

P.120/31/I



# The Mining Magazine

## INDEX TO VOLUME XLIV. — JANUARY TO JUNE, 1931.

	PAGE		PAGE
Aerial.—Ropeway Calculations (G. Brillo), 81; Ropeways, The Mechanics of (G. Brillo), 18; Surveying.....	206	Bauxite in the Gold Coast .....	71
Africa, <i>Living</i> (Willis)—Review .....	219	Bawdwin Mine, Ore Reserve Calculations at the (A. B. Colquhoun) .....	329
Africa, Notes on the Provisional Correlation of the Rocks of South and Central (G. C. Barnard) .....	210	Beatty, G. H.—The Randfontein Estates .....	137
African and European Investment Co. ....	262, 326	Benguela Railway .....	194
African Selection Trust .....	199	<i>Bergbaumechanik</i> (Maercks)—Review .....	91
Alaska, Notes on the Geology of Upper Nizina River .....	127	Beryl Mining Co. ....	34
Alberta, <i>Geology of Southern</i> , etc. ....	191	Beryl, Treatment of .....	252
Alcock—Zinc and Lead Deposits of Canada—Review .....	348	Beryllium Metallurgy (2), 252; Patent .....	382
Aldermac Mine, 224, 294; Anderson and McKay—Digest ..	58	Betts Cove Area, Newfoundland, Geology .....	317
Algeria, Mechanical Mining in .....	125	Bibiani (1927), Ltd. ....	7
Aluminates, Preparation of—Patent .....	317	Bideford Black, Dressing of—Morgans—Digest .....	60
Aluminium Metallurgy—Patent .....	318	Birthday Honours .....	322
Aluminium, <i>Secondary</i> (Anderson) .....	318	Bismuth in the Transvaal .....	228
Amalgamated Metal Corporation .....	72	Bituminous Ores, Treatment of—Patent .....	253
Amari Nigeria Tin Mines (1931) .....	192	<i>Bituminous Sandstone near Vernal, Utah</i> .....	127
American.—Engineers in Russia, 2; Institute 60th Anniversary .....	322	Blackburn—New Concentrator, Treadwell Yukon—Digest ..	381
Amulet Mine, Flotation at (Hubler)—Digest .....	305	Blast-Furnace Slags and other Data .....	126
<i>Analysis of Rocks, Chemical</i> (Washington)—Review .....	219	Borax Consolidated .....	136
<i>Analysis, Technical Methods of Chemical</i> .....	253	Bore-Hole.—Cores and Sludges, D. K. F. MacLachlan on Sampling and Estimation of, 132; and Digest, 180; G. F. Hatch on Check Sampling at Trepeca Mines, 132, 190; Pumping .....	252
Anderson and McKay—Aldermac Mine, Quebec—Digest ..	58	Bornite Leaching .....	252
Anglo African Exploration .....	199	Boulder Perseverance .....	99, 384
Anglo-American Alaska Association .....	320	Boydell—Geological Structure at the Keeley Mine—Digest ..	247
Anglo American Corporation .....	70, 134, 198, 262, 326	Brackenbury, C., on Clay Mining in South Devon .....	132, 190
Anglo American Holdings .....	256	Brakpan .....	262
Anglo-Continental Mines Co. ....	8	Bralco Development and Investment Co. ....	94
Anglo-French Exploration Co. ....	263	Brillo, G.—Aerial Ropeway Calculations, 81, and The Mechanics of Aerial Ropeways .....	18
Anglo-Spanish Construction Co. ....	326	Briseis Tin Mine .....	98
Anyox Concentrator .....	317	Britannia Lead .....	64
Apex (Trinidad) Oilfields .....	128	Britannia Mining and Smelting Co. ....	37, 94
Ariston Gold Mines .....	8	British-Borneo Petroleum Syndicate .....	264
Arlington-Relief Mines .....	354	British Columbia Mineral Output for 1930 .....	93
Ashanti Goldfields .....	7, 71	British Industries Fair .....	131, 168
Askania Minimeter, The .....	167	British Non-Ferrous Metals Research Association's New Headquarters Opened .....	322
Asphalt, Mining Rock .....	125	British Oilfields Development Syndicate .....	128
Assoba Mines .....	320	British South Africa Co. ....	134, 136, 327
Associated Gold Mines of Western Australia .....	64	Brodigan, C. B., on Rand Mining Practice .....	259
Associated Northern Blocks (W.A.) .....	384	Broken Hill—Metallurgy at, 125; Minerals (Smith)—Digest ..	241
Associated Oil Drillers and Refiners .....	256	Broken Hill Proprietary Block 14 Co. ....	128
Associated Tin Mines of Nigeria .....	383	Broken Hill Proprietary Co. ....	72, 263, 291, 317
Association of Scientific and Technical Institutions .....	130, 253	Broken Hill South .....	263, 291, 316
Asturias Minerals Corporation .....	128	Buena Tierra Mining .....	72, 320
Austral Development .....	136	Buenos Aires Exhibition .....	194
Australia.—Gold Bonus in, 2; Mineral Production of, in 1930, 353; Shale-Oil Industry of .....	98, 353	Bukoba (Tanganyika) Tinfields .....	7
Awkrat Mines .....	320	Burma Corporation .....	328
B.C. Silver Mines .....	355	Bwana M'Kubwa .....	70, 134
Balahat Gold Mines .....	200		
Ball-Mill.—Efficiency, 252; Studies, 190; Work Input (Gross and Zimmerley)—Digest .....	369	Cadmium.—Assay, 126; Detection .....	317
Bannister and Gowland— <i>The Metallurgy of the Non-Ferrous Metals</i> —Review .....	90	Calcium-Magnesium Separation .....	382
Barker— <i>The Study of Crystals</i> —Review .....	157	California, <i>Metal Mining in</i> .....	63
Barnard, G. C.—Notes on the Provisional Correlation of the Rocks of South and Central Africa .....	210	California: <i>Names and Definitions of Geologic Units</i> .....	253
Barrett and Gregory—General Stratigraphy—Review .....	220	Cambridge University Mineralogy Department .....	130
Barry-Hollinger .....	40, 93, 164, 224	Cameron—Deephole Drilling at the Rosebery Mine—Digest ..	309
Bartoli Process .....	227	Camsell, Dr. Charles, Receives Institution Gold Medal 258, ..	322
Barytes Refining—Patent .....	318	Canada, <i>Lead and Zinc Deposits of</i> (Alcock)—Review .....	348
Bateman, H.B., and R. P. Reichenbach—Geophysical Tests in the Rhine Valley .....	280	Canada.—Mineral Output for 1930, 223; New High Commissioner. ....	2
		Canadian Copper Refiners, Ltd. ....	164



