

## INDEX TO VOLUME 22

Leading articles are in **bold face type**; notes abstracts and reviews are in ordinary type. Only minerals for which definite data are given are indexed.

Accessory minerals, heavy, of the Val Verde tonalite. (Wilson) . . .	122	Ashby, G. E. with Frondel, C. Oriented inclusions of magnetite in muscovite . . . . .	104
Accessory minerals in igneous and metamorphic rocks, study of. (Reed) . . . . .	73	Atlas der Analysen-linien der wichtigsten Elemente. (Löwe) [Book review] . . . . .	809
Accessory minerals of igneous rocks, study of. (Taylor) . . . . .	686	Atomic structure of minerals. (Bragg) [Book review] . . . . .	1006
Aenigmatite, note on. (optical data) (Bowen) . . . . .	139	Attapulugus clay. (Kerr) . . . . .	534
Ahlfeld, F. . . . .	71	(Das) Ausblühen der Salze. (Schultze) [Book review] . . . . .	311
Albite and beryl, contemporary crystallization vs. replacement. (Shaub) . . . . .	1045	Austinite . . . . .	71
Albite—crystallographic data . . .	294	Autunite, new locality for. (Smith, Maslowski) . . . . .	1184
Allen, V. T. Study of Missouri glauconite . . . . .	1180	Axial angle, graphic method of determining, from refractive indices. (Smith) . . . . .	217, 675
Allodelphite . . . . .	526	Axial ratios of crystals belonging to the oblique systems, x-ray determination of. (Buerger) . .	416
Alunite and the jarosites, crystal structure of. (Hendricks) . . . . .	773	Axinite, crystallography of, and the normal setting of triclinic crystals. (Peacock) . . . . .	588
Amphiboles. Petrographic study of minerals from Tertiary rocks of San Juan region, Colorado. (Larsen, Irving, Gonyer, Larsen) . . . . .	889	Axinite—transformation of coordinates. (Donnay) . . . . .	621
Amphiboles, regeneration of, from their melts at normal pressure. (Grigoriev, Iskill) . . . . .	169	Babingtonite—crystallographic data	295-7
Anaxites and kaolinites, densities and structural relationships of. (Gruner) . . . . .	855	Babingtonite. (Richmond) . . . . .	630
Anderson, G. H. . . . .	208	Bäckströmte . . . . .	52
Andorite (?) from Oregon, crystallography of. (Schaller) . . . . .	651	Balinkin, I. A. . . . .	220
Annabergite . . . . .	328	Bandy, M. C. Lopezite, a new mineral . . . . .	929
Antigorite, X-ray data . . . . .	99	_____ . . . . .	207
Ant-Wuorinen, J. . . . .	1131	Bannister, F. A. and Hey, M. H. Identity of penroseite and blockite . . . . .	319
Apatite-phlogopite deposits, Canadian, origin of. (Landes) . . .	213	_____ . . . . .	71, 311, 1072
Apatite structure, substitution of SiO <sub>4</sub> - and SO <sub>4</sub> -groups for PO <sub>4</sub> -groups in. (McConnell) . . . . .	977	Barth, T. F. W. Crystallographic studies in the vivianite group .	325
Arseniosiderite-analysis . . . . .	483	Bayley, W. S. Mineralogy's contribution to other sciences and to industry . . . . .	147
Arsenopyrite group . . . . .	53	Behre, C. H., Jr. . . . .	215
Arsenostibite. (Quensel) . . . . .	1131	Berg, E. L. Occurrence of diaspore in quartzite . . . . .	997

- Berman, H. Constitution and classification of natural silicates. . . 342  
 ——— . . . . . 215  
 ——— and Gonyer, F. A. Roweite, a new mineral from Franklin, N. J. . . . . 301
- Beryl and albite, contemporaneous crystallization vs. replacement. (Shaub) . . . . . 1045
- Beudantite group. (Lemmon) . . . . 939
- Biographisch-literarisches Handwörterbuch für Mathematik, Physik mit Geophysik, Chemie, Kristallographie und verwandte Wissensgebiete. VI, Part II. (Poggendorff) [Book review] . . . . . 1005
- Biotite. Petrographic study of minerals from Tertiary rocks of San Juan region, Colorado. (Larsen, Irving, Gonyer, Larsen) . . . . . 898
- Biotites of the Carsphairn igneous complex, composition and paragenesis of. (Deer) . . . . . 69
- Biotite, rare-alkali, from Kings Mt., N. Carolina. (Hess, Stevens) . . . . . 209, 1040
- Birefringence color, method for estimating. (von Huene) . . . . . 926
- Birefringence, universal stage method of determining. (Emmons) . . . . . 217
- Bjørlykke, H. Granite pegmatites of southern Norway . . . . . 241
- Blockite and penroseite, identity of. (Bannister, Hey) . . . . . 319
- Bloomer, R. O. Stilbite in the border conglomerate near Culpeper, Va. . . . . 309
