

## INDEX TO VOLUME 9

PREPARED BY EDW. F. HOLDEN

Original articles are in **bold face type**; abstracts and cross references are in ordinary type. To save space, only minerals described in more or less detail are indexed; titles of abstracted articles are not cross-indexed under authors' names; titles of articles by two or more authors are given only under the name of the senior author.

Agate, Vosges (Renck).....	119	Borisov, P. A.....	232
Alabandite, structure (Wyckoff)	121	<b>Bornite as a furnace product</b>	
Albite, Katanga (Cesaro, Belliere)	233	<b>(Guild)</b> .....	201
— Rischuna (Krebs)....	122	Boron, spectroscopic analysis	
Allactite (Aminoff).....	122	(Lacroix, de Gramont).....	22
Alling, H. L.....	43	Boulangerite (Shannon).....	140
Alnoite, monticellite- (Bowen) .	42	Bowen, N. L.....	42, 211
Alpine minerals (Koenigsberger) .	20	Braly, A.....	44, 214
Alum, structure (Valenton).....	121	Brauns, R.....	158
Aminoff, G.....	43, 121,	Brookite, Bobrúvka (Ulrich)....	176
Amphibole, Japan (Marek).....	176	Browning, Glenn.....	20
<b>Andalusite from Cal., new use,</b>		<b>Bruce, E. L. and Greenland, C. W.</b>	
<b>thermal properties (Peck) .</b>	66, 123	<b>Low iron epidote from Por-</b>	
Andalusite, Vorarlberg (Cornelius)	119	<b>cupine</b> .....	199
Anglesite, etc. (Shannon).....	40	Bryan, Kirk.....	198
Anorthite, Vesuvius (Kratzert) .	122	Buttgenbach, H.....	140, 173, 212
Ansheles, O.....	232		
Antimony, native (Behre).....	99	Cady, W. G.....	215
<b>Atomic volume isomorphism</b>		<b>Calcite replaced by gypsum (Rett-</b>	
<b>(Wherry).....</b>	165	<b>ger)</b> .....	153
Augite; Vesuvius, Etna (Washing-		— Shangoinah I. (Parsons) .	119
ton, Merwin).....	21	Campo-Lungo minerals (Mühlen-	
<b>Ayres, V. L. Pyrite from Tucson</b> .	91	thal).....	215
		<b>Canbyite (Hawkins and Shannon)</b>	1
Bamberger, M.....	41	Carrollite, remingtonite (Shannon)	66
Behre, C. H. Jr.....	99	Catalonia, minerals (Tomas) .	233
Belgian Congo minerals (Butteng-		Celestite, strontianite (Dravert)	197
bach).....	140	— Messina (Ranfaldi)....	216
Belliere, M.....	233	<b>Centralliasite; Crestmore, Cal.</b>	
Berthonite (Buttgenbach).....	173	<b>(Foshag)</b> .....	88
Beutell, A.....	100	<b>Ceruleofibrite is connellite (Hol-</b>	
Biographical notices (Spencer) .	122	<b>den)</b> .....	55
<b>Biotite (Grout)</b> .....	159	Cesaro, G.....	233
<b>Blowpipe assaying (Hunt)</b> ....	69, 145	Chabazite, gas absorption by	
Blowpipe reactions of oxides		(Nacken, Wolff).....	100
(Braly).....	214	Chalcocite, action of Cu salts on	
Böggild, O. B.....	19	(Wells).....	68
Bohemian minerals (Jezek; On-		Chapmanite (Walker).....	66
drej; Slavik; Slavikova) .	20, 197, 233	Chinkolobwite (Schoep).....	156

Chirvinsky, P. N. ....	20	Debeaupuis. ....	214
Chirvinsky, V. N. ....	118, 155	de Gramont. ....	22
Chlorites (Shannon)....	40	Dennis, L. M. ....	21
Chloroxiphite (Spencer, Mountain)....	96	Diabantite, etc. (Shannon)....	40
