

INDEX

**THE ENGINEERING
AND
MINING JOURNAL**

115443

VOLUME LXXIII

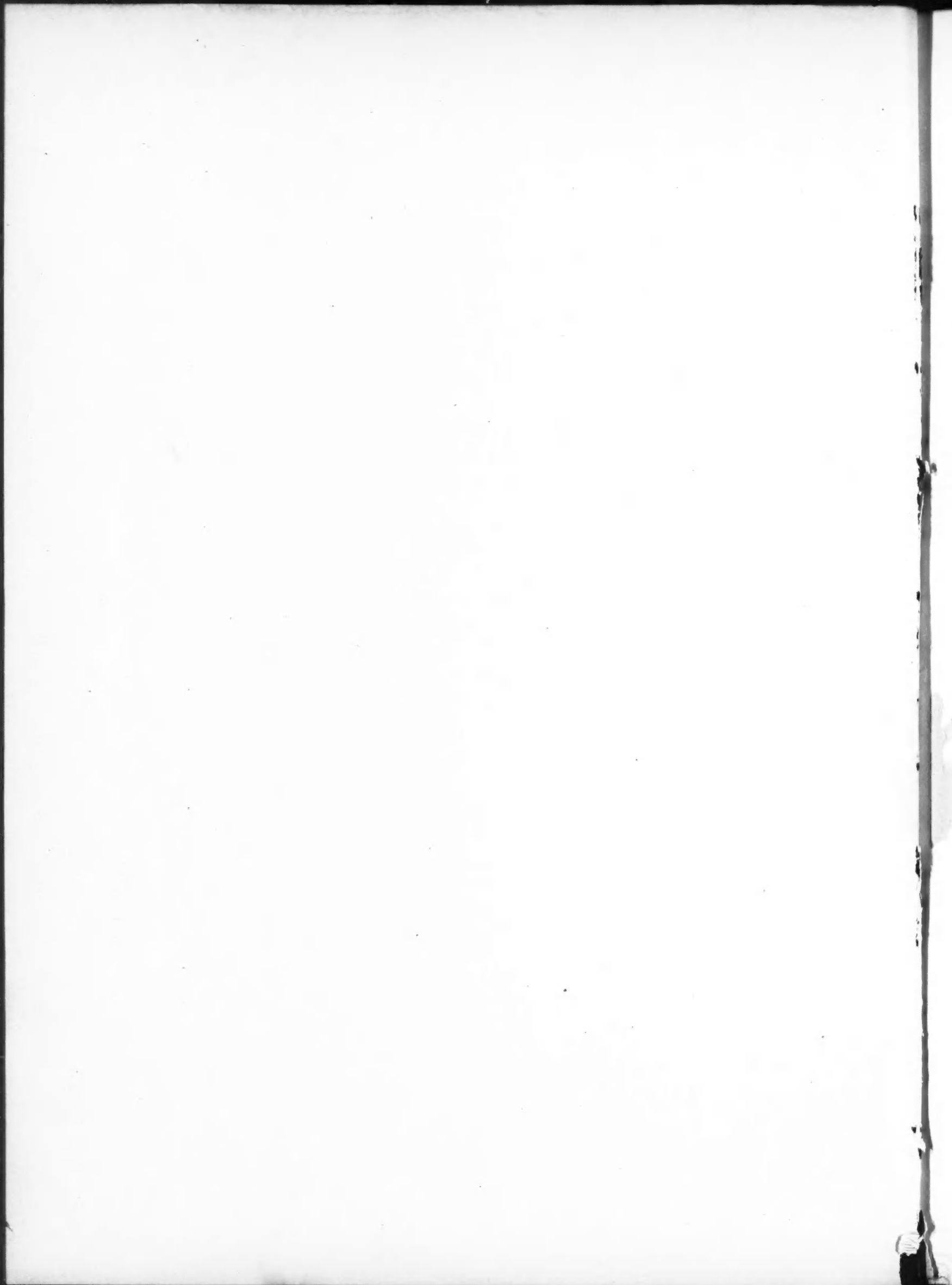
JANUARY TO JULY

1902

THE ENGINEERING AND MINING JOURNAL

INCORPORATED

261 Broadway, NEW YORK



THE ENGINEERING AND MINING JOURNAL

VOLUME LXXIII, JANUARY TO JULY, 1902

INDEX

(Illustrated Articles are Designated by an Asterisk; Names of Books Noted are in Quotation Marks.)

A	
Abadie, E. R. 284	Alabama, Brick Production..... 562
Abandonment, Intention an Element as to. 627	Alabama, Building Stone Production..... 562
Abandonment of Oil Lease, What Constitutes..... 622	Alabama Car Service Association..... 846
Abandonment, Right to Royalties on..... 705	Alabama Coal and Coke Production..... 36, 332, 359, 423, 548, 562, 791
Abdawal Mg. Co., Colo. 622	Alabama, Coal on Government Land..... 635
Abbey Cyanide Gold Mg. and Milling Co., Mont. 638	Alabama Coal Mine Accidents..... 399
Abbe Alice Mine, Mont. 907	Alabama Coal Miners Wages..... 90, 228, 399, 536, 601, 642
Abtrott, Capt. Robert A. 284	Alabama Coal in 1901..... 36
Abe Lincoln Mg. Co., Colo. 872	Alabama Coal Operators' Association..... 877, 813
Abendroth & Root Mfg. Co., N. Y. 253, 903	Alabama Con. Coal and Iron Co., Ala. 423, 462
Abengarez Gold Fields, Ltd., Costa Rica, 120, 397, 812	Alabama Con. Coal and Iron Co., Report..... 523
Abercrombie, E. E. 284	Alabama District, United Mine Workers of America..... 536, 710
Aberdeen Con. Mg. Co., N. M. 398, 874	Alabama, Dolomite Production..... 562
Aberdeen Mg. Co., S. D. 675	Alabama Gold and Silver Production..... 66
Abernant Mine, Ala. 710	Alabama Iron Industry in 1901..... 18
Acacia Gold Mg. Co., Colo. 117, 362, 636	Alabama, Iron Ore Production..... 562
Accident, Evidence that Miner Worked After..... 863	Alabama, Pig Iron Production..... 562
*Accident in New York Subway..... 161, 164	Alabama Iron and Steel Shipments..... 19, 155, 293, 431, 569, 878
Accidents in Alabama Coal Mines..... 399	Alabama, Lime Production..... 562
Accidents in the Chemical Industry..... 732	Alabama, Limestone for Flux Production..... 562
Accidents, Coal Mine..... 686	Alabama Mine, Cal. 771
Accidents in German Coal Mines..... 754	Alabama Mineral Production..... 562
Accidents, Mining in Great Britain..... 161	Alabama, New Blast Furnace..... 858
Acetylene and Calcium Carbide in Austria-Hungary..... 67	Alabama, New Phosphate Deposits..... 562
Acetylene Gas Generator, New..... 101	Alabama, Ochre Production..... 779
Acetylene Gas for Lighthouses..... 140	Alabama Steel and Wire Co. 261, 333, 367, 431, 537, 814, 911
*Acetylene Lamps in New York Subway..... 420	Alamo Oil Co., Wyo. 290
Acheson Graphite Co., N. Y. 187, 310	Alamo Oil Well, Colo. 595
*Acheson's Pat. Metallurgical Process..... 357	Alaska, Geologic Work..... 268
Acheson's Pat. Terminal for Electric Furnaces..... 904	Alaska Goldfields, Ltd. 142
Acid, Exports, U. S. 214	Alaska Gold Mines Corporation, Alaska..... 115
Acid Market in 1901..... 39	Alaska, Gold and Silver Production..... 66
Acid Phosphate Prices..... Weekly	Alaska-Mexican Gold Mg. Co., Alaska..... 115
Acids, Market and Prices..... Weekly	*Alaska-Mexican Gold Mg. Co., Alaska, Report..... 587
*Acker Electrolytic Alkali Process..... 658	Alaska Mine, Cal. 737
Ackerman, A. A. 805	Alaska Mine, Utah..... 876
Acklin's Pat. Car-Haul..... 283	*Alaska Mineral Resources, Investigation of..... 585
Acklin's Pat. Casting Apparatus..... 632	Alaska, Navigation on Tanana River..... 244, 355
*Acklin's Pat. Conveyor Belt..... 901	Alaska, Nome Mining Conditions..... 762
Acklin's Pat. Drive Mechanism for Crushing Rolls..... 591	Alaska, Nome and Norton Bay Regions..... 727
Ace Cement Co. 284	Alaska, Tin..... 145, 373
Ace Concentrator..... 664	Alaska United Gold Mg. Co., Alaska..... 147, 325
Ace Gold Mg. Co., Colo. 808	*Alaska United Gold Mining Co., Report..... 729
Ace Mining Machinery Co., Utah..... 114, 593, 806, 859	*Alberger Cooling Towers..... 665
Actinolite Production, Canada..... 387, 414	Alberta, Canada, Coal in..... 766
Ada Mine, Mont. 257	Alberta Coal Fields on Crow's Nest Pass Branch of Canadian Pacific Railway..... 757
Ada Mine, Pa. 533	Albion Mine, Utah..... 331
Adams, C. W. 709	Albro Mine, Colo. 495
Adams, E. J. 324	Alder Creek Gold Mg. Co., S. Dak. 192, 458, 598, 707, 773, 810
Adams, W. H. 735	Alder and Ruley, "Coal Statistics"..... 450
Adelle Con. Mg. and Milling Co., Idaho..... 328	Aldrich, Col. T. H. 333
Adela Mine, Mexico..... 708	Alen, R. H., New Method of Treating Auriferous Gravels..... 319
Adkinson, Henry M., Clarence King..... 109	Alexander Colliery, B. C. 409
*Adobe Reverberatory Furnace..... 828	Alexander, G. E. 147
Adventure Con. Mg. Co., Mich. 395, 564, 637, 739, 809, 907	Alford, Charles J., Gold Mining in Egypt..... 103
Aetna Con. Quicksilver Mg. Co., Cal. Report..... 622	Algeria, Mining..... 99
Aetna Mine, Cal. 463	Algeria, Phosphate Sales..... 230
Africa, Silver in..... 557, 589	Algodones Smelter, N. M. 810
After Supper Mine, Colo. 531	Algoma Commercial Co., Ont. 676
Afterthought Mine, Cal. 530, 737, 771	Algonquin Coal Co., Pa. 639
Agassiz, Alexander..... 735	Allicante Mines, Colo. 595, 608
Agatized Wood, U. S. 316	Allice Mine, Idaho..... 596
Agile, William C., "Eastern Peru and Bolivia"..... 28	Allice Mg. Co., Cal. 871
Agricultural Co-operative Society, Germany..... 432	Alhunde Con. Mg. Co., Colo. 296
Aguatec Gold Mg. Co., Costa Rica..... 120	*Alkali, Acker Electrolytic Process..... 658
Ahmeek Mine, Mich. 597	Alkaline Cyanides, Making, Darling's Pat. 700
Aichino, Giovanni, "Bauxite"..... 279, 525	Alladin Mine, Cal. 424
Aida No. 2 Mine, Mo. 150	Allan, John..... 769
*Aiken's Pat. Ore Crusher..... 837	Allard's Pat. Eliminating Slate from Coal..... 452
Aimee Mine, Colo. 287	Allegheny Coal Co., Pa. 225
Ainsworth, William & Sons, Colo. 736	Allegheny County Coal Land Sales, Pa. 192
Air Compressing Apparatus, Burdick's Pat. 282	Allegheny Mg. Co., Colo. 455
Air Compressing and Cooling Apparatus, Eberg's Pat. 81	Allegheny Steel and Iron Co., Pa. 711
Air Compressor and Cooler, Ostergren's Pat. 390	Allen & Co.'s Pat. Stamp Shoes and Dies..... 357
*Air Compressor, Franklin..... 630	Allen Concentration Plant, Colo. 906
*Air Compressor, Hill's Pat. 836	Allen, D. H. 633
Air Compressor, Hydraulic, Weyand's Pat. 667	*Allen, E. T., New Government Laboratory and Its Work..... 654
Air Compressor and Intercooler, Cowley's Pat. 734	Allen, O. M., Jr. 338
Air Compressor, O'Connell's Pat. 451	*Alliances, Contribution a l'Etude des..... 248
Air Compressor, Reeder & Freville's Pat. 591	Allis-Chalmers Co. 58, 84, 115, 187, 253, 325, 359, 392, 423, 454, 492, 493, 528, 529, 593, 634, 669, 703, 805, 806, 839, 871, 903
Air Compressor, Regulating Device, Sergeant's Pat. 559	Allison Ranch Con. Mg. Co., Cal. 807
Air Compressor, Rhine's Pat. 734	Allis's Pat. Continuous Heating and Metal Rolling..... 901
Air Compressors, Clayton..... 355	Allis's Pat. Feeding and Heating Metal Plates..... 733
*Air Compressors, Electrically Operated..... 733	Allis's Pat. Furnace..... 357, 733
Air Currents, Measuring, Thompson's Pat. 185	Allis, William..... 186
Air Superheater or Carburetor, McCall's Pat. 901	Allouez Mg. Co., Mich. 86, 395, 426, 456, 739, 842
Atchison, Robert, Perforated Metal Co., Ill. 187, 220	Alloy Castings, Improving, Sperry's Pat. 421
*Ajax Gold Mg. Co., Colo. 61, 148, 149	Alloy, Gesner's Pat. 251
Ajax Hill Mine, Cal. 770	Alloy Making, Keller's Pat. 527
Ajax Mine, Mont. 86, 498, 632, 907	Alloy, Non-Corroding, Wolfe & Geiger's Pat. 491
Ajax Mine, Utah..... 427	Alloy, Rubel's Pat. 631
Ajax Mg. Co., S. D. 289	Alloys, Magnetic Behavior of..... 185
Akers, William A. 284, 422	Alloys, Prices..... Weekly
Alabama, Bauxite Mining..... 39	
Alabama, Bauxite Production..... 562	

Anita Mine, Mexico..... 708
 Annealing Furnace, Danner's Pat. 390
 *Annealing Silver, Stickney's Pat. 708
 Annie Laurie Mine, Utah..... 257, 290, 708
 Anselmo Mine, Mont. 810
 Antelope Mfg. Co., Colo. 287
 Anthony Mine, Cal. 286, 300
 Anthony Mine, Ont. 120
 *Anthracite Coal Breaker, Arkansas. 277
 Anthracite Coal Combinations 66
 Anthracite Coal Consumption at Mines. 834
 *Anthracite Coal Fields of Pennsylvania, Map" 216
 Anthracite Coal Freight Rates 389
 *Anthracite Coal Industry" 280
 Anthracite Coal Marketing 341
 Anthracite Coal Mining Costs 437
 Anthracite Coal Production, U. S. 32, 195, 305, 332, 396, 430, 601, 791, 857
 Anthracite Coal Shipments, U. S. 752
 Anthracite Coal Sizes 242
 Anthracite Coal, Spain Weekly
 Anthracite Coal Trade Weekly
 Anthracite Coal Trade in 1901 34
 Anthracite Labor Situation 652, 686
 Anthracite Mine Conditions 896
 Anthracite Mine Laws in Pennsylvania. 97
 Anthracite Miners' Demands 458, 753
 Anthracite Miners' Strike, Pa. 502, 707, 747, 751, 785, 788, 821, 853, 875, 885
 Anthracite Miners' Wages 887
 Anthracite Mines, Pa., Lessons from Floods in 378
 Anthracite Mine Workers, Nationality 138
 Anthracite Regions, Industrial History of 823
 Anthracite Regions, What are the "Intolerable Conditions" in 855
 Anthracite Trade, An Episode in the History of 576
 Antimony, California 9, 505
 Antimony Imports, U. S. 63, 198, 309, 506, 646, 781
 Antimony Market, New York, in 1901 32
 Antimony Market and Prices Weekly
 Antimony Ore, California 9, 455, 595, 705
 Antimony Ore Production, Portugal 245, 761
 Antimony Ore Treatment, Flew's Pat. 357
 Antimony, Removing from Ores, Ploeg's Pat. 734, 901
 Antimony Sulphide, Duty on 554, 697
 Antioch Coal Mfg. Co., Ind. 362
 Apache Mine, Cal. 222
 Apache Mine, Wash. 844
 Appetite in Canada 809
 Apex Equipment Co., N. Y. 806, 870
 Apex Mfg. Co., Utah 363, 811
 Apex-Right, What is it Worth? 544
 Apollo Coal Co., Pa. 289, 363
 App Mine, Cal. 188, 872
 Appleton Iron Mine, Mich. 426, 532
 April Fool Mine, Nev. 331
 Aragon Mine, Mich. 637
 Arcona Mine, Cal. 905
 Arcadian Mine, Mich. 61, 86, 89, 224, 288, 365, 426, 596, 809, 874
 Archer Iron Works, Ill. 115
 Arctic Chief Mine, Yukon 168
 Areturus Mine, Minn. 244, 457
 Ardath Mfg. Co., Ariz. 251
 Argall, Phillip 82, 453, 592, 902
 "Argentina, Bulletin of Public Works" 179
 Argonaut vs. Kennedy Mfg. Co., Cal. 391, 596
 Argonaut Gold Mfg. Co., Cal. 392
 Argus Mines and Tunnel Co., Colo. 188, 904
 Arimex Consolidated Copper Co., Ariz. 225
 Arizona Copper Co., Ltd., Ariz. 115, 285, 423, 562, 704, 871
 Arizona Copper Co., Ltd., Report 354
 Arizona, Copper Production 23
 *Arizona, Geology of Gallure Mountains 546
 Arizona Gold and Copper Co., Ariz. 115
 Arizona, Gold Deposits of 795
 Arizona, Gold and Silver Production 66
 "Arizona Governor's Report" 79
 Arizona, Miners' Liens 108
 *Arizona, Mining Revival at Tombstone 314
 *Arizona, Tombstone Mining District 584
 *Arkansas, Anthracite Coal 277
 Arkansas, Bauxite Mining 89
 Arkansas, Coal Production 791
 Arkansas Lead and Zinc Fields 738
 Arkansas Phosphate Industry 262
 Arkins, Charles T. 702, 735, 805
 Arlington Copper Co., N. J. 619
 Arlington Mine, B. C. 501, 809
 Armer-Plate Manufacture, Charpy's Pat. 590
 Armer-Plate Treatment, Jamison's Pat. 184
 Armstrong, George E. 845
 *Armstrong's Nipple Holder 801
 *Armstrong's Pat. Assaying Ores 632
 *Armstrong's Pat. Obtaining Zinc from Ores or Mattes 868
 Arn's Pat. Artificial Granite 219
 Arnold, E., "Armature Windings of Direct Current Dynamos" 628, 698
 Arnold Hill Iron Mine, N. Y. 773
 Arnold Leasing Co., Colo. 771
 Arnold Mine, Mont. 118, 150
 Arnold Mfg. Co., Mich. 86, 256
 Arosarena, R. M. de 186
 Arps Mine, Cal. 84
 Arsenic 788
 Arsenic and Lead Mines in the Pyrenees 861
 Arsenic Market in 1901 39
 Arsenic Market and Prices 92, 187, 262
 Arsenic Ore Production 242
 Arsenic Production, Canada 387, 414
 Arsenic Production, Great Britain 413, 761
 Arsenic Production, Portugal 827
 Arsenical Pyrites Production, Great Britain 453
 Arthur, E. P., Jr. 592
 Asano, Kasaku 905
 Asbestos, California 9
 Asbestos Mine, Cal. 562
 Asbestos Production, Canada 387
 Asbestos Production, U. S. 760
 Ashanti Gold-Field Companies in London 437
 Ashburton Gold-Field, Western Australia. 46
 Ash Grove Mfg. Co., Mo. 190
 Ashland Iron and Steel Co., Wis. 669
 Ashland Mine, Oregon 191
 Ashton, Frank 186, 805
 Aspen Mine, Colo. 116, 394
 *Aspen Tunnel 519
 "Asphalt and Bituminous Rock Deposits of U. S." 279, 609
 Asphalt, California 9
 Asphalt Combination 1
 Asphalt Co. of America 58
 Asphalt in Delta County, Michigan 50
 *Asphalt and Mineral Tar in Cuba 541
 Asphalt Preparing, Wolksel's Pat. 694
 Asphalt Production, Germany 549
 Asphaltum Brick 888
 Asphaltum Extracting and Refining, Bell's Pat. 836
 Aspinwald, T., Stability Tests for Smokeless Powder and Nitro Explosives 661
 Assayer's Crusher, Braun's Pat. 283
 *Assayer's Furnace, Loneragan and Calkins's Pat. 559
 *Assay Furnace, Calkins's Pat. 559
 Assay Offices, Cripple Creek, Colo., Destruction 299
 Assaying Ores, Armstrong's Pat. 632
 Assessments and Dividends in 1901 55
 Assessments Weekly
 Assessment Work Done, Sufficient Evidence to Prove 141
 Assignment of Interest in a Mining Claim 448
 *Associated Northern Gold Mine, Western Australia 426
 Assurance Gold Mfg. Co., Cal. 147, 329
 *Athabasca Mine, B. C. 411
 Atha's Pat. Preparing Sand Molds for Steel Castings 703
 Athelstan Mine, B. C. 301
 Atkinson, A. A., "Electrical and Magnetic Calculations" 834
 Atkins's Pat. Electrolytic Production of Chlorine 768
 Atlantic Dynamite Co., N. J. 453
 Atlantic Gulf & Pacific Oil Co., N. Y. 187
 Atlantic Mine, Cal. 704
 Atlantic Mine, Oregon 468
 Atlantic Mfg. Co., Mich. 118, 149, 288, 291, 362, 395, 456, 532, 596, 637, 673, 842, 907
 Atlantic & Pacific Oil Co., Texas 417
 Atlas Car and Mfg. Co., O. 675, 707
 Atlas Coke Co., Pa. 83
 Atlas Engineering Co., Pa. 119
 Atlas Engine Works, Ind. 62, 735
 Atlas Mine, Cal. 453
 Atlas Mine, Idaho 148, 188
 Atlas Oil Co., Colo. 573
 Atlas Pipe Wrench Co., N. Y. 82, 358
 Atlas Portland Cement Co., Pa. 839
 Atlin Division, B. C. 242
 Atlin Lake Mfg. Co., B. C. 844
 Atlin Willow Creek Mfg. Co., B. C. 844
 Atwood Mine, Cal. 116
 Auburn Mine, Minn. 809
 Auction Sales of Stocks Weekly
 Auerbach, Louis 82
 Augusta Mine, Colo. 116
 Auman's Pat. Brass Furnace 837
 *Auman's Pat. Smelting Furnace 283
 Auriferous Gravels, New Method of Treating 319
 Aurora Industrial Company, Mexico 802
 Aurora Mine, Cal. 326, 595
 Aurora Oil Well, Colo. 421
 *Aurora Zinc Plant, Mo. 477
 Austin Coal and Coke Co., W. Va. 397
 Austin-Bryan Mfg. Co., Ala. 879
 Austin, L. S., Theory of Underground Solution and Precipitation 318
 Australia, Copper Production 575, 787
 Australia, Gold Exports, 129, 464, 604, 747, 849
 Australia Gold Production 300
 Australia Mine Managers' Association 324
 Australia, Mineral Production of Queensland 623
 "Australia and New Zealand Statistics" 355
 Australia, Patent Office 511
 Australia, Platinum in 793
 *Australia, Saddle Reefs of Bendigo 440
 Australian Coal for South America 67
 Austria, American Gas Coal in 209
 Austria, Coal for 710
 Austria, Coal Sales, How to Increase 474
 Austria, Copper Production 787
 Austria-Hungary, Calcium Carbide and Acetylene 415
 Austria, Quicksilver Production 67
 Austria State Railroad, Coal for 814
 Austria, Utilizing Blast Furnace Gases 584
 Austria, Zinc Production 405
 Autremont, Charles, Jr. 448
 Avery's Pat. Pulverizing and Separating Line 569
 Avino Mines, Mexico 62, 153, 428, 459, 699
 Avon Mfg. Co., Colo. 60
 A. Y. & Minnie Mine, Colo. 223, 287, 327, 361, 394, 496, 595, 771, 808
 Ayres, W. L. 58
 Ayres, W. S., Some Lessons from the Recent Floods in Anthracite Mines of Pennsylvania 378
 Azo Compounds, Reduction, Buchner's Pat. 804
 Aztec Mfg. Co., Colo. 189, 223

B

Baackes's Pat. Mill for Rolling Tapering Rods 666
 Babcock & Wilcox Co. 839
 Baby Mine, Oregon 191, 773
 Bachelor Mine, Colo. 286, 636
 Bacon, Don H. 186, 220, 528, 633
 Bader Mine, Cal. 904
 Badger, H. S., Discrepancies in Cyaniding 320
 Badger Mine, Ariz. 359, 736
 Badger Mine, Cal. 495
 Badger Mine, Oregon 151, 396, 740, 875
 *Badger Oil Cup 281
 Badger's Pat. Oil Burning 667
 Badger Tunnel, Oregon 773
 Badische Anilin und Soda Fabrik, Germany 669
 Badische Anilin & Soda Fabrik's Pat. Sulphuric Acid Making 185, 491, 734, 837
 Bagdad Mine, Cal. 222, 286, 705, 807
 *Bagdaley's Pat. Automatic Haulage and Delivery System 113
 Bagdaley's Pat. Dumping Car 113
 Bailey, William 668
 Bailly's Pat. Blowing Engine 58
 *Bain, H. Foster, Driving the Newhouse Tunnel 552
 Bain, H. Foster, Progress at Idaho Springs, Colo. 351
 Baisch's Pat. Forming Bars 590
 Baker & Co. and the Rumored Platinum Combination 157
 Baker, Cyrus, Jr. 838
 Baker, David 492
 Baker Placer, Cal. 423
 *Baku Petroleum Field, Russia 613
 Balaklala Mine, Cal. 60, 495, 905
 Bald Butte Mine, Oregon 151
 Bald Eagle Mine, Colo. 85, 180
 Bald Jessie Mine, Ark. 770
 *Baldwin Acetylene Lamp in New York Subway 420
 Baldwin, Beck, Wright & Butler, South Wales 430
 Baldwin, C. W. 146, 702
 Baldwin Locomotive Works, Pa. 59, 187, 221, 324, 358, 528, 634, 903
 Baldwin Mine, Cal. 737
 Baldwin Mine, Colo. 145
 Balen Darnell Coal Co., Ind. Ter. 117
 Bai, J. Marc, "Du Sons-sol, Indo-Chine" 142
 Ballarst, Cal., Gold Mine Sales 670
 Ballard & Martin Mine, Cal. 807, 871
 Ballard Mine, Colo. 452
 Ball Grinding Mill, Lindhard's Pat. 223
 Ball Mine, Cal. 455
 Ball Mountain Development Co., Colo. 145
 *Ballou's Pat. Rock Drill 286, 393
 Balsam Flat Mine, Cal. 737
 Baltic Mine, Cal. 149, 190, 224, 256, 288, 328, 456, 532, 596, 673, 809, 842
 Baltimore Coal Exports 90, 508
 Baltimore & Hope Mine, Cal. 840
 Baltimore Mine, Cal. 807
 Baltimore Mine, Mont. 329, 457, 843
 Baltimore No. 2 Mine, Pa. 598
 Baltimore & Ohio Railroad 151
 Bamberger, J. E. 58
 Bamroff, George T. 869, 702
 Bandora Mine, Colo. 159
 Banker Mfg. Co., Colo. 705
 *Banket' Reefs 809
 Bank Statements: New York and Foreign Weekly
 Bannaek Gold Dredging, Montana 533
 Banner Mine, Idaho 117
 Banta Hill Con. Mines Co., Colo. 189
 Bant Mine, Colo. 563, 872
 Barasa Mine, Mich. 362
 Barbee & Walker Mill, Utah 364
 Barbour, Levi L. 391
 Barclay, Thomas H. 220
 Bardey & Roland Mines, New Caledonia 428
 *Bardill's Pat. Chair for Mine Cages 733
 Bar Iron, Charcoal, Duty on 832
 Barium Salts, Manufacture of 580
 Barium Sulphate 557
 Barnes-King Gold Mines Co., Mont. 329, 638, 907
 Barney, Montagu T. 592
 Barnhurst, H. E. 220
 Burnsall, William, Sr. 82
 *Barrett's Pat. Tapping Jacket 808
 Barry, H. M. 702
 Bars, Forming, Baisch's Pat. 590
 Bartlett Mill, Cal. 807
 Bartlett, C. O. & Snow Co. 839
 Bartlett, C. O. & Co., O. 83
 Bartlett Mine, Colo. 85, 116, 771
 *Bartlett's Pat. Furnace for Refining Lead and Zinc Fume 322
 Barton & McGhie's Pat. Removing Zinc from Lead 58
 Barton Mica Mines, Cal. 905
 Barton's Pat. Artificial Fuel Compressor 283
 Baryta, Making Anhydrous, Martin's Pat. 185
 Baryta Production, Canada 387
 Barytes 451
 Barytes in Missouri 762
 Barytes Production, Great Britain 413, 827
 Barytes Production, Nova Scotia 444
 Barytes Production, U. S. 268, 863
 Basalt Quarries, Cal. 807
 *Basic Steel, Laboratory Analysis of" 628
 Basil Mine, S. D. 397, 875
 Bassick Mine, Colo. 391
 Bastian's Pat. Electrolytic Meter 323
 Bassinger, Max 391
 Bates's Pat. Dredge 323
 Bates's Pat. Rock Drill 145
 Bates's Pat. Treating Explosives 734
 Battistini's Pat. Fluid for Promoting Combustion 836
 *Bauxite" 279, 525
 Bauxite Mining, Alabama 39
 Bauxite Mining, Arkansas 39
 Bauxite Mining, Georgia 39
 Bauxite in New South Wales 763
 Bauxite in 1901 39
 Bauxite Production, Alabama 562
 Bauxite Production, Great Britain 413, 827
 Bauxite Production, U. S. 860
 Bauxite Purifying, Hall's Pat. 667
 Bavaria, Coal in 892
 Bayard Tunnel, Colo. 327
 Bayhorse District, Idaho 149
 Bayless, Rawlinson T. 805
 Bay State Mfg. and Development Co., Cal. 147, 222, 254, 454, 594
 Bazien's Pat. Hydrosulphite Making 283
 B. B. Mine, Colo. 424
 B. C. Mine, B. C. 302
 Beach, Nelson Miles 653
 Beach Sand Mines, Cal. 116, 380
 Beadle, H. M., Gold Mining in Eastern Oregon 136
 Beal's Pat. Surveying Instrument 901
 Beal & Whittle, Thunder Mountain, Idaho. 834
 Beam & Bailey's Pat. Ore Treating Furnace 112
 *Beam's Pat. Ore Crushing and Pulverizing 219
 Bear Creek District, Idaho 906
 Bear Gulch District, S. D. 289, 458
 Bear Gulch Mfg. Co., Mont. 565, 773, 843
 Reason Mine, Oregon 222, 393, 454, 494
 Beatrice Mine, Cal. 560, 702
 Beatty, A. Chester 426
 Beaumont Mine, Mich. 660
 Beaumont Oil Field, Tankage Capacity 616, 675, 681, 811, 875
 Beaumont Oil Field, Texas 169
 *Beaumont Oil as Fuel, Tests 685
 Beaumont Oil Gushers, Texas 352
 Beaumont Petroleum, Free Sulphur in 101
 Beaumont, Texas, Oil Gusher 150
 Beaver Copper and Gold Mfg. Co., Utah 427
 Beaver County Mines, Utah 11
 Beaver County, Utah, Smelter for 740
 Beaverhead Copper Mfg. & Sm. Co., Mont. 907
 *Beaver Hill Coal Mine, Oregon 270
 Becker & Co., Japan 220
 Becker, Henry 453
 Becker's Pat. Mine Hoist Pulley 837
 Beck, Ludwig, "Geschichte des Eisens in Technischer und Kulturgeschichtliche Beziehung" 698
 Beckwith, J. M. 220
 Bedell's Pat. Amalgamator 491
 Bedrock Blue Gravel Mine, Cal. 562
 Beech Creek District, Pa. 844
 Bee-Lode Mfg. Co., S. D. 458, 533
 Bee's Pat. Conveyor Belt Roller 734
 Beeger, E. W. 838
 *Behrend's Improved Cyanide Process 421, 630
 *Behrend's Pat. Steel Converter 701
 Behrend's Pat. Tuyere 700
 Belcher Mine, Cal. 60, 424
 Belcher, Walter C. 336
 Belfont Iron Works Co., O. 220
 Belgian Iron Trade 20
 Belgian Mail Steamers, Order Coal Briqueuses 911
 Belgian Mine, Colo. 327, 771
 Belgium, Bank Statement Weekly
 Belgium, Coal 305
 Belgium, Coal Exports 778, 878
 Belgium, Superphosphate Combination 463
 Belgium, Zinc Production 405
 Belle of Granite Mine, Colo. 85, 286, 808
 Belle Mine, Colo. 424
 Bellevue Pump and Skein Works, Ill. 359
 Bellevue Mfg. Co., Cal. 872
 Bellevue Mine, Cal. 188, 393, 771
 Bellingier, H. C. 220
 Belliton Mountain Iron Co., Minn. 288
 Bell, Louis, "Electric Power Transmission," Bell Mine, Cal. 485, 629
 Bell Mine, Mont. 60, 841, 872, 905
 Bell, Robert 674
 *Bell, Robert, Dredging for Fine Gold in Idaho 241
 Bell, Robert, Geology of Thunder Mountain and Central Idaho 791
 Bell, Robert, Origin of the Fine Gold of Snake River 143
 Bell's Pat. Extracting and Refining Asphaltum 836
 Bell's Pat. Knife 322
 Bell's Pat. Mercury Cathode 868
 Belmont County, O., Coal Land Sale 225
 Belmont Mine, Cal. 704
 *Belt Conveyors in Gold Dredges 184
 Belt Development Co., S. Dak. 87, 192, 598
 Belt Mine, Mich. 224, 288, 395, 426
 Bement, Miles & Co., Pa. 736
 Pen Butler Mfg. Co., Utah 88, 290, 364, 428
 *Bendigo District, Queensland 440
 *Bendigo Saddle Reefs 440, 898
 Benedict Mine, S. D. 500
 Ben Harrison Mine, Ariz. 325
 Ben Harrison Mine, Utah 88, 152
 Bennett's Pat. Tempering Steel 357
 Bentley, George R. 871
 Benton Mfg. Co., Colo. 592
 Benzie Investment Co., Colo. 116, 496
 Bergan Mfg. Co., Utah 287
 Berger's Pat. Attachment for Transits 397
 Berger's Pat. Bracket for Surveying Instruments 112
 *Berger's Pat. Equatorial Adapter for Mine Surveying Instruments 112
 Berger's Pat. Lateral Adjuster for Surveying Instruments 558
 Bergsøe's Pat. Regaining Tin 185
 "Bergwerke, Bewetterung der" 248
 Berlin, Israel, "What is Chemistry?" 142
 Bernasconi Ranch, Cal. 594
 Bernigan's Pat. Process of Centrifugal Extraction 81
 Herr, Edgar H. 453
 Berry, John 805
 Berry's Pat. Copper Precipitation Tank 287
 Bertha Gold Mfg. Co., Colo. 361, 394
 Bertollo, Soliman, "Occurrence and Development of Mineral Deposits" 485, 766
 *Bertrand's Pat. Blast Furnace 667
 "Berwerke, Bewetterung des" 317
 Berwind-White Coal Mfg. Co., Pa. 458
 Besemfelder's Pat. Ammonia Making from Waste Products 81
 *Besly, Charles H. & Co., Badger Oil Cup 281
 Besly, Charles H. & Co., Ill. 187, 593, 839, 903
 Bessemer Coke Co., Pa. 192
 Bessemer Iron Ores 732
 Bessemer Land and Improvement Co., Ala. 813
 Bessemer Limestone Co., O. 453
 Bessemer Steel Plant, McCullough's Pat. 632
 Bessemer Steel Production in U. S. 415
 Best Chance Mine, Yukon 168
 Best's Pat. Ore Treatment 837
 Bethlehem Steam Hammer 581
 Bethlehem Steel Co. 58
 Bettles, A. J. 422
 Betts's Pat. Coating Aluminum 81
 Beulah Mine, Ark. 806
 Beutner, Victor 592
 *Beyer, S. W., Iowa's Iron Mine 275
 Beyer, S. W., Zinc and Lead in Iowa 586
 Bibbins, James Rowland 869
 *Bickel & Evans's Pat. Standing Valve for Wells 112
 Bickford, J. S. V., Soldering Aluminum 318
 Bierwith, Leopold C. 220
 Bierwinger & Beck Mfg. Co., Mont. 496
 Big Blackfoot Mfg. Co., Mont. 496
 *Big Buffalo Mine, Idaho 149, 456
 Big Casino Mine, Cal. 841
 Big Channel Con. Mfg. Co., Cal. 539
 Big Creek Mine, Colo. 117
 Big Evans Mfg. Co., Colo. 116, 455
 Big Five Association, Colo. 60, 188, 326
 Big Four Mfg. Co., Cal. 904
 Big Fourteen Mine, Utah 811
 Big Horn Mine, Cal. 222, 494
 Big Indian Mine, Mont. 638
 Big Indian Mining, Cal. 454, 871
 Big Mountain Mfg. Co., Mexico 120
 Big Ox Mine, Mont. 118
 Big Seven Mfg. Co., Mont. 498, 565
 Big Show Mine, Mont. 150