- Blueberry Mt., Woburn, Mass., paragenesis of the minerals from. (Richmond) . . . . . 290
- Bobierite—x-ray data . . . . . 333
- Boericke, W. F. Prospecting and operating small gold placers. [Book review] . . . . . 67
- Bomb for use in hydrothermal experimentation. (Morey, Ingerson) . . . . . 1121
- Bowen, N. L. Note on aenigmatite. 139  
 ——— . . . . . 206  
 ——— and Ellestad, R. B. Leucite and pseudoleucite . . . . . 409
- Bradley, W. F., Bray, R. H., with Grim, R. E. Mica in argillaceous sediments . . . . . 813
- Bragg, W. L. Atomic structure of minerals. [Book review] . . . . . 1006
- Brammall, A. . . . . 311
- Braunite from Mason Co., Texas. (Hewett, Schaller) . . . . . 785
- Bravais, Law of, extension of. (Donnay, Harker) . . . . . 446
- Bray, R. H., Bradley, W. F., with Grim, R. E. Mica in argillaceous sediments . . . . . 813
- Brickerite. (Ahlfeld, Mosebach) . . . 71
- Buddington, A. F. Memorial of Alexander H. Phillips . . . . . 1094
- Burkeite, synthetic, crystallography of. (Ramsdell) . . . . . 213
- Bustamite, structural lattice and classification of. (Berman, Gonyer) . . . . . 215
- Butler, J. W., Jr. . . . . 218
- Buerger, M. J. Common orientation and classification of crystals based upon a marcasite-like packing . . . . . 48  
 ——— Unit cell and space group of cubanite . . . . . 1117  
 ——— X-ray determination of lattice constants and axial ratios of crystals belonging to the oblique systems . . . . . 416  
 ——— and Parrish, W. Unit cell and space group of tourmaline. (An example of inspective equi-inclination treatment of trigonal crystals.) . . . . . 1139  
 ——— . . . . . 208, 210, 218
- Buerger, N. W. Unit cell and space group of sternbergite,  $AgFe_2S_3$ . . . . . 216, 847
- Cabrerite—crystallographic and x-ray data . . . . . 328, 332
- Calaverite, etch tests on. (Short) . . 667
- Calcium ferri-phosphate. (Efremov) 811

Campbell, I. Types of pegmatites in the Archean at Grand Canyon, Arizona.....	436	miscibility in system CaO-B <sub>2</sub> O <sub>3</sub> -SiO <sub>2</sub> . (Morey, Ingerson).....	37
Carminite and associated minerals from Mapimi, Mexico. (Foshag).....	479	Deckert, H.....	71
Chalcomenite from Bolivia. (Palache).....	790, 1123	Deer, W. A.....	69, 1072
Chert in the tri-state (Mo.-Okla.-Kan.) zinc-lead district, origin of. (Roy).....	214	Descriptive petrography of the igneous rocks. Vol. III. Intermediate rocks. (Johannsen) [Book review].....	1004
Chlopinite (Klopinite, Hlopinite). (Starik).....	810	Detrital authigenic feldspar, occurrence of. (Stewart).....	1000
Chrysotile—x-ray data.....	98	Deuteric mineral sequence in the Enoggera granite, Queensland. (Whitehouse).....	809
Clino-ungemachite. (Peacock, Bandy).....	207	Diaspore in quartzite, occurrence of. (Berg).....	997
Colony, R. J., memorial of. (Kerr).....	195	Discredited species.....	72
Cookeite, hydromuscovite and free gold from Ogofau, Carmarthenshire. (Brammell, Leech, Bannister).....	311	Dollar, A. T.....	1072
Copper Mine Hill, Rh. Island, minerals and associated rocks at. (Quinn, Young).....	279	Donnay, J. D. H. Transformation of coordinates (axinite).....	621
Cordierite. (Winchell).....	1175	—— Book review.....	936
Corin, F.....	72	—— ..... 209, 218	
Corundum occurrence at Fraserburgh, Aberdeenshire. (Walls).....	1072	—— and Harker, D. New law of crystal morphology extending the Law of Bravais.....	446
Crawford, W. P. Tellurium minerals of New Mexico.....	1065	Dreyer, R. M. with Fraser, H. J. Mutual interference in the microchemical determination of ore minerals.....	949
Cristobalite at Crater Lake, Oregon. (Dutton).....	209, 804	Dunham, K. C. Paragenesis and color of fluorite in the English Pennines.....	468
Crystallographic series of Baumhauer and Ungemach—a theoretical consequence and factual confirmation of the Law of Bravais. (Donnay).....	209	Dussertite—optical data.....	484
Crystal models, flexible. (Balinkin).....	220	Dutton, C. E. Cristobalite at Crater Lake, Oregon.....	209, 804
Crystal morphology, new law of, extending Law of Bravais. (Donney, Harker).....	446	Eardley, A. J. Book review.....	67