<b>Chrysoberyl pegmatite, Hartford, Me. (Palache)</b> ....	217	Diaboleite (Spencer, Mountain)..	97
Cinnabar, Avala (Svetolik)....	232	Diamond, inclusions in (Sutton)..	42
——— light-electrical properties (Rose)....	197	Diaspore, libethenite (Cesaro, Beliere)....	233
Clark, T. E. ....	43	Dioptase, plancheite; Guchab (Henglein)....	140
Clarke, J. R. ....	41	Doelter, C. ....	41
<b>Clinozoisite; Lower Cal. (Rogers)</b>	221	Dolomites (Harding, Everman, <i>et al</i> )....	20
Coats, blowpipe (Braly)....	44	Dravert, P. ....	197
Colemanite deposit (Gale)....	99	Dumortierite; Mexico (Wittich, Kratzert)....	99
Colloids and mineralogy (Rinne)	216	Duparc, Louis. ....	214
Collophane, compn. (Rogers)....	67	Eclogites; Norway (Eskola)....	120
Coloration, artificial (Gaubert)....	41	Eitel, W. ....	157
Colors at low temps. (Bamberger, Grengg)....	41	<b>Ellsworth, H. V., see Poitevin, E.</b>	188
Connellite. ....	55	—————	21, 216
Co Ni arsenides; Cobalt (Walker, Parsons)....	66	Ellsworthite (Walker, Parsons) ..	16
Conductivity of crystals (Röntgen)....	198	Elschner, Karl. ....	156
<b>Cook, C. W. Marcasite; Racine, Wis.</b>	151	Epidote in granite (Duparc)....	214
<b>Copiapite; Santa Maria Mts., Cal. (Schairer and Lawson)</b> ....	242	<b>Epidote, low iron, from Porcupine (Bruce and Greenland)</b> ....	199
<b>Copper, unusual specimens (Kraus)</b> ....	23, 67	Eskola, P. ....	120
Cordierite, Korea (Komada)....	214	Everman, Irene. ....	20
——— radiated (Ansheles)....	232	Fairchild, J. G. ....	21
Cornelius, H. P. ....	119	Fassaite, composition (Zsivny)....	215
Cornetite (Cesaro)....	233	Feldspars, composition (Seto)....	40
<b>Correction (Lind)</b> ....	35	Fichtelgebirge minerals (Mieleitner)....	119
Cosalite, Ontario (Walker)....	100	Field book of common rocks and minerals (Loomis) [book review]....	138
Crednerite (Spencer, Mountain) ..	97	Flink, G. ....	174
Croydon minerals (Davies)....	20	Flint, E. ....	176
<b>Crystal, at the surface of a (Wherry)</b> ....	45	Fluorite, color (Doelter; Geijer; Sakao, Hirose)....	41
Crystallographic notes (Hawkins)	65	——— formation (Wetzel)....	44
Crystal structure Ti, Zr, Ce, Th, Os (Hull)....	197	——— Madoc (Wilson)....	99
<b>Cyanite, unusual occurrence of (Wallace)</b> ....	69, 129	<b>Foshag, W. F. Centrollasite; Crestmore</b> ....	88
Davies, G. M. ....	20	——— Freirinite, a new mineral	30
		——— Furnace Creek, Cal. ....	8

- Foshag, W. F. Lavendulan; Joachimsthal** . . . . . 29  
 ——— Obsidian Cliff . . . . . 68  
 ——— **Priceite; Cal.** . . . . . 11, 94  
 ——— . . . . . 20, 100, 122, 140  
 Fourmarierite (Buttgenbach) . . . . . 212  
**Freirinite (Foshag)** . . . . . 30  
 Friedel, G. . . . . 215  
 Friedel's law (Rogers) . . . . . 65  
**Fuller, Margaret B. Witherite at Many Glacier, Mont.** . . . . . 154  
**Furnace Creek locality (Foshag)** 8, 11  
 Gale, Hoyt S. . . . . 99  
 Galenobismutite (Shannon) . . . . . 99  
**Ganophyllite; Franklin Furnace (Larsen and Shannon)** . . . . . 238  
 Garnet, miscibility (Eitel) . . . . . 157  