Table listing various topics such as 'Big Six Mine, Colo.', 'Blow, A. A.', 'British American Copper Co.', etc., with associated page numbers. The list is organized alphabetically by the first few letters of the entry name.

Buckeye Mine, Ariz. 781	Canada, Asphalt 9	Canada, Copper Production 387, 787	Casting Apparatus, Acklin's Pat. 632
Buckeye Mine, Cal. 326, 530, 670, 770	Canada, Bangor Slate Co., Cal. 562	Canada, Corundum Production 387	Casting Machine, Bock's Pat. 700
Buckeye Mine, Minn. 150, 190	Canada, Basalt Quarries 807	Canada, Feldspar Production 387	Casting Machine, Franklin's Pat. 901
Buckeye Tunnel and Mg. Co., Colo. 495	Canada, Beach Mining 116	Canada, Fire Clay Production 387	Casting-Machine, Veeder's Pat. 700
Buckhorn Portland Cement Co., W. Va. 252	Canada, Bituminous Rock 9	"Canada Geological Survey Report" 556, 628, 629, 698	Casting Mold, Michaloff's Pat. 421
Buckley Ranch, Cal. 840	Canada, Borax 9	Canada, Gold Production 5, 587	Castings, Forming, Veeder's Pat. 700
Buck Mine, Ky. 395	Canada, Cement 9	Canada, Granite Production 387	"Cast Iron" 170, 318
"Bucyrus Bucket Dredge" 310	Canada, Chrome Ore 9	Canada, Lead Production 387	Cast Iron, Silicon in 631
Bucyrus Co., O. 769	Canada, Columbia's Greeting to 856	Canada, Limestone for Flax Production 387	Castle Creek Mg. Co., S. Dak. 87, 397, 500, 811
Buek, C. E. & Co., Ala. 269	Canada, Clay 9	Canada, Gypsum Production 387	Castle Rock Gold Mg. Co., S. Dak. 598
Buena Piedra Mine, Cal. 326, 871	Canada, Coal 9, 791	Canada, Iron Ore Exports 387	Caster-Kelner Alkali Co. 531
Buena Suerta Mine, Mexico 742	Canada, Copper Co., Cal. 188, 222, 283	Canada, Lead Production 387	Catalpa-Crescent Mg. Co., Colo. 223, 361, 531
Buena Vista Mine, Ariz. 115, 520	Canada, Copper Production 7, 9	Canada, Lead Production 387	Cataract Mg. Co., Cal. 221
Buena Vista Mine, Cal. 60, 423	"California, Deep-Lying Auriferous Gravels and Table Mountains" 800	Canada, Locating Coal Lands 860	Cataract Power and Conduit Co., N. Y. 221
Buena Vista Mine, Mexico 62	Canada, Fuel Oil in 609	Canada, Manganese Exports 387	Cathode, La Cour's Pat. 185
Buena Vista Smelter, Colo. 85, 148, 361, 807	Canada, Fullers Earth 9	Canada, Mica Production 387	Catsburg Mine, Pa. 307
"Buffalo Forge Co., Engine Direct Connected to a Dynamo" 218	Canada, Gold and Copper Co., Cal. 770, 807	Canada, Mineral Production 387	Caustic Alkali Making, Frasch's Pat. 631
Buffalo Forge Co., N. Y. 358, 529, 594, 634, 670, 735	Canada, Gold in Hydraulic Tailings at Junction City 108	Canada, Mining Department for 374	Cave-Livingstone Mine, Colo. 223
Buffalo Hump District, Idaho 738	Canada, Gold King Mg. Co., Cal. 84, 148, 188, 326, 495, 670, 737, 807, 905	Canada, Natural Gas Production 387	Cave Mine, Utah 876
Buffalo Hump Syndicate, Idaho 596	Canada, Gold and Silver Production 8, 9, 96	Canada, Nickel Production 387	Cavender's Creek Mine, Ga. 86
"Buffalo Improved Down-Draft Forge" 529	Canada, Granite 9	Canada, Other Production 387	Caviness' Pat. Mixing Machine 868
Buffalo Iron Trade Weekly	Canada, Gulch Dumps, Colo. 506	Canada, Peat Production 387	Cazin, F. M. F., New Use for Titanium 249
Buffalo Queen Mine, Idaho 594	Canada, Gulch Mg. Co., Colo. 116, 223, 394, 496, 636	Canada, Petroleum Production 387	Cazin, Franz 220
Buffalo, Rochester & Pittsburg Co., Pa. 535	Canada, Gypsum 9	Canada, Pig Iron Production 380, 387	Cedar Creek Mine, Cal. 393
Buffalo Steel Co., Minn. 874	Canada, Hydraulic Mining, Decision on 576	Canada, Pottery Production 387	Celebes, Matte Smelting 522
Buffalo & Susquehanna Co. 771	Canada, Hydraulic Mining Permits 116	Canada, Pyrites Production 387	Cement, Action of Sea-water on 732
Bug Gold Mg. Co., Colo. 805	Canada, Infusorial Earth 9	Canada, Salt Production 387	"Cement, American" 486
Buhl, Frank H. 805	Canada, Iron Ore 9	Canada, Sewer Pipe Production 387	"Cement Burning Shaft Furnace, Seume-nich's Pat." 768
Building Material Production, Canada 387	Canada, Iron Ore Locations 393	Canada, Silver Production 387	Cement, California 9
Building Material, Refractory, Salamon's Pat. 57	Canada, Lead 9	"Canada, Statistical Year Book" 800	Cement Clinker, Cooling Galschlot's Pat. 452
Building Stone Production, Ala. 562	Canada, Lime 9	Canada, Tale Production 387	Cement Exports, Great Britain 52
Building Stone Production, Ont. 414	Canada, Lithia Mica 9	Canadian Copper Co., Ont. 876	Cement Exports, U. S. 214
Bullion-Beck Mg. Co., Utah 844	Canada, Macadam 9	Canadian Institute of Mining Engineers, 299, 301, 411, 369, 381, 719	"Cement-Gravel Crusher and Separator, Ohm's Pat." 452
Bullion King Mg. Co., Colo. 148	Canada, Magnesite 9	Canadian Iron and Steel Bounties 896	Cement Industry, Germany 821
Bullion Mine, S. D. 707	Canada, Manganese 9	Canadian, Mineral Production in 1901 373	Cement, MacDonell's Pat. 219
Bulluck Electric Mfg. Co., O. 58, 115, 528, 593	Canada, Marble 9	Canadian Mining Dividends 609, 786	Cement Making 526
Bulluck-Wagner Electric Mfg. Co., O. 83	Canada, Marble Mines 497	Canadian-Niagara Power Co. 221	Cement Making, Friz's Pat. 607
Bully Boy Mine, Ont. 62	Canada, Mine, Cal. 326	Canadian Society of Civil Engineers 381	Cement Making, Jordan's Pat. 001
Bully Hill Mines, Cal. 286, 393, 530, 841	Canada, Mine, Colo. 60, 531, 671	Canada Mine, New California 320	Cement Making, Warren's Pat. 57
Bunker, C. E. 422	Canada, Mine, Oregon 458	"Canal, Plan for Enlarging or Making a" 419	Cement Manufacture, Steiger's Pat. 421
Bunker Hill Mine, Cal. 326, 454, 494, 704	Canada, Mine, Utah 364, 500, 741	Canary Islands, Coal Prices 195	Cement Mill, Pemberton's Pat. 837
Bunker Hill & Sullivan vs. Empire State Idaho Mg. Co., Idaho 395	Canada, Mineral Paint 9	Candelaria Mg. and Milling Co., Mexico 290	Cement Production, Canada 387
Bunker Hill & Sullivan Mg. Co., Idaho 224	"California, Mineral Water" 9	Candle, Miners', Manufacture of 400	Cement Production, Ontario 414
Vunnel, J. H. & Co., N. Y. 285	California, Mines in 1901 7	Candles, Miners' Stearic Wax 487	Cement Production, U. S. 120
"Bunnell's Pat. Crushing Machine" 837	California, Mines and Petroleum Fuel 235	Canfield, J. T., Wood as Fuel in Reverberatory Furnace 525	Cement Trade, Gorman 306
Burcey's Pat. Manufacturing Charcoal 324	California, Mg. Co., Utah 121	Cannady Gulch Mine, Cal. 563	"Cement Works of Edison Company, N. J." 724
Burcham, C. A. 903	"California, Mining Laws of the Bodie District" 628	Cannon Mine, Cal. 495	Centennial Copper Mg. Co., Mich., Report 524, 770
Burden Iron Co., N. Y. 282	California, Natural Gas 9	Canthook Platinum and Gold Mg. Co., Cal. 662	Centennial-Emma Mine, Utah 152
Burdick's Pat. Air Compressing Apparatus 679	California, New Era Mines, Cal. 286	Canton Pump Co., O. 453, 839	Centennial-Eureka Mg. Co., Utah 152, 153, 675
Burgess Steel Plant, Pa. 256	"California, Northern Copper Region" 147	Cantrell Co-operative Coal Co., Ill. 149, 256, 288	Centennial Mg. Co., Mich. 190, 224, 227, 288, 328, 497, 501, 874
Burke County, N. C., New Gold Discovery 173	California, Oil Shipments 9	Cape Breton, Dominion Steel Plant at Sydney 892	Centennial Oil and Gas Co., Wyo. 290
Burma, Gold in 473, 828	California, Oil Stock Sales 9	Cape Colony, Mechanical Undercutting 517	Center Star Mg. Co., B. C. 62, 193, 290, 364, 501, 640
Burma, Petroleum in 473, 828	California, Onyx 9	Cape Copper Company, Ltd., Report 179	Central America, Mining Dividends 163, 786
Burnah Mg. Co., Colo. 906	California, Paving Bricks 9	Cape of Good Hope, Copper Production 787	Central Con. Mg. Co., Colo. 497
Burnard's Pat. Superphosphate Making 559	California, Petroleum 7, 9, 41	Cape Nome Conspiracy Case 84	Central Electric Co., Ill. 115, 870
Burnett's Pat. Coal Washing 836	California, Petroleum Miners' Association, "Burning Crude Oil for Steam Purposes" 524	Capital City Brick Co., O. 146	Central Eureka Mine, Cal. 423, 454, 704
Burns, E. Z. 702, 848	California, Platinum Production 9	Capital Con. Mg. Co., Mont. 707	Central Hill Mine, Cal. 494, 794
Burns Fire Brick Co., Pa. 358	California, Platinum Flnds. 871	Capitalization of Mining and Industrial Companies in France 677	Central Iron Co., Ala. 220
Burnside's Pat. Hand Rock Drill 734	California, Portland Cement Co., Cal. 771	Capitol Coal Co., Ill. 117	Central Lead Co., Mo. 874
Burns-Moore Tunnel, Colo. 255, 905	California, Pyrites 9	Capitol Mine, Cal. 360, 454	Central Mg. Co., Mich., Report 588
Burquet & Baker Mine, Cal. 454	California, Quartz Crystals 9	Cappeau's Pat. Ore-Roasting Furnace 185	Central Mining Institute, Germany 131
Burrows Park, Colorado 656	California, Quicksilver Production 50	Carbides, Producing Roberts's Pat. 113	Central Montana Mines Co., Mont. 118, 224
Burt Mfg. Co., O. 83, 114, 146, 221, 253, 255, 423, 735, 839, 902	California, Quicksilver Mining "California, Register of Mines and Minerals of Placer County" 556	Carbonaceous Ores, Reducing, McKnight's Pat. 390	Central Oil Co., Wyo. 270
Burt Mine, Minn. 118, 772	California, Rubble 9	Carbonate Hill Mg. Co., Colo. 116, 771	Central Shaft Mine, Cal. 201
Burton Pils, France 221	California, Sand 9	Carbon Coal Mines, Wyo. 397	Central Tunnel, Colo. 304
"Burton & Lodwick's Pat. Coal Mining Machinery" 768	California, Sandstone 9	Carbon Hill Coal Co., Wash. 445, 741	Centrifugal Distributor, Blaisdell's Pat. 81
Burton Refining Co., Texas 875	California, Serpentine 9	Carbonic Acid Gas from Lime Kilns, U. S. 450, 664	Centrifugal Extraction Process, Berrigan's Pat. 81
Burt's Pat. Split Expansion Bit for Oil Wells 113	California, Silver 8, 9	Carbons for Diamond Drills, Facts About 732	Centrifugal Fan, Davidson's Pat. 112
Burwell, H. J. 702	California, Slate 9	Carbureted-Hydrogen Gas Manufacture, Van Steenberg's Pat. 734	Centrifugal Pumps 750
Bushnell, A. B. 186	California, Slate Co., Cal. 222, 562	Carcessonno Gold Mg. Co., Colo. 737	Century Coal Co., W. Va. 732
Bush, T. G. 284	California, Slate Quarries 222	Cardiff Coal for British Navy 154	Century Mine, Ariz. 450, 590
Bushy Ridge Mine, Cal. 704	California, Smelters' Troubles 414	"Car Dump for Elevators in Mines, Moses's Pat." 322	Central Mining Institute of Western Pennsylvania 709
Butcher Creek Oil Field, Mont. 739	California, Soapstone 9	Car-Dumping Structure, Revolvable, Ramsay's Pat. 868	Central Oil Co., Wyo. 270
Butler Con. Mines Co., Colo. 327	California, Soda 9	Carey, G. 82	Central Shaft Mine, Cal. 201
Butler, C. W. 284	California, State Miners' Association 446	Car-Haul, Acklin's Pat. 283	Central Tunnel, Colo. 304
Butler Investment Co., Colo. 287	California, State Mining Bureau and "Wild Cat" Companies 448	Caribou Mg. Co., Colo. 223, 287, 327, 361, 595, 841	Centrifugal Distributor, Blaisdell's Pat. 81
Butler, J. L. 291	California, Steamers, Petroleum on 438	Carisa Mine, Utah 129, 673	Centrifugal Extraction Process, Berrigan's Pat. 81
Butler, Nicholas Murray 82, 592	California, Sulphur 9	Carisa Mine, Wyo. 673	Centrifugal Fan, Davidson's Pat. 112
Butler's Pat. Shale Rock Plow 559	California, Tourmaline 9	Carley Mine, Cal. 286	Centrifugal Pumps 750
Butte & Boston Mg. Co., Mont. 363	California, Tunnel, Colo. 85	Carlise Mine, Mont. 87, 118, 151	Century Coal Co., W. Va. 732
Butte & Boston Mg. Co., Wash. 534, 640, 675	California, Turquoise 9	Carlise Mine, Yukon 168	Century Mine, Ariz. 450, 590
Butte Copper Co., Mont. 533, 810	California, University 220, 540	Carl Mg. Co., Cal. 188	Century Mine, Utah 152, 153, 566, 639, 708
Butte District, Mont., New Mines in 97	California, An Unprospected Region in 150	Carmichael, Herbert, Platinum in Britain Columbia 249	Cerbat Mg. and Reduction Co., Ariz. 84
Butte Lode Mg. Co. 360	California's Mineral Product and Assessed Valuation 754	Carmichael, Herbert, Platinum in Britain Columbia 249	Cerium 694
Butte Mg. Co., Cal. 147, 222, 286	"Calkins's Pat. Assay Furnace" 559	Carmichael, Herbert, Platinum in Britain Columbia 249	Cerrillos Smelter, N. Mex. 329
Butte Mining Conditions, Mont. 396	"Calkins's Pat. Ore Crusher" 632	Carmichael, Herbert, Platinum in Britain Columbia 249	Cerro Bonito Mine, Cal. 424, 455, 762, 595, 840
Butte Mining Consolidations, Mont. 609	Callaban Dredger, Cal. 84, 635	Carmichael, Herbert, Platinum in Britain Columbia 249	Cerro Verde Mine, Mexico 534
Butte Oil Co., Mont. 257, 329, 707	Calliope Mine, Colo. 61	Carmichael, Herbert, Platinum in Britain Columbia 249	Chally's Pat. Fuel Block and Briquette 501
Butterfield Mine, Utah 120, 152, 329, 774	Calumet & Arizona Mg. Co., Ariz. 670, 770, 904	Carmichael, Herbert, Platinum in Britain Columbia 249	Chain Conveyor, Levalley's Pat. 803
Butterfly-Terrible Mg. Co., Colo. 10, 327, 738, 906	Calumet & Hecla Mg. Co., Mich. 149, 256, 328, 295, 497, 532, 596, 609, 676, 730, 842, 874	Carmichael, Herbert, Platinum in Britain Columbia 249	Chainman Mg. and Electric Co., Nev. 751, 295
Butterworth-Terrible Gold Mg. Co., Colo., Report 765	Calumet & Montana Mg. Co., Mont. 329	Carmichael, Herbert, Platinum in Britain Columbia 249	Chair for Mine Cages, Bardill's Pat. 733
Butte School of Mines 505	Cambrian Mine, Cal. 116, 390, 457	Carmichael, Herbert, Platinum in Britain Columbia 249	Chalcopryrite Mine, Cal. 670
Buttgenbach, J. & Co., Fla. 87	Cambria Steel Co., Pa. 87, 187	Carmichael, Herbert, Platinum in Britain Columbia 249	Chaldeen Alloys 769
Buxton & Big Bonanza Mine, S. Dak. 488	Cameron, William M. 902	Carmichael, Herbert, Platinum in Britain Columbia 249	Chalk Deposits, Texas 675
"Byrnes' Automatic Pulp Sampling Machine" 560	"Cam-Fastening for Shafts or Stamp Mills, Blanton's Pat." 558	Carmichael, Herbert, Platinum in Britain Columbia 249	Chalk Production, Great Britain 413, 827