2671.

# THE MINING MAGAZINE

	PAGE		PAGE
Canadian Lorrain .....	264		
Candlish, E. D.—Diamond Recovery from Gravels and Clays in Gold Coast Colony .....	333	Davis.—Action of Sulphur Dioxide on Manganese Ores— Digest .....	190
Canusa .....	356	Davison, C.— <i>Japanese Earthquake of 1923</i> —Review .....	352
Cape Asbestos .....	383	Davison, E. H.— <i>Handbook of Cornish Geology</i> —Review .....	349
Cape Coast Exploration .....	198	Dawson Gold Mines .....	354
Carbonaceous Slime Tailings, Retreatment of .....	252	De Beers Consolidated .....	6, 70, 198
Carnochan and Spence—Radium in Ontario—Digest .....	377	Denœl and Fourmarier— <i>Géologie et Industrie Minière du Pays de Liège</i> —Review .....	288
Carpenter, Sir Harold, and Ancient Metallurgy .....	258	Denver Portable Mills .....	233
Central Manitoba .....	41, 90, 225	DeVanev and Clemmer—Concentration of Manganiferous Iron Ores—Digest .....	125
Central Mining and Investment Corporation .....	326	Diamond.—Mines of South Africa, 190; Recovery from Gravels and Clays in Gold Coast Colony (E. D. Candlish), 333; Restriction Scheme, 6, 264, 326; Southern Rhodesia .....	34
Central Patricia .....	96, 295, 357	Diatomite .....	382
Central Provinces Manganese Ore Co. ....	200	Dome Mines .....	40, 95, 163, 356
Cerro de Potosi .....	198	Dominion Explorers, Ltd. ....	317
Chambishi, Geology and Ore-Deposits of .....	252	Dorr Co. Changes .....	362
Champion Reef .....	200	Draper, Memorial to Dr. David .....	296
Chinese Engineering and Mining .....	328	Dredging a River .....	190
Chosen Corporation .....	64	Drill.—Sampling, 62; Steel Sharpener, New .....	103
Chromite.—in Asia Minor, 317; in Ontario (Hurst)—Digest .....	189	Drilling, Deephole, at the Rosebery Mine (Cameron) Digest .....	309
Chromium.—Determination, 126; Metallurgy—Patent .....	62	Dunstan—Cyanide Extraction for Oxidized Copper Ores— Digest, 314; and Electro-Deposition of Gold—Digest .....	179
City Deep .....	318	Durban Roodepoort Deep .....	70, 255
Clark, A. W.—Ore-Deposits of the Otavi Mountains, South- West Africa .....	265	Dust in Mining .....	62
Classification.—by Elutriation—Patent, 191; of Fine Powders .....	382	Dwight-Lloyd.—Furnace—Patent, 253; Process Applied to Rammelsberger Ores .....	252
Clay Mining in South Devon, C. Brackenbury on .....	132, 190	East Cornwall Wolfram .....	384
Clemmer and DeVanev—Concentration of Manganiferous Iron Ores—Digest .....	125	East Geduld Mines .....	70, 198, 255, 262
Cloke—Differential Abrasive Milling—Digest .....	189	East Pool and Agar .....	41, 200, 228
Cloncurry Minerals .....	352	East Rand Proprietary .....	318
Coal.—Australian, 35, 161, 222, 290, 353; British Columbian, 38; Composition of Wyoming, 252; Hydrogenation, 197; Strip Mining of .....	382	Economics of Precious Metals Production .....	317
<i>Coal, The Propagation of Combustion in Powdered</i> .....	127	Electro-Deposition of Metals—Patent .....	191
<i>Coal Dusts, Inflammation of</i> .....	253	Electrolysis of Molten Haloids—Patent .....	191
<i>Coal Fields of the United States</i> .....	127	Electrolytic Refining .....	317
Cologne Mining Exhibition .....	258	Electrolytic Zinc Co. ....	71
Colombian Mining and Exploration .....	264	Elutriation.—in Classification—Patent, 126; in Ore-Dressing (Gaudin, Groh and Henderson)—Digest .....	49