 ——— Ouessant (Debeaupuis) . . . . . 214  
 Gaubert, P. . . . . 41  
 Geijer, Per. . . . . 41  
 Germanite, mineralography of (Thomson) . . . . . 66  
 Germanium in samarskite (Dennis, Papish) . . . . . 21  
 G. rms, H. C. . . . . 158  
 Glass, effect of rays on (Clarke) . . . . . 41  
 Glauconit (Hallimond) . . . . . 118, 198  
 Gledhill, T. L. . . . . 119  
 Goldschmidt, V. . . . . 19  
 Gossner, B. . . . . 40  
 ——— Lehrbuch der Mineralogie [book review] . . . . . 155  
 Graphite, origin (Clark; Alling; Winchell) . . . . . 43  
 Gray, O. J. . . . . 44  
**Greenland, C. W., see Bruce, E. L.** 199  
 Greig, J. W. . . . . 211  
 Grengg, R. . . . . 41  
**Grout, F. F. Notes on biotite** . . . . . 159  
 ——— and Thiel, G. A. **Stilp-nomelane** . . . . . 228  
 Gudden, B. . . . . 42  
**Guild, F. N. Bornite as a furnace product** . . . . . 201  
 Gypsum, crystallography (Rosicky) . . . . . 19  
 Haas, J. O. . . . . 20  
 Halite, symmetry (Rosicky) . . . . . 19  
 Hallimond, A. F. 118, 121, 158, 198  
 Haloes, pleochroic (Gudden) . . . . . 42  
 Harding, C. L. . . . . 20  
 Harker, A. Petrology [book review] . . . . . 173  
 Harmotone, Udo (Kinoshita) . . . . . 214  
 Hausmannite; Ark. (Miser, Fairchild) . . . . . 21  
**Hawkins, A. C. Crystallographic notes** . . . . . 65  
 ——— and Shannon, E. V. **Canbyite** . . . . . 1  
 Henglein, M. . . . . 120, 140  
 Heulandite, water in (Beutell) . . . . . 100  
 ——— (Scheumann) . . . . . 44  
**Hinrichs, Gust. (Keyes)** . . . . . 5  
 Hirose, M. . . . . 41  
**Hisingerite, Parry Sound (Schwartz)** . . . . . 141  
 ——— . . . . . 2  
 Hoegbomite, Va. (Watson) . . . . . 67  
 Hoelite (Ofstedal) . . . . . 118  
**Holden, E. F. Cause of color in rose quartz** . . . . . 67, 75, 101  
 ——— **Ceruleofibrite is con-nellite** . . . . . 55  
 ——— **Sarcopsidite** . . . . . 205  
 ——— book review . . . . . 155  
 Hot Springs, Ark. (Bryan) . . . . . 198  
 Hull, A. W. . . . . 158, 197  
**Hunt, W. F. Blowpipe assaying; Pb, Cu, and Ag ores** . . . . . 69, 145  
 ——— **Improved Wentworth recording micrometer** . . . . . 190  
 ——— book reviews . . . . . 16, 138, 173  
 Hydrocerussite (Spencer, Mountain) . . . . . 98  
 Hydrotalcite group (Foshag) . . . . . 21  
 Ice crystals, habit (Kalb) . . . . . 121  
 Identification of minerals (Gray) . . . . . 44  
 Inclusions, liquid (Nacken) . . . . . 43  
**Index of liquid, method for checking (Rutherford)** . . . . . 207  
 Iridosmine crystals (Gledhill) . . . . . 119  
 Iron hydroxides (Willmann) . . . . . 44  
 ——— sulfates (Scharizer) . . . . . 22

- Isomorphism (Widmer) . . . . . 215
- Jade, Tuxtla statuette (Washington) . . . . . 214
- Jaeger, F. M. . . . . 158
- Jakob, J. . . . . 140
- Japanese mineral analyses (Shibata, Kimura) . . . . . 39
- Jefferisite, Ti-; Westcliffe, Colo. (Waldschmidt)** . . . . . 113
- Jezeq, B. . . . . 176, 197
- Johnsen, A. . . . . 42