C

Chemical Manufacture and the Anthracite Coal Strike 815
Chemical Market in 1901 39
Chemicals, Minerals and Rare Elements Weekly Prices Table 121
Chemicals, Producing in Electric Furnaces, Taylor's Pat. 901
Chemical Trade of Spain 896
Chemical Works, Enamelled Iron Vessels for 666
Chemische Fabrik Griesheim Electron's Pat. Chromium Compounds 734
Chemische Fabrik Griesheim Electron's Pat. Lead Oxide Making 734
Chemische Fabrik Rhenania's Pat. Nitric Acid-Making 283
"Chemistry: What Is?" 142
Chemung-Belmont Mine, Colo. 155
Cherokee Foundry and Machine Co., Kan. 392
Cherokee Mine, Cal. 84
Cherry Hill Mg. Co., Cal. 424
Chert Production, Great Britain 840
Chesapeake & Ohio Railway Co. 840
Chestnut Mine, Mich. 637
Chestnut Gap, Georgia 86
Chicago Coal and Iron Markets in 1901 19
Chicago Coal and Iron Market Weekly Chicago-Counterville Mg. Co., Ill. 117
Chicago Drainage Channel 643
Chicago Gear and Mill Supply Co., Ill. 806
Chicago House Wrecking Co., Ill. 339
Chicago Iron Co., Minn. 597
Chicago Lead and Zinc Co., Mo. 772
Chicago Mica Co., S. Dak. 707
Chicago & Northwestern Railroad 450
Chicago Pneumatic Tool Company, Franklin Air Compressor 630
Chicago Pneumatic Tool Co., Ill. 83, 84, 115, 147, 187, 355, 453, 609, 735, 769, 902
Chicago & South Gold Placer Mf. Co., Mex. 534
Chicago Gold Mg. Co., Colo. 873
Chihuahua Manganese Mines, Mexico 704
Chilcot Mine, S. Dak. 427
Chilean Copper Market 433
Chile, Coal Imports 461
Chile, Copper Exports 295, 461, 881
Chile, Copper Production 787
Chile, Nitrate of Soda Duties 294, 401, 505
Chile, Nitrate of Soda Exports 92, 202, 335, 505, 602, 680, 780, 880
Chile, Nitrate of Soda Industry 40, 717
Chile, Nitrate of Soda Industry, Labor Troubles 267
Chile, Nitrate of Soda Land Sales 463
Chile, Nitrate of Soda Market and Prices 197, 335, 463, 602, 645, 680, 730, 815, 880
Chile, Nitrate of Soda Production 92, 463, 645, 746, 780, 880
Chile Ravine Mine, Cal. 999
Chilkoot Mine, S. Dak. 599
China, Gold Mines near Port Arthur 306
China, Mining Notes from 893
China Ock Mine, Cal. 807, 905
China, Quicksilver in 557
Chinese Indemnity 801
Chinese Mining Regulations 821, 827
Chipman's Pat. Electrode for Purifying Liquids in Electrolysis 451
Chippewa Leasing Co., Colo. 149, 255, 327, 496, 771, 872
Chiricahua District, Arizona 254
Chisholm Exploration, Minn. 849
Chitwood, Mo. 28
Chloride-Bailey Mine, Cal. 455, 671
Chloride Point Con. Mg. and Milling Co., Utah 708
Chlorinating Copper Pyrites, Alwise's Pat. 283
Chlorine Gas and Caustic Soda Production, Wilson's Pat. 357
Choate, Wayne 186
Chodzko's Pat., Continuous Compression of Fluids 113
Chollar Mg. Co., Nev. 458
Chrimes, Walter A. S. 422
Christensen Engineering Co., Electrically Operated Air Compressors 733
Christensen Engineering Co., Wis. 806, 903
Christie, William Wallace, "Furnace Draft" 216, 417
Christy Box Car Loader 253
Christy, Samuel Benedict 389
Chrome Market in 1901 39
Chrome Ore 289
Chrome Ore Buyers 418, 589
Chrome Ore, California 9
Chrome Ore Exports, New Caledonia 364, 876
Chrome Ore in New Caledonia 32
Chrome Ore Production, New South Wales 586
Chrome Steel Co., N. Y. 221, 593
Chromite Exports, Canada 387
Chromium Compounds, Chemische Fabrik Griesheim Electron's Pat. 734
Chuckakawa Mg. Co., Cal. 530
Chuck for Rock Drills, Hamill's Pat. 457
Chuck for Rock Drills, Kay & Wearne Pat. 57
Church Consols Plant, Western Australia 46
Church, John A. 668
Church, John A., Tombstone Mining District, Ariz. 584
Church Mine, Cal. 326
Chute, Johnson's Pat. 559
Chynoweth, James 492
Cienega Placers, Mexico 132
Cincinnati Milling Machine Co., O. 58
"Cinematograph Theorie, Traite" 279
Cinnabar Butte Mine, Oregon 151
Cinnabar Discoveries in Texas 639
Cinnabar District, Cal. 223
Cinnabar Leaching 281
Cinnabar Mg. Co., Cal. 84
Circle Zinc Properties, Mo. 29
Cisco Con. Mg. Co., Cal. 286
Citizens' Oil Co., Colo. 563
Civil Engineering, Popular Lectures on 180
C. K. & N. Gold Mg. Co., Colo. 117, 773
Clackamas Mine, Wash. 534
Claggett, H. M. 902
Clamer's Pat. Producing Metals 527
Clamp for Rock Drills, Brown's Pat. 701
Clapp, A. W., Aspen Tunnel, Colo. 519
Clapp, A. W., Coal in Nebraska 481
Clapp, A. W., Iron-Making at Port Townsend, Wash. 137
Clapp, A. W., Timbering in Deep Mines 611
Clapp, Otis F., "Report of City Engineer of Providence, R. I." 588
Ciara Belle Mine, S. Dak. 61, 151, 225, 458, 875
Clarke, F., Satchell, Notes on Gold Dredging 384
Clark Electric Power Co., Utah 394
Clarke & Pike Iron Mines, Mont. 396, 907
Clarke's Pat. Crucible Steel Making 701
Clarke's Pat. Purifying Water 767
Clark, H. S. 114, 838
Clark, N. 902
Clark, Patrick 495
Clark, Placer, Cal. 391
Clark, V. V. 838
Clarkson School of Technology 702
Clarkson, Thomas S., Memorial School of Technology 633
Clauser, A. E. 735
Clausthal School of Mines 283
Clawson's Pat. Hydrocarbon Composition 770
Claybank Mine, Cal. 9
Clay, California 387
Clay, Fire, Production, Canada 205, 423
Clay Industry, Indiana 413, 827
Clay Production, Great Britain 112
Clay-Separating Apparatus, Snyder's Pat. 706
Clayton Air Compressors 900
Clay Working, Stacey's Pat. 60
Clear Creek Mine, Colo., Output in 1901 841
Clear Creek Light and Power Co., Colo. 841
Clear Creek Independent Samplers, Colo. 841
Clear Creek Reduction & Mg. Co., Colo. 189, 563, 808
Clearfield & Cush Creek Coal and Coke Co., Pa. 257
Clement, Victor M., 58, 492, 560, 668, 702
Clemm & Hasenbach's Pat. Making Sulphuric Anhydride 113
Clemm's Pat. Making Sulphates and Chlorine 908
Cleopatra Mg. Co., S. D. 115
Clercy, Jules de, Quebec 230
Clergue, Edwin Victor 842
Clergue Syndicate, Ont. 324
Cleveland Coal and Iron Trade Weekly Cleveland Iron Market in 1901 18
Cleveland, J. W. 254
Cleveland Mine, Cal. 424
Cleveland Oil Co., Colo. 902
Cleveland Pneumatic Tool Co., Ohio 151
Clifton Con. Copper Mines of Arizona, Ltd., Ariz. 841
Clifton Copper Co., N. Mex. 635
Clifton Mine, Cal. 85
Climax Mine, Ariz. 907
Climax Mg. Co., Colo. 667
Cline's Pat. Tooth and Base for Phosphate Logs 52
Cling-Surface Mfg. Co., N. Y. 252
Clio Mine, Cal. 188, 671, 737, 872
Clinger Mine, Oregon 773
Cloit & Crist Mfg. Co., Cal. 529
Cloquet Mine, Minn. 673
Clot Co. 593
Cloud City Mg. Co., Colo. 85, 223, 705, 808
Cloverdale Mine, Cal. 530, 905
Clover Flat Mine, Cal. 423, 807
Clover Leaf Mg. Co., S. Dak. 225, 458, 573
Clyde Coal Co., Pa. 87
Coahuila Mg. and Sm. Co., Mexico 534
Coal, Alabama in 1901 36
Coal in Alberta, Canada 766
Coal in Alsace Lorraine 659
Coal in America 663
Coal, American, Abroad 200
Coal, American in Austria 140
Coal, American vs. British in the Mediterranean 461
Coal, American in Denmark 692, 751
Coal, American in Egypt 70
Coal, American in Germany 379
Coal, American, Prospects for in France 754
Coal, American, Tests of 277
Coal, Anthracite, Arkansas 234
Coal, Anthracite, Consumption at Mines 286
Coal, Anthracite Industry 686
Coal, Anthracite Labor Situation 341
Coal, Anthracite, Marketing 753
Coal, Anthracite Miners' Demands 430
Coal, Anthracite Miners' Strike 875
Coal, Anthracite Mining Costs 437
Coal, Anthracite Production 305
Coal, Anthracite Regions, Industrial History of 576
Coal, Anthracite Trade, An Episode in the History of 67
Coal, Australian for South America 710
Coal for Austria 814
Coal for Austrian State Railroads 305
Coal in Belgium 892
Coal in Bavaria 33
Coal, Bituminous, Mechanical Production in U. S. 69
Coal, Bituminous Production, Pa. 399
Coal Breaker, Acri's Pat. 911
Coal Briquettes for Belgian Mail Steamers 491
Coal Briquetting in Illinois 557
Coal, British Royal Commission on 130
Coal, California 393
Coal, Canadian for Swedish State Railways 129
Coal Cars on German Railroads 165
Coal Cars, Large in Great Britain 120
Coal and Coke Exports, Great Britain 323, 461, 602
Coal and Coke Imports and Exports, Germany 122, 260, 461, 536, 602, 744, 846
Coal and Coke Imports, Spain 896
Coal and Coke Imports and Exports, U. S. 33, 195, 214, 366, 503, 611, 643, 777
Coal and Coke Shipments 165, 305, 473
Coal Combination, Indiana 456
Coal Companies Profits, British 437
Coal Consumption, France 69
Coal Contract, Right to Recoup Damages 388
Coal Conveyor, Otmuwa 631
Coal Creek Mine Disaster, B. C. 775
Coal Creek Mg. Co., Tenn. 774
Coal Cutters, Mechanical in Cape Colony 517
Coal Cutters, Mechanical at a French Colliery 306
Coal Cutting by Machinery in British Collieries 348, 824
Coal Cutting by Machinery in United Kingdom 865
Coal Deposits, Snitzbergen 687
Coal Depot at Kingston 410
Coal Discovery near Oatlands 785, 897
Coal-Dust Briquettes, Coating 140
Coal Dust, Settling, Lloyd's Pat. 113
Coal, Eliminating Slate from, Allard's Pat. 452
Coal, English in Germany 833
Coal, Exportation of South Russia 826
Coal Exports, Baltimore, Md. 890
Coal Exports, Belgium 778, 878
Coal Exports, Great Britain 194, 744, 911
Coal Exports, Japan 911
Coal Exports, New York 52
Coal Export Tax, British 310
Coal Field, New British 277
Coal Fields, Alberta, on Crow's Nest Pass Branch of Canadian Pacific Railway 757
Coal Fields, British Columbia 408
Coal Fields, Coos Bay, Ore. 238, 270
Coal Fields, Crow's Nest Pass, B. C. 549
Coal Fields, Indiana County, Pa., Development 134
Coal Fields, Snow Shoe and Broad Top, Pa. 177
Coal Fields, Southwestern Iowa, Character and Stratigraphical Peculiarities of 631
Coal Fields of the United States 470
Coal Field, Western Kentucky in 1901 178
Coal, Freight Rates 438
Coal Freight Rates, Foreign Weekly Coal, Freight Rates in Ohio 430
Coal on French Railroads 836
Coal on Government Land in Alabama 635
Coal Handling Appliances, Demand for in Loureco Marquez 696
Coal Hoisting Towers, Highest Power Station 809
Coal Imports, Chile 461
Coal Imports and Exports, France 878, 911
Coal Imports, Genoa, Italy 229
Coal in India 798
Coal and Industrial Stock Quotations Weekly Coal and Industrial Stock Trading in 1901 75
Coal in Ireland 865
Coal Land Sales in Ohio 639
Coal Land Sales in Tennessee 192
Coal Lands, Looting in Canada 860
Coal Lease, Construction of 522
Coal Lease, When Forfeiture will be Sustained 388
Coal Loading and Screening Machine, Portable 767
Coal Market, Chicago in 1901 19
Coal Market, Chicago Weekly Coal Market, San Francisco 461, 678, 710
Coal of Michigan 628, 766
Coal, Michigan 696
Coal Mine Accidents in Germany 754
Coal Mine Accidents in Great Britain 161
Coal Mine Accidents in Pennsylvania 686
Coal to be Mined by Fixed Date, Construction of Used Conveying 799
Coal Mine Disaster, British Columbia 775
Coal Mine Laws, Anthracite 97
Coal Mine Rubbish, "Handy Way" of Getting Rid of 212
Coal Mine Shaft Lining, Steel Braces for 661
Coal Mine Workers, Anthracite, Nationality 138
Coal Miners' and Operators' Convention, Ill. 395
Coal Miners' and Operators' Convention, Indiana 362
Coal Miners' Strike, Colorado 671
Coal Miners' Strike, Pennsylvania 632, 707, 747, 751, 785, 788, 821, 863, 885
Coal Miners' Strike, West Virginia 876
Coal Miners' Troubles in Indiana 532, 772, 842
Coal Miners' Wages 187, 235, 253
Coal Miners' Wages, Alabama 90, 228, 399, 442
Coal Miners' Wages, Illinois 536, 601, 642
Coal Miners' Wages, Indiana 497, 532
Coal Miners' Wages, Maryland 407, 592
Coal Miners' Wages, Michigan 395
Coal Miners' Wages, Ohio 407
Coal Miners' Wages, Pa. 122, 499, 827
Coal Mines of the Loire, France 213
Coal Mines, Washington in 1901 445
Coal Mining, British and American 203
Coal Mining Company Liability in Pennsylvania 316
Coal Mining, Germany 333
Coal Mining, Illinois Law on Supplying Timbers 247
Coal Mining, Indian Territory 117
Coal Mining, Liability for Accident in 832
Coal Mining Machine, Naukirch's Pat. 325
Coal Mining, Moschler, Wissemann's Pat. 900
Coal Mining Machinery, Burton & Lodwick's Pat. 768
Coal Mining and the Mule 543
Coal Mining, Natal 350, 811
Coal Mining in New South Wales 267
Coal Mining, Sydney Harbor, New South Wales 139
Coal Mining in Utah 37
Coal in Nebraska 481
Coal in New Caledonia 76
Coal in 1901 32
Coal Operators' Association of Alabama 642
Coal and Petroleum in Locomotives 795
Coal, Possibilities for American in Smyrna 445
Coal Prices in Canary Islands 195
Coal Prices on the Lakes 467
Coal Production, Alabama 36, 332, 359, 423, 548, 562, 791
Coal Production, Arkansas 791
Coal Production, British Columbia 173
Coal Production, California 791
Coal Production, Canada 387
Coal Production, Colorado 548, 791
Coal Production, France 228, 430
Coal Production, Georgia 791
Coal Production, Germany 134, 415, 537, 549
Coal Production, Great Britain 413, 438, 827
Coal Production, Illinois 177, 791
Coal Production, Indiana 791
Coal Production, Indian Territory 791
Coal Production, Iowa 791
Coal Production, Kansas 791
Coal Production, Kentucky 791
Coal Production, Maryland 791
Coal Production, Michigan 791
Coal Production, Missouri 321, 791
Coal Production, Montana 226, 500
Coal Production, Natal 226, 500
Coal Production, New Mexico 791
Coal Production, New South Wales 586
Coal Production in 1901 791
Coal Production, North Carolina 791
Coal Production, North Dakota 791
Coal Production, Nova Scotia 444
Coal Production, Ohio 791
Coal Production, Oregon 791
Coal Production, Pennsylvania 652, 791, 887
Coal Production, Portugal 245, 761
Coal Production, Queensland 623
Coal Production, Tennessee 791
Coal Production, Texas 791
Coal Production, U. S. 32, 786
Coal Production, Utah 791
Coal Production, Virginia 791
Coal Production, Washington 364, 791
Coal Production, West Scotland 757
Coal Production, West Virginia 791
Coal Production, Wyoming 791
Coal Rates, Russian 309, 799
Coal Receipts, Hamburg, Germany 195
Coal Receipts, San Francisco 80, 260, 400, 643
Coal, Rhodesia 762
Coal Sales in Austria, How to Increase 474
Coal Separator, Haran's Pat. 58
Coal Shipments 138
Coal Sizes, Anthracite 752
Coal Smoke, Prevention 66
Coal, Some Lessons from Recent Floods in Anthracite Mines, Pa. 378
Coal Sorting Plants in Germany 793
Coal Stamping, Kuhn's Pat. 490
Coal Statistics 450, 625
Coal Supply, Great Britain 67
Coal Tar Products in Germany 86
Coal Teamsters' Union, Chicago, Ill. 223
Coal Thieves' Union 273
Coal Trade, American in France 240
Coal Trade Combinations 66
Coal Trade, Damages for Injuries from Combinations in Restraint of 388
Coal Trade, Hungary 602
Coal Trade Reviews: Anthracite, Bituminous, Birmingham, Cleveland, Pittsburg, Foreign Weekly Coal Trading Concern, German 209
Coal, Treating for Coking, Schwartz's Pat. 734
Coal, Turkey 892
Coal Unloading, Risk Assumed by Workmen 353
Coal at Vladivostok 823
Coal Washer, McLellan's Pat. 701
Coal Washer and Ore Concentrator, Campbell's Pat. 491
Coal Washing, Burnett's Pat. 836
Coal Waste, Marketing 841
Coal Weighing before Screening, Constitutionality of Law on 587
Coal, Welsh for British Navy 154
Coal, Western Australia 48
Coal in Western Siberia 762
Coal, What are the "Intolerable Conditions" in the Anthracite Region 855
Coarse Gold Camp, Cal. 424
Coates, Henry 592
Coating Coal-Dust Briquettes 140
Coating Machine, Breeze's Pat. 734
Cobalt and Nickel in 1901 31, 794
Cobalt Ore Exports, New Caledonia 258, 364, 870
Cobalt Production, Germany 549
Cobalt Separation, Frasch's Pat. 52
Cochise Mine, Cal. 530
Cochiti Gold Mg. Co., N. Mex. 288, 429, 875
Cochran, D. S. 423, 391
Cochran Mine, S. Dak. 152, 500, 533
Cochran's Pat. Protecting Oil Wells from Fires 452
Cockerill, L. Maurice 58, 220, 284
Cockrell, Zinc Smelter, Kan. 673
Cocconongo Mining District, Nevada 257
Cocconino Copper Co., Ariz. 423
Cocconino Copper Co., Utah 330
C. O. D. Mine, Ariz. 188
Coe Mine, Cal. 530
Coeur d'Alene Mine, Colo. 872
Coeur d'Alene Mg. Co., Idaho 149, 673
Coffee Creek District, Cal. 60
Coffey, G. T. 220
Coggin, F. G., Jr. 492
Cohen, Hartwig A. 186, 358, 735
"Coherer, Sensitiveness of the" 730
Colaba, British Mint 332
Colaba, France 332
Coinage, Mexico 209
Coinage of Silver in Venezuela 825
Coinage, U. S. 93, 231, 368, 505, 681, 816
Coins, Foreign, Prices Weekly Coins, Foreign, Value of in U. S. Currency 522
Coke, Connellsville in 1901 98
Coke Exports, U. S. 214
Coke Imports and Exports, Germany 122, 260
Coke Loading, Wellman's Pat. 667
Coke Making, Kennedy's Pat. 185
Coke Manufacture from Compressed Fuel 830
Coke Manufacture, Naef's Pat. 837
Coke Oven Charger and Discharger, Wellman & Seaver's Pat. 283
Coke Oven Discharge, Wellman-Seaver Engineering Co.'s Pat. 185
Coke Oven Gases, Cooling 521
Coke Oven, Koppers' Pat. 527
Coke Oven Lining, Wellman's Pat. 559
Coke Oven, Martin's Pat. 145
Coke Oven, Simon Carves Company's Pat. 452
Coke Production, Alabama 423, 562
Coke Production, British Columbia 171
Coke Production, Canada 387
Coke Production, Nova Scotia 444
Coke in Russia 803
Coke (See also Coal)
Coke Shipments 138, 165
Coke, Suspension of Deliveries on Account of Strike 662
Coke Trade, Connellsville, Pa. Weekly Colbath, Henry 560
Colby, Albert Ladd, "Review and Test of the American Standard Specifications for Steel" 588
Coldwater Mine, Wyo. 741
Cole & McDonald Exploring Co., Minn. 224
Coleman, A. F. 668
Coleman Mining Process 144
Coleman, Robert J. 146
Coleman's Pat. Method of Mining 58
Coleman's Pat. Mining Apparatus 58
Coleman's Pat. Pouring Metal into Molds 185
Coker, Bird S. 358
Cole, Thomas F. 422, 702
Colley, John, Mechanical Undercutting in Cape Colony 517
Colley Mill, Colo. 456
Collier, Arthur J., Mining Conditions in the Nome Region, Alaska 762
Collier's Pat. Ore Bucket, Dumper and Chute 856
Colliery Tub-Brake, Wilkinson, King & Hank's Pat. 491

Collins, A. L. 528
Collins, J. H., & Son 391
Collins, John R. 186
Collins' Pat. Flue Connection for Furnaces 282
Collins' Pat. Rendering Metallic Sulphides Soluble 901
Colloidal Gold Manufacture, Paal's Pat. 868
Colloidal Silver Manufacture, Paal's Pat. 868
Colombia, Gold Mining 139
Colombia, Iron Making 214
Colonial Coal and Coke Co., Va. 193
Colonial Mg. Co., Minn. 809
Colorado, Aspen Tunnel 519
Colorado, Bismuth Production 548
Colorado, Boulder Oil Fields 445, 459
Colorado, Burrows Park 656
Colorado Coal Miners' Strike 671
Colorado, Coal Production 548, 791
Colorado, Copper Production 373, 548
Colorado, Cripple Creek District in 1901 70
Colorado-Dakota Mine, S. Dak. 427
Colorado, Expense of Mining and Milling Gold Ore in San Juan County 696
Colorado, Extension of Leadville District 483
Colorado Fuel and Iron Co. 192, 352, 674, 845
Colorado, Gilpin County Mines in 1901 134
Colorado Gold Camp, New 520
Colorado Gold Mg. Co., Idaho 497
Colorado, Gold and Silver Production 66, 373, 497, 548
Colorado Iron Works, Colo. 89, 146, 187, 285, 325, 392, 493, 597, 806
Colorado Lead Production 60, 373, 548
Colorado Machinery in Mexico 52
Colorado Manganese Production 548
Colorado-Manhattan Gold Mg. and Leasing Co., Colo. 327
Colorado-Mexico Mg. Co., Cal. 840
Colorado Mine, Colo. 326
Colorado Mine Operators' Association 492, 718
Colorado, Mine Taxation 405, 437
Colorado, Mine Workings Endangered by a Dump 575
Colorado, Mineral Production in 1901 543
Colorado Mining Companies' Combination 577
Colorado & Northwestern Gold Mg. Co., Colo. 223, 531
Colorado Oil Gas and Coal Co., Wyo. 290
Colorado Oil Industry 223, 672
Colorado Oil Prospects 189
Colorado Oil Wells, Torpedoes for 277
Colorado, Petroleum Production 548
Colorado, Progress at Idaho Springs 351
Colorado, Rico Mountains Ore Deposits 485
Colorado, Right to File Additional Certificate Colorado School of Mines 114, 809
Colorado, Silver Production 60, 66, 373, 548
Colorado Smelter, Mont. 457
Colorado Specie Payment Mg. Co., Colo. 148, 394, 737, 905
Colorado Springs, Colo. Mining Stock Trading in 1901 71
Colorado Springs Mining Stock Association, Colo. 121
Colorado Springs Mining Stock Market, Weekly 548
Colorado, Tungsten Production 548
Colorado, Zinc Production 60, 548
Coloring Marble, Stone, etc., Roach's Pat. 768
Colquhoun, James 805
Coltrane, Texas 119
Columbia Gold Mg. Co., Mont. 86, 118, 396
Columbia Gold Mg. Co., Oregon 598
Columbia Hydraulic Mg. Co., B. C. 844
Columbia Lead Co., Mo. 426
Columbia Mine, Colo. 2-5
Columbia Mg. Co., Mexico 534
Columbia Mg. Co., Minn. 597, 709
Columbia Mg. Co., S. Dak. 875
Columbia Mg. and Milling Co., Cal. 84
Columbia's Greeting to California 856
Columbine Mine, Colo. 280
Columbus Con. Mg. Co., S. Dak. 458, 674
Columbus & Hocking Coal and Iron Co., O. 810
Columbus & Hocking Coal and Iron Co., Report 833
Columbus Mine, Cal. 704
Columbus Stein and Iron Works, O. 669
Colusa-Parrot vs. Anaconda Mg. Co., Mont. 288
Colusa-Parrot Mine, Mont. 329, 810
Colusa-Parrot Purchase, Mont. 300
Colvin, Clarence K. 146, 186
Combination Mine, Idaho 149
Combinations in Restraint of Coal Trade, Damages for Injuries from 388
Combine Mine, Ont. 641
Combustibles, Determining the Heating Capacity of, Parr's Pat. 804
Comet Mine, Mont. 804
Comet Mine, Utah 708
"Commerce, Review of the World's" 524, 556
Commercial Mine, Utah 192, 258
Commodore Mine, Minn. 673
Commonwealth Mg. Co., Ariz. 115
Commonwealth Steel Co., Mo. 358
Compagnie des Mines d'Or du Long Canyon, Cal. 188
Compania Carbonifera de Monterey, Mexico 531
Compania Metalurgica, Mexico 290
Compania Minera Fundadora y Afundadora, Mexico 290
Compania Minera Mexicana, Mexico 62
Complaint, Sufficiency of, but Erroneous Instructions 316
Composition of Matter, Lencheres's Pat. 901
"Compressed Air" 180
Compressing Air Apparatus, Howe & Vauclain's Pat. 390
Compressed Air Drill, Wetmar's Pat. 282
Compressed Air Haulage Systems 376
Compressed Air Heater, Duncan's Pat. 734
Compressed Air Machinery Co., Cal. 669
Compressed Air Water Elevator, Buchanan's Pat. 491
Compressed Air Water Elevator, Latta & Martin's Pat. 185
Compressed Air Water Elevator, Rickett's Pat. 591
Compressed Air Water Elevator, Taylor's Pat. 591
Compressing or Liquefying Gases, Bonland's Pat. 667
Compressor, Parson's Pat. 357
Comstock Mine, Colo. 771
Comstock Mine, Utah 576
Comstock Mining Assessments 121, 257, 877
Comstock Mining Companies, Financial Statements 153, 291, 429, 600, 743, 877
Comstock, W. B. 391
Comstock, William 391
Conan Land, Minn. 874
Concentrating Amalgamator, Horton's Pat. 81
Concentrating Iron Ore in Norway 666
Concentrating Low-Grade Gold Ores 487
Concentrating, Oil Process 144
*Concentrating Plant, New, Anaconda 312
*Concentrating Table, Lampert 807
Concentrating Table, Wesley's Pat. 283
Concentrator, Acme 664
*Concentrator, Dodd's Pat. 390, 804
Concentrator, Green's Pat. 701
*Concentrator, Lehrritter's Pat. 527
Concentrator, New Standard Concentrator Co.'s Pat. 901
Concentrator, Overstrom's Pat. 81
*Concentrator, Rochford's Pat. 708
*Concentrator, Sale's Pat. 390
Concentrator, Sperry's Pat. 868
*Concentrator, Sullivan's Pat. 559
*Concentrator, Traylor's Pat. 527
Concentrator, Webb's Pat. 357
Concentrator, Wesley's Pat. 323
Concentrator, Wilfley Concentrator Co.'s Pat. 283, 421
Concession Gros, Dutch Gulana 88
Concrete Mine, Colo. 808
Condensing Apparatus, Edison's Pat. 768
Condensing Smoke, Fumes and Gases, Jackson's Pat. 836
*Conductors, Separating from Non-Conductors, Swart and Blake's Pat. 868
Confidence Mine, Cal. 635, 737, 841
Conflicting Locations, Jury Determines Facts 77
Congo Explorations, Minn. 190
Congo Mg. Co., Ala. 568
Congress Mine, Ariz. 147, 454
Congress Mine, Colo. 652
Congress Mine, Wash. 632
Conley's Pat. Electric Furnace 98
Connellville Coke Trade in 1901 98
Connellville Coke Trade 73
Conner, E. T. 805
Connor Mine, Cal. 84
Connor's Bonanza Mg. and Reduction Co., Colo. 287
Connors, Eli T. 453
Conqueror Mine, Colo. 563
Consolidated African Copper Trust, Rhodesia 34, 365
Consolidated Alpine Mg. Co., Colo. 394
Consolidated Coal Co., Ill. 532
Consolidated Coal Co. and the Illinois Mine Inspection Law 564
Consolidated Copper Mg. Co., Cal. 60
Consolidated Franklin Mines Co., Colo. 148
Consolidated Goldfields Co., New Zealand 909
Consolidated Gold Mountain Mg. Co., Ariz. 115
Consolidated Hydraulic Mg. Co., Idaho 531
Consolidated Mercur Mg. Co., Utah 62, 153, 194, 259, 290, 350, 460, 876
Consolidated Mines Co., Colo. 61, 149, 189
Consolidated Mg. Co., Ga. 117
Consolidated Mg. and Development Co., Cal. 705
Consolidated Oil and Dredger Co. of Pittsburgh, Cal. 530
Consolidated Oil Co., Colo. 116, 563
Consolidated Pneumatic Tool Co. 187
Consolidated Rosendale Cement Co., N. Y. 82, 493
Consolidated St. Gothard Mg. Co., Cal. 670
Consolidated Silver Mines of Lake Superior, Ont. 330
Consolidated South Spring Hill Gold Mg. Co., Cal. 454
Consolidated Spruce Creek Placers, Ltd., B. C. 226
Consolidated Texas Oil Co., Texas 844
Consolidation Coal Co., Md. 328, 543
Consolidation Coal Co., Md., Report 555
Consolidation Mine, Cal. 495
Contested Claims and Re-Location 214
Continental Coal Co., O. 289, 707
Continental Mine, Cal. 147, 222
Continental Mg. Co., Colo. 148, 189
Continental Zinc and Lead Mg. and Sm. Co., Mo. 722
Contract for Sale of Mine, Construction of 419
Contributory Negligence of Miner 108
*Convers & De Saulles's Pat. Zinc-Dust Production 452
*Convers & De Saulles's Pat. Zinc Furnace 491
*Converter, Klein's Pat. 323
Converter Lining, Oswald's Pat. 81
Converters, Reynolds's Pat. 81
Conveying Apparatus, French's Pat. 803
*Conveyor Belt, Acklin's Pat. 901
*Conveyor Belt, Dodge's Pat. 803
Conveyor Belt Roller, Bee's Pat. 734
Conveyor, Cross's Pat. 701
Conveyor, Delaney & Miller's Pat. 420
Conveyor, Frith's Pat. 145
Conveyor for Metal Rods or Bars, Edwards's Pat. 837
Conveyor, Oldham's Pat. 632
Conveyor, Roger's Pat. 527
Conveyor for Rolling Mills, Swindell's Pat. 527
Conveyor, Stillman's Pat. 734
Conveyor, Zwayer's Pat. 732
Cook, Adam Sons, N. Y. 252, 734
Cook, H. 496
Cook Mine, Colo. 496
Cook Placer, Ga. 637
Cook Well Co., Mo. 187, 806
Coalcardie Gold-Field, Western Australia 46
Coolidge, Winthrop 669
Coolidge, Winthrop, Platinum in Wyoming 418
*Cooling Towers, Alberger 665
Cooney Mine, N. Mex. 810
Coon, Harry 809
Coon Valley Mine, Colo. 60
Co-operative Coal Co., Ill. 117
Co-operative Topographic Survey of Ohio 178
Cooper Union Chemical Society 422
Coosaw Phosphate Co., S. C. 505
*Coos Bay Coal Fields, Oregon 288, 270
Co-owners of Mining Claims, Rights 668
Copake Iron Co., N. Y. 534
Copete Mine, Mexico 120, 531
Copper vs. Aluminum Conductors 31
Copper, American for Germany 166
Copper Basin Gold and Copper Mg. Co., Ariz. 781
*Copper-Bearing Volcanic Rocks in the Eastern Townships of Quebec 412
Copper Belle Mg. Co., Ariz. 222
Copper in Bohemia 69
Copper Butte Mine, S. Dak. 119, 875
Copper, California 9
Copper Cementation, Villorola's Pat. 804
Copper Chief Mg. Co., Mont. 597
Copper Claims, Kern County, Cal. 188
Copper Cliff Mg. Co., S. Dak. 740
Copper Consumption in Europe 162
Copper Consumption in Germany 295
Copper Deposits, California 705
Copper Discovery, Nevada County, Cal. 807
Copper Dividends, Michigan 25
Copper Exports, Bolivia 464
Copper Exports, Chile 295, 464, 581
Copper Exports and Imports, U. S. Weekly 52
Copper Exports, New York 52
Copper Exports and Production, U. S. 214, 267, 295, 405
Copper Exports, South Australia 708
Copper Exports, Tasmania 876
Copper Export Trade 717
Copper Extracting from Ores, Waterbury's Pat. 81
Copper Farm Mine, B. C. 501
*'Copper Hand-Book' 418, 450
Copper Hardening, Walter & Keiner's Pat. 808
Copper Hill Mg. Co., N. Mex. 329
*'Copper, Hydro-metallurgy of' 834
Copper Imports and Exports, Great Britain 157, 336, 605, 747, 913
Copper Imports, Germany 349
Copper and Iron Sulphides 487
Copper King Mine, Cal. 116, 147, 285, 326, 393
*Copper King Mine, Yukon 167
Copper Market, Chile 433
Copper Market, London in 1901 24
Copper Market, New York in 1901 24
Copper Market and Prices, Weekly 554
Copper Mines, Lake Superior, Machinery in 629
Copper Mines, Lake Superior in 1901 25
Copper Mines, Rhodesia 341
Copper Mining in Mono County, Cal. 770
Copper Mountain Gold Mg. Co., Colo. 456
Copper Mountain Mine, Ariz. 254
Copper in New South Wales 50
Copper-Nickel-Sulphide Ore Treatment, Shuler's Pat. 591
Copper in 1901 23
Copper Ore Discovery in Pennsylvania 773
Copper Ore Dressing, Improvements in Lake Superior Practice 468
Copper Ore Exports, Mexico 813
Copper Ore Exports, Spain 112, 301, 806
Copper Ore Production, Great Britain 413, 726
Copper Ore Production, Newfoundland 444
Copper Ore Production, Nova Scotia 826
Copper Production, South Australia 113
Copper Ores, Leaching, Irvine's Pat. 282
Copper Ore Treatment, Knox's Pat. 452
Copper Precipitate Treatment, McKechnie's Pat. 591
Copper Precipitation Tank, Berry's Pat. 701
Copper Precipitation from Water, Polmeester's Pat. 670
Copper Prince Mine, Ariz. 23
Copper Production, Arizona 575, 787
Copper Production, Australia 173
Copper Production, British Columbia 787
Copper Production, Bolivia 7
Copper Production, California 387, 787
Copper Production, Canada 787
Copper Production, Cane of Good Hope 787
Copper Production, Chile 373, 548
Copper Production, Colorado 787
Copper Production, Cost of 787
Copper Production, England 549, 787
Copper Production, Germany 787
Copper Production, Hungary 787
Copper Production, Italy 787
Copper Production, Japan 787
Copper Production, Mexico 787, 913
Copper Production, Michigan 23, 25
Copper Production, Montana 787
Copper Production, Newfoundland 787
Copper Production, New South Wales 787
Copper Production, Norway 787
Copper Production, Ontario 787
Copper Production, Peru 787
Copper Production, Portugal 761, 787
Copper Production, Producers' Committee Statement 125, 295, 433, 571, 713, 881
Copper Production, Queensland 623
Copper Production, Russia 787
Copper Production, Spain 787
Copper Production, Sweden 787
Copper Production, Turkey 787
Copper Production, U. S. 27, 97, 125, 267, 295, 405, 433, 543, 571, 713, 717, 787, 881
Copper Production, Utah 152
Copper Production in the World 24, 787
Copper Protioxide 181
Conner Pyrites Imports, U. S. 679
Copper Queen Mine, Ariz. 350, 594, 904
Copper Queen Mine, Idaho 328
Copper Queen Mine, Wash. 258
Copper Queen Mine, Colo. Mont. 498
Copper Range Mine, Utah 257
Copper Range Con. Mg. Co., Mich. 61, 497
Copper Range Railroad, Mich. 190, 426, 739, 907
Copper Recovery, Thomson's Pat. 113
Copper Region of Northern California 387
Copper Salts, Electrolysis, Tossizza's Pat. 565
Copper and Silver Values of Ores 80
Copper Situation from a Statistical Standpoint 273
*Copper Smelting, Ancient in Mexico 246
Copper Smelting Furnace, Mitchell's Pat. 219
Copper Smelting, Hot Blast in 525
Conner Smelting, Hot Blast for, Mitchell's Pat. 837
Copper Stocks 822
Copper Sulphate, American for Greece 304, 679
Copper Sulphate Exports, Great Britain 156, 463, 602, 779, 912
Copper Sulphate Exports, New York 52, 197, 294, 432, 745, 881
Copper Sulphate Exports, U. S. 368, 504, 645, 779
Copper Sulphate in 1901 39
Copper Sulphide Ore Treatment, Thofern's Pat. 901
Copper Supplies, 125, 231, 295, 369, 506, 816, 881
Copper Tube Making in England 751
Copper-Tube Treatment, Polmeester's Pat. 901
Copper Weights, Smelter's Deductions from 217
Copper World Mine, Cal. 254
Copperas Market in 1901 39
Copperas Market and Prices 92
Coppertown Mg. and Sm. Co., Cal. 60
Cora Jeanette Mine, Mo. 907
Cora Placer, Colo. 595
Corbett's Pat. White Lead Manufacture 390, 481
Coriolanus Mine, Colo. 327
Cornell University 891, 805
"Cornell University Association of Civil Engineers' Transactions" 834
Cornish, Joseph 324
Cornwall, Ont., Proposed Locomotive Works 420
Cornwall Ore Banks, Pa. 810, 908
Coromandel Mine, India 876
Coronado Mine, Colo., 60, 189, 287, 327, 841, 906
Corona Mine, Colo. 531, 771
Coronation Mill, Colo. 501
Corrigan, McKinley & Co., Minn. 190
Corlland Mine, Colo. 563
Corundum Production, Canada 387, 414
Coryell's Pat. Differential Pump 58
Cory, R. J. 52
Cosgrave's Pat., Compound Ingots and Mold Thereof 421
Cosmopolite Mine, Cal. 455, 705, 771, 807
Co-Tenant in Mining Property, Rights of 522
Couch, Thomas 324
Countryman, H. R. 324
Coupling-Welding Rolls, Heggie's Pat. 666
Courant's Pat., Making Triple Salt 357
Coutis, W. M., Tin in Alaska 143
Covode Mountain Mg. Co., Colo. 872
Cowles Mg. Co., Mont. 605
Cowles's Pat., Air Compressor and Inter-cooler 734
Cowper-Coles's Pat., Depositing Metals on Metallic Surfaces and the Product Thereof 867
Coxe Bros. & Co., Pa. 119
Coxe, Edward H. 422, 702, 769
Cox, Tom 869
Cracker-Jack Mg. and Milling Co., Idaho 61, 256, 596, 672, 738, 873, 869
Craig, John 114
Craig Mine (Ont.), Corundum for Abrasive Wheels 114
Craig & Paterson's Pat., Cyanide Making 185
Craig's Pat. Submarine Gold-Saving Device 666
Cramer & Smith Tunnel, Colo. 287
Cranberry District Coal Mines, B. C. 409
Crane Co., Ill. 670, 839
Cramer Bros. Mine, Cal. 454
Crawford & McCrimmin Co., Ind. 453
Crawford, W. H. 528, 592
Crean's Pat. Manufacturing Iron and Iron Alloys 491
Creede Home Mg. Co., Colo. 706
Cramer, G. 805
*Creosent Coal Co., Oregon 239
Creosent Hill Mg. Co., Utah 598
Cresson George V., Co., Pa. 839
Creston-Colorado Mine, Mexico 828
Crete Mg. Co., Minn. 362
Crippen, Maxwell & White's Pat. Electric Rock Drill 591
Cripple Creek Assay Offices, Destruction 295, 327, 336, 361
Cripple Creek, Colo., Mining Dividends 227
Cripple Creek, Colo., Railroad Facilities 564
Cripple Creek, Colo., Re-survey 873, 906
Cripple Creek District, Colo., in 1901 70
Cripple Creek Gold Mining, Colo. 362, 543, 808
Cripple Creek Gold Production, Colo., 70, 255, 531, 842
Cripple Creek-Idaho Gold Mg. and Milling Co., Colo. 149, 496
Cripple Creek Mine Consolidation, Large 564
Cripple Creek Mine Leasing, Colo. 117, 287, 323
Cripple Creek Mine Taxation, Colo. 361
Cripple Creek Mining Conditions, Colo. 528
"Cripple Creek Mining Directory" 828
Cripple Creek Mining Stock Exchange Association, Colo. 361
Cripple Creek Old Mine Dumps, Working 456
Cripple Creek Railroad Freight, Colo. 361
Crocker, Dr. Francis Bacon 592
Crocker-Wheeler Co., Equipment in U. S. Mint 480
Crocker-Wheeler Co., N. J. 59, 253, 285, 359, 634, 736, 806, 870
Crockett Mg. Co., Colo. 255
Croesus Gold Mg. Co., Cal. 905
Crofton Smelter, B. C. 676
Crooked River Mg. and Milling Co., Idaho 117, 256, 328
Cross's Pat. Conveyor 701
Crown Deep, Ltd., Transvaal 397, 459
Crown Hill Mg. Co., S. Dak. 119, 844
Crown Mica Mine, S. Dak. 61, 533
Crown Mountain Mine, Ga. 117, 287
Crown Point Mine, Cal. 188, 871
Crown Point Mg. Co., Nev. 843
Crown Point Mg. Co., Utah 844
Crown Pottery Co., Ind. 284
Crown Prince Mine, Idaho 395
Crown Reef Gold Mg. Co., Transvaal 193, 330, 459, 775
Crown Silver Mine, B. C. 303
Crow's Nest Pass Coal Co., B. C. 640
Crow's Nest Pass Coal Company, Mine Disaster 775
Crow's Nest Pass Coal-Fields 549
Crowther, H. M. 422, 453, 492, 735, 808
Croxtton Mine, Minn. 809
Crucible Steel Co. of America 745, 879, 912
Crucible Steel Making, Clarke's Pat. 701
Crusher for Assays, Braun's Pat. 113
Crusher, Johnson's Pat. 58
*Crusher, Morris's Pat. 701
*Crusher, Sturtevant Rotary Fine 322
*Crushing Machine, Bunnell's Pat. 219
*Crushing Mill, Sturtevant's Pat. 145
Crushing Roller, Wegeriff's Pat. 323
Crushing Rolls, Drive Mechanism for, Acklin's Pat. 591
Cryolite 419
Crystal Graphite Co., Mont. 118
Crystal Lake Gold Mg. Co., Cal. 326, 360, 494, 807
Crystalline Mine, Cal. 84, 116, 360, 455, 872
Crystalline Oil Well, Colo. 424
Crystal Run Coal Co., Pa. 568, 598
C. & S. Mine, Colo. 117
*Cuautlan, Mexico, Turbine Installation 802
*Cuba, Asphalt and Mineral Tar in 344
*Cuba, Bitumens of 341, 344
Cuba, Petroleum 347
Cub & Star Mines, Cal. 495
Cudner's Pat. Hydraulic Dredge 632, 804