Crystal structure models, nuclear, building of. (Fisher, Stevens).....	268	Earlandite. (Bannister).....	71
Cubanite, unit cell and space group of. (Buerger).....	1117	Efremov, N. E.....	811
Dakeite, a new uranium mineral from Wyoming. (Larsen, Gonyer).....	561	Elements of optical mineralogy. (Winchell) [Book review].....	810
Danburite, melting of: liquid im-		Ellestad, R. B. with Bowen, N. L. Leucite and pseudoleucite.....	409
		Ellestadite. (McConnell).....	977
		Emigh, G. D. An improved Vanderwilt rock saw.....	142
		Emmons, R. C. and Wilcox, R. Mineralogic study of silicosis.....	207, 256
		—— Book review.....	809
		—— ..... 217	

- Enargite and famatinite (luzonite), distinction between. (Harcourt)..... 517
- Epidote..... 294
- Erythrite—crystallographic and x-ray data..... 326, 331
- Evans, M. H. New microchemical test for selenium..... 1128
- Fahey, J. J. with Glass, J. J. Graftonite from Greenwood, Maine..... 1035
- Fairbairn, H. W..... 211
- Famatinite (luzonite) and enargite, distinction between. (Harcourt) 517
- Faust, G. T. with Hunt, W. F. Pentacite from Organ Mts., N. Mex..... 1151
- (Die) Fedorow-Method. (Nikitin) [Book review]..... 809
- Feldspar, authigenic, in shales and silts, occurrence of. (Gruner, Thiel)..... 842
- Feldspar content of Glenwood formation, unusually high. (Gruner)..... 212
- Feldspar, detrital authigenic. (Stewart)..... 1000
- Feldspar, unusual, from northern Inyo range. (Anderson, Maclellan)..... 208
- Feldspars, accelerated weathering of. (Norton)..... 1
- Ferri-sicklerite. (Quensel)..... 875
- Fisher, D. J. and Stevens, E. H. Building nuclear crystal structure models..... 268
- Fleischer, M. Relation between chemical composition and physical properties in the garnet group..... 751
- Fluorite in English Pennines, paragenesis and color of. (Dunham)..... 468
- Foshag, W. F. Carminite and associated minerals from Mapimi, Mexico..... 479
- Book review..... 145
- Fraser, H. J. Microchemistry of precious metal elements..... 1016
- and Dreyer, R. M. Mutual interference in microchemical determination of ore minerals. 949
- Fron del, C. Selective incrustation of minerals..... 1104
- and Ashby, G. E. Oriented inclusions of magnetite in muscovite..... 104
- Galbraith, F. W. Microscopic study of goethite and hematite in brown iron ores of east Texas. 1007
- Galena from Boulder Co., Col., octahedral parting on. (Wahlstrom)..... 906
- Garnet group, relation between chemical composition and physical properties. (Fleischer) 751
- Gem-stone materials, identification by emission spectra. (Howell)..... 796
- Glass, J. J. and Fahey, J. J. Graftonite from Greenwood, Maine..... 1035
- Stevens, R. E. with Pardee, J. T. Massive low-fluorine topaz from Brewer mine, S. Carolina..... 1058
- Glauconite, Missouri, study of. (Allen)..... 1180
- Goethite and hematite in brown iron ores of east Texas, microscopic study of. (Galbraith) ... 1007
- Goniometer, 2 E. (Quirke)..... 217
- Gonyer, F. A. with Berman, H. Roweite, a new mineral from Franklin, New Jersey..... 301
- ..... 215
- , Irving, J. with Larsen, E. S. Biotite from Tertiary volcanic rocks of San Juan, Colo..... 898
- with Larsen, E. S., Jr. Dakeite, a new uranium mineral from Wyoming..... 561
- Goodspeed, G. E. Development of plagioclase porphyroblasts... 1133
- Development of quartz porphyroblasts in a siliceous hornfels..... 133

.....	216	New law of crystal morphology extending the Law of Bravais.	446
Goranson, R. W. Silicate-water systems: "Osmotic pressure" of silicate melts.....	485	Hastingsite in thealite from Crazy Mts., Mont. (Wolff).....	742
Gordonite, morphology of. (Pough)	625	Hautefeuilleite.....	337
Gosseletite. (Corin).....	72	Hawley, J. E. Riebeckite in quartz veins from Michipicoten district, Ontario.....	1099
Graftonite from Greenwood, Maine. (Glass, Fahey).....	1035	Headenite. (Quensel).....	876
Granite pegmatites of southern Norway. (Bjørlykke).....	241	Heins, P. S. Thenardite crystals from Rhodes Marsh, Nev.....	307
Graton, L. C. Technique in mineralogography at Harvard.....	491	Helium ratio of Florida anhydrite. (Urry).....	212
Greenalite-chert in Ordovician rocks of the southern uplands of Scotland. (Kennedy).....	69	Helvite from Butte district, Mont. (Hewett).....	803