Colquhoun, A. B.—Ore Reserve Calculations at the Bawdwin Mine .....	329	Emeralds in the Transvaal .....	34
Columbium and Tantalum, Extraction of (Fink and Jenness) —Digest .....	124	Empire Mineral Resources .....	66, 131
<i>Compressed Air Plant (Peele)</i> —Review .....	287	English Crown Spelter Co. ....	136
Coniaurum .....	95, 223, 294	English Steel Corporation Winding Engines .....	231
Consolidated African Selection Trust .....	199	Enterprise Syndicate .....	99
Consolidated Diamond Mines .....	6, 198, 263	Esperanza, Ltd. ....	8
Consolidated Gold Alluvials of British Columbia .....	128, 225	Explosion Measuring .....	382
Consolidated Mines Selection Co. ....	200	Explosives, Toxic Gases from .....	190
Consolidated Mining and Smelting Co. 37, 38, 94, 96, 136, 353, 355 Consolidated Tin Mines of Burma .....	64	Fabulosa Mines .....	384
Copper.—Cyanide Extraction for Oxidized Ores (Dunstan)— Digest, 314; Extraction—Patent, 126; Milling in New Mexico (Hodges)—Digest, 380; Nickel in Hudson Bay, 317; Ore Flotation in Portugal, 317; Production of High Conductivity—Patent, 191; Recovery from Fine Ores and Dump Materials (Sullivan and Towne)—Digest, 113; Red-Bed Deposits, 382; Refining—Patent, 253; Refining at Mount Lyell, 252; Shale of Mansfield, Dr. J. W. Gregory on, 3; Vermont District .....	317	Falconbridge .....	39, 96, 162, 224, 355
Copper Cliff .....	39, 90	Fan.—Selection of a Mine (H. G. Smith), 213, 258; Testing (Davies)—Digest .....	115
Coppermine River Area Geology .....	317	Fanti Consolidated Investment Co. ....	8
<i>Cornish Geology, Handbook of</i> (Davison, E. H.)—Review .....	349	Felspar, Magnetic Purification of Ground—Digest .....	61
Cornwall, Mining Scheme for .....	41	Ferreira Estate .....	70
Covellite Leaching (Sullivan)—Digest .....	187	Ferro Alloy, Proprietary Ltd. ....	35
Crowle, P. J., on Kolar Gold Field Rock-Bursts .....	67, 125	Filtering Lead and Zinc Concentrates (C. Q. Schlereth) .....	157
Crown Diamond Mining and Exploration Co. ....	134	Fink and Jenness—Extraction of Tantalum and Columbium —Digest .....	124
Crown Mines .....	227, 254	<i>Firedamp, Ignition of, etc.</i> .....	126
Crushing Practice .....	190	Flin Flon .....	40, 295
<i>Crystals, The Study of</i> (Barker)—Review .....	157	Flotation.—at the Amulet Mine (Hubler)—Digest, 305; of Copper Ore in Portugal, 317; Effect of Grinding Time and Pulp Dilution on, 252; Effect of Particle Size on, 252; of Gold in Copper Ores (Leaver and Woolf)—Digest, 251; Lead-Zinc, 62; at North Broken Hill, 317; of Oxidized Silver Ores (Gieser)—Digest, 312; Plant in Algeria, 190; "Poisons," Control of—Patent, 191; at Zinc Corporation .....	317
Cyanide, Effects of Copper and Zinc on .....	382	Fourmarier and Denœl— <i>Géologie et Industrie Minière du Pays de Liège</i> —Review .....	288
Cyanide.—Extraction for Oxidized Copper Ores (Dunstan)— Digest, 314; New Method for Recovery of .....	322	Fraser and Chalmers's "Sherwen" Screen .....	231
Daggafontein Mines .....	70, 159, 198, 262, 326	<i>French-English and English-French Dictionary, etc.</i> (Kettridge)—Review .....	158
Dams.—A Device for Controlling Mine, G. Trestrail on .....	3	French Fluor Spar .....	64
Davies.—Fan Testing—Digest .....	115	Frontino and Bolivia Co., Gold Mines of the (W. H. Rundall) .....	66, 73