Culbertson Mine, Cal. 530
 Cullen Mine, Colo. 906
 Culin Drier and Separator, Perry's Pat. 559
 Culver-Buer Mine, Cal. 841
 Culver's Pat. Ore Separator and Classifier. 900
 *Cumberland Gold Mine, Western Australia. 48
 Cumberland Lead & Zinc Co., Mo. 637
 Cumberland Mill, Colo. 148
 Cumberland Mg. Co., Ariz. 770
 Cumberland Mg. Co., S. Dak. 675
 Cummer, F. D., & Son Co., O. 561, 703
 Cuneo Mine, Cal. 736
 Cupelling Lead and Silver, Silver Losses in. 529
 Cupella, Note on. 728
 Curle, J. H., "Gold Mines of the World". 865
 Curlew Mg. Co., Wash. 290
 Curran, Thomas J. 528
 Currie's Pat. Treating Ores. 113
 Curtis & Co. Mfg. Co., Mo. 769
 Curtis & Curtis Co., Conn. 839
 Curtz-Evans Mg. and Milling Co., Cal. 59, 254
 Cusick, James 968
 Custer Peak Mg. Co., S. Dak. 119, 289
 Custom and Usage. 627
 Cuyahoga Mg. Co., S. D. 908
 Cyanide Briquettes, Stassfurter Chemische Fabrik's Pat. 357
 Cyanide Making, Craig & Paterson's Pat. 185
 Scheide Anstalt's Pat. 421
 Cyanide Making, Otterman's Pat. 398
 Cyanide Making, Rossiter's Pat. 283
 Cyanide Market in 1901. 39
 Cyanide Operations, Discrepancies in. 663
 Cyanide Patents 699
 Cyanide Patents in South Africa. 785
 Cyanide Plant, Webb, Lilley and Chapman's Pat. 632
 Cyanide of Potassium, Commercial. 352
 "Cyanide Practice". 79, 142
 Cyanide Process 590
 *Cyanide Process, Beeger's Improved. 630
 Cyanide Process, Beeger's Pat. 421
 Cyanide Process in the Black Hills, S. Dak. 389, 663
 Cyanide Process, Pneumatic. 281
 Cyanide Process, Progress in 1901. 13
 Cyanide Process, Schiltz's Pat. 527
 Cyanide Refining Furnace, Stassfurter Chemische Fabrik's Pat. 632
 Cyanide of Soda, Anhydrous, Stassfurter Chemische Fabrik's Pat. 357
 Cyanide Solutions, Exhausted, Treatment of. 57
 Cyanide Solutions, Heating. 80
 Cyanide Solutions, Notes on. 237
 Cyanide Solutions, Regenerating Waste, Orr's Pat. 57
 Cyanides, Manufacture. 728
 Cyanides, Recovering, Orr's Pat. 57
 Cyanide Tank, Hervey's Pat. 666
 Cyanide Vat, Electrolytic. 112
 *Cyaniding, Agitating Machine, Rubsch's Pat. 113
 Cyaniding and Amalgamation vs. Amalgamation and Cyaniding. 249
 Cyaniding in the Black Hills, S. Dak., in 1900. 14
 Cyaniding, Discrepancies. 319
 Cyaniding Ores, Wood's Pat. 837
 Cyaniding Tailings, Loss in. 79
 Cyclone Mine, Utah. 350
 Gagnet Mine, Utah. 566, 708

D

Dadeszen, E. J. von, "New Zealand Official Yearbook. 355
 Dahlonga Gold Mg. and Milling Co., Ga. 86, 287, 637
 Daira Sanieh, Egypt. 751
 Daisy Mine, Idaho. 809
 Dakin, Fred H. 492
 Dakota Mg. Co., S. Dak. 119, 674, 707
 Dale District, Cal. 286, 454
 Daly's Pat. Fuel Burner. 868
 Dalmatia Mine, Cal. 670
 Dalton & Lark Mg. Co., Utah. 844
 Dalry-Judge Mine, Utah. 534, 566, 640, 675, 844
 Daly Mg. Co., Utah. 330
 Daly, R. A. 869
 Daly-West Mg. Co., Utah. 121, 330, 458, 566, 640, 675, 708, 844
 Daly West-Quincy Consolidation, Utah. 500
 Daly West vs Quincy Mg. Co., Utah. 364, 453
 "Dampferheizung, Entwicklung und Anwendung der". 248
 "Dams". 525
 Dams Injurious to Lower Proprietors will be Enjoined. 278
 Dana's Pat. Gold Separator. 390
 Dando & Stair's Pat. Miner's Safety Lamp 804
 Daniel B. Mine, Idaho. 672
 Daniel, Dr. J., "Poudres et Explosifs". 556
 Daniels Brothers Mine, Mont. 843
 Daniel Webster Mine, Cal. 360
 Danmen's Pat. Detonating Composition. 901
 Danmer's Pat. Annealing Furnace. 399
 *Darby, John H., Manufacture of Coke from Compressed Fuel. 830
 Dardanelles Mine, Cal. 369
 Dark Horse Mine, Idaho. 395
 Darling's Pat. Making Alkaline Cyanides. 700
 Barrow Mine, Cal. 90
 Darton, N. H., "Preliminary List of Deep Borings in the U. S.". 800
 Daulton Mine, Cal. 594
 Davey's Pat. Roasting Furnace. 145
 Davidov, I., Gold Mining in Colombia, S. A. 139
 Davidoff, Isidor. 592
 Davidson's Pat. Centrifugal Fan. 112
 Davies, Charles. 592
 Davies, Daniel. 528
 Davies's Pat. Furnace. 452
 Davies's Pat. Molding Machine. 836
 Davies's Pat. Pick. 357
 Davies, William H. 698
 Davis, A. J. 146
 Davis, A. P., Proposed Tonto Reservoir, Ariz. 413
 Davis Calyx Drill Co., N. Y. 359
 Davis Calyx Drill Co.'s Pat. Drilling Deep Holes. 559
 Davis Coal and Coke Co., Ala. 494
 Davis Creek Coal and Coke Co., Ala. 366, 494
 Davis, C. S., Removal of Boiler Scale. 218
 Davis, John & Son, Eng. 115
 Davis Mg. and Sm. Co., Cal. 360
 Davis's Pat. Boring Process. 421
 Davis's Pat. Extracting Precious Metals from their Ores. 283
 Davis's Pat. Hardening Steel. 491
 Davis's Pat. Mining Elevator. 390
 Davis's Pat. Piercing and Shaping Metallic Ingots. 666
 *Davis's Pat. Roasting and Cooling Ores. 863
 Davis's Pat. Well Boring. 868
 Davy's Pat. Mine Hoisting Cage. 632
 Davy's Pat. Raising or Lowering Apparatus for Mines. 452
 Dawson, P. G. 735
 Dawson & Reilly, Ont. 221
 Day's Pat. Stamp Mill Dies. 598
 Day Lands, Minn. 597
 Dayton Coal and Iron Co., Tenn. 500
 Dayton Globe Iron Works Co., Ohio, Turbine Installation at Cautidlan, Mex. 802
 Dayton-Globe Iron Works, O. 633
 Deadbroke Mine, S. D. 875
 Dead Horse Mine, Cal. 255, 495, 595
 Deadwood Custom Cyanide Plant, S. D. 427
 Deadwood & Delaware Smelting Co., S. D. 257
 Deadwood-Standard Mine, S. Dak. 151, 289, 674
 Deadwood-Terra Mg. Co., S. D. 289, 740, 742
 Deadwood Tunnel, Colo. 425, 738
 Deane Steam Pump Co., Mass. 147
 Dean & Jones Mine, Cal. 670
 *Dean Steam Tube Cleaner. 250
 De Beers Con. Mines, Ltd., S. Af. 121
 De Beque Oil Field, Colo. 223, 672
 De Chalmot's Pat. Manufacture of Soluble Phosphates. 58
 Decker, George A. 569
 Decker Mine, Cal. 254, 393
 Deep Gulch Mine, Cal. 147, 254
 Deep Mining in the Transvaal. 687
 Deer Creek Dredging, Cal. 897
 Deer Creek Placers, Oregon. 574
 Deering Harvester Co., Minn., 634, 673, 706, 809, 874
 Deer Lick Mg. Co., S. D. 458, 740
 Defender Mine, Cal. 84, 504
 Defiance Gold Mg. Co., Colo. 530
 Defiance Mine, Cal. 531
 Deitz Oil, Gas and Mg. Co., Ind. 873
 De Kalb, Courtenay, Thawing Dynamite. 180
 De La Mar Mine, Nev. 191, 396, 446, 773
 *De La Mar Mine, Utah. 309
 De La Mar Smelter, Cal. 254
 Delaney & Miller's Pat. Conveyor. 420
 Delaney's Pat. Pumping Engine. 452
 De La Vergne, E. M. 252
 Delaware & Hudson Coal Co., Pa. 674
 Delaware & Hudson Company, Report. 388
 Delaware, Lackawanna & Western Co. 289, 533, 596, 598
 Delaware, Lackawanna & Western Co., Report. 341, 354
 De Lay Mine, Cal. 255, 393
 Delhi Mine, Cal. 393
 Delhi Mine, Idaho. 637
 Delmonico Mg. Co., Colo. 496, 808
 Del Monte Leasing Co., Colo. 394
 Del Monte Mg. and Milling Co., Cal. 222, 455, 704, 905
 De Morgan, Augustus, "Study and Difficulties of Mathematics". 800
 Delta Iron Co., Minn. 288
 Demarest's Pat. Guide for Stamp Stems. 667
 Dementjeff & Ouskof's Pat. Alumina and Alum Making. 283
 Denby, W. 284
 Denmark, American Coal in. 461
 *Dennis, W. B., Borax Mine in Southern Oregon. 581
 Denny, G. A., "Deep-Level Mines of the Rand and their Future Development". 485, 629, 765
 *Denton, Prof. James E., Tests of Beaumont Oil as Fuel. 161
 Denver & Boston Con. Mg. and Milling Co., Colo. 671
 Denver & Chicago Mg. Co., Idaho. 673
 Denver Engineering Works, Colo. 423, 561, 593
 Denver Mine, Mexico. 428
 Derby Lead Co., Mo. 597
 Derigo Mine, Colo. 148, 738
 Derleth, Charles. 114
 Dernier Mine, Mont. 457
 Descubridora Mg. and Sm. Co., Mexico 193, 428, 534, 812
 Desert Queen Mine, Cal. 495, 530
 Desloge Lead Co., Mo. 426, 597
 Des Moines's Pat. Miner's Safety Loading Tool. 283
 Dessau Co., vs M. D. Hull, Minn. 564
 Detonating Composition, Danmen's Pat. 901
 Detroit & California Mg. Co., Cal. 841
 Detroit Graphite Co., Mich. 325
 Detroit Iron and Steel Co. 634
 Detroit Mine, S. D. 559
 Detroit Reduction Co., Colo. 223
 Deutsche Gold und Silber Scheide Anstalt's Pat. Cyanide Making. 421
 Dewey Mine, Idaho. 395, 596, 873
 De Wolfe, Edward C. 702
 Dexter Mine, Nev. 875
 Dexter Mg. and Development Co., Wyo. 226
 Dexter-Tuscarora Con. Mines Co., Nev. 151, 288, 396
 Diamond Creek Copper Mines, Cal. 770
 Diamond Cutter, Wauter's Pat. 185
 Diamond Cutting Machine, Sturman's Pat. 282
 Diamond Exports, British Guiana. 331, 676
 Diamond Fields of British Guiana. 375
 Diamond Gold Mg. Co., Colo. 906
 Diamond Joe Mine, Colo. 773
 Diamond Mg. Co., Colo. 189, 287, 361, 496, 738
 Diamond Production New South Wales. 586
 Diamond R. Mine, Mont. 150
 Diamond Setting in Metal, Brejcha's Pat. 768
 Diamonds in U. S. 38
 Dick, James. 702
 Dickman, Mackenzie & Potter, Ill. 220
 Dickson, James R. 735
 Dickson's Pat. Disintegrating Machine. 559
 Dickson's Pat. Peat Press. 800
 Dick's Pat. Guiding Device for Tube Mills. 357
 Dicter Mine, Colo. 361
 Diedrich's & Burke, Utah. 146
 Dierdorff's Pat. Mining Machine. 804
 Dietscher's Pat. Drawing Tubes. 323
 Dietscher's Pat. Heating Furnace. 323
 Dietzgen, Eugene Co., Ill. 423, 736
 Dignowity, C. L. 114, 838
 *Diller, J. S., Copper Region of Northern

California. 857
 Dilworth Coal Co., Pa. 533
 Dimmick Pipe Co., Ala. 847
 Dinchester, M. W. 592
 Dinero Leasing Co., Colo. 149, 361, 496, 906
 Dinger, Weiman & Co., Va. 423
 Dinger, Guillermo C. 528
 Dingler, T. 324
 Directors of Iron Company, Implied Delegation of Authority by. 316
 Discovery, Burden of Proof Regarding. 388
 Discovery Gold Mining Co. of B. C. of New York, B. C. 258
 Discovery of Minerals & Location of Claim. 448
 Disintegrating and Comminuting Minerals or Ores, Graham's Pat. 112
 Disintegrating Machine, Dickson's Pat. 559
 Disintegrating Machine, MacDonald's Pat. 768
 Division, Henry & Sons. 84
 Dividend Mine, Mo. 843
 Dividends and Assessments in 1901. 55
 Dividends of Nitrate Companies. 712, 746, 848
 Dividends, Review of. 163, 301, 468, 786
 Dixie District, Idaho. 425
 Dixie Mg. Co., Utah. 88, 459
 Dixon, C. W., Note on the Condition of Nickel in Nickeliferous Pyrrhotite from Sudbury. 660
 Dixon, James T., Discovery of Platinum in Wyoming. 143
 Dixon, Joseph Crucible Co., N. J. 263, 561, 806
 Dixon, Joseph Crucible Co., Silica Graphite Paint for Bridges. 184
 D & M Mine, Utah. 62, 458
 *Doan's Pat. Tuvrey. 390
 Dober, F. C. 590
 Doble, Abner Co., Cal. 591, 699, 803
 Doble, Robert McF. 254, 422
 Dolson's Pat. Pea Press. 867
 Doctor-Jack Pot Con. Mg. Co., Colo. 61, 224, 362, 456, 460, 808, 812
 *Dodd's Concentrator. 390, 804, 900
 *Dodd's Pat. Ore or Pulp Sampler. 357
 Dodge's Pat. Conveyor Belt. 803
 Dolcoath Mines, Ltd., England. 365
 Dolcoath Mine, S. D. 740
 Dolomite Mine, Colo. 562
 Dolomite Production, Alabama. 562
 Dolomitic Sandstone Making, Brown's Pat. 591
 Dolores Mg. Co., Mex. 223
 Dombrowa Collieries, Russia. 211
 Dominion Coal Co., N. S. 163, 397, 428, 561, 708, 776, 812, 844, 896
 Dominion Coal Co., Ltd., Report. 575
 Dominion Coal-Dominion Iron and Steel Consolidation. 303
 Dominion Copper Co., B. C. 303
 Dominion Iron and Steel Co., Report. 596
 Dominion Iron and Steel Co., N. S. 163, 205, 365, 453, 561, 667, 776, 812, 885
 Dominion Iron and Steel-Dominion Coal Consolidation. 575
 Dominion Steel Company's Plant at Sydney, Cape Breton. 892
 Donald, J. T., Limestone of the Phillipsburg Railway and Quarry Co. 657
 Dondero Mine, Cal. 116
 Donkin, Bryan. 422
 Donnelly Mine, Cal. 148
 Donner Mine, Cal. 737
 Donora Mg. Co., Minn. 224, 874
 Doolittle Mine, Cal. 771
 Door for Dumping Cars, Sage's Pat. 768
 Doris Mg., Milling and Tunnel Co., Colo. 561
 Dorieske Mine, Cal. 85, 286, 595
 Dorr, John V. N. 734
 *Dorr & Spang's Pat. Ore Treatment. 734
 Dorr's Pat. Producing Solid Materials from Tar. 251
 Dorsey, Stephen A. 59
 Dougherty's Pat. Mechanical Stirrer for Gas Producers. 558
 Douglas District Coal Mines, B. C. 409
 Douglas & Griffin Mine, Cal. 848
 Douglas, James. 58
 Douillet's Pat. Refining Oil. 155, 186, 698
 Dowling, John. 117
 Dowling, I. P. 117
 Downer, Emmon H. 701
 Downhaul for Mines, Schenk's Pat. 804
 Downie's Pat. Drilling Machine. 666
 Down's Pat. Lubricant. 666
 Doyle's Pat. Safety Device for Blasting. 843
 Dragon Mg. Co., N. M. 843
 Drake & Stratton Co., Minn. 457
 Draper Mine, Cal. 595, 872, 905
 *Drar-Bar for Ore Cars, Trux's Pat. 357
 Dredge, Bate's Pat. 323
 Dredges, Curious Complaint Against. 184
 *Dredging, Gold, Belt Conveyors on. 241
 *Dredging for Fine Gold in Idaho. 334
 Dredging for Gold, Notes on. 255, 393
 Dressed Mine, Cal. 255, 393
 *Dresser, John Alexander, Copper-Bearing Volcanic Rocks in the Eastern Townships of Quebec. 412
 Dreverhoff, Max, Germany. 221
 Driesam Mine, Cal. 421
 *Drill, Binne's Pat. 491
 Drill for Deep Wells, Livermore's Pat. 559
 Drilling Deep Holes, Davis Calyx Drill Co.'s Pat. 559
 Drilling Machine, Downie's Pat. 804
 Drills, Carbons for. 732
 Dron, A. 838
 Druid Gold Mg. Co., Colo. 705
 Dry-Klin, Gerrard's Pat. 768
 Dryland Dredge, Cal. 286
 Dubbs's Pat. Distilling Oil. 421
 DuBois, A. Jay, "Mechanics of Engineering". 834
 DuBois, H. J. 735
 DuBois, John E. 505
 DuBois, P. L. 805
 Duchess Mine, Cal. 904
 Ducktown Sulphur, Copper and Iron Co., Tenn. 226
 Duerden, J. E., "Report on the Actinians of Porto Rico". 834
 Duffield Mine, Cal. 737
 *Duff's Pat. Gas Producer. 591
 Duff & United Alkali Company's Pat. Electric Furnace. 837
 Dug-Way Shipments, Utah. 640

Duluth & Iron Range Railroad. 118, 256, 261, 395, 597, 739, 842
 Duluth & Iron Range Railroad vs Minnesota. 118, 673
 Duluth, Missabe & Northern Railroad. 118, 150
 Dumars & Wagner Mine, Mo. 118
 Dumping Bucket, Slick's Pat. 113
 Dumping Car, Baggley's Pat. 113
 Dumping Car, Hart's Pat. 339
 *Dunbar's Western Mining Directory". 79, 318
 Duncan, G. A. 146, 391
 Duncan, John. 391, 633
 Duncan & Sheriff's Pat. Slimes Treatment. 632
 *Duncan's Pat. Compressed Air Heater. 734
 Dunderland Iron Ore Co., Ltd., Norway. 717
 Dunderland Iron Ore Deposits. 651
 Dunham, George H. 391
 Dunham, L. A. 146
 Dunkin, Mg. Co., Colo. 496
 Dunksirk Oil Well, Ill. 772
 Dunn, B. W. 284
 Dunn Mfg. Co., Pa. 325
 Dunn, William. 902
 Dunraven Mine, Rhodesia. 373
 Duntley, J. W. 560
 Duntoon, C. H. 735
 Dupont de Nemours Co., N. Y. 392
 Dupont, Eugene. 220
 Duquesne Coal and Coke Co., Pa. 87
 Durango Mineral Production, Mexico. 612
 Durango Mining, Mexico. 909
 Durango Oil Co., Colo. 671
 Durrell, C. T. 284
 Durges Mine, Ga. 873
 Durham's Pat. Safety Blasting Cartridge. 219
 *Duro's Blow-Off Valve. 80
 Dusseldorf Industrial Exposition. 616
 Dust Collecting and Settling, Larson's Pat. 900
 Dutch East Indies, Gold Mining. 87
 *Dutch East Indies Mineral Industry Year-book". 179
 Dutch East Indies, Mineral Production. 413
 Dutch Hill Mine, Pa. 598
 Dutch Mg. and Milling Co., Cal. 85, 298, 705, 872
 Dutch Ravine Mine, Cal. 770
 Duval Mine, Cal. 671
 Dwyer, John. 220
 Dyatt, Andrew. 838
 Dynamite Detonating Cap, Hoover's Pat. 632
 *Dynamite Explosion in New York Subway. 161, 194
 Dynamite Factory at Monterey, Mexico. 620
 Dynamite, Thawing. 180
 *Dynamost, Armature Windings of Direct Current". 628, 698
 Dyson Mine, Ark. 770

E

Eagle Bird Mine, Cal. 424, 530
 Eagle Bluff Mine, Cal. 872
 Eagle Chief Mg. Co., S. D. 707
 Eagle Milling Co., Colo. 189
 Eagle Mine, Ariz. 84
 Eagle Mine, Cal. 116
 Eagle Mg. Co., N. M. 565
 Eagle-Shawmut Mine, Cal. 60, 116, 223, 280
 Eames, Richard, Jr. 560, 702, 902
 Early Brothers Mine, Cal. 705
 East Argentine District, Colo. 320
 East Argon vs West Argon Mg. Co., Utah 330
 East Baldwin Mine, Colo. 148
 East Bird Mine, Cal. 84
 East Birmingham Machine and Foundry Co. 711
 East Boston Mine, Colo. 85
 East Calhoun Mine, Colo. 327
 East Helena Smelter, Mont. 658, 843
 East Hascua Mg. Co., Minn. 253
 East Manos Mining District, Colo. 520
 East Pacific Mine, Mont. 874
 Eastern Minnesota Railroad. 150, 190, 256, 261, 288, 739, 842, 874
 Easton Camp, Cal. 454
 Easton, S. A., Notes on Tonopah, Nevada. 697
 Easton, Stanley A. 668
 Easy Bird Mine, Cal. 670
 Eaton & Benson's Pat. Sand Reel for Wells. 867
 Eaton & Merritt Land Suits, Minn. 395
 Eberg's Pat. Air Compressing and Cooling Apparatus. 81
 Eclipse Gold Mg. Co., Nev. 493
 Eclipse Mine, Cal. 300, 424, 530, 562
 Eclipse Mine, Colo. 85
 Economic Mill, Colo. 224
 Ecnador, Gold Mining. 719
 Eddy, Franklin D. 902
 Eddy, Frank D. 596, 638, 838
 Eginburgh Mine, Cal. 596, 638, 838
 Edison Magnetic Separating Process in Norway. 642
 *Edison Portland Cement Company's Works, N. J. 724
 Edith Mg. Co., Mo. 739
 Edmonds, R. H. 422
 Edna Mg. Co., Colo. 465
 Edison's Pat. Condensing Apparatus. 768
 *Education, Academic for Young Men, Utility of". 270
 Edwards and Carroll's Pat. Feeding Mechanism for Billet Heating Furnace. 837
 Edwards, D., & Co., I. T. 117
 Edwards, Henry W., Notes on the Geology of Panama. 862
 Edwards & Morgan's Pat. Furnace for Heating Ingots. 251
 Edwards, R. M. 538
 Edwards's Pat. Conveyor for Metal Rods or Bars. 837
 Edwards's Pat. Furnace. 837
 Egypt, American Coal in. 692, 753
 *Egypt, Ancient Mine Workings. 104
 Egypt, Gold Mining. 104
 *Egyptian, Ancient Gold Mills. 595
 Egyptian Mine, Colo. 697
 Egypt, Mineral Resources. 87
 Egypt, Mining in. 67
 Ehlers, Karl. 702
 Eimer & Amend, N. Y. 561
 Elmsleigh Freehold Copper Mines, Queensland. 599
 Eissler, M., "Hydro-metallurgy of Copper". 834
 Elba, Iron Ore. 827
 Elba, Miners in. 859
 El Caliph Mine, Wash. 153