Grids for determination of non-opaque minerals. (Donnay, Mélon).....	218	Hematite and goethite in brown iron ores of East Texas. (Galbraith).....	1007
Grigoriev, D. P. and Iskill, E. W. Regeneration of amphiboles from their melts at normal pressure.....	169	Hematite inclusions in muscovite. (Fondel, Ashby).....	113
Grim, R. E., Bray, R. H. and Bradley, W. F. Mica in argillaceous sediments.....	813	Hendricks, S. B. Crystal structure of alunite and the jarosites.....	773
Groves, A. W. Silicate analysis. [Book review].....	1005	Henry, N. F. M.....	312, 1072
Gruner, J. W. Composition and structure of stilpnomelane.....	209, 912	Herapathite, crystallography of. (West).....	731
——— Densities and structural relationships of kaolinites and anauxites.....	855	Hess, F. L. and Stevens, R. E. Rare-alkali biotite from Kings Mt., N. Carolina.....	209, 1040
——— Structure of serpentines.....	97	Hewett, D. F. Helvite from Butte district, Mont.....	803
.....	212	——— and Schaller, W. T. Braunitite from Mason Co., Texas...	785
——— and Thiel, G. A. Occurrence of fine grained authigenic feldspar in shales and silts.....	842	Hey, M. H. with Bannister, F. A. Identity of penroseite and blockite.....	319
Gypsum in Kentucky, new occurrence of. (Munyan).....	1070	.....	1072
Halite, colorless and blue, spectrographic examination of. (Kennard, Howell, Yaeckel).....	65	Heyl, G. R.....	213
Halite, unusual occurrence of. (Spiroff).....	931	Hilgardite, a new mineral from Choctaw salt dome, Louisiana. (Hurlbut, Taylor).....	1052
Harcourt, G. A. Distinction between enargite and famatinite (luzonite).....	517	Holmes, A.....	68
Harker, D. with Donnay, J. D. H.		Hornblende—analysis and optical data.....	895
		Hornfels-granodiorite transitional facies at Cornucopia, Oregon. (Goodspeed).....	216
		Howell, D. H. Identification of certain gem-stone materials by their emission spectra.....	796

- , Yaeckel, M. P. with Kennard, T. G. Spectroscopic examination of colorless and blue halite. . . . . 65
- Hunt, W. F. and Faust, G. T. Pencatite from Organ Mts., N. Mex. . . . . 1151
- Book reviews. . . . . 67, 810, 1005
- Hurlbut, C. S., Jr. Synadelphite and plumbosynadelphite. . . . . 526
- and Taylor, R. E. Hilgardite, a new mineral species from Choctaw salt dome, Louisiana. . . . . 1052
- Hutton, C. O. . . . . 312
- Hydromuscovite. . . . . 311
- Hydrothermal veins and pegmatites. (Landes). . . . . 551
- Hypersthene, optically positive, from Manchuria. (Tsuru, Henry). . . . . 312
- Ice, symmetry of. (Rogers). . . . . 209
- Illite—analysis and *x*-ray data. (Grim, Bray, Bradley). . . . . 816
- Inclusions, oriented, of magnetite in muscovite. (Fron del, Ashby) 104
- Incrustation, selective, of minerals. (Fron del). . . . . 1104
- Index liquids, checking with the microscope. (Slawson). . . . . 210
- Ingerson, E. Accurate orientation of thin sections. . . . . 219, 760
- Book review. . . . . 1185
- with Morey, G. W. Bomb for use in hydrothermal experimentation. . . . . 1121
- Melting of danburite: liquid immiscibility in system  $\text{CaO-B}_2\text{O}_3\text{-SiO}_2$ . . . . . 37
- Introduction to the study of minerals. (Rogers) [Book review]. 936
- Iron-rhodonite, pyroxmangite. (Perutz). . . . . 809
- Irving, J., Gonyer, F. A., Larsen, E. S. 3rd., with Larsen, E. S. Petrologic study of the minerals from the Tertiary volcanic rocks of the San Juan region, Col. Amphiboles. Biotite 889
- Isküll, E. W. with Grigoriev, D. P. Regeneration of amphiboles from their melts at normal pressure. . . . . 169
- Jarosites, crystal structure of. (Hendricks). . . . . 773
- Johannsen, A. Descriptive petrography of the igneous rocks. Vol. III. Intermediate rocks. [Book review]. . . . . 1004
- Johnston, W. D., Jr. . . . . 216
- Joplin, G. A. . . . . 312
- Kaolinite deposited from solution. (Tarr, Keller). . . . . 933
- Kaolinites and anauxites, densities and structural relationships of. (Gruner). . . . . 855
- Keller, W. D. with Tarr, W. A. Kaolinite deposited from solution. . . . . 933
- Kelley, V. C. Mineralization at Crestmore, Calif. . . . . 140
- Kennard, T. G., Howell, D. H. and Yaeckel, M. P. Spectrographic examination of colorless and blue halite. . . . . 65