- Kalb, G. . . . . 121
- Kaolinite, detn. in soils (Matejka) . . . . . 234
- Katanga minerals (Lohest) . . . . . 216
- , radium at (Schoep) . . . . . 120
- Kempite (Rogers) . . . . . 66
- Kerr, P. F.** Detn. opaque minerals by X-ray patterns . . . . . 65
- **Rotation apparatus** . . . . . 169
- Keyes, Chas. Gust. Hinrichs** . . . . . 5
- Kimura, K. . . . . 39
- Kinoshita, K. . . . . 18, 214
- Kochite (Kozu, Seto, Kinoshita) . . . . . 18
- Koenigsberger, J. . . . . 20
- Komada, I. . . . . 214
- Kozu, S. . . . . 18
- Kratzert, J. . . . . 99, 122
- Kraus, E. H. Unusual specimens of copper** . . . . . 23, 67
- book reviews . . . . . 154, 172
- Krebs, Berta . . . . . 122
- Kunz, G. F. . . . . 121
- Kurskite (Chirvinsky) . . . . . 118, 155
- Lacroix, A. . . . . 22
- Mineralogie de Madagascar [book review] . . . . . 155
- Lansfordite; Atlin, B. C. (Poitevin)** . . . . . 225
- Larsen, E. S. and Schaller, W. T.** Variscite, peganite, and lucinite . . . . . 69
- **and Shannon, E. V. Wardite** . . . . . 66
- **Ganophyllite, Franklin Furnace, N. J.** . . . . . 238
- Lavendulan; Joachimsthal (Foshag)** . . . . . 29
- Lawson, C. C., see Schairer, J. F.** . . . . . 242
- Lazulite, Georgia (Watson) . . . . . 100
- Lead sulfates, etc. (Jaeger, Germs) . . . . . 158
- Lehrbuch der Mineralogie (Gossner) [book review] . . . . . 155
- Leiss, C. . . . . 158
- Levison, W. G. (obituary notice) . . . . . 195
- Liesegang, R. E. . . . . 216
- Lillianite, galenobismutite (Walker, Thomson) . . . . . 43
- Lind, S. C. A correction** . . . . . 35
- Linneite, Katanga (Schoep) . . . . . 120
- Lohest, Max . . . . . 216
- Longchambon, L. . . . . 233
- Loomis, F. B. Field book of common rocks and minerals [book review] . . . . . 138
- Lubeckite (Morozewicz) . . . . . 39
- Madagascar minerals (Kunz) . . . . . 121
- Marcasite from Racine, Wis. (Cook)** . . . . . 151
- Marek, M. J. . . . . 176
- Margarite, Cr-colored; Md. (Shannon)** . . . . . 194
- Martens, J. H. C. Scorodite from N. Y.** . . . . . 27
- Mason, O'Neal . . . . . 20
- Matejka, J. . . . . 234
- Mayaite (Washington) . . . . . 18
- Melilite at Lazio (Millosevich) . . . . . 100
- Melon, Joseph . . . . . 216
- Mendipite (Spencer, Mountain) . . . . . 97
- Merrill, G. P. Quartz in meteoric stones** . . . . . 112
- . . . . . 42
- Merwin, H. E. . . . . 21
- Meteorites, catalogue (Prior) [book review] . . . . . 16
- Meyersite (Elschner) . . . . . 156
- Micrometer, improved Wentworth recording (Hunt)** . . . . . 190
- Mieleitner, K. . . . . 119
- Mikroskopische Physiographie (Rosenbusch-Wülfing) [book review] . . . . . 172
- Millosevich, F. . . . . 100

- Mineralogical Society of America  
 annual meeting . . . . . 56  
 by-laws, amendment to . . . . . 57  
 election of officers and fellows . . 56  
 fellows; additions, corrections . . 70  
 members; additions, corrections  
 papers read before . . . . . 65  
 report of comm. on nomen-  
 clature, etc. . . . . 50  