El Capitan Mine, Ariz. 59
"Eldorado County, Cal., Mines and Minerals of" 865
Eldorado Mines, Ariz. 670
Eldorado Placer, Mont. 773, 907
Eldred's Pat. Calcining Mine. 82
Eldridge, George H., "Asphalt and Bituminous Deposits of U. S." 699
Eldridge, George H., Petroleum Industry of California 41
"Electrical Apparatus, Standardization of" 248
"Electrical Engineering Testing" 355, 485
Electrical Equipment Co., Ill. 870
"Electrical Generating Set, Direct Connected" 218
Electrical Machinery for South Africa. 52
"Electrical and Magnetic Calculations" 834
"Electrical Measurements, Arithmetic of" 628, 766
Electric Amalgamator, Henneberg & Pape Pat. 113
Electric Combustion Furnace, Carr's Pat. 734
Electric Furnace, Chalmot's Pat. 767
Electric Furnace Co., N. Y. 146
Electric Furnace, Conley's Pat. 632
Electric Furnace, Duff & United Alkali Company's Pat. 837
Electric Furnace, Keller's Pat. 57, 421
Electric Furnace for the Laboratory. 692
Electric Furnace, Park's Pat. 836
Electric Furnace Terminal, Acheson's Pat. 901
"Electric Locomotives, Jeffrey" 490
"Electric Metal Working, Burton's Pat." 527
Electric Mine, Cal. 116
"Electric Mine Hoist" 183
"Electric Mine Locomotive" 308
Electric Mining Machine, Morgan's Pat. 57
"Electric Plants, Economy of Isolated" 524, 629
Electric Power in South Wales. 723
"Electric Power Transmission" 629
Electric Power Transmission, Long Distance 166, 485
Electric Power Transmission in Mines. 299
Electric Pumping Engine, Brunau's Pat. 868
Electric Railroads in Italy. 659
Electric Railways for Industrial Purposes. 321
Electric Rock Drill, Crippen, Maxwell & White's Pat. 591
Electric Spark Gold Mg. Co., Colo. 872
"Electric Switch, Waterproof for Mine Signal System" 835
Electric Treatment of Peat. 516
Electric Welding, Hunter's Pat. 185
Electric Welding Machine, Portable, Meyer's Pat. 219
"Electricity in Mining" 307
"Electrochemiker sowie Technische Chemiker und Physiker Kalender fur 1902" 142
"Electrochemistry, Outlines of" 79
Electro-Cyanide Plant, S. D. 773
Electrode, Kinrade's Pat. 58
Electrodeposition of Compound Wire Bars, Sanders's Pat. 527
Electrodeposition, Forming Bodies by, Steinweg's Pat. 390
Electrodeposition of Zinc, Mond's Pat. 491
Electrode for Purifying Liquids in Electrolysis, Chipman's Pat. 451
"Electrolytic Alkali Making, Acker Process." 658
"Electrolytic Alkali Co., England." 471
Electrolytic Anode, d'Andrimont's Pat. 701
Electrolytic Apparatus, McDonald's Pat. 591
Electrolytic Apparatus, Reed's Pat. 734
Electrolytic Apparatus, Roepfer and Scholl's Pat. 768
Electrolytic Cell, Le Sueur's Pat. 283
Electrolytic Converter, Long's Pat. 768
Electrolytic Cyanide Vat. 112
Electrolytic Decomposition of Alkaline Salts, Gilmour's Pat. 452
Electrolytic Deposition of Metals, Harrison & Day's Pat. 421
Electrolytic Electricity-Meyer, Bastian's Pat. 323
Electrolytic Manufacture of Chlorates and Perchlorates Lederlin's Pat. 323
Electrolytic Precipitation of Gold. 700
Electrolytic Process, Mourant's Pat. 421
Electrolytic Production of Chlorine, Atkins's Pat. 768
Electrolytic Recovery of Metals, Frasch's Pat. 632
Electrolytic Reduction of Nitro Compounds, Buchner's Pat. 804, 808
Electrolytic Separation of Tin. 213
"Electrolytic Soda and Bleach, Hargreaves-Bird Process for Producing." 471
Electrolytic Solution, Meyer's Pat. 185
Electrolytic Treatment of Alkali Metals, Brochet & Ranson's Pat. 421
Electrolyzing Alkali Chlorides, Gintl's Pat. 113
Electro-Metallurgy in Germany in 1901. 51
Elisha Ray Mine, Oregon. 427
Elizabeth Iron Co., Minn. 874
Elizabeth Mine, Cal. 770
Elizabeth Mine, Colo. 595
Elizabeth Mine, Ont. 62, 439
Elizabeth Mg. Co., S. Dak. 87, 152, 226, 500
Elkhart Mine, Ariz. 188, 325, 359, 736
Elkhorn Mine, Mont. 739
Elkhorn Mining District, Montana. 583
Elk Mountain District, Colo. 287
Elkton Con. Mg. Co., Colo. 189, 256, 327, 394, 398, 535, 564, 596, 808, 842, 906
Elia Hill Gold Mg. Co., Idaho. 86, 809
Ellen Gowen Mine, Pa. 119
Ellenville Zinc Co., N. Y. 288
Ellershausen's Pat. Ore Treatment. 803
Ellingham Mine, Cal. 393
Elliot's Pat. Hydrocarbon Burner. 837
Ellis, J. S. 391
Ellsworth Coal Co., Pa. 192
Elwood City Brick and Clay Co., Pa. 252
El Mahdi Mine, Colo. 287
Elmendorf Gold Mg. Co., S. Dak. 87
Elmore Copper Tube Works in England. 751
Elmore's Pat. Separating Mineral Substances by Oil. 57, 283
Elm River Mine, Mich. 86, 426, 596, 809
El Oro Mine, Cal. 737
El Paso Consolidated Mg. Co., Colo. 149, 700
El Paso, Texas, New Smelter. 429, 497, 564, 641, 709
El Porvenir Mine, Costa Rica. 331
Elmer's Pat. Clearing Blast Furnace Gases. 283
El Teuku Mine, Costa Rica. 331
Elwell Springs Placer Diggings, Ariz. 635
Ely District, Nevada. 225
Ely Mg. and Milling Co., Nev. 119
Emerald Lake Mine, Colo. 189
Emerald, U. S. 283
Emerson's Pat. Artificial Stone. 293
Emerson's Pat. Making Metal Tubes. 491
Emery in Greece. 178
Emery, John A. 633
Emery Mine, Mont. 87, 843
Emery in Turkey. 178
Emily Knot Mine, Cal. 904
Emma Mine, Colo. 455
Emma Mine, Mont. 151
Emma Mine, Utah. 511
Emmet Mg. Co., Colo. 771
Emmons Mine, N. C. 499
***Emmons, S. F., Clarence King.** 3
Empire Coal Mg. Co., W. Va. 534
Empire Copper Co., N. M. 674
Empire Gold M. Co., Colo. 362, 455
Empire Gulch Mg. Co., Colo. 771
Empire Mine, Ariz. 59, 359
Empire Mine, Cal. 286, 840
Empire & Pacific Mine, Cal. 806
Empire Portland Cement Co., N. Y. 840
Empire State-Idaho vs Bunker Hill & Sullivan Mg. Co., Idaho. 395
Empire State Mg. Co., S. Dak. 675, 811
Empire Steel and Iron Co., N. Y. 398
Empire Steel and Iron Co., Pa. 146, 147, 392
Empire Tunnel and Gold Mg. Co., Colo. 189
Employer, Liability of, for Injury through Negligence of Superintendent. 522
Enamelled Iron Vessels for Chemical use. 731
Encampment-Battle Lake Aerial Tramway, Wyo. 640
Encampment Smelter, Wyo. 226
Engbert's Pat. Artificial Sandstone. 826
Engelhardt, E. C. 82, 769
Engelhardt, Viktor, "Electrolyse des Wassers" 765
***Engine Bearings, Modern Lubrication of.** 696
"Engineering, Mechanics of" 109, 834
"Engineering and Mining Journal" 65, 97
"Engineering and Mining Journal" and "Mining and Metallurgy," Consolidation. 1
Engineering and Mining Journal, Removal. 300
Engineering Research Laboratory, American, Need of. 469, 557, 663
Engineer Mine, Colo. 873
England, Bank Statement. Weekly 787
England, Copper Production. 787
English Electro-metallurgical Co. 751
English Mining Engineers, Opening for. 530
English Steel Trade, Consolidations. 298
English Steel Works, Reorganization of. 575
Ennis Mine, Cal. 116
Ennis's Pat. Tunneling Machine. 113
Enoch's Pat. Precipitating Silico Fluoride of Sodium. 452
Ensign Mine, Cal. 450
Ensign Land Co., Ala. 220
Ensign Southern Railroad, Ala. 228, 461
Enterprise Mine, Colo. 116
Enterprise Mine, Minn. 150
Ernzinger's Pat. Filtering Press. 501
***Equatorial Adapter for Mine Surveying Instruments, Berger's Pat.** 112
Ericson, Alexander. 186
Eric Canal Improvement. 237
Erikson, E. E., Pa. 593
Ernst, A. B. 72
Erythra, Gold Mining in. 874
Esmeralda Mine, Colo. 223, 563
Esser's Pat. Producing Half-Staff from Peat. 113
***Essner & Lauran's Pat. Melting Furnace.** 282
Estella Mine, Utah. 740
Estelle Mine, B. C. 909
Ethel Mine, Cal. 494
Etna Mine, Cal. 454, 704
Etowah Gold Mg. Co., Ga. 738
Etruscan Copper Estates, Ltd., Italy. 601, 743, 776
***Etzatlan Mining District, Mexico.** 243
Eureka Con. Mg. Co. 563
Eureka Con. Mg. Co., Nev. 457
Eureka Mill, Utah. 774
Eureka Pacific Placer Mg. Co., Idaho. 86
Eureka Slate Co., Cal. 222
Eureka Slate Quarry, Cal. 871
European Proposed Iron and Steel Combination. 467
European Trade Conditions. 65
Europe, Copper Consumption. 162
Europe, Copper Production. 98
Europe, Nitrate of Soda Stocks and Statistics. 40, 432, 645
Evalyn Mg. Co., Colo. 738, 808
Eva May Mine, Mont. 224, 257, 396
Evans, A. 426
Evans City Coal Co., Pa. 192
Evans, George H. 252
Evans, Lo. 638
Evans, Robert D. 592
Evans's Pat. Wheel or Rail Thread. 803
Evelyn Mg. Co., Colo. 189, 361, 595
Evering Star & Central Mines, Cal. 255, 495
Everhart's Pat. Alum Making. 113
Everitt & Co., Molybdenum and Chrome Buyers. 418
Everman, B. W., "Fishes of Mexico and Central America" 698
Excavating Machine, Blalock's Pat. 390
Excavating Mechanism for Dredges, Postelwaite's Pat. 251
Excavator, Gross's Pat. 323
Excavator, McKinney's Pat. 322
Expansion Mine, Cal. 116
Experimental Gulch Mine, Cal. 393, 737
Exploration Co., Ltd., London. 511
Exploration Co., Ltd., London, Report. 523
Exploration Mg. Co., Ariz. 84
Exploration and Mining Co., Mont. 191, 224
Explosive Making, Bonnet's Pat. 491
Explosive, New German. 516
Explosive, New Safety. 451
Explosives, New in Great Britain. 549
Explosives, Treating, Bate's Pat. 734
***Expurt Oil and Pipe Line Co., Tests of Beaumont Oil as Fuel.** 169
Export Shipping Co., N. Y. 83
Exports, New York. 315
Exposed Treasure Mine, Cal. 360, 424, 454
Exposition, Permanent, in Mexico. 105
Extension Coal Mines, B. C. 409
Extracting Metals from their Oxide Ores, Budolphs and Ludin's Pat. 701
Extra-Lateral Right, Origin in U. S. Mining Law. 406
Extra-Lateral Rights in Mining Lands. 763, 799
Eyerermann's Pat., Malleable Iron Casting. 804

F

Fairbanks Co., N. Y. 703
Fairbanks, H. W. 805
***Fairbanks-Morse Automatic Ore Dump.** 590
Fairbanks, Morse & Co., Ill. 146, 528, 698
Fairfield Car Wheel Co., Mass. 392
Fairfield Mg. Co., Colo. 361
Fairmont Coal Co., W. Va. 226, 640
Fairview Mine, Cal. 286, 495, 671, 807
Fairview Mine, Colo. 773
Fayview Mg. Co., S. Dak. 500
***Famous' Oil Filters, Sales.** 488
Fanchon Mg. Co., Colo. 117, 189, 455, 531, 771, 906
Fannie Marie Gold Mg. and Milling Co., Cal. 60, 147, 530, 584
Fanny Mine, Colo. 327
Fanny Rawlings Mg. Co., Colo. 906
Faraday Mine, Va. 253
Fargo Gold and Copper Co., Oregon. 289
Farish, John B. 902
Farish, William. 391
Fassler Ranch, Cal. 594
Father De Smet Mill, S. Dak. 192
Fattelay's Pat. Steel Making. 559
Faulkner's Pat. Generating Gas Apparatus. 837, 865
Faure, Pierre. 114
***Fauth & Co., New Precision Level.** 320
***Fawcett, Waldon, New Ore-Carrying Vessels.** 21
Fay Iron Co., Minn. 362, 637, 739
Fay Exploration Co., Minn. 457, 498, 597, 739
Fay, H. F. 391, 869
Fay, John. 220
Faywood Lead Co., N. M. 458
Feather Fork Gold Mg. Co., Cal. 737
Feather River Exploration Co., Cal. 222, 254, 905
Feather River Gravel Mining, Cal. 905
Federal Chemical Co. 114, 124
Federal Copper Co., N. M. 843
Federal Lead Co. 358, 359, 392, 597
Federal Loan Mine, Cal. 286
Federal Mine, Colo. 808
Federated Co-operative Window Glass Co. 221
Federated Mines of Rhodesia, Ltd. 398
Feldman, E. S. 433
Feldspar Production, Canada. 387
Feldspar Production, Ontario. 414
Feldspar, Swedish. 767
Fell, E. Nelson. 422
***Fell, E. Nelson, Athabasca Mine, B. C.** 411
Fellowcraft Mine, Cal. 115
Fellows, A. M. 422
Felt & Tarrant Mfg. Co., Ill. 493
Fentress Mines, N. C. 225
Ferguson, J. C. H. 82
Ferracuta Machine Co., N. J. 147, 528
Ferreira Deep Mine, Transvaal. 428
Ferrell's Pat. Fireproofing Wood. 491
Ferris-Haggarty Copper Mfg. Co., Wyo. 226, 330, 364
Ferro-Chrome Color Making, Haagen's Pat. 557
Ferro-Molybdenum, Duty on. 522
Fibrous Material. 526
Fidelity Mine, Cal. 60, 255
"Field Columbian Museum Reports" 524, 556
Fielding, C. W. 220
Fiero District, N. M. 151
Figel-Grimm Copper and Milling Co., Cal. 393
Filaments for Incandescent Lamps. 728
Fillmore, H. A. 284
Filter-Press Cloth, Burning. 557
Filter-Press, Euzinger's Pat. 901
***Filter-Press, Wernecke's Pat.** 184
Filter-Press, Wilson's Pat. 701
Financial Notes. Weekly 787
Findlay Gold Mg. Co., Colo. 362, 394, 398
Findland, Ozokerite. 67
Finney, Charles E. 592
Fire Assay of Lead. 730
Fireproofing Wood, Ferrell's Pat. 491
Fireproofing Wood, Rucker's Pat. 251
Firing Cables, Testing, Stebb's Pat. 559
First National Mine, Colo. 636
Fischer & Belden Mine, Cal. 528
Fisher Creek Mg. Co., Mont. 86, 288
Fisher, George K. 324
Fish, Hamilton, "Systematic Organization of First Aid Corps for the Treatment of Injured in Mines" 524, 556
Fisher Mine, Idaho. 809
Fish Springs Shipments, Utah. 363, 427, 458, 534, 640, 675, 741, 811
Fiske's Pat. Brick Kiln. 323
Fitch, Walter. 284, 422
Fitz, John C. 186
Fitzgerald, Francis A. J., Artificial Graphite. 310
***Fitzgerald's Pat. Quicklime Separating and Continuous Ore Furnace.** 527
Flag, J. R. 284
Flag Hill Gold Mg. Co., Wash. 566, 640
Flagstaff Mine, Cal. 454
Flagstaff Mine, Oregon. 565
Flagstaff Mine, Utah. 61
Flagstaff Mine, Wash. 534
Flaming Metallic Tubes, McKechnie's Pat. 666
Flathead Oil Co., Mont. 329
Fleischer's Pat. Making Water Gas. 868
Fleming, J. A. 146
Fletcher, Charles R. 358
Fletcher, Frank. 324
Flewelling Mine, Mich. 809
Flint Lake Gold Mg. Co., B. C. 641
Flint Pebbles, French. 447
Flint Production, Great Britain. 827
Floods in Anthracite Coal Regions. 366
Floods in Anthracite Mines of Pennsylvania, Some Lessons from. 378
Floods in Iron Making Districts. 367
Florence Mine, Cal. 286
Florence Mine, Mich. 706
Florence Mine, Wis. 676
Florence Mg., Milling, Smelting and Refining Co., Colo. 287
Florida Phosphate Industry. 92, 230
Florida, Phosphate Land Sales. 505
Florida, Phosphate Shipments. 40, 92, 244, 262, 335, 401, 538, 570, 645, 712, 848, 880
Florida, Phosphate Trade. 244
Florodora Mine, Ariz. 904
Flue Connection for Furnaces, Collins's Pat. 282
Flue Dust, How to Save. 803
Fluid for Promoting Combustion, Battistini's Pat. 836
Fluids, Continuous Compression Chodzko's Pat. 113
Fluker, W. H., Gold Mining in McDuffie County, Ga. 725
Fluorine Production, Meslans's Pat. 283
Fluorspar. 250, 796, 834
Fluor Spar Co. 117, 253
Fluorspar for Iron Flux. 111
Fluorspar Production, Great Britain. 413, 827
Fluorspar Production, U. S. 760
Fluxing and Separating Compound, Miller's Pat. 804
Flying Dutchman Mine, Cal. 562, 670
Flynn, C. B. 590
Foggett, George C. 633
Follett, B. 633
***Foomis, Andre, New Drop Shaft.** 583
Foote, C. H. 58, 82
Foote, F. H. 58
Foot & Simmons Mine, Colo. 189
Forbis, John. 638
"Formermachine, Wartung der" 109
Foreign Syndicate. 259
Foreman, Liability for Direction of, in Mining Operations. 483
Forest, B. J. 220
Forest City Leasing Co., Colo. 738
Forest City No. 2 Mine, Colo. 671
Forest Mine, Colo. 286
Forest Queen Mine, Colo. 255
Forfeiture, Law to Prevent. 178
Forfeiture of Mining Claims, Laws Strictly Construed. 863
Forfeiture, What will be Taken as Payment to Prevent. 416
***Forge, Improved Buffalo Down-Draft.** 526
Fortuna Copper Co., Cal. 60
Fortuna Mg. Co., Colo. 287, 773
Fort Wayne Electric Works, Ind. 769, 903
Fossil Oil Field, Wyo. 723
Foster Engineering Co., N. J. 253, 423, 593
Foster, Ernest Le Neve. 838
Foster's Pat. Blast Furnace Apparatus. 452
***Foster's Pat. Circulating Water Through Tuyeres and Coolers of Blast Furnaces.** 527
Foster's Pat. Ore Sampler. 421
Foster's Pat. Tuyere. 195, 760
Fouch Mill, Cal. 804
Fouquay Mine, N. S. 193
Four Metals Mg. Co., Colo. 672
Four-Mile Gulch Mg. Co., Colo. 705
"Fourth Dimension, Recognition of" 556
***Fowler & Ewen's Pat. Stamp Mill.** 112
Fowler, Samuel S. 869
Fowler's Pat. Steel Mine Props. 357
Fowlls's Pat. Gas Retort Charger. 701
Fox Brothers & Co., N. Y. 59
Foxdale Mine, Mich. 874
Fraction Mine, Nev. 707
France, American Coal in. 69, 240
France, Bank Statement. Weekly 787
France, Blast Furnaces in. 242
France, Capitalization of Mining and Industrial Companies. 677
France, Coal Consumption. 69
France, Coal Imports and Exports. 878
France, Coal Mines of the Loire. 213
France, Coal Production. 228, 430
France, Colnage. 332
France, Demand for Silver. 136
France, Foreign Trade. 154, 292, 352, 430, 502, 677, 780
France, Gold and Silver Movement. 194, 322, 502, 677, 849
France, Hours of Work in Mines. 292
France, Iron and Steel Imports and Exports. 863
France, Iron and Steel Production. 536, 601
France, Petroleum Briquettes in. 108
France, Population of. 196
France, Prospects for American Coal in. 379
France, Zinc Production. 405
Franchot's Pat. Making Paris Green. 701
Francisco Mg. and Milling Co., Utah. 257
Frank Coal Mines, Canada. 152
Frank, Henry L. 324
***Franklin Air Compressor.** 630
Franklin Con. Mine, Colo. 737
Franklin, John M. 633
Franklin Mine, Cal. 254, 393
Franklin Mg. Co., Mich. 118, 121, 194, 256, 288, 395, 456, 532, 596, 673, 809
Franklin Mg. Co., Wash., Report. 484
Franklin's Pat. Casting Machine. 901
Franklin's Pat. Furnace Charging. 491
Franklin Tailings, Mich. 426
Franklin Tunnel, Utah. 459
Fraser Nickel Process. 431
Fraser's Pat. Caustic Alkali Making. 631
Fraser's Pat. Cobalt Separation. 901
Fraser's Pat. Nickel-Ammonium Salt. 357
Fraser's Pat. Producing Nickel Salts. 81
Fraser's Pat. Recovering Metals by Electrolysis. 632
Fraser, George. 869
Fraser Mountain Copper Co., N. M. 329
Fraser River Gold Dredging Co., B. C. 641
Frazier Mine, Tenn. 740
Frazier, Schuyler. 528
Fredericks, Charles L. 252
Free America Mine, Colo. 706
Free Gold Mine, Cal. 222, 393, 840
Free Gold Mg. and Milling Co., N. M. 191, 329
Freeland Extension Mine, Colo. 808
Freiberg Mine, Mont. 426
Freight Rates on Anthracite Coal. 389
Fremont County, Colo., Coal Mines. 563
Fremont Mg. Co., Cal. 154, 530, 562
French Colliery, Mechanical Coal-Cutters at French Colonies, Immigrants to. 228
French Doctor Mine, Cal. 776
"French Gulana, New Gold Fields." 243
"French Gulana in 1902" 355
French Hill Mining, Cal. 84
French Iron Trade. 863
French Railroads, Coal on. 836
French Rand Gold Mg. Co. 154
French Sea Flint Pebbles. 447
French's Pat. Conveying Apparatus. 803
Fresno Placer Mg. Co., Cal. 116, 562
Freyhold's Pat. Steam Pump. 323
Freyman & Tolman's Pat. Gas Detector. 251
Friday Mine, Cal. 904

Friday Mine, Idaho..... 637
 Friedd, B..... 902
 Frisco Shipments, Utah..... 397, 458, 534, 560
 639, 774, 811, 844
 Frith's Pat. Conveyor..... 145
 Fritsch, Arthur Foundry and Machine Co., Mo..... 114, 157, 389, 422, 492, 805
 Fritz, John, Medal..... 803
 Fritz's Pat. Perforating Blooms..... 491
 Fritz's Pat. Cement Making..... 687
 Frolich's Pat. Ore Separating..... 251
 Frost, C. A. S., and Cape Nome Conspiracy Case..... 84
 Frost Mfg. Co., Ill..... 704
 Frost, Oscar J., Fire Assay of Lead..... 731
 Frothingham, N. L..... 702
 Fryer Hill Mines Co., Colo..... 636, 671, 738, 841, 906
 Frye's Pat. Oil Well Casting Head..... 185
 Fuchs, Frederick..... 633
 Fuel, Artificial, Compressor, Bratton's Pat..... 283
 Fuel, Artificial, Springborn's Pat..... 145
 Fuel, Artificial, Tucker & Cory's Pat..... 804
 Fuel Block and Briquette, Chaillly's Pat..... 591
 Fuel Briquettes, Jousset & McKay's Pat..... 837
 Fuel-Burner, Daily's Pat..... 808
 Fuel, Feeding, Fine, Carpenter's Pat..... 185
 Fuel, Liquid, in Open-Hearth Steel Furnaces..... 140
 Fuel, Liquid for War-Vessels..... 67
 Fuhrmann's Pat. Making Magnesium Peroxide Compound..... 667
 Fulda Iron Works, Cal..... 561
 Fullers Earth, California..... 9
 Fulmer Mine, W. Va..... 428
 Fulton, Charles H., "Cyanide Process in the Black Hills, S. D."..... 389, 663
 Fulton, Charles H., Cyaniding in the Black Hills, S. Dak in 1900..... 14
 Fume Condenser, Webb's Pat..... 357
 Funke, A. H., New York..... 492, 493
 Furer, F. A., "Salzbergbau und Salinenkunde"..... 79
 Furman, H. Van F..... 252, 633, 668, 769
 Furman, John H..... 284
 Furman's Pat. Safety Device for Gas Lines..... 901
 Furnace, Allis's Pat..... 357
 Furnace for Burning Fine Fuel, Herzberg's Pat..... 803
 Furnace Charging, Franklin's Pat..... 491
 Furnace, Davies's Pat..... 452
 "Furnace Draft"..... 216, 417
 Furnace, Edwards's Pat..... 837
 Furnace for Heating Billets, Morgan's Pat..... 300
 Furnace for Heating Ingots, Edwards & Morgan's Pat..... 251
 Furnace for Heating Ingots, Nau's Pat..... 421
 Furnace for Heating or Smelting Metals, Hewitt's Pat..... 700
 Furnace, Laird's Pat..... 251
 Furnace, MacCormack's Pat..... 590
 "Furnace for Refining Lead and Zinc Fume, Bartlett's Pat..... 322
 Furnace for Rolling Mills, Allis's Pat..... 733
 Furnace Sand, Duty..... 316
 Furnaces and Boiler Flues, Duty on..... 587
 "Furnace, Spike & Jones's Pat..... 323
 "Furnace, Wakely's Pat..... 559
 Fuse Igniter, Jenkins and McDonald's Pat..... 837
 Fuse, Render's Pat..... 357
 "Fusible Boiler Plugs..... 665

G

Gable & Kearns's Pat. Red-Lead Furnace..... 112
 Galnes, James L..... 324
 Galena Basin Mining, Colo..... 148
 Galena Mg. and Sm. Co., S. Dak..... 363, 707, 810
 "Galuro Mountains Geology, Arizona..... 546
 Gallagher, J. B..... 82
 Galloway Coal and Coke Co., Ala..... 454, 494, 594, 869
 "Galschiot's Pat. Cooling Cement Clinker..... 452
 Galt Mine, Mont..... 150
 Galt Boy Mine, Colo..... 223
 Galway Mine, Cal..... 505
 Gambetta Mine, Cal..... 360, 393, 454, 804, 807
 Garbutt Mine, Colo..... 287, 841
 Garden City Fan Co., Ill..... 528
 Garden City Mg. Co., S. Dak..... 151
 Gardner Electric Drill and Machinery Co..... 528, 560
 Garibaldi Mine, Cal..... 60, 116, 326, 393, 494, 704
 Garnet Smelting and Developing Co., Ala..... 779
 Garrett, W. A..... 186, 391, 528, 702
 Garrison Gold and Copper Mg. Co., Utah..... 428
 Garvin, C. J..... 702
 Gary, A. C..... 569
 Gary, E. H..... 186
 "Gas-Analysis, Handbook of Technical"..... 800
 Gas, Blast Furnace, Utilizing..... 718
 "Gas and Coal Dust Firing"..... 834
 Gascoyne Gold-Field, Western Australia..... 40
 Gas Detector, Freymann & Tolman's Pat..... 251
 Gas Detector for Miners Safety Lamps Mackie's Pat..... 322
 Gases, Vessel for the Reception of High-Pressure, Ludwig's Pat..... 734
 Gas Fuel for Line-Kilns..... 699
 Gas Generating, Faulkner's Pat..... 868
 Gas Generator for Gas Engine, Bonds's Pat..... 632
 Gas Lease, Reservation in..... 353
 Gas Lighting in Great Britain..... 448
 Gas Lines, Safety Device for Furman's Pat..... 901
 Gas Manufacture, Harris's Pat..... 323
 Gas Manufacture, Schindler's Pat..... 660
 Gas, Natural, Production, Ontario..... 414
 Gas and Oil Engines, Demand for..... 282
 Gas and Oil in Kansas..... 37
 "Gas and Oil in Kansas-Indian Territory and Texas Fields..... 100
 Gasoline Engines in the Far North..... 51
 Gas from Peat..... 591
 Gas Plant, Naeff's Pat..... 591
 "Gas Producer, Duff's Pat..... 81
 "Gas Producer, Hyatt's Pat..... 632
 "Gas Producer, Mond's Pat..... 632
 Gas Producer Plant, Necessari, Mexico..... 687
 Gas Producer, Swindell's Pat..... 81
 Gas Purifying Agents, Making, Blackmore's Pat..... 632
 Gas Purifying, Theison's Pat..... 58
 Gas Retort Charger, Fowles's Pat..... 701
 Gas Retort, Isbell's Pat..... 768
 Gas Separating from Water and Oil, Newbold & Lowry's Pat..... 58