- Kennedy, W. Q. . . . . 69
- Kerr, P. F. Attapul gus clay. . . . . 534
- Memorial of Roy J. Colony. 195
- Köttigite. . . . . 328
- Kraus, E. H. . . . . 206
- Krennerite, crystal structure of. (Tunell, Ksanda). . . . . 207
- Krennerite, etch tests on. (Short). 667
- Ksanda, C. J. with Tunell, G. Space group and unit cell of sylvanite. . . . . 728
- . . . . . 207
- Labite. (Efremov). . . . . 811
- Lamprophyres of the Bay of Exploits, Newfoundland. (Heyl). 213
- Landes, K. K. Pegmatites and hydrothermal veins. . . . . 551
- . . . . . 213
- Larsen, E. S., Irving, J., Gonyer, F. A. and Larsen, E. S. 3rd. Petrologic study of the min-

erals from Tertiary volcanic rocks of San Juan region, Colo. The amphiboles. Biotite.	889	Marshall, P.	1131
— Book review	1004	Maslowski, E. O. E. with Smith, E. S. C. New locality for autunite.	1184
Larsen, E. S., Jr. and Gonyer, F. A. Dakeite, a new uranium mineral from Wyoming.	561	Matildite. (Ramdohr)	72
Lattice constants of crystals belonging to the oblique systems, x-ray determination of. (Buerger).	416	Mazapilite—crystallographic data	483
Lattice constants of single crystals, apparatus for the precision determination of. (Buerger).	218	McCabe, L. C.	219
Lawsonite, occurrence in glaucophane-bearing rocks from New Caledonia. (Joplin).	312	McConnell, D. Substitution of $\text{SiO}_4$ and $\text{SO}_4$ -groups for $\text{PO}_4$ -groups in the apatite structure; ellestadite, the end member.	977
Lead-zinc ores, Wisconsin, mineralogy of. (Behre).	215	Meier, A. E. with Tomlinson, W. H. Origin of montmorillonite.	1124
Leech, J. G. C.	311	Mélon, J.	218
Lemmon, D. M. Woodhouseite, a new mineral of the beudantite group.	939	Menzel, H.	71
Leucite-diopside-silica. (Schairer).	213	Merwin, H. E. and Posnjak, E. Sulphate incrustations in Copper Queen Mine, Bisbee, Ariz.	567
Leucite and pseudoleucite. (Bowen, Ellestad).	409	Metakernite. (Menzel, Schulz, Deckert).	71
Lithium, distribution of, in rocks and minerals as revealed by qualitative spectrum analysis. (Strock).	212	Mica in argillaceous sediments. (Grim, Bray, Bradley).	813
Löllingite group.	51	Microchemical determination of ore minerals, mutual interference in. (Fraser, Dreyer).	949
Lonsdale, J. T. Plantersville meteorite, Grimes Co., Texas.	213, 877	Micro-pyknetometric method for specific gravity determination. (Bannister, Hey).	1072
Lopezite, a new mineral. (Bandy).	929	Millerite, new occurrence of. (Northup).	1184
Löwe, F. Atlas der Analysenlinien der wichtigsten Elemente. [Book review].	809	Mineral names. (Spencer).	682
Luzonite.	517	Mineralization at Crestmore, Calif. (Kelley).	140
Maclellan, D. D.	208	Mineralogical research, trend of. (Tarr).	206, 869
(Das) Magma und seine Produkte. I. (Niggli) [Book review].	1185	Mineralogical Society of America. Constitution and By-laws.	223
Marble, J. P. Further study of the age of Great Bear Lake pitchblende.	564	List of correspondents, fellows and members.	227
Marcasite-like packing, common orientation and classification for crystals based on. (Buerger).	48	List of former officers and meetings.	221
Marcasite sink-hole deposits of central Missouri. (Tarr).	214, 830	Nominations for officers for 1938.	1004
		Preliminary list of titles for 18th annual meeting.	1188
		Proceedings of 17th annual meeting.	199
		Mineralogical Society of Great Britain and Ireland.	68, 311, 808, 1072

- Mineralogical Society of Southern California..... 937
- Mineralography at Harvard, technique in. (Graton)..... 491
- Mineralogy's contribution to other sciences and to industry. (Bayley)..... 147
- Monazite, note on morphology of. (Parker)..... 572
- Montmorillonite, origin of. (Tomlinson, Meier)..... 1124
- Moore, C. H., Jr. Staurolite area of Patrick and Henry Counties, Va..... 211, 990
- Morey, G. W. and Ingerson, E. Bomb for use in hydrothermal experimentation..... 1121
- Melting of danburite: liquid immiscibility in system  $\text{CaO-B}_2\text{O}_3\text{-SiO}_2$ ..... 37
- Mosebach, R..... 71
- Munyan, A. C. New occurrence of gypsum in Kentucky..... 1070
- Natural silicates, classification of. I; composition of. II. (Swartz).  
