ellsworth) . . . . .	158	Rutile, ilmenite and leucoxene in mid-continentalsediments (Brown) . . . . .	115
Pyroxene, pronunciation of (Burt) . . . . .	199	Schadler, J. . . . .	159
Quartz crystals, doubly terminated, from N. Mex. (Tarr) . . . . .	112	Schafarzikite (Tokody) . . . . .	493
Ramsdell, L. S. . . . .	115	<b>Schaller, W. T. Probable identity of camsellite with szaibelyite</b> . . . . .	111, 230
Rao, T. V. M. . . . .	69, 246	——— . . . . .	111
Rare mineral occurrence in R. I. (Gedney, Brown) . . . . .	111	Schallerite (Bauer, Berman) . . . . .	113, 341
Rate of growth of crystals in different directions (Bentivoglio) [Review] . . . . .	31	Scharizerite (Schadler) . . . . .	159
<b>Refractive index liquids, method for measuring temperature of (Ashton, Taylor)</b> . . . . .	411	Schornstein, W. Die Rolle Kolloider Vorgänge bei der Erz- und Mineralbildung, insbesondere auf den Lagerstätten der Hydrosilikatischen Nickelerze [Book review] . . . . .	122
<b>Richards, G. Newberyite and other phosphates from Ascension Island</b> . . . . .	397	<b>Schwartz, G. M. Black Hills mineral region</b> . . . . .	56

— <b>Dyscrasite and the Ag-Sb constitution diagram</b> .....	495	Stilbite from Keweenawan lavas of northern Wis. (Richarz)...	115
Scrivenor, J. B. and Shenton, J. C.	159	Symmetry classes, arrangement of (Wherry).....	198
<b>Seligmannite from Bingham, Utah (Palache)</b> .....	402	<b>Szaibelyite, identity of camsellite with (Schaller)</b> .....	111, 230
Sensius, M. W.....	121, 122	Tanatarite (Petrushkevich).....	493
<b>Sequence of mineralization in pegmatites (Landes)</b> .....	109, 519, 537	Tarr, W. A.....	112
<b>Shannon, E. V. Miargyrite and tetrahedrite, Idaho</b> .....	18	Taylor, W. C., see Ashton, F. W.	411
— <b>Xanthoconite from Idaho</b> .....	469	Telegdite (Zechmeister, Vrabély)	72
—.....	34	Tetrahedrite (Shannon).....	18
— see Palache, C.....	492, 406	Thorotungstite (Scrivenor, Shenton).....	159
— see Ross, C. S.....	110	<b>Thucholite, carbon mineral from Parry Sound, Ont. (Ellsworth)</b>	419
Shannonite (Tilley).....	160	<b>Thucholite from Quebec (Ellsworth)</b> .....	442
Shenton, J. C., see Scrivenor, J. B.	159	Tilley, C. E.....	160
Short, M. N.....	115	Tikhvinita (Ansheless, Vlodavetz)	491
Shuster, E. D. Iron and zinc industry in Sussex Co., N. J. [Review].....	565	Tinzenite (Jakob).....	202
Sideromelane (Peacock, Fuller) ..	360	Tokody, L.....	493
Silica, properties of (Sosman) [Book review].....	489	Tomkeieff, S. I.....	488
<b>Silica minerals, natural history of (Rogers)</b> .....	73	Tourmaline-bearing quartz from Amelia, Va. (MacCarthy) ...	531
<b>Simpson, E. S. Wodgina, Australia, famous mineral locality</b> ..	457	Triplite, chemical composition and optical properties (Henderson).....	114
—.....	570	Truscottite (Grutterink).....	202
Skiagite (Fermor).....	33	Ulrich, F.....	492
Slavik, F.....	488	Uraninite, Quebec (Ellsworth) ..	442
Slavikite (Jirkovsky, Ulrich) ....	492	Uvarovite from California (Henderson).....	114
Smith, W. C.....	158	<b>Van Horn, F. R. Large magnetite and franklinite crystals</b> ...	112, 171
Sosman, R. B. The properties of silica [Book review].....	489	<b>Vaux, George Jr. Mines at Falls of French Creek, Penna.</b> ....	25
Specific gravities of minerals (Spencer).....	69	— <b>memorial of. (Gordon)</b> ..	97
Spencer, J. L. Potarite, a new mineral.....	158, 201	Viterbite. (Codazzi).....	492
— Recent mineral acquisitions of British museum.....	239	Vlodavetz, N. J.....	491
—.....	69, 201, 488, 494	<b>Von Groth, P. H., memorial of. (Kraus)</b> .....	93
Sperryllite, crystal structure of (Aminoff, Parsons).....	110	Vrabély, V.....	72
<b>Spodumene and autunite from N. Hamp. (Megathlin)</b> .....	578	Wherry, E. T. Arrangement of symmetry classes.....	198
Steiger, G.....	494		
Steinmetz, H.....	33, 34		
Sterling Hill, mineralogical notes.	297		

—— Status of Keeleyite.....	29	—— Notes on chlorite.....	161
—— [Review].....	31	—— Optic and Microscopic Characters of Artificial Miner- als [Book review].....	156
Whin Sill and related dikes of north England (Holmes, Har- wood).....	240	Winchell, N. H. and A. N. Ele- ments of Optical Mineralogy. Part II, 2nd. ed. [Book review]	156
Whin Sill, petrology of. (Tom- keieff).....	488	<b>Wodgina, famous mineral locality</b>	457
<b>Wilder, F. A. Gypsum and anhy- drite</b> .....	476	<b>Xanthoconite and associated min- erals from Idaho (Shannon)...</b>	469
Willemite, south African occur- rence, and fluorescence in ultra violet rays (Spencer).....	69	Zechmeister, L.....	72
<b>Winchell, A. N. Composition of muscovite</b> .....	567	Zelter, W. Petrographische Un- tersuchung über die Eignung von Graniten als Strassen- baumaterial [Book review]....	121
—— Elements of Optical Min- eralogy. Part I, 3rd. ed. [Book review].....	532	<b>Zircon from North Burgess, Ont. (Palache, Ellsworth).....</b>	384
—— <b>Isomorphous relations of MgSiO<sub>3</sub> and AlAlO<sub>3</sub> in sili- cates</b> .....	52, 109	Zirklerite (Harbort).....	592