 report of editor, 1923 . . . . . 59  
 report of secretary, 1923 . . . . . 58  
 report of treasurer, 1923 . . . . . 58
- Mineralogical Society of Wash-  
 ington . . . . . 14
- Mineralogie de Madagascar (La-  
 croix) [book review] . . . . . 155
- Miser, H. D. . . . . 21
- Monticellite from slag (Hallimond) 121
- Morenosite, Joachimsthal (Ulrich) 176
- Morozewicz, J. . . . . 38, 39
- Mountain, E. D. . . . . 96
- Mügge, O. . . . . 19, 42
- Mühlenthal, F. . . . . 215
- Mullite (Bowen, Greig, Zies) . . . . 211
- Myers, W. M. Oblique illumina-  
 tion in mineragraphy** . . . . 69, 177
- Nacken, R. . . . . 43, 100
- Newark Mineralogical Society 38, 73
- New minerals (Spencer) . . . . . 198
- New minerals 16, 34, 38, 96, 118, 155,  
 173, 175, 211
- New York Mineralogical Club 14, 37,  
 72, 95, 116, 195, 210
- Niggli, P. . . . . 121
- Niter deposits; Dubois, Idaho  
 (Stearns)** . . . . . 135
- Oblique illumination in minera-  
 graphy (Myers)** . . . . . 69, 177
- Obsidian Cliff minerals (Foshag) . . 68
- Oftedal, Ivar . . . . . 118
- Orcel, J. . . . . 99
- Orthoclase, development in mag-  
 ma (Johnsen; Walker) . . . . . 42  
 ——— growth in soil (Mügge). 19
- Palache, C. Chrysoberyl; Hart-  
 ford, Me.** . . . . . 217  
 ——— Pegmatites, Maine 68, 217
- Papish, Jacob . . . . . 21
- Paradoxite (Schüler) . . . . . 22
- Parker, R. L. . . . . 215
- Parsons, A. L. Pectolite, apophyl-  
 lite; Que . . . . . 67  
 ——— . . . . . 16, 43, 66, 100, 119
- Peck, A. B. Andalusite from Cal.;  
 new use; thermal proper-  
 ties** . . . . . 66, 123
- Peckhamite (Merrill) . . . . . 42
- Pectolite, apophyllite, Que. (Par-  
 sons) . . . . . 67
- Pegmatites, Maine (Palache) . . . . 68
- Petrology (Harker) [book review] 173
- Phenacite, Oberlausitz (Henglein) 120
- Philadelphia Mineralogical Society 13,  
 36, 73, 96, 117, 156, 171, 231
- Phillips, A. H. Thomsonite;  
 N. Y.** . . . . . 67, 240
- Phosphorescent sulfides (Tiede,  
 Schleede) . . . . . 197
- Piezo-electric resonator (Cady) . . . 215
- Pilz, R. . . . . 19
- Plastic crystals of  $\text{NH}_4\text{NO}_3$  (Bond) 198
- Poitevin, E. Lansfordite; Atlin,  
 B. C.** . . . . . 225  
 ——— and Ellsworth, H. V.  
**Optical data for sussexite** . . . . 188
- Polymorphous substances  
 (Brauns) . . . . . 158
- Porter, Mary. Note on struvite** . . . 93
- Priceite; Cal. (Foshag)** . . . . . 11, 94
- Prior, G. T. Catalogue of meteor-  
 ites [book review] . . . . . 16
- Puertollano minerals (Melon) . . . . 216
- Pyrargyrite twins (Böggild *et al.*) . . 19
- Pyrite; Tucson (Ayres)** . . . . . 91  
 ——— morphology (Ulrich) . . . . 176
- Quartz in meteoric stones (Mer-  
 rill)** . . . . . 112  
 ———, isotropic (Winchell) . . . . 235  
 ———, rose, cause of color  
 (Holden) . . . . . 67, 75, 101  
 ———, color (Wild, Liesegang) 216

- Quartz**, geol. thermometer  
 (Mügge) ..... 42  
 ———, smoky (Raman)..... 41
- Radium bearing pegmatites, Ont.  