..... 1073, 1161
- New mineral names and data.....  
..... 70, 810, 875, 1131
- New York Mineralogical Club.....  
69, 145, 312, 313, 806, 807, 875, 1187
- Niggli, P. Das Magma und seine Produkte. [Book review]..... 1185
- Nikitin, W. Die Fedorow-Methode. [Book review]..... 809
- ..... 810
- Normal triclinic face-symbols and harmonic-arithmetic rule. (Peacock)..... 210
- Northup, M. A. New occurrence of millerite..... 1184
- Norton, F. H. Accelerated weathering of feldspars..... 1
- Olivine zone in the Palisades sill, N. Jersey, time required to form. (Butler)..... 218
- Orientation of thin sections, accurate. (Ingerson)..... 219, 760
- Pabst, A. Crystal structure of plazolite..... 861
- Palache, C. Chalcomenite from Bolivia..... 790
- List of published works.... 745
- Note on powellite..... 63
- Supplementary note on chalcomenite..... 1123
- Paragenesis of the uranium-bearing and associated minerals of the Ruggles' pegmatite near Grafton Center, N. Hamp. (Shaub) 207
- Parawollastonite. (Peacock)..... 70
- Pardee, J. T., Glass, J. J. and Stevens, R. E. Massive low-fluorine topaz from Brewer mine, S. Carolina..... 1058
- Parker, R. L. Note on morphology of monazite..... 572
- Parrish, W. with Buerger, M. J. Unit cell and space group of tourmaline..... 1139
- Parsons, A. L. Two-circle calculation in the hexagonal system..... 581
- Peacock, M. A. Crystallography of axinite and the normal setting of triclinic crystals..... 588
- The normal triclinic setting: correction..... 987
- ..... 70, 207, 210
- Pegau, A. A. Mineralogy of the Virginia diabase..... 872
- Pegmatites in Archean at Grand Canyon, Ariz. (Campbell).... 436
- Pegmatites and hydrothermal veins. (Landes)..... 551
- Pencatite from Organ Mts., N. Mexico. (Hunt, Faust)..... 1151
- Penroseite and blockite, identity of (Bannister, Hey)..... 319
- Perutz, M..... 809
- Petrofabric diagrams, new method of interpretation. (Winchell) .. 15
- Petrography of some rocks from the South Orkney Islands and the Antarctic Archipelago. (Stewart)..... 178
- Philadelphia Mineralogical Society..... 70, 314, 808, 1130, 1186



Phillips, Alexander H., memorial of. (Buddington).....	1094	Quartz porphyroblasts, development of, in a siliceous hornfels. (Goodspeed).....	133
Pitchblende, Great Bear Lake, age of. (Marble).....	564	Quartzite, transfusion of, Kiloran Bay, Colonsay. (Reynolds)...	68
Plagioclase porphyroblasts, development of. (Goodspeed).....	1133	Quensel, P.....	875, 876, 1131
Plantersville meteorite, Grimes Co., Texas. (Lonsdale).....	213, 877	Quinn, A. and Young, J. A., Jr. Minerals and associated rocks at Copper Mine Hill, Rh. Island.....	279
Plazolite, crystal structure of. (Pabst).....	861	Quirke, T. T.....	217, 219
Plumbosynadelphite and synadelphite. (Hurlbut).....	526	Ramdohr, P.....	72
Poggendorff, J. C. Biographisch-literarisches Handwörterbuch für Mathematik, Astronomie, Physik mit Geophysik, Chemie, Kristallographie und verwandte Wissensgebiete. [Book review].....	1005	Ramsdell, L. S.....	213
Posnjak, E. with Merwin, H. E. Sulphate incrustations in Copper Queen Mine, Bisbee, Ariz.....	567	——— Book review.....	1006
Potash-soda feldspars. (Spencer)...	311	Read, H. H. Rutley's Elements of Mineralogy. [Book review]...	67
Pough, F. H. Crystallized powellite from Tonopah, Nev.....	57	Reed, J. C. Study of accessory minerals in igneous and metamorphic rocks.....	73
——— Morphology of gordonite...	625	Reynolds, D. L.....	68
Powellite, crystallized, from Tonopah, Nev. (Pough).....	57	Richmond, W. E., Jr. Babingtonite.....	630
Powellite from Houghton, Mich....	61, 63	——— Paragenesis of minerals from Blueberry Mt., Woburn, Mass.....	290
Praktikum der Edelsteinkunde. (Wild) [Book review].....	145	Riebeckite in quartz veins from Michipicoten District, Ontario. (Hawley).....	1099
Precious metal elements, micro-chemistry of. (Fraser).....	1016	Rock saw, improved. (Emigh)....	142
Prehnite-crystallographic data...	295-6	Rogers, A. F. Introduction to the study of minerals. [Book review].....	936