"Gasket, McKim..... 557
 Gascon Ridge Mg. Co., Cal..... 494
 "Gates & Capen's Pat. Rock Breaker..... 185
 Gauntlet Gold Mg. Co., Colo..... 60
 Gay, George E..... 114
 Gebro Mine, Mont..... 457
 Gee, Emerson..... 453
 Gehre's Pat. Manufacturing Plates or Tiles..... 251
 "Geissel, H. L., Western Australia's Mining Industries..... 45
 Geldenhuis Deep Mg. Co., Transvaal..... 193, 330, 459, 908
 Geldenhuis Estate Mg. Co., Transvaal..... 193, 459
 Gem Con. Mg. Co., Oregon..... 639
 Gem Extension Mine, Colo..... 394
 "Gem-Jessie Copper and Silver Group at Butte, Mont..... 107
 Gem Jessie Mine, Butte, Mont..... 217
 Gem Mfg. Co., Pa..... 114
 Gem Mine, Oregon..... 87, 773
 Gems, Grinding and Polishing, Hilliard's Pat..... 900
 Gems, Museum Collections of..... 268
 General Chemical Co., N. Y..... 570, 676, 709
 General Concentrates Co., N. Y..... 453, 735
 General Electric Co., N. Y..... 59, 593
 General Electric Co. in Mexico..... 62
 General Fireproofing Co., O..... 325
 General Merritt Mine, S. D..... 598
 General Mining and Finance Co..... 259
 Generating Gas Apparatus, Faulkner's Pat..... 667
 Genoa Iron Co., Minn..... 395
 Geological Society of America, Meeting..... 101, 899
 "Geological Survey of Canada, Report"..... 629
 Geological Survey, U. S., Reorganization..... 516
 Geological Survey Work in Texas Oil Fields..... 471
 Geological Work in Alaska..... 288
 Georgetown Deep Mg. and Tunnel Co., Colo..... 286
 Georgetown Mill, Cal..... 393
 Georgia, Bauxite Mining..... 39
 Georgia, Coal Production..... 791
 "Georgia Exhibit, Charleston Exposition..... 695
 "Georgia Geological Survey, Report on Roads and Road-Making Materials..... 485, 556
 Georgia, Gold Mining..... 79
 Georgia, Gold Mining in McDuffie County..... 725
 Georgia, Gold and Silver Production..... 362
 Georgia Iron and Coal Co., Ga..... 262
 Georgia, Phosphate Production..... 672
 Georgia, Salt Well in..... 702
 Gerber, H. C..... 702
 German-American Con. Gold Mg. Co., Colo..... 636
 German-American Petroleum Co., Germany..... 653
 German Cement Industry..... 321
 German Cement Trade..... 306
 German Central Mining Institute..... 131
 German Coal Cars..... 129
 German Coal Mine Accidents..... 754
 German Explosive, New..... 516
 German Interests in Manganese in Brazil..... 682
 German Kall Syndicate..... 262, 785
 German Mine, Cal..... 424
 "German Miners' Day at Dortmund, Proceedings"..... 865
 German Potash Salts Industry..... 746
 German South Africa, Prospecting..... 352
 German Trade in Machine Tools..... 893
 Germany, American Coal in..... 70
 Germany, American Copper, Lead and Zinc for..... 166
 Germany, American vs. Russian Petroleum in..... 135
 Germany, Asphalt Production..... 549
 Germany, Bank Statement..... Weekly
 Germany, Bismuth Ore Production..... 549
 Germany, Borling Mine Shafts..... 140
 Germany, Coal and Coke Imports and Exports..... 122, 280, 461, 536, 602, 744, 846
 Germany, Coal Mining..... 233
 Germany, Coal Production..... 134, 415, 537, 549
 Germany, Coal Sorting Plants..... 793
 Germany, Coal Tar Products..... 67
 Germany, Cobalt Production..... 549
 Germany, Consumption of Foreign Copper..... 295
 Germany, Copper Imports..... 849
 Germany, Copper Production..... 549, 787
 Germany, Electro-Metallurgy in 1901..... 51
 Germany, English Coal in..... 333
 Germany, Gold and Silver Ore Production..... 549
 Germany, Imports of Iron and Other Ores..... 620
 Germany, Iron Ore Production..... 549
 Germany, Iron and Steel Production..... 16, 65, 203, 445, 468, 474, 549, 687
 Germany, Lead Production..... 549
 Germany, Lead Production..... 549
 Germany, Litharge Production..... 549
 Germany, Manganese Ore Production..... 549
 Germany, Mineral Production..... 549
 Germany, New Method of Hardening Steel..... 51
 Germany, Nickel Ore Imports..... 620
 Germany, Nickel Ore Production..... 549
 Germany, Petroleum Profits..... 653
 Germany, Petroleum Production..... 549
 Germany, Pig Iron Consumption..... 610
 Germany, Potash Salts Production..... 549
 Germany, Potash Salts Industry..... 785
 Germany, Pyrites Imports..... 620
 Germany, Pyrites Production..... 549
 Germany, Salt Production..... 349
 Germany, Zinc Imports and Exports..... 125, 231, 402, 713, 849
 Germany, Zinc Production..... 405, 549
 Gernot & Flevet's Pat. Sulphide Treatment..... 323
 Gernot's Pat. Lead Ore Treatment..... 145
 Gernaert, Jules, "Associations Industrielles et Commerciales"..... 248
 Gernot's Pat. Treating Metallic Sulphides..... 551
 Gerrat's Pat. Dry-Kiln..... 768
 Gertie Mg. Co., S. Dak..... 81, 363, 797
 Gesner's Pat. Alloy..... 251
 Geyser Marion Mg. Co., Utah..... 62
 "Gibson, George H., Electricity in Mining..... 307
 Gibson and Weaslin's Pat. Producing Silica Bricks..... 868
 Giebler Process for Hardening Steel..... 51
 Gieshold's Pat. Rolling Solid or Hollow Bodies..... 219
 Gifford Mine, Cal..... 293
 Gilbert, E. A..... 838
 Gille, George H..... 838
 Gilkerson, H. G..... 668
 Gillette, John..... 58
 Gillis, Donald B..... 358
 Gilmore, W. H..... 82
 Gilmore's Pat. Electrolytic Decomposition of Alkaline Salts..... 452

Gilpin County, Colo., Machinery Receipts..... 327
 Gilpin County, Colo., Mines in 1901..... 134
 Gilpin County, Colo. Mining Deeds and Transfers..... 60, 85, 189, 223, 255, 287, 327, 394, 455, 496, 531, 563, 595, 636, 671, 705, 737, 841, 905
 Gilpin County, Colo., New Mining Locations in..... 805
 Gilpin County, New Stamp Mills, Colo..... 394
 Gilpin County Ore Shipments, Colo..... 148, 85, 148, 255, 361, 531, 671, 809
 Gint's Pat. Electrolyzing Alkali Chlorides..... 113
 Glacier Mound Placer, Oregon..... 427
 Gladstone Mine, Cal..... 455, 671, 705
 "Gladstone Tin Mine, Western Australia..... 47
 Gladys Gold Mg. Co., Cal..... 737
 Glasgow & Western Mg. Co., Nev..... 225
 Gleason's Pat. Lime Kiln..... 357
 Glen Deep Mine, Transvaal..... 428, 459
 Glenwood Mine, Pa..... 428, 459
 Globe Coal Co., Ala..... 494, 534
 Globe Copper Mg. Co., Wyo..... 908
 Globe Gold Mg. Co., S. D..... 533
 Globe Iron Works, Cal..... 187, 593
 Globe Mine, Mich..... 224, 456, 673, 842
 Globe Mg. Co., S. Dak..... 363
 Glossop's Pat. Rock Drill Tool..... 591
 Glossop's Pat. Sharpening Rock Drills..... 491
 Glover Gold Mg. Co., S. Dak..... 119, 363
 Glover, John..... 736
 Glover's Pat. Wire Drawing..... 667
 "Godbe Agitation Method of Leaching..... 321
 Goff, August..... 593
 Goheen Mfg. Co., O..... 392
 Golconda Mine, Cal..... 116, 222, 871
 Golconda Mine, Oregon..... 499, 598, 740, 875
 Gold Anchor Mine, Colo..... 60
 Gold Bank Mine, Cal..... 115, 494
 Gold Basin Mg. Co., Colo..... 117, 361, 394, 425, 595, 636, 771, 841
 Gold Bearing Clay, Treating, Breedon's Pat..... 701
 Gold Blossom Mine, Cal..... 562, 670
 Gold Bluff Mg. and Lumbering Co., Cal..... 360, 454, 871
 Gold Bug Mine, Cal..... 116, 222, 360, 530, 840
 Gold Bug Mine, Idaho..... 596
 Gold Bug Mg. Co., Oregon..... 427, 639
 Gold in Burma..... 173
 Gold, California..... 9
 Gold Canyon Tunnel Extension Co., Nev..... 533
 Gold Coast, Gold Exports..... 876
 Gold Coast, Mining..... 437
 Gold Coast, West Africa..... 139
 Gold, Commercial Movement of..... 6
 Gold Cord Mine, Colo..... 905
 Gold Cord Mine, Wash..... 290, 534
 Gold Cord Mg. and Sm. Co., Colo..... 531
 Gold Creek Mg. Co., Idaho..... 86
 Gold Cross & Eagle Mg. Co., Oregon..... 151
 Gold Cup Mine, Colo..... 808, 872
 Gold Deposits of Arizona..... 795
 Gold Discovery, Madison County, Mont..... 101
 Gold Discovery at Pringle, S. D..... 289
 Gold Dollar Con. Mg. Co., Colo..... 328
 Gold Dollar Mine, Cal..... 188, 455, 905
 Gold Dredge, Lee's Pat..... 559
 Gold Dredge, New Zealand for Brazil..... 518
 "Gold Dredgers, Sacramento County, Cal..... 184
 "Gold Dredging, Curious Complaint Against..... 521
 Gold Dredging, Laval's Pat..... 804
 Gold Dredging, Montana..... 633
 Gold Dredging, New Zealand..... 88, 364, 566, 599, 877
 Gold Dredging, Notes on..... 384
 Gold, Electrolytic Precipitation..... 700
 Gold, Exports, Australia..... 129, 464, 604, 747, 849
 Gold Exports, British Guiana..... 599, 812, 909
 Gold Exports, Gold Coast..... 876
 Gold Exports, New Zealand..... 63, 88, 331, 534, 877
 Gold Exports, South Australia..... 708
 Gold Exports, Tasmania..... 876
 Gold Extracting, Heatherman's Pat..... 113
 Gold-Fields, Alaska, Investigation of..... 585
 Gold-Fields, New in French Guiana..... 243
 "Gold, Fine, Dredging for in Idaho..... 241
 Gold, Fine, Snake River, Origin..... 143, 280
 Gold Fissure Mine, Colo..... 563
 Gold Gravels, New Method of Treating..... 319
 Gold Hill Copper Co., N. C..... 427, 740
 Gold Hill Mine, Cal..... 326, 494, 530, 670, 770, 772
 Gold Hill Mg. and Milling Co., Ariz..... 222
 "Gold Holdings, European Banks..... 6
 Gold Hur Mine, Wash..... 226
 Gold in Hydraulic Tailings at Junction City, Cal..... 108
 Gold, Hyposulphite Solutions for..... 181
 Gold Imports and Exports, U. S..... 6, 230, 340, 342, 368, 539
 Gold Imports and Exports, Great Britain..... 6
 Gold Imports and Exports, San Francisco..... 93, 156, 336
 Gold King Con. Mines, Colo..... 223, 362, 425, 906
 Gold King Gold Mg. Co., Wash..... 290
 Gold King Mg. Co., Utah..... 102
 Gold Ledge Mine, Utah..... 428
 Gold Ledge Mine, Wash..... 88, 193, 258, 290, 364, 397, 534, 599, 640
 Gold in Madagascar..... 144
 Gold, "Making"..... 144
 Gold Metals Mg. and Milling Co., Colo..... 361, 563, 906
 "Gold Mills, Ancient Egyptian..... 104
 Gold Mines Near Port Arthur, China..... 306
 "Gold Mines of Phillip of Macedonia..... 272
 "Gold Mines of the World"..... 869
 Gold Mining in Columbia, South America..... 137
 Gold Mining, Dutch East Indies..... 136
 Gold Mining in Eastern Oregon..... 719
 Gold Mining in Ecuador..... 97, 103
 Gold Mining in Egypt..... 97, 103
 Gold Mining in Georgia..... 79
 Gold Mining in McDuffie County, Ga..... 725
 Gold Mining in Minas Geraes, Brazil, Historical Sketch..... 447
 Gold Mining in Rhodesia..... 373
 Gold Mining in Siberia..... 609
 Gold Mining in the Transvaal..... 690, 774
 Gold Mining in Uruguay..... 631
 Gold Mining Tax in the Transvaal..... 910
 Gold Mining in Western Kansas..... 853
 "Gold Mountain Geology, Arizona..... 546
 Gold Mountain Mine, Ariz..... 59
 Gold Movement, France..... 194, 332, 502, 677, 849

Gold Movement, Great Britain..... 156, 464, 905, 747
 Gold Movement in 1901..... 342
 Gold in New South Wales, Discoverer of..... 754
 Gold Nugget, Montana, Large..... 150
 Gold Ore Discovery, Mohave County, Ariz..... 670
 Gold Ore Mining and Milling Expense in San Juan County Colo..... 604
 Gold Ore Production, Great Britain..... 827
 Gold Ores, Concentrating Low-Grade..... 487
 Gold Ore Treatment, Graham's Pat..... 81
 Gold Ore Treatment, Pethybridge's Pat..... 452
 Gold Ore Treatment, Sacio's Pat..... 113
 Gold Ounces..... 534
 Gold Pick Mg. Co., Colo..... 456
 "Gold Placers of La Cienega, Sonora, Mexico..... 132
 Gold in Portuguese East Africa..... 799
 Gold Production, Alabama..... 66
 Gold Production, Alaska..... 7
 Gold Production, Arizona..... 66
 Gold Production, British Columbia..... 173
 Gold Production, British Guiana..... 258, 501
 Gold Production, California..... 8, 66
 Gold Production, Canada..... 5, 387
 Gold Production, Colorado..... 60, 66, 70, 255, 373, 548
 Gold Production, Georgia..... 373, 548
 Gold Production, Great Britain..... 413
 Gold Production, Guanajuato, Mexico..... 309
 Gold Production, Idaho..... 66, 497
 Gold Production, India..... 120, 152, 290, 428, 599, 741, 908
 Gold Production, Klondike..... 373
 Gold Production, Maryland..... 66
 Gold Production, Michigan..... 66
 Gold Production, Missouri..... 66
 Gold Production, Montana..... 66
 Gold Production, Nevada..... 66
 Gold Production, Newfoundland..... 726
 Gold Production, New Mexico..... 66
 Gold Production, New South Wales..... 300, 459, 586, 741, 821
 Gold Production, North Carolina..... 66
 Gold Production, Nova Scotia..... 444
 Gold Production, Ontario..... 414
 Gold Production, Oregon..... 66
 Gold Production, Portugal..... 245, 761
 Gold Production, Queensland..... 120, 226, 300, 599, 741, 821, 844
 Gold Production, Rhodesia..... 88, 193, 330, 459, 500, 640, 774, 811
 Gold Production, Russia..... 5, 544
 Gold Production, South Africa..... 5
 Gold Production, South Australia..... 826, 300
 Gold Production, South Carolina..... 66
 Gold Production, South Dakota..... 66
 Gold Production, Tasmania..... 300, 821
 Gold Production, Tennessee..... 66
 Gold Production, Texas..... 66
 Gold Production, Transvaal..... 5, 161, 226, 330, 459, 568, 774, 908
 Gold Production, U. S..... 5, 66
 Gold Production, Utah..... 66, 152
 Gold Production, Victoria..... 226, 300, 459, 741, 821
 Gold Production, Virginia..... 66
 Gold Production, Washington..... 66
 Gold Production, Western Australia..... 120, 290, 300, 428, 566, 708, 821, 876
 Gold Production, Witwatersrand..... 5
 Gold Production of the World..... 5
 Gold Production, Wyoming..... 66
 Gold Production, Yukon..... 373
 Gold on Public Lands, Rights of Finder..... 179
 Gold Receipts, San Francisco..... 156
 Gold-Recovering Apparatus, Lawrence's Pat..... 81
 "Gold Recovery from Refractory Ores, Cassel's Pat..... 420
 Gold Ridge Mine, Cal..... 494, 495, 564
 Gold Road Mine, Ariz..... 325, 359, 494
 Gold Sand Mg. Co., Cal..... 454
 Gold-Saving Apparatus, Hambleton's Pat..... 81
 Gold Saving Device, Submarine, Craig's Pat..... 690
 Gold, Saving Fine from Sand..... 145
 "Gold Separating Machine, Sweet's Pat..... 145
 Gold Separator, Dana's Pat..... 390
 Gold Separator, Lester's Pat..... 768
 Gold Shipments..... 150, 335
 Gold Shipments, Klondike..... 885
 Gold and Silver Exports, New Zealand..... 258, 450, 676, 775
 Gold and Silver Imports and Exports, U. S. Weekly..... 231
 Gold and Silver Imports, San Francisco..... 231
 Gold and Silver in 1901..... 5
 Gold and Silver Ore Production, Germany..... 549
 Gold and Silver Shipments, San Francisco..... 294, 402
 Gold Standard Mg. Co., Idaho..... 362, 497, 564
 Gold Star Mg. Co., Ont..... 193, 253
 Gold Stone Mg. Co., Idaho..... 459
 Gold Tunnel & Railway Co., Colo..... 149, 563
 Golden Chest Mg. Co., Idaho..... 328
 Golden Crest Mg. Co., S. Dak..... 319, 844, 908
 Golden Cross Mine, Cal..... 495, 671, 905
 Golden Cycle Mg. Co., Colo..... 256, 328, 394, 638, 738
 Golden Dale Mine, Colo..... 189
 Golden Eagle Mine, Oregon..... 458
 Golden Eagle Mg. Co., Colo..... 60
 Golden Eagle Mg. Co., Mo..... 874
 Golden Eagle Tunnel, Cal..... 904
 Golden Era Mine, Colo..... 906
 Golden Era Mine, Mont..... 498
 Golden Fleece Mg. Co., Colo..... 116, 287, 394, 424
 Golden Front Mine, Cal..... 115
 Golden Gate Mine, Cal..... 60, 286, 326, 670, 704, 770, 904
 Golden Gate & Sulphuree Mg. Co., Cal..... 60
 Golden Hecla Mg. and Milling Co., Colo..... 424
 Golden Horn Mine, Ont..... 290, 742
 "Golden Horseshoe Mine, Western Australia..... 49
 Golden Jubilee Mine, Cal..... 60
 Golden Lion-Little Four Mine, Wash..... 88, 364
 Golden Peak Mg. Co., Cal..... 871
 Golden Queen Mine, Cal..... 846
 Golden Reef Mine, Utah..... 119
 Golden Reef Mine, Ontario..... 741
 Golden Reward Mg. Co., S. Dak..... 363, 499, 533, 474
 Golden Rule Mg. Co., Idaho..... 656
 Golden Slipper Mine, S. Dak..... 87, 226
 Golden Smelter, Colo..... 905
 Golden Star Mine, Cal..... 708
 Golden Star Mine, Utah..... 708
 Golden State Mg. and Milling Co., Colo..... 905
 Golden Summit Mine, Cal..... 904
 Golden Trout Mine, Cal..... 770, 904

Golden Tunnel & California Mine, Cal. 148, 393, 424, 494, 737	Great Britain, Fluorspar Production... 413, 827	Groveland Mine, Mich. 706	Hart's Pat., Dumping Car. 380
Golden Valley Mashonaland Mines, Ltd., South Africa 910	Great Britain, Foreign Trade. 156, 203, 334, 336, 464, 605, 747, 913	Grover Cleveland Mine, Colo. 60	Hart's Pat. Making Hydrochloric Acid. 701
Golden Wedge Mine, Colo. 808	Great Britain, Gas Lighting. 448	Guadalupe Mine, Cal. 188	"Harvard Engineering Journal". 834
Golden West Mine, Cal. 188, 360, 424	Great Britain, Gold Imports and Exports. 6	Guadalupe Mine, Mexico. 775	Harvard Mine, Cal. 255, 563, 705, 737, 771
Goldfield Assay Offices, Colo., Destruction. 336	Great Britain, Gold Production. 413, 827	*Guanaquato City, Mexico. 613	Harvard University. 324
*Goldfields, Western Australia. 45	Great Britain, Gold and Silver Movement. 156, 464, 605	Guanaquato Con. Mg. and Milling Co., Mexico. 120, 121, 201	Haskell Mine, Cal. 840, 904
Goldfish Mg. Co., S. Dak. 225	Great Britain, Gypsum Production. 413, 827	*Guanaquato Con. Mg. and Milling Co., Mexico. 120, 121, 201	Hassan, Tagge & Dean, Mich. 804, 808
Golding & Co., N. J. 504	Great Britain, Igneous Rocks Production. 827	Guanaquato Mining District, Mexico. 206, 613	Hastings, John B. 838, 869
Golding Sons & Co. 654	Great Britain, Iron Imports. 155, 439, 447, 582, 726, 891	Guanaquato Power and Electric Co., Mexico. 742	Hattfield, William H., Elimination of Silicosis in Open-Hearth Steel Making. 829
Goldsborough, E. L., "Fishes of Mexico and Central America". 698	Great Britain, Iron Ore Imports. 38, 173, 379, 481, 623, 726, 894	Guatemala Railway Construction. 853	Hattie E. Mine, Wash. 876
*Goldsmit's Pat. Prospector's Pick. 185	Great Britain, Iron Ore Production. 413, 827	Guaymas, Mexico, Smelter for. 194	Hattie Jane Mine, Colo. 808
Golets Con. Mg. Co., Cal. 369	Great Britain, Iron Pyrites Production. 827	Guffey Oil Co., Texas. 676	Hattson's Pat. Ingot Casting Ladle. 701
Goodell, Albert I. 809	Great Britain, Iron and Steel Exports. 173, 480, 580, 726	Guffin's Pat. Hoist and Conveyor. 420	*Haulage, Compressed Air Systems. 376
Goodell, B. E. 635	"Great Britain Iron and Steel Institute Journal". 248	Guilfray Mine, Cal. 594, 704	*Haulage and Delivery System, Automatic, Baggaley's Pat. 113
Good Hope Mine, Cal. 254	Great Britain, Iron and Steel Production. 885, 868	Gum Boot Mine, Cal. 738	Haultin, H. E. T. 702
Good Hope Mine, Colo. 116, 531	Great Britain, Iron Trade in 1901. 163	Gunnel Gold Mg. and Milling Co., Colo. 455, 738	Hauraki Gold-Field, New Zealand. 88, 304, 599, 877
Good Hope Mfg. Co., Mont. 565	Great Britain, Large Coal Cars. 165	*Gunpowder and Explosives". 499	Havens, William H. 560
Goodier, G. P. 284	Great Britain, Lead Imports and Exports. 163	Gusano Mg. Co., N. C. 843	Havilland District, Cal. 904
Goodman, J. L. 902	Great Britain, Lead Production. 413, 827	Guskie K. Mine, Mex. 843	Hawkeye Mine, S. Dak. 844
Goodman Mfg. Co., Ill. 83, 284	Great Britain, Limestone Production. 413, 827	Gutierrez's Pat. Brine Evaporator. 901	Hawkeye Mine, Wash. 152, 290, 675
*Golden Bar Electric Coal-Cutting Machine. 824	Great Britain, Manganese Ore Production. 413, 827	Gutus, John. 186	Hawkinsville Ditch, Cal. 424
Gopher Gold Mg. Co., Oregon. 257	Great Britain, Metal Trades, Reduced Wages. 163	Gwin Mg. Co., Cal. 423, 562, 704	Hawkinsville Dredger, Cal. 84
Gordon, Douglass. 422	Great Britain, Mica Production. 827	Gypsum. 629	Hawley Down-Draft Furnace Co.'s Pat. Melting Furnace. 701
Gordon Mine, B. C. 501	Great Britain, Mineral Paints Production. 827	Gypsum, California. 9	Hawley, Edwin. 358, 422
Goss, W. F. M., "Locomotive Sparks". 524, 663	Great Britain, Mineral Production in 1901. 413	Gypsum Cement Plaster Industry in Kansas. 37	Haworth, Erasmus, Gypsum Cement Plaster Industry in Kansas. 37
Goth, T. R. & Co., Cal. 769	Great Britain, Mining Accidents. 161	Gypsum Production, Canada. 387	Haworth, Erasmus, Oil and Gas in Kansas. 37
Goubert Mfg. Co., N. Y. 358	Great Britain, New Explosives. 549	Gypsum Production, Great Britain. 413, 827	Hayden & Co., Explorations, Mo. 190
Gouldshambarrow, Stephen. 492	Great Britain, Nitrate of Soda Imports. 156	Gypsum Production, Nova Scotia. 444	*Hayes, Dr. C. Willard. 516
Gould Mg. Co., Colo. 328	Great Britain, Ocher Production. 413, 827	Gypsum Production, Ontario. 414	Hayes & Wheeler Mine, Colo. 189
Goulichambaroff, S., "Map of Petroleum Fields of the Caucasus". 109	Great Britain, Oil Shale Production. 413, 827		Haynes, Edwin. 453
Gouyard, G. M. 82	Great Britain, Patents. Weekly		Haynes H. E., & Co., Utah. 114
Gover Mine, Cal. 840	Great Britain, Petroleum Production. 413, 827		Haywood Mine, Utah. 639
Governor Mine, Colo. 361	Great Britain, Phosphate Imports. 156, 602		Hazel Dell Mine, Cal. 360
Gower Mines Co., Colo. 189	Great Britain, Phosphate of Lime Production. 827		Hazelwood, C. S. 146
Gowers Mines Syndicate, Ltd., Colo. 60	Great Britain, Pyrites Imports. 156, 602, 746, 912		Hazleton Mine, Cal. 147
Gow, J. E. 186	Great Britain, Pyrites Production. 413		Headlight Mine, Cal. 60
Grabill, Clarence A., Hot Blast in Copper Smelting. 525	Great Britain, Pyrites Production. 413		Headlight Mg. Co., Colo. 148
Grace, W. J. 902	Great Britain, Pyrites Production. 413		Headrick, E. C. 838
Grace, W. B. & Co. 830	Great Britain, Pyrites Production. 413		Healdsburg Quicksilver Mg. Co., Cal. 771
Gracey, A. H. 492	Great Britain, Pyrites Production. 413		Healy, James. 453
Grafter Mine, Yukon. 168	Great Britain, Pyrites Production. 413		Hearon & Thierkopf Mine, Cal. 188
Grafton Mine, Colo. 738	Great Britain, Pyrites Production. 413		Heatherman's Pat. Extracting Gold. 113
Graham Gulch Mg. Co., Colo. 223, 361, 455, 531	Great Britain, Pyrites Production. 413		Heating Furnace, Diescher's Pat. 323
Graham, J. D. 284	Great Britain, Pyrites Production. 413		Heating Furnace, Hibbard's Pat. 559
Graham-McKellar Iron Properties, Ont. 775	Great Britain, Pyrites Production. 413		Heating Furnace, Suppes & Crooker's Pat. 550
Graham, Maurice. 633	Great Britain, Pyrites Production. 413		Heating Granular Substances, Greene & Dollar's Pat. 251
Graham's Pat. Disintegrating and Communiting Minerals or Ores. 112	Great Britain, Pyrites Production. 413		Heating Material, Campbell's Pat. 380
Graham's Pat. Gold Ore Treatment. 81	Great Britain, Pyrites Production. 413		Heating and Metal Rolling System, Allis's Pat. 901
Graham, William S. 146	Great Britain, Pyrites Production. 413		Heckler Mg. Co., Utah. 152
Grandanenas Mine, Mexico. 364	Great Britain, Pyrites Production. 413		Hecksher, Richard. 358
Granby Con. Mg., Sm. and Power Co., B. C. 397, 741, 909	Great Britain, Pyrites Production. 413		Hecla Con. Mg. Co., Mont., Report. 353
Granby Smelter Improvements, B. C. 205	Great Britain, Pyrites Production. 413		Hecla Mine, Idaho. 190
Granby Smelting Co., Mo. 190	Great Britain, Pyrites Production. 413		Hedges, G. L. 492
Grandal's Pat. Magnetic Separator. 185	Great Britain, Pyrites Production. 413		Heggie's Pat. Coupling-Welding Rolls. 666
Grand Central vs. Mammoth Mg. Co., Utah. 152, 289, 329, 708, 741	Great Britain, Pyrites Production. 413		Heiden, Fred. 324
Grand Central Mg. Co., Colo. 327, 429	Great Britain, Pyrites Production. 413		Heighway, A. E. 453
Grand Central Mg. Co., Mexico, Report. 179	Great Britain, Pyrites Production. 413		Heimberger, Jacob. 391
Grand Central Mg. Co., Utah. 811	Great Britain, Pyrites Production. 413		Heinbrener, J. A. 702
Grand Forks & Republic Railroad, Wash. 152	Great Britain, Pyrites Production. 413		Heine Safety Boiler Co., Mo. 358
Grand Gulch Mine, Ariz. 59, 254, 255	Great Britain, Pyrites Production. 413		Heintz Gold Extraction Co., Cal. 360
Grand Hope Gold Mg. Co., Wyo. 226	Great Britain, Pyrites Production. 413		Heintz, T. E. 560
Grand Junction Smelter, Colo. 639	Great Britain, Pyrites Production. 413		Heinze, F. A., vs. Anaconda Mg. Co., Mont. 61, 191, 498
Grand Mogul Mine, Colo. 85, 143	Great Britain, Pyrites Production. 413		Helne Mining Properties Consolidated. 609
Grand Oil Co., Cal. 222	Great Britain, Pyrites Production. 413		Helbing's Pat. Manufacturing Briquettes. 804
Grangeville Hydraulic Mg. Co., Idaho. 149	Great Britain, Pyrites Production. 413		Helen Assay Office, Mont. 257
Granite, Artificial, Aran's Pat. 219	Great Britain, Pyrites Production. 413		Helen Gold Mg. Co., Cal. 671
Granite, Big Blast In. 276	Great Britain, Pyrites Production. 413		*Helen Mining Company, Oregon. 890
Granite-Bi-Metallic Mg. Co., Mont. 423, 597	Great Britain, Pyrites Production. 413		Helen Gold Mine, Colo. 361, 394, 636, 708, 841
Granite, California. 8	Great Britain, Pyrites Production. 413		Helen Mine, Cal. 455
Granite Gap Mine, N. M. 151	Great Britain, Pyrites Production. 413		Helen Mg. Co., Utah. 363
Granite Mine, Colo. 425, 842	Great Britain, Pyrites Production. 413		Heller, M. J. 114, 391, 769, 902
Granite Production, Canada. 387	Great Britain, Pyrites Production. 413		Henahan, T. R., Newhouse Tunnel, Colo. 767
Granite Reef Mine, S. D. 875	Great Britain, Pyrites Production. 413		Hendershot's Pat. Tool for Oil Wells. 803
Granite Shipments, Quincey, Mass. 305	Great Britain, Pyrites Production. 413		Henderson Mg. Co., Cal. 254
Grant County, Ind., Oil Wells. 809	Great Britain, Pyrites Production. 413		Hendry, Arthur. 284
Grant Mine, Wash. 844	Great Britain, Pyrites Production. 413		Hendrie & Bolthoff Mfg. and Supply Co., Colo. 633
Grant & Williams Co., N. Y. 146	Great Britain, Pyrites Production. 413		Henley, J. H. 284, 492, 528
Grantz Mg. Co., S. Dak. 289, 397, 533, 740, 908	Great Britain, Pyrites Production. 413		Henneberg & Pape's Pat. Electric Amalgamator. 113
Graphite, Artificial. 310	Great Britain, Pyrites Production. 413		Hennefer Mine, Utah. 120
Graphite as a Lubricant. 664	Great Britain, Pyrites Production. 413		Henrietta & Lizzie Mine, Colo. 255
Graphite Production, Canada. 387	Great Britain, Pyrites Production. 413		Henrietta Mine, Colo. 85
Graphite Production, Ontario. 414	Great Britain, Pyrites Production. 413		Henry, H. 838
Graphite Production, U. S., in 1901. 858	Great Britain, Pyrites Production. 413		Hercules Mine, Colo. 148
Graphite Production, Wisconsin. 389	Great Britain, Pyrites Production. 413		Hercules Oil Refining Co., Cal. 424
Graphite Purifying, Langben's Pat. 591	Great Britain, Pyrites Production. 413		Hernals de Thun, Vicomte de, "Associations Industrielles et Commerciales". 248
Graphite, Silica Paint for Bridges. 184	Great Britain, Pyrites Production. 413		Herman, H., "Report on Wallhalla Gold-Field, Victoria". 889, 834
Grassell Chemical Co. 629	Great Britain, Pyrites Production. 413		Herrick's Pat. Blast Furnace. 591
Grass Valley Con. Mine, Cal. 60, 326, 393, 562, 670	Great Britain, Pyrites Production. 413		Herron & Bury Mfg. Co., Pa. 58
Graves, A. 186	Great Britain, Pyrites Production. 413		Herron, J. 869
Graves's Pat. Ore-Leaching Apparatus. 81	Great Britain, Pyrites Production. 413		*Hervey's Pat. Cyanide Tank. 666
Gravitric Ore Roaster, Ogden's Pat. 231	Great Britain, Pyrites Production. 413		Herzberg's Pat. Furnace for Burning Fine Fuel. 803
Gray Eagle Mine, Mont. 418, 907	Great Britain, Pyrites Production. 413		Herz, C. S. 358, 528
Gray Eagle Tunnel, Colo. 563	Great Britain, Pyrites Production. 413		Hewitt's Pat. Furnace for Heating or Smelting Metals. 700
Gray Lizard Mine, Cal. 84	Great Britain, Pyrites Production. 413		Hexter Mine, Cal. 115
Gray Wing Mine, Cal. 495, 770	Great Britain, Pyrites Production. 413		Heywood Brothers' Oil Corporation, La. 906
*Great Boulder Mine, Western Australia. 49, 428	Great Britain, Pyrites Production. 413		Heywood, W. A. 146
Great Boulder Perseverance Gold Mg. Co., Western Australia. 47, 259, 602	Great Britain, Pyrites Production. 413		Hawatha Coal Trap. 419
Great Boulder Perseverance Mg. Co., Western Australia, Report. 485	Great Britain, Pyrites Production. 413		Hibbard's Pat. Heating Furnace. 119
Great Boulder Proprietary Gold Mines, Ltd., Western Australia. 47	Great Britain, Pyrites Production. 413		Hibb Brothers' Placer, Idaho. 559
Great Britain, Alum Shale Production. 827	Great Britain, Pyrites Production. 413		*Hibernia Mining Co. of Herne, Westphalia. 425
Great Britain, Ammonium Sulphate Shipments to U. S. 294, 432, 602, 912	Great Britain, Pyrites Production. 413		Hickman & Hutchinson's Pat. Phosphorizing Iron. 527
Great Britain, Arsenical Pyrites. 827	Great Britain, Pyrites Production. 413		Hidalgo Mg. Co., Mexico. 290, 331, 599
Great Britain, Arsenic Production. 413, 827	Great Britain, Pyrites Production. 413		Hidden Fortune Mill, S. Dak. 811
Great Britain, Barytes Production. 413, 827	Great Britain, Pyrites Production. 413		Hidden Fortune Mg. Co., S. Dak. 87, 119, 226, 289, 363, 397, 458, 533, 674, 740, 773, 844, 908
Great Britain, Bauxite Production. 413, 827	Great Britain, Pyrites Production. 413		Hidden Treasure Mine, Colo. 872
Great Britain, Bog Ore Production. 827	Great Britain, Pyrites Production. 413		Hidden Treasure Mine, Idaho. 149
Great Britain, Brimstone Imports and Exports. 156, 463, 602, 746	Great Britain, Pyrites Production. 413		Hidden Treasure Mine, Utah. 330, 428, 844
Great Britain, Cement Exports. 52	Great Britain, Pyrites Production. 413		Hidden Valley Mine, Wash. 844
Great Britain, Chalk Production. 413, 827	Great Britain, Pyrites Production. 413		Hiden, Henry. 869
Great Britain, Chemical Imports and Exports. 156, 197, 463, 602, 746, 827	Great Britain, Pyrites Production. 413		Highland Boy Con. Mg. Co., Utah. 253, 459, 500
Great Britain, Chert Production. 413, 827	Great Britain, Pyrites Production. 413		Highland Boy Shipments, Utah. 811
Great Britain, Clay Production. 154	Great Britain, Pyrites Production. 413		Highland Boy Smelter, Utah. 534, 566, 708, 774
Great Britain, Coal and Coke Exports. 184, 833, 461, 602, 744, 911	Great Britain, Pyrites Production. 413		Highland Chief Mine, S. Dak. 392, 811
Great Britain, Coal Production. 413, 827	Great Britain, Pyrites Production. 413		Highland Mill, S. Dak. 674, 705
Great Britain, Coal Supply. 66	Great Britain, Pyrites Production. 413		High Peak Mine, Cal. 903
Great Britain, Copper Imports and Exports. 157, 336, 464, 605, 747, 913	Great Britain, Pyrites Production. 413		Hildebrand, J. 902
Great Britain, Copper Production. 413, 827	Great Britain, Pyrites Production. 413		Hiller, Walter. 560
Great Britain, Copper Sulphate Exports. 156, 165, 463, 602, 779, 912	Great Britain, Pyrites Production. 413		Hillebrand, W. F., "Common Errors in the Determination of Silica". 588
Great Britain, Flint Production. 827	Great Britain, Pyrites Production. 413		Hillhouse, James D. 838