 (Ellsworth)..... 21, 216
- Radley, E. G. .... 198
- Raman, C. V. .... 41
- Rammelsbergite, Ont. (Walker,  
 Parsons)..... 100
- Ramsdell, L. S. Strychnine sulfate 65
- Rancieite (Haas)..... 20
- Ranfaldi, F. .... 216
- Realgar at Matra (Orcel)..... 99  
 ——— (Pilz, Schröder, Thost). 19
- Refractometers (Leiss, Thomas,  
 Hallimond)..... 158
- Remingtonite (Shannon)**..... 208
- Renck, Julius..... 119
- Rettger, R. E. Calcite replaced by  
 gypsum**..... 153
- Rinne, F. .... 216
- Rogers, A. F. Clinzoisite; Lower  
 Cal**..... 221  
 ——— Compn. of colophane.. 67  
 ——— Friedel's law..... 65  
 ——— Kempite..... 66
- Röntgen, W. C. .... 198
- Rose, H. .... 197
- Rosenbusch-Wülfing. Mikro-  
 skopische Physiographie [book  
 review]..... 172
- Rosicky, V. .... 19, 20
- Rotation apparatus (Kerr)**..... 169
- Rotatory power (Longchambon).. 233
- Rothrock, A. W. .... 20
- Ruff, Otto..... 158
- Russian minerals (Chirvinsky)... 20
- Rutherford, R. L. Method for  
 checking index of a liquid**... 207
- Sakao, T. .... 41
- Sarcopsidite (Holden)**..... 205
- Scapolite (Winchell)**..... 108
- Schairer, J. F. and Lawson, C. C.  
 Copiapite; Santa Maria Mts.,  
 Cal**..... 242
- Scharizer, R. .... 22
- Scheumann, K. H. .... 44
- Schleede, A. .... 197
- Schmidt, Paul..... 158
- Schoep, A. .... 120, 156
- Schröder, R. .... 19
- Schüler, W. .... 22
- Schwartz, G. M. Hisingerite;  
 Parry Sound**..... 141  
 ——— **Xonotlite; Minnesota**.. 32
- Scorodite; New York (Martens)** 27
- Seto, K. .... 18, 40
- Shannon, E. V. Cr-colored mar-  
 garite; Md**..... 194  
 ——— **Remingtonite**..... 66, 208  
 ——— **Carrollite**..... 66  
 ——— **see Hawkins, A. C.**... 1  
 ——— **see Larsen, E. S.**... 238  
 ——— 40, 99, 122, 140
- Shibata, Y. .... 39
- Shumaker, J. B. .... 20
- Silica, stability (Wietzel)..... 157
- Silicates, constitution (Gossner).. 40  
 ——— in dolomites (Borisov). 232
- Silver nitrate, action on FeS<sub>2</sub>  
 (Kinoshita)..... 214
- Slavik, F. .... 20, 233
- Slavikova, L. .... 233
- Soil minerals (Whitney)..... 43
- Solid soln.; isomorphism (Jakob) 140
- Spectrum of silicates (de Gra-  
 mont)..... 22
- Spencer, L. J. .... 44, 96, 122, 198
- Spencerite (Walker, Parsons).... 43
- Stannous sulfide (Spencer)..... 44
- Staszicite (Morozewicz)..... 38
- Staurolite twins (Friedel)..... 215
- Stearns, H. T. Origin of niter de-  
 posit; Dubois, Idaho**..... 135
- Stibnite, morphology (Jezek).... 176
- Stilpnomelane (Grout and Thiel)** 228
- Struvite (Porter)**..... 93
- Strychnine sulfate (Ramsdell).... 65
- Sulfo-salt minerals, classification  
 (Wherry, Foshag)..... 100
- Sulpho-salts of Pb and Cu, iso-  