# THE MINING MAGAZINE

	PAGE		PAGE
Fullerton Creek Alluvial Gold .....	295	Hecla Mining Co. ....	226
Furnace, Roasting, Improvements—Patent. ....	382	Heidelberg District on the Rand .....	358
Gases, Inflammable .....	382	Henderson, Gaudin and Groh—Elutriation in Ore-Dressing— Digest .....	49
<i>Gaotoma and Battlefields, Geology of Country between</i> .....	191	Hignett, Royster and Madorsky—Smelting of Potash and Phosphate Minerals—Digest .....	119
Gaudin, Henderson and Groh—Elutriation in Ore-Dressing— Digest .....	49	Hobson Creek Mining Co. ....	355
Geco Electric Sampler .....	361	Hodges—Copper-Milling in New Mexico—Digest .....	380
Geduld Proprietary Mines .....	255	Hoisting, Underground .....	125
Geevor .....	41	Hole-Directors, H. Simon on The Use of, in Ground-Breaking Control, 195 and Digest .....	243
Goldenhuis Deep .....	192	Hollinger Consolidated .....	40, 95, 163, 223, 293, 356
General Mining and Finance Corporation .....	263	Hollinger Precipitate, Matthew Scott on Treatment of, to Produce Fine Gold, 195, and Digest .....	248
Geneva Lake, Ontario, Lead-Zinc Deposit .....	382	Holman Drill Sharpener .....	360
Geological Survey, Netherlands East Indies (J. B. Scrivenor) .....	285	Hongkong Tin .....	8
<i>Géologie et Industrie Minérale du Pays de Liège</i> (Fourmarier and Denoël)—Review .....	288	Howe Sound Co. ....	94, 225
<i>Geology, Bibliography of North American</i> .....	253	Howey Mine .....	96, 295, 357
<i>Geology, Elementary Economic</i> (Ries)—Review .....	350	Hubler—Flotation at the Amulet Mine—Digest .....	305
<i>Geology, Outline of Historical</i> (Schuchert)—Review .....	351	Hudson Bay Mining and Smelting Co. ....	96, 164 (2), 224, 295, 357
<i>Geology, Outlines of Physical</i> (Longwell)—Review .....	92	Hunt and Kraus— <i>Tables for the Determination of Minerals</i> — Review .....	91
Geophysics.—Determination of Magnetic Fields—Patent, 317 ; Electrical Exploration in Civil Engineering (Leonardon)— Digest, 185 ; Electrical Prospecting in, 126, 252 ; Electro- magnetic Absorption by Rocks, 382 ; Exhibition of Apparatus used in, 194 ; Ground Resistivity Map, 317 ; Magnetic Surveying, 190 ; Measurement of Resistivity, 190 ; New Process in—Patent, 126 ; Proposed School of, at the Imperial College, 133 ; Radiore Methods in, 317 ; Surface Potential Methods, 317 ; Tests in the Rhine Valley (R. P. Reichenbach and H. B. Bateman) .....	280	Hurst—Chromite in Ontario—Digest .....	189
<i>Geophysics, Applied</i> (Shaw)—Review .....	194	Hydrogenation—Patent .....	317
<i>Geophysik, Handbuch der</i> —Review .....	349	I. M. M. Sieve Passes .....	324
Geothermal Gradient in Rocks .....	317	<i>Idaho, A Graphic History of Metal Mining in</i> .....	127
Gieser—Flotation of Oxidized Silver Ores—Digest .....	312	Idris Hydraulic Tin .....	328
Globe and Phenix Gold .....	319	Ignatieff, A.—Gold Reefs at Remance Mine, Panama .....	153
Gloucester-Manganese Co. ....	227	Indian Copper Corporation .....	8, 328
Gold.—Alluvial in the Bolivian Andes, 317 ; Alluvial in Korea, 62 ; Bearing Pyrite in the Pyrenees, 190 ; Bonus in Australia, 2 ; Discovery in Queensland, 160 ; Electro- Deposition of (Dunstan)—Digest, 179 ; Find in Western Australia, 36 ; Flotation of, in Copper Ores (Leaver and Woolf)—Digest, 251 ; Mining in Australia, 291 ; Mining, Some Methods of (Whitehouse)—Digest, 177 ; Murichison Range Ores, 34 ; New Zealand, 317 ; Nugget Find in Larkinsville, 71, 99 ; Orange Free State, 158, 227 ; Origin of Rand, 126 ; Reef Discovery in Southern Rhodesia, 92 ; in Southern Rhodesia, 295 ; Standard Replacement, Sir Auckland Geddes on, 324 ; Tube-Milling Ores of .....	190	Indo-China, Mineral Industry of .....	382