Prospecting and operating small gold placers. (Boericke) [Book review].....	67	———	209
Pseudoleucite and leucite. (Bowen, Ellestad).....	409	Römerite, reorientation of. (Wolfe)	736
Pumpellyite, occurrence in Lake Wakatipu region, Western Otago, New Zealand. (Hutton)	312	Ross, C. S. Sphalerite from pegmatite near Spruce Pine, N. Car..	643
Pyroxenes. (Deer, Wager).....	1072	Roweite, new mineral from Franklin, N. Jersey. (Berman, Gonyer).....	301
Pyroxmangite. (Perutz).....	809	Roy, C. J.....	214
Pyroxmangite from Invernessshire, Scotland. (Tilley).....	720	Russell, A.....	808
Quartz, enantiomorphous, in tectonites. (Fairbairn).....	211	Rutley's Elements of Mineralogy. (Read) [Book review].....	67
		Schairer, J. F.....	213
		Schaller, W. T. Crystallography of valentinite and andorite (?) from Oregon.....	651
		——— with Hewett, D. F. Braunite from Mason Co., Texas.....	785

- Schultze, K. Das Ausblühen der Salze. [Book review]..... 311
- Schulz, H. .... 71
- Scorodite—analysis and optical data..... 482
- Seignette and related salts, optical properties of. (Winchell)..... 1088
- Selenium, new microchemical test for. (Evans)..... 1128
- Senstius, M. W. Book review..... 311
- Serpentines, structure of. (Gruner) 97
- Shaub, B. M. Contemporaneous crystallization of beryl and albite vs. replacement..... 1045  
..... 207
- Short, M. N. Etch tests on calaverite, krennerite and sylvanite. 667
- Silicate analysis. (Groves) [Book review]..... 1005
- Silicate synthesis with laboratory gas furnace. (Dollar)..... 1072
- Silicate-water systems: "Osmotic pressure" of silicate melts. (Goranson)..... 485
- Silicates, natural, classification and composition of. (Swartz)..... 215, 1073, 1161
- Silicates, natural, constitution and classification of. (Berman).... 342
- Silicosis, mineralogic study of. (Emmons, Wilcox)..... 207, 256
- Slawson, C. B. .... 210
- Smith, E. S. C. and Maslowski, E. O. E. New locality for autunite..... 1184
- Smith, H. T. U. Simplified graphic method of determining approximate axial angle from refractive indices of biaxial minerals..... 217, 675
- Smith, L. L. Fluorescent sodalite... 304
- Sodalite, fluorescent. (Smith).... 304
- Sodium-heterosite. (Quensel).... 876
- Sodium-purpurite. (Quensel).... 876
- Spencer, E. .... 311
- Spencer, L. J. Some mineral names ..... 682  
..... 312
- Sphalerite from a pegmatite near Spruce Pine, N. Car. (Ross) .. 643
- Spiroff, K. Unusual occurrence of halite..... 931
- Starik, I. E. .... 810
- Stauriolite area of Patrick and Henry counties, Va. (Moore). .... 211, 990
- Sternbergite, unit cell and space group of. (Buerger)..... 216, 847
- Stevens, E. H. with Fisher, D. J. Building nuclear crystal structure models..... 268
- Stevens, R. E., Glass, J. J. with Pardee, J. T. Massive low-fluorine topaz from Brewer mine, S. Carolina..... 1058
- with Hess, F. L. Rare-alkali biotite from Kings Mt., N. Carolina..... 209, 1040
- Stewart, D., Jr. Occurrence of detrital authigenic feldspar... 1000
- Petrography of some rocks from the South Orkney Islands and the Antarctic Archipelago. 178
- Stilbite in border conglomerate near Culpeper, Va. (Bloomer). 309
- Stilpnomelane, composition and structure of. (Gruner).... 209, 912
- Strock, L. W. Book review..... 809  
..... 212
- Sulphate incrustations in Copper Queen Mine, Bisbee, Ariz. (Merwin, Posnjak)..... 567
- Swartz, C. K. Classification of natural silicates. I. Composition II..... 215, 1073, 1161
- Sylvanite, etch tests on. (Short).... 667
- Sylvanite, space group and unit cell. (Tunell, Ksanda)..... 728
- Synadelphite and plumbosynadelphite. (Hurlbut)..... 526
- Synthetic gems, observations on production of. (Kraus)..... 206
- System CaO-B<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub>. (Morey, Ingerson)..... 37
- System leucite-diopside-silica. (Schairer)..... 213
- System NaAlSiO<sub>4</sub>-FeO-SiO<sub>2</sub>. (Bowen)..... 206