 morphism in (Foshag)..... 140
- Sussexite, optical data (Poitevin,  
 Ellsworth)**..... 188

- Sutton, J. R. . . . . 42  
 Svetolik, S. . . . . 232  
 Symmetry in crystal axes (Niggli) . . . . . 121  
 Swedish mineralogy (Aminoff) . . . . . 43
- Thiel, G. A., see Grout, F. F.** . . . . 228  
 Thomas, H. H. . . . . 158  
 Thomas, Ellis Germanite, mineral-  
 ography . . . . . 66  
 ———— . . . . . 43
- Thomsonite; New York (Phil-  
 lips)** . . . . . 67, 240  
 Thost, V. . . . . 19  
 Tiede, E. . . . . 197  
 Tomas, L. . . . . 233  
 Topaz (Rosicky) . . . . . 20  
 Trevorite (Crosse, Walker) . . . . . 98  
 Trumbull, Conn.; minerals  
 (Shannon) . . . . . 99  
 Tuxtlite (Washington) . . . . . 18
- Ullmannite, Harz (Mieleitner) . . . . . 119  
 Ulrich, F. . . . . 176  
 U. S. National Museum collec-  
 tions (Foshag, Shannon) . . . . . 122
- Valenton, J. J. P. . . . . 121  
 Vanadinite, Transvaal (Wagner) . . . . . 139  
 Vapor pressure of Si, Al, and Ca  
 oxides (Ruff, Schmidt) . . . . . 158  
 Variscite, peganite, lucinite (Lar-  
 sen, Schaller) . . . . . 69
- Wagner, P. A. . . . . 139  
**Waldschmidt, W. A. Ti-jefferi-  
 site; Westcliffe, Colo.** . . . . 113  
 Walker, T. L. Chapmanite . . . . . 66  
 ———— . . . . . 16, 42, 43, 98, 100  
 ———— and Parsons, A. L. Co-  
 Ni arsenides . . . . . 66
- Wallace, R. C. Cyanite, unusual  
 occurrence** . . . . . 69, 129
- Wardite (Larsen, Shannon) . . . . . 66  
 Washington, H. S. . . . . 18, 21, 214  
 Watson, T. L. Hoegbomite, Va. . . . . 67  
 ———— . . . . . 100  
 Wells, R. C. Action Cu salts on  
 chalcocite . . . . . 68  
 Weslienite (Flink) . . . . . 174  
 Wetzel, W. . . . . 44  
**Wherry, E. T. At the surface of a  
 crystal** . . . . . 45  
 ———— Atomic volume iso-  
 morphism . . . . . 165  
 ———— . . . . . 100  
 Whitney, Milton . . . . . 43  
 Widmer, E. . . . . 215  
 Wietzel, Rudolf . . . . . 157  
 Wild, G. O. . . . . 216  
 Willmann, Karl . . . . . 44  
 Wilson, M. E. . . . . 99  
**Winchell, A. N. Isotropic quartz** . . . . . 235  
 ———— Scapolite . . . . . 108  
 ———— . . . . . 43
- Witherite at Many Glacier,  
 Mont. (Fuller)** . . . . . 154  
 Wittich, E. . . . . 99  
 Wolff, W. . . . . 100  
 Wulfenite; Kas-Kai-Gur (Flint) . . . . . 176  
 Wyckoff, R. W. G. . . . . 121
- Xonotlite; Minnesota (Schwartz)** . . . . . 32  
 X-ray analysis 13 metals (Hull) . . . . . 158  
 ———— patterns in detn. opaque  
 minerals (Kerr) . . . . . 65
- Yxsjö minerals (Zenzen) . . . . . 120  
 Zenzen, N. . . . . 120  
 Zeolite, paragenesis (Parker) . . . . . 215  
 Zies, E. G. . . . . 211  
 Zincite, structure (Aminoff) . . . . . 121  
 Zsivny, V. . . . . 215