Gold Coast Colony, Diamond Recovery from Gravels and Clays in (E. D. Candlish) .....	333	Institute of Metals.—American Meeting, 130 ; New Journal .....	66
Gold Coast Consolidated Lands .....	320	Institution.—Annual Meeting, 322 ; Dinner, 258 ; Gold Medal .....	258
Gold Coast Mines .....	128	International Diamonds .....	256
Gold Mines of Australia .....	353	International Nickel Co. ....	39, 96, 162, 224, 355
Golden Horse Shoe (New) .....	8	Iron.—Concentration of Manganiferous Ores (DeVaney and Clemmer)—Digest, 125 ; Mining in Australia, 316 ; Ore Industry, the Lake Superior (R. S. Lewis), 342 ; Sponge, Manufacture—Patents .....	253, 317
Gopeng Consolidated .....	135	Isamungu Gold Mine .....	128
Government Gold Mining Areas .....	254	Itanf Mines .....	320
Gowland and Bannister— <i>The Metallurgy of the Non-Ferrous Metals</i> —Review .....	90	<i>Japanese Earthquake of 1923</i> (C. Davison)—Review .....	352
Granada Rouyn .....	40, 164, 224, 294, 357	Jennens and Fink—Extraction of Tantalum and Columbium— Digest .....	124
Granby Consolidated Mining, Smelting and Power Co. 38, 94, 354		Jeppé, C. W. B., Receives Consolidated Gold Fields Medal 258, 323	222
<i>Greensand Bibliography to 1930</i> .....	191	Jervois Range Minerals .....	127
Gregory, Dr. J. W., on Copper-Shale of Mansfeld .....	8	Jos Tin Area (Nigeria) .....	127
Gregory and Barrett— <i>General Stratigraphy</i> —Review .....	220	Kaduna Prospectors .....	327
Grigalund Exploration and Finance .....	64	Kaduna Syndicate .....	327
Groh, Gaudin and Henderson—Elutriation in Ore-Dressing— Digest .....	49	Kafue Copper Development Co. ....	7
Grootvlei Proprietary Mines .....	198, 262	Kagera (Uganda) Tinfields .....	71, 383
Gross and Zimmerley—Ball-Mill Work Input—Digest .....	369	Kansanshi Mine .....	7, 327
Hadfields Crushers .....	232	Katanga-Rhodesia Sediments .....	62
Hanlon's Reward (Jervois Range), Ltd. ....	222	Kay Yew (Kinta Valley) Tin Mines .....	263
Hanton— <i>Metalliferous Mine Surveying</i> —Review .....	91	Keeley Mine Geological Structure (Boydell)—Digest .....	247
Harvey's Works, Royal Visit to .....	362	Kendall—Stamp-Mill Screens—Digest .....	370
Hatch, G. F., on Check Sampling of Diamond Drill-Holes at Trepana Mines .....	132, 190	Kettridge— <i>French-English and English-French Dictionary</i> , etc.—Review .....	158
Haulage by Electric Locos .....	252	Kinta Tin .....	384
		Kirkland Lake .....	40, 96, 163, 223, 294, 356
		Koffyfontein Mines .....	108
		<i>Kohle, Entstehung, Veredlung, und Verwertung der</i> —Review ..	350
		Kolar Gold Field Rock-Bursts, P. J. Crowle on .....	67
		Kootenay-Florence .....	226
		Korea, Alluvial Gold in .....	62
		Kraus and Hunt— <i>Tables for the Determination of Minerals</i> — Review .....	91
		Kurra Falls Hydro-Electric Station .....	2, 32
		Lake Shore .....	40, 95, 163, 223, 294, 356
		Lake Superior Iron Ore Industry (R. S. Lewis) .....	342
		Lake View and Star .....	63, 99, 135, 199, 263
		Land and Royalty .....	320
		Langlaagte Estate and Gold .....	255