- Talasskite. (Nikitin)..... 810
- Tarr, W. A. Origin of marcasite

sink-hole deposits of central Missouri.....	214, 830	of. (Peacock).....	588, 987
— Trend of mineralogical research.....	206, 869	Tsuru, K.....	312
— and Keller, W. D. Kaolinite deposited from solution.....	933	Tuhualite. (Marshall).....	1131
Taylor, J. H. Study of accessory minerals of igneous rocks.....	686	Tunell, G. and Ksanda C. J. Space group and unit cell of sylvanite.....	728
Taylor, R. E. with Hurlbut, C. S., Jr., Hilgardite, new mineral from Choctaw salt dome, Louisiana.....	1052	—.....	207
Tektite problem. (Spencer).....	312	Turquoise in Cornwall. (Russell)...	808
Tellurium minerals of New Mexico. (Crawford).....	1065	Two-circle calculation in the hexagonal system. (Parsons).....	581
Tepper, G. H.....	811	Ungemachite and clino-ungemachite, new minerals from Chile. (Peacock, Bandy).....	207
Thenardite crystals from Rhodes Marsh, Nevada. (Heins).....	307	Urry, W. D.....	212
Thiel, G. A. with Gruner, J. W. Fine grained authigenic feldspar in shales and silts.....	842	Valences of iron in pyrite and marcasite. (Buerger).....	208
Thiesmeyer, L. R. Vein quartz pseudomorphs of cross-fiber asbestos in Virginia.....	701	Valentinite and andorite (?) from Oregon, crystallography of. (Schaller).....	651
Thin sections, accurate orientation of. (Ingerson).....	219, 760	Vanado-magnetite. (Tepper).....	811
Tilley, C. E. Pyroxmangite from Inverness-shire, Scotland....	720	Varulite. (Quensel).....	876
—.....	1072	Vein filling at Nevada City, Calif. (Johnston).....	216
Tomlinson, W. H. and Meier, A. E. Origin of montmorillonite....	1124	Vein quartz pseudomorphs of cross fiber asbestos in Virginia. (Thiesmeyer).....	701
Topaz, low fluorine, from Brewer mine, S. Carolina. (Pardee, Glass, Stevens).....	1058	Virginia diabase, mineralogy of. (Pegau).....	872
Tourmaline, unit cell and space group of. (Example of inspective equi-inclination treatment of trigonal crystals. (Buerger, Parrish).....	1139	Vitrians, refractive indices of. (Quirke, McCabe).....	219
Transformation of coordinates—axinite. (Donnay).....	621	Vivianite group, crystallographic studies in. (Barth).....	325
Transfusion of quartz xenoliths in alkali basic and ultra basic lavas, southwest Uganda. (Holmes).....	68	Vivianite—x-ray data.....	329
Transfusion of quartzite. (Reynolds).....	68	von Huene, R. Estimating the finishing birefringence color of a crystal of random orientation in a thin section.....	926
Trend of mineralogical research. (Tarr).....	206, 869	Wager, L. R.....	1072
Triclinic crystals, normal setting		Wahlstrom, E. E. Octahedral parting on galena from Boulder, Colorado.....	906
		Walls, R.....	1072
		Weissenberg treatment of crystals belonging to the oblique systems. (Buerger).....	210
		West, C. D. Crystallography of herapathite.....	731
		Whitehouse, M. J.....	809

Wilkite (alpha and beta) (Ant- Wuorinen).....	1131	römerite.....	736
Wilcox, R. with Emmons, R. C. Mineralogic study of silicosis. .....	207, 256	Wolff, J. E. Hastingsite in thealite from Crazy Mts., Montana ...	742
Wild, G. O. Praktikum der Edel- steinkunde. [Book review]....	145	Wollastonite solid-solutions from Scawt Hill, Co. Antrim. (Tilley).....	1072
Wilson, R. W. Heavy accessory minerals of the Val Verde tonalite.....	122	Woodhouseite, a new mineral of the beudantite group. (Lem- mon).....	939
Winchell, A. N. Cordierite.....	1175	Yaeckel, M. P., Howell, D. H. with Kennard, T. G. Spectro- scopic examination of colorless and blue halite.....	65
— Optical properties of seig- nette and related salts.....	1088	Young, J. A., Jr. with Quinn, A. Minerals and associated rocks at Copper Mine Hill, Rh. Island.....	279
— Further studies of the zeo- lites.....	85, 206	Zeolites, further studies of. (Win- chell).....	85, 206
— Elements of optical min- eralogy. [Book review].....	810		
Winchell, H. New method of inter- pretation of petrofabric dia- grams.....	15		
Wolfe, C. W. Reorientation of			