Table listing various topics and their corresponding page numbers, including entries like Hillhouse, S. M., Gold Mining in Georgia, 79; Independence Mine, Mex., 226; Iron Deposits, Shasta County, Cal., 807.

Iron and Steel Workers Wages, Pa. 123, 401
Iron and Steel Works, Directory of U. S. and Canada 839, 417
Iron and Steel Works, Mortality In 660
Iron and Steel Works, Natural Gas In 661
Iron and Steel Works of the U. S. 347
Iron and Steel Works, Water Power In 657
Iron Trade, Belgium 20
Iron Trade, French 863
Iron Trade, Great Britain in 1901 163
Iron Trade Reviews: Birmingham, Buffalo, Cleveland, New York, Philadelphia, Pittsburg Weekly
Iron Trade, Sentiment In 719
Iron Vessels, Enamelled for Chemical Work 666
Iron Works Consolidation in British Columbia 503
Iron, Wrought from Ores, Meininghaus's Pat 804
Iron, Wrought and Soft Steel 451
Iroquois Machine Co. 561
Irvine's Pat. Leaching Copper Ores 113
Irwin's Pat. Electrolytic Cyanide Vat 112
Irwin's Pat. Metal Extraction from Ores 81
Irwin, W. A. 838
Irwin, W. G., Development of the Indiana County, Pa., Coal Fields 134
Isabella Gold Mfg. Co., Colo. 117, 121, 256, 287, 328, 596, 808, 842
Isbell's Pat. Gas Retort 768
Isbell's Pat. Making Illuminating Gas 323
Island Creek Coal Co., W. Va. 811
Isle Royale Copper Co., Mich., Report 522
Isle Royale Island, Mich. 190
Isle Royale Mfg. Co., Mich. 56, 288, 426, 456, 460, 532, 598, 673, 842, 907
Issaquah Coal Co., Wash. 445
Isserlis's Pat. Lime Kiln 185
"Isthmian Canal, Where to Build" 279
Italy, Bank Statement Weekly
Italy, Blast Furnace In 616
Italy, Carrara Marble Combination 616
Italy, Chemical Manufactures 447
Italy, Coal Imports at Genoa 229
Italy, Copper Production 787
Italy, Electric Railroads In Weekly
Italy, Long Distance Power Transmission 487
Italy, Quarries In 101
Italy, Quicksilver Production 415
Italy, Zinc Production 405
Itasca County, Minn. Iron Ore Explorations Gold Corporation, Ltd., Western Australia 47
Ivanhoe Gold Mine, Western Australia 48
Ivanpah Smelting Co., Cal. 222
Ivill Mine, Pa. 598
Ivy Grace Mine, Idaho 149, 532
I. X. L. Mine, Oregon 773, 908

J
Jackman Coal Land, Pa. 639
Jack Pot Mfg. Co., Colo. 272
Jack Rabbit Mine, Ariz. 904
Jackson Bros., Chile Nitrate of Soda Market and Prices 92
Jackson Camp, Cal. 222
Jackson Coal and Coke Co., Ind. 772
Jackson Co., Colo. 115
Jackson, John M. 838
Jackson Mine, Mich. 637
Jackson's Pat. Condensing Smoke, Fumes and Gases 836
Jackson, W. B. 838
*Jacobs, E., Boundary District, B. C. 302
*Jacob's Pat. Making Pigment 112
Jade Nephrite 444
James, Alfred, "Cyanide Practice" 79, 142
James's Pat. Squib 113
Jamieson & Odling's Pat. Sifting Pulverized Ores 184
Jamieson Coal and Coke Co., Pa. 499
Jamieson's Pat. Treating Armor-Plate 184
Jamieson's Pat. Treating Steel 184
Janin, Louis, Jr. 146
Janney, Frank 358
January Mine, Mont. 86
Japan, Copper Production 787
Japan, Coal Exports 911
Japan International Exposition 528
Japan Mines Co., Colo. 117, 223, 596, 672
Japan, Petroleum In 448
Japan Tunnel, Colo. 808, 906
Jardine, A. C. 597
Jardine Electric Light, Water and Power Co., Mont. 597
Jaspas Magnetic Separator 590
Jasper County Oil Discovery, Ind. 425
Jasper Mine, Colo. 872
Jasper Oil Well, Colo. 424
Jaubert's Pat. Paste for Making Oxygen 185
Jawbone District, Cal. 360
Jeannette Iron Works Co., Pa. 221, 253, 325, 453, 902
Jefferson Mine, Cal. 85
*Jeffrey Electric Locomotives 490
Jeffrey Mfg. Co. 870
Jenkins and McDonald's Pat. Fuse Igniter 837
Jenkins's Pat. Portable Melting Apparatus 113
Jenks, Arthur W. 769
Jenney, Walter P., Mineral Crest 825
Jenney's New Oil Gushers, La. 800
Jennings Oil Field, La. 809, 853
Jennie Sample Con. Gold Mfg. Co., Colo. 497
Jennings, E. P. 528
Jenny Dell Mfg. Co., Mont. 875
Jenny Lind Mine, Cal. 85, 455
Jericho Mine, Idaho 287
Jermyn, John 805
*Jernigan's Pat. Amalgamator 867
Jerome Canyon Copper Co., Ariz. 326
Jersey Mine, Pa. 363
Jessemine Mine, Colo. 827
Jesop, Wm. & Sons, Quick Speed Self-Hardening Steel 322
Jesup's Pat. Separator 323
Jesus Maria District, Cal. 116
Jevons, Herbert Stanley 902
Jewel Mine, B. C. 303
Jewett, John, Smelter's Deductions from Copper Weights 217
J. I. C. Mine, Colo. 255
Jillson Mine, Cal. 495
Joe Dandy Mine, Ariz. 904
John B. Mine, S. Dak. 119

John Brown Mine, Cal. 148
John Bull District, Cal. 530
John Dix Mine, Cal. 530
John Duncan Land Co., Mich. 426
John Jackson Mine, Mo. 329
John Kay Mine, Ariz. 835
Johnny Mine, Utah 192, 329, 427, 741, 811, 844
John Owen Mfg. and Milling Co., Colo. 737
John Quincy Mine, Cal. 84
John Royal Mine, Cal. 424
Johns-Manville Co., N. Y. 593
Johns, M. C. 82
Johnson, A. M. 114, 284
Johnson Brothers' Mine, Ind. 908
Johnson, Fred 869
Johnson & Grier's Pat. Steel Making 527
Johnson, Guy R. 220
Johnson, J. H. 391, 528
Johnson Nickel Mfg. Co., Minn. 673
*Johnson, Paul, Automatic System of Sampling 514
Johnson Process for Saving Fine Gold from Sand 145
Johnson's Pat. Chute 559
Johnson's Pat. Crusher 58
Johnson's Pat. Pump 593
Johnson, Stewart 324
Johnson, W. C. & Sons Machinery Co., Mo. 284
Johnstone, F. W. 186
Johnston, T. J., Cyanide Patents 699
Johnston, T. J., Uniform Monetary Standard 557
Jolliffe, William 702
Jones, F. H., Clayton Air Compressors 355
Jones, Harry C., "Outlines of Electrochemistry" 79
Jones, J. S. 422, 592, 700, 902
Jones & Laughlins, Ltd., Pa. 593, 634
Jones & Laughlins Steel Co., Pa. 879
Jones Mine, Cal. 594
Jones Mine, Colo. 361
Jones Mixer Patent 651, 751
Jones and Pennell's Pat. Composition of Matter 491
Jones, W. A. Foundry and Machine Co., Ill. 561
Joplin Ore Market, Mo. Weekly
Joplin Zinc and Lead Districts in 1901 628
Jordan, C. W. 872
Jordan Mine, Cal. 219
Jordan's Pat. Aluminum Hydrate Making 901
Jordan Mine, Minn. 498, 739, 809
Josephine Mine, Eldorado County, Cal. 530, 737
Josephine Mine, Kern County, Cal. 737
Josephine Mine, Madera County, Cal. 360, 393, 530
Josephine Mine, Mont. 457
Josephine Mfg. Co., Yukon 364
Jousset & McKay's Pat. Fuel Briquette 837
J. R. Mfg. Co., S. Dak. 363, 599
Juab County Mines, Utah 11
Judson Mine, Colo. 636
Juhl Brothers Mine, Cal. 770
Jumbo Mine, Idaho 61, 149, 596, 672
Jumbo Mine, Utah 329
Jumper Gold Syndicate of California, Ltd., Cal. 495, 505
Jumper Mine, Cal. 872
Jumpers Deep, Ltd., Transvaal 290, 459
Junction Mine, Cal. 494
Junjata Tube Co., Pa. 493
Junior Coal Co., W. Va. 500
Juno Mine, Ariz. 670, 704, 736
Justice Leasing Co., Colo. 361, 595
Justice Mine, Colo. 361, 595
Justice Mfg. Co., Nev. 707

K
Kahajan Mine, Borneo 708, 775
Kainit Production, Germany 549
Kaiping Mining Co., China 77
Kalgoorlie Gold-Field, Western Australia 49
Kangaroo Mine, Cal. 188
Kankakee Mine, Colo. 189
Kansas-Burroughs Con. Mfg. Co., Colo. 189, 287, 738, 841
Kansas City & Sonora Mfg. Co., Mexico 248, 428
Kansas, Coal Production 791
Kansas, Gold Mining 853
Kansas Gypsum Cement Plaster Industry 37
Kansas-Indian Territory, Oil and Gas in "Kansas Mineral Industries" 389
Kansas Oil and Gas 37
Kansas as an Oil State 140
Kansas Smelter Labor Troubles 874
Kansas & Texas Coal Co. 285
Kalspell & Dayton Mfg. Co., Mont. 907
Kansas Shales 891
Kansas, Zinc Ore Strikes 190
Kaolin Exports, New Zealand 671
Karl Mine, Cal. 360, 840
Karma Mine, Cal. 360
Katie Mine, Mont. 907
Katinka Gold Mfg. Co., Colo. 149
Kauffman, M. H. 114
Kauffman, W. H., Losses of Silver in Cupelling with Varying Amounts of Lead and Silver 829
Kaverne Mine, Colo. 189
Kay Mine, Ariz. 736
Kay's Pat. Rock Drill Chuck 701
Kay & Wearne's Pat. Chuck for Rock Drills 87
Keady, L. Y. 146
Keane-Kelth Mfg. Co., Utah 89
Kearns, Thomas 358, 492
Kearse Mine, Mont. 565
Keating & Blacker Mine, Mont. 875
Keble's Pat. Brick Manufacture 734
Keep, William J., "Cast Iron" 179, 318
Keffe, Frederic, Method of Mining Low-Grade Ores in the Boundary Creek District, B. C. 383
Keighley, Fred C. 82
Keith-Kearns Mfg. Co., Utah 811
Keith's Pat. Ore Treatment 836
Keller's Pat. Electric Furnace 57, 421
Keller's Pat. Making Alloys 527
Kellher Mine, Cal. 736
Kellner's Pat. Extracting Zinc from Waste Products 113
Kelly, F. G. 186
Kelly Mine, Cal. 873
Kelly Tunnel, Colo. 189
Kelly, William 737
Keltz Mine, Cal. 737
Kelvin, Lord 692

Kemp Calhoun Mine, Colo. 148
Kemp, James F., Notes on Platinum and its Associated Metals 512
Kempton, C. W. 186, 492
Kendall Coal and Coke Co., Pa. 773
Kendall Gold Mfg. Co., Mont. 638
Kendall Mill, Mont. 568, 739
Kendall's Pat. Extracting Precious Metals from Their Ores 901
Kendall's Pat. Recovering Metals 697
Kendrick & Gelder Smelting Co., Colo. 155
Kendrick & Roberts, Pa. 493
Kennedy vs. Argonaut Mfg. Co., Cal. 392
Kennedy, E. R. 528
Kennedy, Hugh 902
Kennedy Mine, Cal. 84, 115, 360, 393, 704, 840, 871
*Kennedy's Pat. Blast Furnace Filling 701
*Kennedy's Pat. Coke Making 185
Kennedy's Pat. Operating Blast Furnaces 701
Kennedy's Pat. Rolling Mill 323
Kennelly, A. E. 735
Kenney-Hawkins Exploration, Minn. 597
Kennott Water Softener 489
Kennott Water Softener Co., Ill. 769
Kent Mill Co., N. Y. 593
Kent's Pat. Reverberatory Furnace 451
Kentucky Con. Mfg. Co., Nev. 87
Kentucky, Coal Production 791
Kentucky Fluor Spar Co., Ky. 253
*Kentucky Lithographic Stone Deposits 895
Kentucky State College 902
Kerkerov & Mazel, Dutch East Indies 358
Kern County, Cal., Reopening Abandoned Mines In 871
Kern County Oil Fields, Cal., Large Deal in Kern Petroleum Field, Cal. 871
Kerr, E. W., "Power and Power Transmission" 486
Ketchum, E. C. 769
Kettle Valley Lines Railway, Wash. 290, 428
Kettle Valley & Republic Railroad, Wash. 566
Keyes, Charles R., Character and Stratigraphical Peculiarities of the Southwestern Iowa Coal Fields 661
Keyes Gulch Placers, Cal. 770
Keyes Mine, Cal. 360, 393, 770, 871
Keystone Mine, Mont. 907
Keystone Coal and Coke Co., Pa. 192, 289
Keystone Con. Mfg. Co., Cal. 530, 594, 736, 807, 840
Keystone Driller Co., Pa. 58, 84, 493, 698, 810
Keystone Gold and Copper Co., Colo. 738
Keystone Lubricating Co., Pa. 83
Keystone Mine, S. D. 773
Keystone Mfg. Co., Colo. 85, 563, 596, 705, 808
Keystone Placer Co., Nev. 672, 808
Key West Mfg. Co., Nev. 446
*Kiandra Lead, New South Wales, Report on 765
Kiddle, Thomas 391
Kidd Mine, Oregon 458
Kilbourne & Jacobs Mfg. Co., New Equipment 52
Kilby Mfg. Co., O. 82
Kiln, Brice's Pat. 527
Kilton, James A. 539
*Kimball, James P., Bohemia Mining District of Western Oregon 889
*Kimball's Pat. Ore Concentrator 706
Kimberly Mine, Colo. 287
Kimberly, P. 668
Kincaid, John H. 805, 902
"Kinematics, Treatise on" 730
King-Barnes Mine, Mont. 185
*King, Clarence 1, 3, 109
Kingdon, George 737
King, Frederick B. 838
King Gold Mfg. Co., Cal. 737
King Mine, Ariz. 806, 871
King Mine, Colo. 189
King Mine, Idaho 395
King Oil Well, Colo. 595
King Solomon Mine, B. C. 303
King Solomon Mine, Cal. 771, 801, 904
King Solomon Mine, Mont. 86, 457, 565
King Solomon Tunnel and Mfg. Co., Colo. 85, 255
Kingston Coal Depot 410
Kinney-Hawkins Exploration, Minn. 597
Kinney-Hawkins Mine, Minn. 268
Kinraide's Pat. Electrode 58
Kintla Lake Oil Co., Mont. 498
Kipp, B. A. 324
Kirby vs. Potter 146
Kirby, John A. 670
Kirkpatrick-Picard's Pat. Zinc Recovery from Sulphide Ores 251
Kirkwood Mine, Cal. 222, 426
Kirkwood's Pat. Rotary Pump 357
*Kirson's Pat. Blasting Cartridge 734
*Kirschweg Waterproof Electric Switch for Mine Signal System 835
Kishpaugh Mine, N. J. 598
Kiss's Pat. Amalgamator 559
Kitchener Iron Ores, B. C. 373
Kitto Mine, Minn. 810
Klamath River Mines, Cal. 671, 771
Klein's Pat. Wood Preserving Compound 632
*Klein's Pat. Converter 491
*Klein's Pat. Ore Classifier 559
*Kleppek & Evans's Pat. Roasting Furnace 803
Klerksdorp Extended, Ltd. 535
Kloman Mine, Mich. 828
Klondike Bonanza, Ltd. 89
Klondike Gold Production 373
Klondike Mine, Mont. 855
Klondike Gold Shipments 907
Klondike Mining Conditions 909
Klondike, Outlook In 615
Knecht's Pat. Hydrosulphurous Acid Making 868
Knetsch's Pat. Making Sulphuric Anhydride 112, 251
Knife, Bell's Pat. 322
Knight, A. B. 114
Knight, Wilbur C., Notes on the Occurrence of Rare Metals in the Rambler Mine, Wyo. 696
*Knight, Wilbur C., Petroleum Fields of Wyoming 720
*Knob Hill Mine, B. C. 617
*Knowles' Sinking Pump 308
Knox's Pat. Treating Copper Ores 282
Knox, William 902
Knoxville Iron Co., Tenn. 453
Koch, Walter 769
Koelbeck's Pat. Hot Blast Stove 283

Kokomo-Pioneer Mfg. and Milling Co., Colo. 596, 741, 908
Kolar Gold-Field, Indiana 120, 152, 290, 428, 590, 641
Kolb's Pat. Hardening Steel 787
Kootenay Districts, B. C. 42, 43
Kootenay Mine, B. C. 186
Koppel, Arthur, Electric Railways for Industrial Purposes 562
Koppel, Arthur, N. Y. 806
Kopper's Pat. Coke Ovens 527
Kortz, J. C. 702
Kouanua Mine, New Caledonia 120
Komonovsky, E. S. 802
Kosnetzoff, W. A. 422
Kramers & Aarts's Pat. Water Gas Making 491
Krause's Pat. Magnesium Peroxide 804
*Krauss & Berneck's Pat. Making Sulphuric Acid and Sulphur Anhydride 804
Kreiselheimer, L. 82
Kroll, W. R., Germany 903
Kuehner, J., Coal Mfg. and Supply Co., Ind. 906
Kuech, George 114
Kuhn's Pat. Stamping Coal 490
Kummel, Henry B. 252
Kunz, George F., Composition of Tourmaline Gems 269
Kunz, George F., Museum Collections of In 1901 38

L
La Bella Compressor Plant, Colo. 873
La Belle Iron Works, Minn. 457
La Belle Mfg. Co., Colo. 361, 873
Laboratory, Electric Furnace for 692
*Laboratory, New Government 654
Lacey-Buek Co. 493
Leachman, Arthur 805
Lackawanna Iron and Steel Co. 119, 285, 493, 528, 806
Lackawanna Mine, Colo. 85, 223, 289
Lackawanna Mine, Pa. 289
*Laconda Mfg. Co., Weiland Water-Power Tube Cleaner 867
La Corona Gold and Copper Co., N. M. 674
La Cour's Pat. Cathode 185
Ladle, Sherman's Pat. 700
Lady Belle Mine, Cal. 571
*Lady Loch Mine, Western Australia 48
Lady Washington Mine, Cal. 737, 905
La Esquina Mine, Mexico 428
La Follette Coal, Iron and Railway Co., Tenn. 811
La Grange Dredges, Cal. 841
La Grange Mine, Cal. 393
Laird, George A. 252
Laird's Pat. Lead Smelter Ladle 283
Laird's Pat. Liquid Heating Furnace 251
Laird's Pat. Retort Furnace 559
Laisant, C. A. 146
Lake Angelina Dock Co., Pa. 839
Lake Coal Rates 846
*Lake County, Cal., Register of Mines and Minerals 765
Lake County, Mo., Lead Ore Discovery 118
Lake Erie Iron Ore Stocks 717, 727
Lake George Stone and Marble Co., N. Y. 151
Lake Iron Ore Prices 196, 229, 293, 468, 503
Lake Iron Ore Shipments 16, 21, 244, 261, 426, 678, 814, 911
Lake Iron Ore Trade in 1901 536
Lake Navigation 497
Lake Shore Mine, Mont. 407
Lake Superior Concentrating Co., Mich. 532
Lake Superior Copper Mines, Machinery in 731
Lake Superior Copper Mines in 1901 25
Lake Superior Mining Institute 358
*Lake Superior Mining Institute Proceedings 216
Lake Superior Ore Dressing Practice, Improvements in 408
Lake Superior Smelting Co., Mich. 256, 328, 497
Lake Superior Traffic 267, 289
Lake Superior Traffic in 1901 21
Lake View Consols., Ltd., Western Australia 47, 259, 291, 535, 776
*Lalle's Universal Transit Compass 487
Lamb, C. A. 902
Lambert-Johnson Mine, Colo. 872
*Lampert Concentrating Table 867
Lamprecht, Robert "Recovery Work After Pit Fires" 834
Lancefeld Cyaniding Tanks, Western Australia 47
Lancell Mine, Cal. 84
Land Conveyed, Liabilities for Injury to Surface 522
Land Office Entry Prevents Relocation while it Stands 627
Lane, A. C. 902
Lane, Alfred C., Asphalt in Delta County, Michigan 50
Lane, Alfred C., "Coal of Michigan" 628, 766
Lane, Charles D. 358
Langbein's Pat. Purifying Graphite 591
Lang, Charles L. 252
Langlaagte Deep, Ltd., Transvaal 397, 152, 397, 459, 908
Lanthanum 664
Lanyon Zinc Co., Kas. 328, 673
Lappin Mine, Cal. 671, 705
La Preciosa Mine, Cal. 841
La Reine Mine, Utah 427
La Reyna Mine, Mexico 364
Larkin Mine, Cal. 84
Larson Mine, Mexico 428
Larson's Pat. Collecting and Settling Dust 909
Las Adargos Mine, Mexico 228
Las Becerras Mine, Mexico 428
Lasca Mine, Colo. 842
Las Canas Syndicate, Costa Rica 331
*La Sirena Mine, Mexico 207
Las Perlas Milling Co., Cal. 771
Las Planchas de Plata Mine, Mexico 120
Las Remedios Mine, Mexico 226
*Laswell's Pat. Fine Gold Amalgamator 390
Last Chance Gold Mfg. and Milling Co., Oregon 707
Last Chance Mine, B. C. 909
Last Chance Mine, Colo. 189, 255, 496, 672, 771, 808, 841, 872, 873, 906
Last Chance Mine, Utah 500
Last Chance Mining Co., N. M. 839
Last Stake Gold Mfg. and Leasing Co., Colo. 738
Lateral Adjuster for Surveying Instruments, Berger's Pat. 558