# THE MINING MAGAZINE

	PAGE	PAGE
Lawn Hills	97	264
Leaching Improvements—Patent	382	
Lead—Determination of, 382; Production of White—Patent, 62; Silver Discoveries near Mount Isa, 36; Smelting, 125; Zinc Concentrates, Filtering (C. Q. Schlereth), 157; Zinc Depost, Geneva Lake, Ontario, 382; Zinc Flotation	62	
Lead and Zinc Deposits of Canada (Alcock)—Review	348	
Leaver and Woolf—Flotation of Gold in Copper Ores—Digest	251	
Lena Goldfields	8	
Leonard—Electrical Exploration in Civil Engineering—Digest	185	
Lewis, R. S.—The Lake Superior Iron Ore Industry	342	
Lightning Creek Gold Mines	225	
London Tin Corporation	136	
Lonely Reef Gold	383	
Longwell—Outlines of Physical Geology—Review	92	
Lorne Gold Mines	39, 94	
Low, V. F. S.—Panama	201, 273	
Lower Bisichi (Nigeria) Tin Mines	135	
Lower Perak Tin Dredging	162	
Luipaard's Vlei Estate and Gold Mining Co.	134	
Lydenburg Gold Farms Co.	262, 357	
Lydenburg Platinum Areas	93	
McCreedy Tins	127	
McIntyre Porcupine	40, 95, 163, 293, 356	
McKay and Anderson—Alderma Mine, Quebec—Digest	58	
MacLachlan, D. K. F., on Sampling and Estimation of Bore-Hole Cores and Sludges, 132, and Digest	180	
Macassa	356	
Madorsky, Hignett and Royster—Smelting of Potash and Phosphate Minerals—Digest	119	
Maerks— <i>Bergbaumechanik</i> —Review	91	
Magnesite in the Transvaal	358	
Magnesium-Calcium Separation	382	
Magnetic—Separator, A New, 229; Susceptibility of Core Samples	190	
Malaria Prevention	66	
Malaya, Opening for British Plant in	161	
Malayan Statistics	37	
Manganese—Natal, 227; Ores, Action of Sulphur Dioxide on (Davis)—Digest	190	
Manganese Corporation	34, 358	
Manganiferous Iron Ores, Concentration of (DeVanev and Clemmer)—Digest	125	
Manitoba, Prospecting Areas in North-West	317	
Mansfield Copper-Shale, Dr. J. W. Gregory on	3	
Mason, Death of F. H.	165	
Mason and Barry, Ltd.	264	
Mawchi Mines	72	
Melchett, Death of Lord	2	
Mepale (Burma) Oil	128	
Merricks, Frank, Receives French Honour	296	
Meru Tin	8	
Metal—Position at end of 1930, 4; Prices, W. Pellew-Harvey on Effect of Fall of, 323; Scrap, De-Tinning—Patent, 382; Sponge, Production of—Patent	191	
Metallgesellschaft	72	
Metallography	382	
Metallurgy—Ancient, 258; Broken Hill, 125; in South Africa (S. W. Smith)	24	
Metallurgy of the Non-Ferrous Metals (Gowland and Bannister)—Review	90	
Metropolitan-Vickers Winding Engines	105	
Meyer and Charlton Gold	318	
Milling—Differential Abrasive (Clove)—Digest, 189, and Patent, 253; Practice	190	
Milner—Sedimentary Petrography—Review	89	
Mine Lamps, Permissible Electric	63	
Mine Timber Preservation—Taylor—Digest	56	
Mineral—Classification—Patent, 125; Resources Exhibition, 66, 131, 194; Resources Survey	258	
Mineral Position of the British Empire, A Survey of—Review	131	
Mineral Products, Guide to the Study of Non-Metallic	382	
Mineralogy, Spectrum Analysis in	318	
Minerals Separation	264	
Minerals, Tables for the Determination of (Kraus and Hunt)—Review	91	
Mining—Alluvial Tin with Dragline Excavators (S. A. Westrop), 8; Clay in South Devon, C. Brackenbury on, 132, 190; Losses of Ore in, G. W. Eaton Turner on, 67, 125; Open-Stope, 316; Pellew-Harvey on Effect of Fall in Metal Prices on, 323; Support of Workings in Deep, P. J. Crowle on, 67, 125; Witwatersrand (Whitehouse)—Digest	177	
Modderfontein B.	192	
Modderfontein Deep Levels	255	
Moffatt-Hall	356	
Molybdenum Analysis—Digest	125	
Mond Nickel Company Refinery Opening	261	
Money versus Man	191	
Montana: Geology of the Big Snowy Mountains	383	
Montreal Mine (Schaus)—Digest	125	
Morgans—Dressing of Bideford Black—Digest	60	
Morgon Hot Miller	103	
Morkwa, Ltd.	71	
Morocco Minerals Syndicate	8	
Mount Coolon	353	
Mount Elliott	221	
Mount Horror Gold Find	291	
Mount Isa, 35, 71, 97, 159, 199, 221, 289, 352; and Silver-Lead Discoveries near	36	
Mount Lyell Mining and Railway Co.	36	
Mount Morgan	160, 263, 352	
Mount Oxide	221, 352	
Mount Wellington	101	
Mufulira Copper Mines	134, 327	
Murchison Range Gold Ores	34	
Murex, Ltd.	264	
Mysore Gold Mining Co.	199	
Namaqua Diamonds, Ltd.	70	
Naraguta Extended	319	
Naraguta Karama Areas	383	
Naraguta Korot Areas	64	
Natal: The Geology of the Country Surrounding Nkandhla	383	
National Mining Corporation	264	
Natural Gas, Re-Forming	190	
N'Changa	6, 70	
Netherlands East Indies Geological Survey (J. B. Scrivenor)	285	
New Consolidated Gold Fields	199, 263	
New Goldfields of Venezuela	72	
New Guinea Goldfields	72	
New Jagersfontein	198	
New Kleinfontein Co., 92, 319, 326; Ore-Body	6	
New Modderfontein	326	
New Morro Velho Gold Mining Co.	295	
New State Areas	254	
Newfoundland.—Iron Ore, 190; Mining	252	
Niagara Falls Survey, 1927	383	
Nickel.—Copper in Hudson Bay, 317; Extraction—Patent, 126; Transvaal	252	
Nigerian Consolidated Mines	64	
Nippoldt— <i>Verwertung magnetischer Messungen zur Mutung</i> —Review	349	
Nitrate Deposits in South-Eastern California	383	
N'Kana Mine	327	
Noranda	40, 64, 224, 294, 356	
North Broken Hill	71, 135, 263, 291, 317, 327	
North Kalgurli Co.	99	
Northern Nigerian Lead Mines	384	
Novo Brdo Mines	8	
Nundydroog Mines	256, 328	
Nyasaland Minerals	7	
O'Brien Cadillac	164	
Offin River Gold Estates	64	
Oil.—from Coal, 197, 322, 353; Effect of Vacuum on Wells, 62; Gas-Lift Method of Flowing Wells, 62; -Shale in Natal, 93; -Shale in New South Wales	353	
Oil Properties and Holdings	320	
Oliver United Filters Changes	362	

# THE MINING MAGAZINE

	PAGE		PAGE
Ontario Gold Output for 1930 .....	95	Rhodesia.—Gold Reef Discovery in Southern, 92; Malaria	
Oregum Mine .....	72, 135, 319	Prevention in, 66; Railway Development, 69, 194; Vanadium	
Ore.—Dressing, Elutriation in (Gaudin, Groh and Henderson)—Digest, 49; Dressing Progress in 1930, 382; Grinding, 125; Losses during Mining, G. W. Eaton Turner on, 67, 125; Reserve Calculations at the Bawdwin Mine (A. B. Colquhoun) .....	329	Recovery at Broken Hill .....	88
Oroville Dredging .....	320	Rhodesia Broken Hill Development Co. ....	71, 199
Otavi Mountains, S.W. Africa, Ore-Deposits of the (A. W. Clark) .....	265	Rhodesia-Katanga Co. ....	7, 70, 327
Pahang Consolidated .....	264	<i>Rhodesia, Southern, Geology West of Mount Darwin</i> .....	318
Palmer Development Co. ....	98	Rhodesian Anglo American .....	7
Palmer River Gold .....	260	Rhodesian Congo Border Concession .....	6, 7, 135, 136
Panama (V. F. S. Low), 201, 273; and Gold Reefs at Remance Mine (A. Ignatieff) .....	153	Rhodesian Selection Trust .....	134, 327
<i>Panama: A Geologic Study of the Madden Dam Project</i> .....	191	Rhokana Corporation .....	135, 327
Panama Corporation .....	8, 72, 136, 200, 264	Ries— <i>Elementary Economic Geology</i> —Review .....	350
Pandora .....	164, 224, 294	Rio Tinto Co. ....	135, 200
Parsons, Death of Sir Charles .....	130	Roan Antelope Copper Mines .....	7, 327
Peele— <i>Compressed Air Plant</i> —Review .....	287	Robinson Deep .....	134, 254, 358
Pelepah Tin Dredging .....	135, 256	Rock.—Bursts in the Kolar Gold Field, P. J. Crowley on, 87, 125; Drill Maintenance, 316; Handling in Narrow Stopes .....	125
Pellew Harvey, Mr. W.—Elected President of the Institution, 2; Presidential Address of .....	323	Rooiberg Minerals .....	263
Penawat (Malaya) Tin Dredging .....	128	Ropeways, The Mechanics of Aerial (G. Brillo), 18; and Calculations .....	81
Pengkalen .....	319	Rose Deep .....	192
Perak River Hydro-Electric Power Co. ....	72	Rosebery Mine, Deephole Drilling at (Cameron)—Digest .....	309
Petaling Tin .....	192	Royal School of Mines Annual Dinner, 324; Register .....	194
Peters Arc Welding Plant .....	297	Royster, Hignett and Madorsky—Smelting of Potash and Phosphate Minerals—Digest .....	119
Petroleum.—Hydrogenation, 62; North American, 126; Refining .....	190	Rundall, W. H.—The Gold Mines of the Frontino and Bolivia, etc. ....	66, 73
Phosphate Minerals and Potash, Smelting of (Madorsky, Hignett and Royster)—Digest .....	119	Russia, American Engineers in .....	2
Pioneer Gold Mines .....	39	Ruston-Bucyrus Excavator Mounting .....	361
Platinum.—Refinery at Acton, Opening of, 261; Transvaal .....	227	Rutherford, Lord, on Oil from Coal .....	322
Pneumatic Analysis of Fine Powders .....	382	St. John del Rev, 136, 194, 320, and Gold Medal .....	66
Polish Mining Law .....	130	<i>Salt Industry of Canada, The (Heber)</i> .....	127
Porter-Idaho Mines .....	355	San Antonio Mines .....	164
<i>Potash Bibliography to 1928 (Berliner)</i> .....	127	San Finx Tin Mines .....	328
Potash and Phosphate Minerals, Smelting of (Madorsky, Hignett and Royster)—Digest .....	119	San Francisco Mines of Mexico .....	128
Potgietersrust Platinums .....	6, 93	Santa Gertrudis Co. ....	328
Power Holdings .....	122	<i>Saskatchewan, Geology of Southern, etc.</i> .....	191
<i>Power and the Internal Combustion Engine</i> .....	382	Schaus—Montreal Mine Digest .....	125
Premier Gold Mining Co. ....	37, 39, 94, 164, 226	Schlereth, C. Q.—Filtering Lead and Zinc Concentrates .....	157
Premier (Transvaal) Diamond Mining Co. ....	70	Scholarships at Missouri School of Mines .....	66
Producer Gas Lorry .....	104	Schuchert— <i>Outline of Historical Geology</i> —Review .....	351
Pumping, Underground .....	252	Scott, Matthew, on Treatment of Hollinger Precipitate to Produce Fine Gold, 195, and Digest .....	248
Quasi-Arc Welding .....	105	Scraper-Loading .....	125
Queensland.—Mining Concessions, 36, 97; Mining Laws .....	98	Screen Sizes .....	253
Radium in Ontario (Spence and Carnochan)—Digest .....	377	Scrivenor, J. B.—Netherlands East Indies Geological Survey .....	285
Rahman Hydraulic Tin .....	263	<i>Sedimentary Petrography (Milner)</i> —Review .....	89
Rambutan .....	128	Settlingstones Witherite Mine, G. Trestrail on .....	3
Rand.—Foot-Wall Reef in the Far East, 159; Labour, 198; Mining, H. Simon on the Use of the Hole-Director in, 195, and Digest, 243; Mining Practice, C. B. Brodigan on, 259; Origin of Gold, 126; Phthisis Compensation .....	198	Shaft.—Sinking at Texas Salt Mine, 62; Surveying at Broken Hill South .....	316
Rand Mines, Ltd. ....	198	Shale-Oil Industry, Australian .....	98
Rand Selection Corporation .....	198, 326	Shamva Mines .....	199
Randfontein Estates, 134, 255, and G. H. Beatty .....	137	Sherritt-Gordon .....	41, 164, 224, 295, 357
Ransomes and Rapier Excavators .....	361	Sieve.—the Passing of the I.M.M., 324; Sizes .....	258
Raub Gold Mine .....	37	Silicosis.—International Conference on, 130; Regulations .....	66
Red-Bed Copper Deposits in Nova Scotia .....	382	<i>Silicosis: Records of International Congress, Johannesburg, 1930</i> .....	130, 191
Redmayne, Sir Richard, on Oil from Coal .....	322	Silver.—in Chemical Plant, 190; Fall in Price of, 2, 68; Flotation of Oxidized Ores (Gieser)—Digest, 312; Lead Discoveries near Mount Isa .....	36
Reichenbach, R. P., and H. B. Bateman—Geophysical Tests in the Rbine Valley .....	280	<i>Silver, Economic Relations of to other Metals, etc.</i> .....	63
Reid—Sulphur Production in Texas—Digest .....	52	Simmer and Jack Mines .....	254
Remance Mine, Panama, Gold Reefs at (A. Ignatieff) .....	153	Simon, H., on the Use of Hole-Directors in Ground-Breaking Control, 195, and Digest .....	243
Reno Gold Mines .....	39, 354	Sinal Mining .....	320
<i>Research, Report of the Department of Scientific and Industrial</i> .....	133	Sione Tin (F.M.S.) .....	328
—Review .....	133	Siscoe Gold Mine .....	164, 224, 294, 357
Rexman Mill .....	104	Smith—Broken Hill Minerals—Digest .....	241
Razende Mines .....	199	Smith, H. G.—The Selection of a Mine Fan .....	213, 258
		Smith, S. W.—Metallurgy in South Africa .....	24
		Snowflake Mine, B.C. ....	252
		Société Générale des Minerais .....	72
		Society of Chemical Industry Jubilee .....	258
		Sons of Gwalia .....	99, 384
		South Bukeru Areas .....	319

# THE MINING MAGAZINE

	PAGE		PAGE
South Crofty .....	41,	Trestrail, G., on Settingstones Witherite Mine .....	3
South Kalgurli Consolidated .....	327	Tungsten Ores, Mining and Milling .....	382
South-West Africa, The Ore-Deposits of the Otavi Mountains (A. W. Clark) .....	265	Turner, G. W. Eaton on Ore Losses in Mining .....	67, 125
Southern Rhodesia Base Metals Corporation .....	7	Turner and Newall .....	256
Spence and Carnochan—Radium in Ontario—Digest .....	377	Tweefontein Colliery .....	266
Springs Mines .....	70, 262, 326	Uganda Railways .....	69
Stainless Metals .....	382	Underground Supports, Reinforced Concrete .....	316
Stamp-Mill Screens (Kendall)—Digest .....	370	Union Corporation .....	198, 262, 326, 357
Standardization in Engineering .....	66	<i>United States, Boundaries, Areas, etc., of</i> .....	127
Stefano Syndicate .....	384	Van Ryn Deep .....	254
Stone Crushing .....	382	Vanadium.—Determination, 123; Recovery at Rhodesia Broken Hill .....	88
Stopes, Handling Rock in Narrow .....	125	Ventilation.—in Arizona, 190; in Ecuador, 190; in Mining, 62; Tables for .....	62
Stoping.—Cut-and-Fill, 382; Open, 316; Square-Set, 125; by Top-Slicing .....	252	Vergelegen Oil Shale and Mineral Co. ....	93
Straits and General Development Co. (1931) .....	192	Vermont Copper District .....	317
<i>Stratigraphy, General</i> (Gregory and Barrett)—Review .....	220	<i>Verwertung magnetischer Messungen zur Mutung</i> (Nippoldt)— Review .....	349
Sub Nigel .....	70	Vickers-Armstrong's Winding Engines .....	231
Sudbury Offsets .....	224	Village Deep .....	70, 134, 162, 358
Sullivan—Leaching of Covellite—Digest .....	187	Vipond .....	40, 95, 163, 294
Sullivan and Towne—Copper Recovery from Fine Ores and Dump Materials—Digest .....	113	Vlakkfontein .....	262, 357
Sulphide Corporation .....	63	<i>Volcanoes</i> .....	253
Sulphide Roasting—Patents (2) .....	62	Waelz Process .....	382
Sulphur.—Distillation—Patent, 62; Mining, 316; Pre- paration—Patent, 62; Production in Texas—Reid—Digest .....	52	Waihi Gold Mining .....	319
Sungei Besi Mines .....	135	Waite-Montgomery .....	40, 224
Sungei Kinta Tin Dredging .....	319	Walker, Edward, Obituary Note .....	165
<i>Surveying Calculations</i> (Winiberg)—Review .....	286	Wanderer Consolidated Gold Mines .....	134
<i>Surveying, Metalliferous Mine</i> (Hanton)—Review .....	91	Washington— <i>Chemical Analysis of Rocks</i> —Review .....	219
Switbin's Investment .....	128	Waterval Platinum Mining Co. ....	93
Sylvanite .....	40, 163, 356	West Australian Gold.—Discoveries, 36, 71, 99; Yield for 1930 .....	100, 161
Tadanac Smelter .....	93, 382	West Mexican Mines .....	136
<i>Tanganyika: A Note on the Geology of the Country around Tandagaru</i> .....	191	West Rand Consolidated Mines .....	318
Tanganyika Railways .....	69	West Springs .....	262
<i>Tanganyika Territory: Deposits of Newala-Lindi Area</i> .....	318	Westrop, S. A.—Mining Alluvial Tin with Dragline Excavators 9 .....	177
Tanjong Tin Dredging .....	384	Whitehouse—Mining on the Witwatersrand—Digest .....	177
Tantalum.—(Youngman)—Digest, 123; and Columbium, Extraction of (Fink and Jenness)—Digest .....	124	Williams—Tin Dredging—Digest .....	316
<i>Tantalum and Niobium</i> .....	127	Willis— <i>Living Africa</i> —Review .....	219
Taylor—Mine Timber Preservation—Digest .....	56	Wiluna Gold Corporation, 99, 135, 195, 263, and Arsenic Recovery Plant .....	72
Teck-Hughes .....	40, 95, 163, 223, 294, 356	Winiberg— <i>Surveying Calculations</i> —Review .....	286
Tebidy Minerals .....	136, 228	Witpoort Gold Areas .....	262
Tekka-Taiping .....	319	Witwatersrand Deep .....	262, 319
Telluride .....	96, 164, 224	Witwatersrand Gold .....	255
Texas Sulphur Production—Reid—Digest .....	52	Witwatersrand System, Origin of .....	190
Tharsis Sulphur and Copper .....	256	Woolf and Leaver—Flotation of Gold in Copper Ores—Digest .....	251
Theodolite, the Tavistock .....	382	Wright-Hargreaves .....	40, 96, 163, 223, 294, 356
Tigon Mining and Finance .....	264	Yelnu Syndicate .....	128
Timber, Mine, Preservation—Taylor—Digest .....	56	<i>Yosemite Valley, Geologic History of the</i> .....	127
Tin.—in Bolivia, 382; in China, 317; Dredging, 101, and (Williams)—Digest, 316; Electrolysis of Salts of—Patent, 126; Extraction Process—Patent, 126; Mining Alluvial, with Dragline Excavators (S. A. Westrop), 9; Mining, Evolution of, 293; Research, 66; Restriction, 37, 100, 136, 161, 165, 200, 228, 264, 291, 328; Scrap—Patent .....	317, 382	Youngman—Tantalum—Digest .....	123
Torbrtit Mining Co. ....	94	Yuanmi Mine .....	135
Tough Oakes-Burnside .....	164, 226	Yuba Dredge, A New .....	162
Towne and Sullivan—Copper Recovery from Fine Ores and Dump Materials—Digest .....	113	Yukon Consolidated .....	72
Toyo Tin, Ltd. ....	264	Zante Oilfields .....	192
Transport of Ore .....	190	Zimmerley and Gross—Ball-Mill Work Input—Digest .....	369
Transvaal Torbanite .....	295	Zinc.—Blende Roasting—Patent, 62; -Lead Concentrates, Filtering (C. Q. Schlereth), 157; -Lead Deposit, Geneva Lake, Ontario, 382; -Lead Flotation, 62; Metallurgy— Patent, 317; Ores, Furnace for—Patent, 63; Oxide Pre- paration—Patent, 63; Smelting in High-Silica Retorts, 126; Vapour Condensation—Patent, 317; Volatilization .....	62
Treadwell Yukon, 39, 96, 163, 356; New Concentrator (Black- burn)—Digest .....	381	Zinc Corporation .....	71, 135, 263, 291, 317, 327
Trepca Mines, 200, 264, 328; G. F. Hatch on Check Sampling of Diamond Drill-Holes at .....	132, 190	<i>Zinc Industry, World Survey of the</i> .....	383
		<i>Zinc and Lead Deposits of Canada</i> (Alcock)—Review .....	348