Maid of Orleans Mine, Colo. 842
Magnesia Compound, Rueff's Pat. 421
Magnesite, California 9
Magnesite Market and Prices 602
Magnesium-Aluminum Alloys 80, 584
Magnesium Carbonate, Young & Griffith's Pat. 901
Magnesium Peroxide Compound, Making, Fuhrmann's Pat. 667
Magnesium Peroxide, Krause's Pat. 804
Magnesium Sulphite Making, Wing's Pat. 145
Magnetic Behavior of Alloys 613
Magnetic Movements of Different Steels 301
Magnetic Separating Co., Mo. 902
Magnetic Separation, McKenna's Pat. 81
Magnetic Separator, Carter's Pat. 901
Magnetic Separator, Grandal's Pat. 185
Magnetic Separator, Jaspur 590
Magnetic Separator, McPhie's Pat. 667
Magnetic Separator, Magnetic Ore Separating Co.'s Pat. 113
Magnetic Separator, Schiebel's Pat. 184
Magnolia Metal Co., N. Y. 221
Maguire Mine, Ariz. 871
Mabala Mine, Cal. 84
Mahala Mg. Co., Colo. 771
Mahoney, David 492
Mahogany Mine, Cal. 905
Mahoning Mine, Minn. 722
Mahoning Ore and Steel Co., Minn. 224, 574
Maier Mine, Cal. 593
"Maine Industrial and Labor Statistics" 524, 628
Majestic Mine, Utah, 61, 88, 120, 257, 289, 599, 639, 811
Malachite Copper-Gold Co., Cal. 454
Malarino, Manuel Maria 146
Maloney-Blue Lead Copper Co., Wash. 364
Maloney-Blue Lead Mine, S. Dak. 192
Mammoth Coal Co., Cal. 188
Mammoth-Collins Mine, Ariz. 59
Mammoth Gold Mg. Co., Colo. 496
Mammoth Gold Mg. Co., Oregon 908
Mammoth vs. Grand Central Mg. Co., Utah, 152, 289, 329, 708, 741
Mammoth Gulch Placers, Cal. 770
Mammoth Mill, Idaho 224
Mammoth Mine, Mo. 190
Mammoth Mine, Mont. 86
Mammoth Mine, Ont. 330
Mammoth Mine, Utah, 192, 329, 427, 534, 928, 995
Mammoth Mg. Co., Idaho 256, 673
Mammoth Mg. Co., Utah 839
Mancho, A. 869
Manco Con. Gold Mg. and Development Co., Colo. 636
Manganese Borate, Duty on 832
Manganese Bronze for Boiler Stay Bolts 107
Manganese, California 9
Manganese Claims, Cal. 222
Manganese Exports, South Australia 708
Manganese Ore 526, 866
Manganese Ore, Colorado 85, 327, 548
Manganese Ore Exports, Canada 387
Manganese Ore Exports, Spain 211
Manganese Ore Imports, Germany 620
Manganese Ore in India 692
Manganese Ore, Montana 498
Manganese Ore Production, Germany 549
Manganese Ore Production, Great Britain 413, 827
Manganese Ore Production, Nova Scotia 444
Manganese Ore Production, Portugal 245, 761
Manganese Ore Production, Queensland 823
Manganese Ore Production, South Australia 218
Manganese Ore, Prices of 251
Manganese Ore, Trust 470
Manganese Supplies of Brazil 318
Manhattan Copper Co., Ariz. 285
Manhattan Mine, Cal. 562
Manila, U. S. Coal Station 803
Manuhelm-Bremen Petroleum Co., Germany 653
Mann, W. S., Discrepancies in Cyanide Operations 663
Manufacturers' and Consumers' Coal Co., Pa. 90, 119, 744
Manufacturers' Railroad of Toledo, O. 90
"Manufacturers' Record" 341
Mapami District, Mexico 62
Mapes Mine, Cal. 188, 390
Mapleaden Mine, Cal. 424
Marble Mine, California 9
Marble Combination, Carrara, Italy 616
Marden, W. R. 220
Marfa & Mariposa Mine, Texas 119
Margaret Mine, Utah 363
Marino Mariscano Mg. Co., Cal. 325
Marine Iron Works, Ill. 325, 703
Marquette Steam Shovel Co., Wis. 82, 325
Mariposa Electric and Power Co., Cal. 393
Mariposa Mg. and Commercial Co., Cal. 116, 254, 300, 424, 594, 840, 904
Market Conditions 79
Marksboro Portland Cement Co., N. J. 191, 252
Marlin Fire Arms Co., Conn. 634
Maroney, R. F. 592
Marquette & Nelson's Pat. Amalgamator 837
Marshall Gravel Mine, Cal. 736
Marshall, J. A. 769
Marshall-Russell Gold Mg., Milling and Tunnel Co., Colo. 189, 505, 737
Marshall, Thomas W., "Logarithmic Tables of the Measures of Length" 588, 834
Martel Mg. Co., Cal. 841
Martha Washington Mg. Co., Utah 429, 458
Martin, E. H. 739
Martinique Disaster 685
Martin Oil Well, Colo. 595
Martin's Pat. Coke Oven 145
Martin's Pat. Making Anhydrous Baryta 185
Mary Harrison Mine, Cal. 254
Maryland Coal Miners' Wages 395
Maryland, Coal Production 791
Maryland Gold Mg. Co., Cal. 737
Maryland, Gold and Silver Production 66
Maryland Granite Co., Md. 256
"Maryland Industrial Statistics" 450, 558
Maryland Steel Co. 453
Mary McKinney Mg. Co., Colo. 906
Mascott Mine, Colo. 872
Mason & Barry, Ltd., Report 704
Mason, Hobart, "Alternating Current Machines" 834
Mason, J. F. 422
Mason's Pat. Grinding or Crushing Head, Davis's Pat., Colo. 322, 804
Mason's Pat. Revolving Screen 421
Massachusetts Institute of Technology 561, 735
Massachusetts Mine, Utah 675
Mass. Con. Mg. Co., Mich. 86, 118, 150, 259, 426, 498, 564, 597, 673, 739, 742, 809, 842, 907
Mass. Con. Mg. Co., Mich. Report 316
Massillon Coal Mg. Co., O. 499
Massillon-Tuscarras Coal Co., O. 225
Masters, Harris K. 592
"Mathematics, Discussion of the Teaching of" 109, 180
Masurite, Tests of 451
"Mathematics, Study and Difficulties of" 698, 800
Matheny, P. G. 633
Mather, Henry A., Use for Carbon Dioxide from Lime Kilns 450
Mathews, John A. 702
Mathias & Ray's Pat. Pick 219
"Mathieson's Handbook for Investors" 248
Matosa Mg. Co., Colo. 189
Mattern Mill, Cal. 905
Matte Smelting in Celebes 522
Matthews, John Alexander "Study in Alloys" 248
Maud Mine, Colo. 255
Maud S. Mine, Wash. 675
Mauna Brothers Mine, Cal. 704
Maxey Mine, Colo. 84
Maxwell Mine, Colo. 636
Maybell Mine, Cal. 841
Mayday Mine, Cal. 60
May Day Mg. Co., Utah, 121, 150, 259, 289, 363, 427, 429, 675, 708
Mayflower Con. Mg. Co., Mont. 498
Mayflower Mine, Cal. 188
Mayflower Mine, Mich. 86, 288, 739
Mayflower Mine, Oregon 458
Mayflower Mg. Co., Mich., Report 554
May Harson Mine, Cal. 148
May Mg. Co., S. Dak. 61, 329, 533
Mayne & Linnard Zinc Plant, Utah 741
Mayor's Pat. Stamp Mill Guide 804
May Queen Mine, Colo. 496, 672
Mecham Hill, Cal. 454
Mead, E. H. 331
Meade, Richard K., "Chemical and Physical Examination of Portland Cement" 170, 210
Meade's Pat. Briquette 867
Mead, John A. & Co., Vt. 358
Meadow Creek Mine, N. C. 191
Meadow Lake Mill, Cal. 871
Meadow Lake Mine, Cal. 60
Meadow Mountain Coal and Coke Co., Md. 288
Meals, J. F. 391
Meares, Mr. 358
"Mechanical Drawing and Machine Design," Easy Lessons in 524, 588
Mechanical Stokers, Use of 488
Mechanics' Lien on Mining Property, Foreclosure 278
"Mechanics, Science of" 698
Mechernich System 899
Medart Patent Pulley Co., Mo. 669
Medina Quarry Co., N. Y. 358
Medrado, Alcides, Historical Sketch of Gold Mining in Minas Geraes, Brazil 447
Medrado, Alcides, Manganese Supplies of Brazil 318
Me-Edna Oil Co., Colo. 595
Mechan, Gus F. 633
Mechan, James & Sons 611
"Mechan's Pat. Blast Furnace Top" 536
"Mechan's Pat. Handling Blast Furnace Slag" 112
Meikeljohn, George D. 805
Meinlinghaus's Pat. Iron or Steel Making from Ore 804
"Meissner, C. A. Some of the Pyrites Deposits at Port au Port, Newfoundland" 626
Melones Con. Mg. Co., Cal. 84, 222, 254, 326, 360, 393, 454, 494
Meloy, Edward W. 58
Melting Apparatus, Portable, Jenkins's Pat. 113
Melting Furnace, Chartier's Pat. 421
Melting Furnace, Essner & Laurans's Pat. 282
Melting Furnace, Hawley Down Draft Furnace Co.'s Pat. 701
Memphis & Idaho Springs Mg. and Milling Co., Colo. 394
Mendenhall, Walter C., Outlook in the Klondike 615
Mendoza Mg. Co., Cal. 871
Mennida Mill, Colo. 394
Mennie, T. 702
Menominee Range 189
Menominee Exploration Co., Mich. 288
Menominee Range Shipments, Mich. 809
Mephram & Krause Mfg. Co., Mo. 147
Mercedes Oil Co., Cal. 147
Merchants' Coal Co., Pa. 533, 639
Mercur Con. Mg. Co., Utah 428, 459
Mercury Cathode, Bell's Pat. 868
Mercury Mg. Co., Cal. 85, 530
Merk's Pat. Disintegrating Superphosphates 837
Merrill, George P., Rutile Mining in Va. 351
Merrell Mfg. Co., O. 83
Merrimac Mine, Ariz. 736, 871
Merrimac Mine, Cal. 286
Merritt Mine, S. D. 707, 773
Merry, Harry D. 252
Merton Mg. Co., Cal. 148
Merton's Pat. Ore Roasting Furnace 632
Mesabi Central Land and Exploration Co., Minn. 395
Mesabi Chief Mine, Minn. 739
Mesabi Iron Range, New Developments 418
Mesabi Range, Geology of 277
Mesabi Range Explorations, Minn. 224, 256, 362, 395, 532, 597, 739, 809, 842, 874
Mesabi Range Land Sales 283
Meslans's Pat. Producing Fluorine 826
Mesolite 807
Mesquite Oil Co., Cal. 214
Metal Clippings, Duty on 214
Metal Deposition, Cowper-Coles's Pat. 867
Metal Extraction from Ore, Aluzgaray's Pat. 837
Metal Extraction from Ore, Irwin's Pat. 81
Metal Extraction from Ore and Scrap, Sadtler's Pat. 804
Metal Market, New York 79
Metal Pigs, Ejecting from Their Molds, Slick's Pat. 251
Metal Plate Coating, Williams' Pat. 632
Metal Plates, Feeding and Heating, Allis' Pat. 733
Metal Pouring into Molds, Coleman's Pat. 185
Metal Production, Clamar's Pat. 627
Metal Trade, British, Reduced Wages in 163
Metal Tube Making, Emerson's Pat. 491
Metallic Ingots, Piercing and Shaping, Davis's Pat., Colo. 666
Metallic Minerals, Detecting and Locating, Brown's Pat. 112
Metallic Sulphides, Rendering Soluble, Collins's Pat. 901
Metallic Tubes, Seamless, McIntosh & Thornburgh's Pat. 323
"Metallurgical Crane, Blair's Pat." 632
"Metallurgical Filter, Long's Pat." 219
"Metallurgical Furnace, Hunter's Pat." 768
Metallurgical and Mining Patents, Weekly 357
"Metallurgical Process, Acheson's Pat." 667
Metals, Recovering, Kendall's Pat. 667
Metals, Reducing and Producing Alloys Thereof, Blackmore's Pat. 734
Metals, Treating, Carson's Pat. 420
Meteor Mining Co., Wash. 193
Metric System 236, 405, 577, 589, 854
Metric System in U. S. 865
Metropolitan Street Railway Co., Property Value 467
Meurant's Pat. Electrolytic Process 421
Mexican Anthracite Coal Co., Mexico 428
Mexican Gulf Coal and Transportation Co., Ind. Ter. 149, 772
Mexican Mill, Nev. 638
Mexican Mg. and Smelting Co., Mexico 238
Mexican National Dynamite and Explosive Co. 528
Mexican National Iron and Steel Co., Mexico 593
Mexican National Oil and Development Co., Mexico 599
Mexican White Lead Co. 696, 703
Mexico, American Capital in 685
Mexico, American Concessions 226
Mexico, Ancient Copper Smelting 246
Mexico, Coinage 209
Mexico, Colorado Machinery in 52
Mexico, Copper Exports 913
Mexico, Copper Production 787, 913
Mexico, Quatlian Turbine Installation 802
Mexico, Etzatlan Mining District 243
Mexico, Guanajuato Mining District 123
Mexico, Large Steel Rail Contract 506
Mexico, Mines 606
Mexico, Mining Dividends 163, 299, 609, 788
Mexico, Monterey Dynamite Factory 620
Mexico, Nacarsari Gas Producer Plant 687
Mexico, Permanent Exposition in 165
Mexico, Petroleum Deposits 758
Mexico, Placers of La Cienea, Sonora 132
Mexico, Prospecting for Petroleum in 306
Mexico, Rhyolites 628
Mexico, Smelter at Monterey 611
Mexico, Stock Quotations, Weekly 612
Mexico, Unwatering Former Bonanza Mines at Guanajuato 612
Meyer, J. G. A., "Easy Lessons in Mechanical Drawing and Machine Design" 524, 588
Meyers, F. M. & Co., Ind. 594
Meyer's Pat. Electrolytic Solution 185
Meyer's Pat. Portable Electric Welding Machine 219
Meyer's Pat. Sulphuric Acid Making 57
Mica Mines, Cal. 495
Mica Mining in India 631
Mica Production, Canada 387
Mica Production, Great Britain 827
Mica Production, Ontario 414
Mica Springs 471
Mica, Uses for 218
Michaels, Max 220
Michaloff's Pat. Casting Mold 421
Michigan Alkali Co., Mich. 82
Michigan, Asphalt in Delta County 50
"Michigan, Coal" 628, 766
Michigan, Coal Miners' Wages 497
Michigan, Coal Resources 696
Michigan, Coal Production 791
Michigan, Copper Dividends 25
Michigan, Copper Production 23, 25
Michigan, Copper Shipments 426
Michigan Diamond Oil Co., Texas 811
"Michigan Engineer" 800
Michigan, Gold and Silver Production 66
Michigan Hill Tunnel, Colo. 327
Michigan Iron Ore Shipments 16
"Michigan Labor and Industrial Statistics" 663
Michigan Mg. Co., Mich. 86, 256, 328, 456, 564, 676, 809, 842
Michigan-New Mexico Copper Co., N. M. 674
Michigan Portland Cement Industry 657
Michigan, Wolverines Copper Mine 582
Midas Gold Mg. Co., Cal. 148
Midas Gold Mg. Co., Idaho 256
Midas Mine, Utah 152, 364, 459
Midas Mg. Co., Colo. 149, 287, 738, 841
Middle Yuba Development Co., Cal. 871
Midland Coal Co., Pa. 90
Midland Mine, Mont. 907
Midland Portland Cement Co., Ind. 903
Midlothian Mg. Co., Va. 534
Midnight Mine, Ariz. 704
Midnight Mine, Cal. 326
Mijnboom Maatschappij Kehajang, Borneo 120
Mikado Mine, Colo. 85
Mike & Starr Mine, Colo. 327, 455
Miles, E. C. 838
Milford Gold and Copper Co., Utah 631
Milford Smelter, Utah 774
Miller Bros. Mine, Cal. 423
Miller & Brown Explorations, Minn. 637
Miller Creek Coal Co., Iowa 772
Miller, Jacob William, "Where to Build the Isthmian Canal" 279
Miller Mine, Cal. 188, 255, 737, 905
Miller, Reuben 592
Miller's Pat. Fluxing and Separating Compound 804
Miller's Pat. Ore Treatment 804
Miller, W. G. 668
Mill for Rolling Tapering Bodies, Baackes's Pat. 668
Mills, A. L. 252
Mill, Single-Floor, Cost of 580
Millspaugh Mill and Mg. Co., Cal. 360, 424
Minn. Con. Mg. Co., Mont. 595
Minas Geraes, Brazil, Historical Sketch of Gold Mining in 447
Minckley, G. S. 698
Mindermann, F. W. E., Revival of Iron Mining in New Jersey 136
Miner, A. F. 702
Mine Boss, When He Delegates His Duties 316
Mine Car Door Fastening, Watt's Pat. 901
Mine Door, Young's Pat. 491
Mine Entries, Negligence in Keeping Safe 729
Mine Gate, Bowman's Pat. 491
"Mine Hoist, Electric" 183
Mine Hoisting Cage, Davy's Pat. 632
Mine Hoist Pulley, Becker's Pat. 837
Mine Labor, Worth of 587
"Mine Locomotive, Jeffrey Electric" 490
"Mine Management, Gradation for" 588
Mine Mule, N. 1, Ind. 543
Mine Operations Damage Surface, Rights and Liabilities When 388
Mine Operator, Liability When Failure to Comply with the Law 353
Mine Operator Liable for Negligence of Foreman 833
Mine Operator is Required Only to Use Known Devices 662
"Mine Pumps, Lead-Lined" 183
Mine Shafts, Boring in Germany 140
"Mine Signal System, Waterproof Electric Switch for" 835
Mine and Smelter Supply Co. 146, 529, 569, 668, 704, 735, 769, 781, 839
Mine Superintendent in Indiana, Liability for Neglect 278
"Mine Surveying" 418, 485
"Mine Surveying Instruments, Evolution of" 698
Mine Taxation in Colorado 437
"Mine Timber, Brunton's Pat." 251
Mine Trolley, Radu's Pat. 527
"Mine Working" 485
Mine Workings Endangered by a Dump 575
Mineral Claims in Texas 77
Mineral Crest 825
"Mineral Deposits, Their Occurrence and Development" 762
Mineral Export Trade, U. S. 482
Mineral Mount, California 151
Mineral Paints, California 9
Mineral Paints, Production, Great Britain 307
Mineral Park District, Nev. 596
Mineral Point Mg. Co., Colo. 85, 505
Mineral Point Zinc Co., N. M. 674
Mineral Ranch Mine, Cal. 494, 670
Mineral Range Railway, Mich. 328
Mineral Rights, Owner Can Buy Surface at Tax-Sale 108
Minerals, Chemicals and Rare Elements, Prices Table, Weekly 9
Mineral Water, California 9
Mineral Water, Production, Canada 387
Mineral Wax Manufacture, Von Boyden's Pat. 81
Miner to Employer, Sufficiency of Notice by 246
Miner Mine, Mont. 457, 638
Miner, Risks Assumed by 214
Miner's Axe, Rees's Pat. 527
Miner's Candles, Manufacture of 700
Miners' Candles, Stearic Wax 487
Miner's Dream Mine, Utah 258, 299
Miners in Elba 859
Miners, Foreign in Scotland 219
Miner's Hat, Harris's Pat. 145
Miner's Lamp Lock, Prastwich's Pat. 701
Miner's Lamp, Prastwich's Pat. 145
"Miners' Lamps, Detecting Leakage in" 326
Miners' Liens in Arizona 108
Miner's Ore Sampling Co., Colo. 705, 738
Miner's Pick, Waterfall & Woods's Pat. 868
"Miners' and Prospectors' Handbook" 485
Miner's Ratchet Drill, Lucas, Decker, and Hoover's Pat. 801
Miner's Safety Lamp, Dando & Stair's Pat. 84
Miner's Safety Loading Tool, Des Moines' Pat. 283
Miner's Squibb, Gross's Pat. 390
Miner's Squibb, Richards's Pat. 58, 591
Miners' Strike, Rosland, B. C. 204
Miners' Union Mine, Mont. 427
Miners' Union, Right to Enjoin Action of in Fixing Wages 697
Miners' Wages, Illinois 632
Mines Exploration and Development Co., Cal. 592
Mines Must be Inspected When Law Requires It 353
Mines, Raising or Lowering Apparatus for, Davy's Pat. 452
Mines, Securities Corporation, N. Y. 84
Mines, Taxing 374
Minetta B. Mine, Cal. 148
Mingo Gold Mg. Co., Colo. 189
Minihan, Dennis 114
Mining Accidents in Great Britain 161
Mining Apparatus, Coleman's Pat. 56
Mining Car, Brown's Pat. 604
Mining Car, McAllister's Pat. 627
Mining Claim, Effect of Entry 316
Mining Claim Entry in Land Office Prevents Relocation While It Stands 627
Mining Claims in British Columbia 256
Mining Companies, American, Floating 639
Mining Companies Combination in Colorado 577
Mining Company Reports, Abstracts, Weekly 793
Mining Concession, Old 874
Mining Department for Canada 374
Mining Dividends, Review of 163, 301, 468, 639
Mining Dividends, Mexico 299
Mining Dredges, Swenson's Pat. 283
"Mining, Electricity in" 307
Mining Elevator, Davis's Pat. 390
Mining Engineers, English Openings for 590
"Mining Exhibits at the Charleston Exposition" 693
Mining Law Decisions, Weekly 419
Mining Law, New York 419
Mining Law for the Philippines 343, 446
"Mining Law of the Bodie District, Cal." 628
Mining Lease, Damages for Breach of 833
Mining Location, Changing 666
Mining Location, Rights Where it is in Excess of Legal Quantity 863
Mining Machine, Dierdorff's Pat. 804

*Mining Machine, McHugh's Pat. 901
Mining Machine, Wylie's Pat. 804
Mining and Metallurgical Patents Weekly 447
Mining and Metallurgy and "Engineer" 688
Mining and Metallurgy Consolidation, I. 65
Mining Method, Coleman's Pat. 58
Mining Methods in the New York Subway 136
702
161, 174
Mining Operations, Negligence in, Questions for Jury 587
Mining in the Philippines 625
Mining Property, Titles to 204
Mining and Prospecting 418
Mining Regulations in China 821, 827
Mining Revival at Tombstone, Ariz. 314
Mining Scheme, Novel 521
Mining School, India 474
Mining Schools in Russia 761
Mining Stock Markets and Quotations: Boston, Colorado Springs, New York, Salt Lake City, San Francisco, London, Paris.
Mining Stock Quotations: Philadelphia, Weekly, Louis, Spokane, Montreal, Toronto, Mexico Weekly.
Mining Stock Sale, Acts Precluding Reclamation of 863
Mining Stocks in Boston in 1901 53
Mining Stocks in New York in 1901 52
Minneapolis Mine, Colo. 705
"Minneapolis, Minn., Report of City Engineer" 588
Minneapolis-Montana Mg. Co., Mont. 191
Minnesota B. Mine, Cal. 495
Minnesota Wire Mill 352
Minnesota vs. Duluth & Iron Range Railroad 118
Minnesota Iron Co. 190, 224, 256, 498, 532, 706, 739, 842
Minnesota Iron Land Sales 288
Minnesota Iron Mining Wages 118
Minnesota Iron Ore Shipments 16, 532, 597, 637, 673, 706, 809, 842
Minnesota Mill, Ariz. 325
Minnesota Mine, Ariz. 254, 325, 359, 704, 733
Minnesota Mine, Cal. 595
Minnesota Mine, Minn. 597
Minnesota Gulch Section, Colo. 85
Minnie Healey Mine, Mont. 87, 329, 396, 457, 598, 740
Minnie Mine, Cal. 737
Minnie Mg. Co., S. Dak. 152
Minod, H. Switzerland 529
Minorena Mine, Minn. 673
Minority Stockholders' Rights of 854
Minor, Liability When Employed in Mine 316
Minor Metals and Alloys Prices Weekly 670
Mint Con. Mg. Co., Colo. 189, 637
"Mint, U. S., Director's Report" 834
Missimer, H. C. 805
Missouri, Barytes 762
Missouri, Coal Production 521, 791
Missouri, Geological Relations and Age of St. Joseph and Potosi Limestones 861
Missouri Gold Production 328
Missouri & Kansas Zinc Miners' Association 328
Missouri Lead and Zinc Ore Exhibits at Charleston Exposition District 773
Missouri, New Mining District 118
Missouri, New Ore Discovery 874
Missouri, Pig Iron Making 695
Missouri River Power Co., Mont. 224, 843
Missouri River Power Co.'s Transmission Plant 789
Missouri School of Mines and Metallurgy 869
Missouri, Southeast Disseminated Lead Ores 478
Missouri, Southeastern Lead Ores, Composition of 682
Missouri, Southeast Lead District in 1901 26
Missouri Southern Railroad 507, 874
Missouri Tornado Damages 637
Mitchell, G. V. 422
Mitchell, James 492
Mitchell, J. L., Ariz. 284, 633, 735
Mitchell Mine, Ariz. 494
Mitchell Mine, Cal. 454, 840
Mitchell's Appeal to the Public 585
Mitchell's Pat. Copper Smelting Furnace 219
Mitchell's Pat. Hot Blast for Copper Smelting 837
Mitchell, W. 220
Mittlermine Mine, Cal. 840
Mixer, Jones Patent 751
Mixing Machine, Cavin's Pat. 868
Mixsell, Phillip 391
M. N. Fraction, Colo. 873
Modena Mine, Colo. 906
Modoc Coal Mg. Co., O. 358
Moffett, Thomas 560, 633
Moffit, Samuel G. 402
Mohave County, Ariz., New Smelter for 781
Mohawkite 605
Mohawk Mine, Cal. 326
Mohawk Mine, Mich. 86, 224, 426, 456, 498, 564, 673, 842, 874, 907
Mohawk Mg. Co., Mich., Report 524
Mohawk Paint and Chemical Co., N. Y. 284
Mohlman Mine, Cal. 223, 805
Mohr, Dr. Bernhard 735
Molghan, James M. 769
Mojave Copper Co., Cal. 704
Mokelumne Mg. Co., Cal. 737
Molding Machine, Davies' Pat. 830
Mollie Gibson Mg. Co., Colo. 842
Mollie Gibson Mg. Co., Mont. 907
Mollie McGregor Mine, Mont. 457
Mollman, W. 902
Molten Metal Drawing from Receptacles Lincoln's Pat. 632
Molten Metals, Preventing Oxidation of, Walker's Pat. 701
Molybdenite Production, Queensland 623
Molybdenite, Separating from Gangue 181
Molybdenum 250
Molybdenum Buyers 418, 589
Molybdenum Production, U. S. 760
Monaghan, Frank 735
Monarch Mine, Mont. 243
Monarch Coal Mg. Co., W. Va. 226
Monarch Mine, N. C. 225
Monarch Mining Co., Ky. 190
Monarch Mg., Milling, Tunnel and Power Co., Colo. 148, 495, 841
Monarch Oil Co., Colo. 424
Monazite in Brazil, German Interests in 692
Monazite Production, U. S. 760
Monazite Sands of Bahia, Brazil 330
Mond Fuel Gas in England 437
Mond Nickel Process 685
Mondro Mg. and Milling Co., Cal. 562
Mond's Pat. Electrodeposition of Zinc 491
Mond's Pat. Gas Producer 632
Mond's Pat. Obtaining Zinc by Electrolysis 837
Monetary Standard, Uniform 486, 557, 589
Money in U. S. 198, 231, 369, 506, 681, 816
Moniteau County Mg. and Sm. Co., Mo. 638
Monitor Mine, Nev. 638
Mono Mg. and Milling Co., Utah 330, 428, 774, 844
Monongahela Iron Mine, Mich. 809
Monongahela River Con. Coal and Coke Co., Pa. 151, 430, 536, 744, 846
Monroe Mine, Wash. 103, 258, 534
Montana Coal and Coke Co., Mont. 457
Montana, Coal Production 791
Montana, Copper Production 23
Montana Corundum Co., Mont. 86, 638, 875
Montana, Elkhorn Mining District 583
*Montana, Gem-Jessie Copper and Silver Group at Butte 107
Montana Gold Dredging 533
Montana Gold Dredging Co., Mont. 533
Montana, Gold and Silver Production 66
Montana Land and Oil Co., Mont. 224
Montana, Manganese Ore 498
Montana Mine, Cal. 840
Montana Mine, S. Dak. 192
Montana Mg. Co., Mont. 638, 642, 707, 739, 810, 875, 907
Montana Mining Co., Ltd., Report 800
Montana Mg. Co. vs. St. Louis Mg. and Milling Co., Mont. 565, 875
Montana Mining in 1901 25
*Montana, Missouri River Power Company's Transmission Plant 789
*Montana, New Anaconda Reduction Works 311
Montana, New Mines in Butte District 97
Montana Oil and Fuel Co., Mont. 86, 191
Montana Ore Purchasing Co. vs. Boston & Montana Mg. Co., Mont. 674
Montana, Sapphires 38
Montana, Speculator Mine, Butte 862
Montana Verde Copper Co., Mont. 535, 565
Monte Cristo Mine, Cal. 84, 147
Monterey Dynamite Factory, Mexico 58, 620
Monterey Foundry and Mfg. Co., Mexico 325, 392, 453, 528, 634
Monterey Quicksilver Mg. Co., Cal. 59
Montezuma Gold Mg. and Milling Corporation, Colo. 250
Montezuma Lead Co., Mexico 364, 428
Montezuma Mine, Cal. 285, 840
Montezuma Mine, S. D. 397, 427, 508
Montgomery District, Cal. 904
Montgomery Machinery Co., Colo. 52, 903
Montgomery, W. & Co., Nitrate of Soda Statistics 124
*Montreal & Boston Copper Company's Smelter, B. C. 518
Montreal & Boston Mg. Co., B. C. 88, 121, 500
Montreal Stock Quotations Weekly
Monuments to be Erected on Discovery of Lode 77
Moody, J. 195
Moonlight Mine, Mont. 810
Moore & Martin's Pat. Generating Sulphur Dioxide 804
Moore, Russell W., Commercial Cyanide of Potassium 352
Moore, W. B. 146
Moore Mine, Mont. 563
Morgan, Augustus de, "Study and Difficulties of Mathematics" 698
Morgan, C. L. 769
Morgan-Draper, T. Wain 358
Morgan Engineering Co., Ohio 903
Morgan-Gardner Electric Co., Ill. 83, 146
Morgan, J. 633
Morgan, James H. 698
Morgan's Pat. Electric Mining Machine 57
Morgan's Pat. Furnace for Heating Billets 633
Morgan, S. T. 868
Morrison's Pat. Stamp Mill Mortar 427, 458
Morrison Basin Mining District, Oregon 191
Morrison Mg. and Milling Co., N. M. 427, 458
Morning Glory Mine, Wash. 534, 566, 640
Morning Star Mine, Cal. 737
Morning Star Mine, Colo. 326, 424, 498
Morning Star Mine, Oregon 409
Morocco Mg. Co., Colo. 117, 223, 738
Morrellville Coal and Coke Co., Pa. 674
Morris, A. F. 186
Morrison, J. R. 24
Morrison Mine, B. C. 303
Morris's Pat. Crusher 701
Morris's Pat. Hoisting and Dumping Apparatus 768
Morris's Pat. Ore Sack 491
Morris Township Coal Land Sales, Pa. 598
Morrow Mine, Minn. 532
Morse, A. J. 358
Mortimer & Wisner's Nitrate of Soda Statistics 92
Morton, Henry 702
Morwood, B. H., "National Iron and Steel, Coal and Coke Bluebook" 698
Moscow-Georges Creek Mg. Co., Md. 772
*Moses's Pat. Car Dump for Elevators in Mines 322
Moss Creek Coal Field, Pa. 225
Moss, Harry A. 702
*Mother Lode Mine, B. C. 302
Mother Lode Mg. Co., Mont. 288, 773
Mother Lode Mg. and Milling Co., Cal. 737
Mould, Henry S. Co., Pa. 59, 252
Moulton, E. S. 633
Moundsville Mg. Co., W. Va. 193
Mountain Copper Co., Ltd., Cal. 60, 254, 393, 512, 705
Mountain Copper Company, Cal., Report 628
Mountain Lion Mine, Cal. 148
Mountain Lion No. 2 Mine, Wash. 675, 876
Mountain Meadow Mine, Mont. 363
Mountain Queen Mine, Cal. 60
Mountain View Mine, Cal. 530
Mountain View Mg. Co., Nev. 225
Mountain View Mg. Co., Nev. 225
Mountain View Mill and Mg. Co., Cal. 428
Mount Aetna Mg. Co., S. Dak. 87, 675, 875
Mount Alamo Mica Co., Cal. 563
*Mount Baker Mining District, Washington 378
Mount Buckingham Mining, Cal. 770
Mount Bullion Cyanide Plant, Cal. 904
Mount Carmel Mine, Pa. 289
Mount Gaines Mine, Cal. 116
Mt. Goram Mg. and Milling Co., Colo. 287
Mount Hope Mine, Cal. 454
Mount Ida Mine, Cal. 254
Mount Jefferson Mine, Cal. 116, 286, 424
Mount Jessop Coal Co., Pa. 119
Mount Lyell Mg. Co., Tasmania 120, 226, 330, 676, 908
Mount Lyell Mg. and Railway Co., Tasmania Report 141
*Mt. Margaret Gold-Field, Western Australia 44
Mount Morgan Gold Mg. Co., Queensland 258, 330, 500, 908
Mt. Pleasant Coke Co., Pa. 289
Mount Pleasant Con. Gold Mg. Co., Cal. 670, 807
Mount Rainier Forest Reserve, Wash. 242
Mt. Rosa Mining, Milling and Leasing Co., Colo. 672, 842
Mount Royal Mg. Co., Utah 289
Mount Shasta Gold Mines Corporation, Cal. 60, 326, 393, 495, 562, 595, 671, 771, 840, 872
Mt. Sneffels District, Colo. 361
Mudd, S. W. 560, 633
Muellet Lands, Minn. 874
Mulas Mine, Mexico 836
Mullan's Pat. Unloading Ships' Cargoes 836
Muncie Mining and Investment Co., Ind. 706
Munson, Charles Belting Co., Ill. 561
Murchie Mine, Cal. 254, 326, 494, 562, 737
*Murchison Gold-field, Western Australia 46
Murdoch, W. 492
Murga, Zaperino 902
Murlin Coal Mg. Co., Mo. 498
Murray's Pat. Aluminum Alloy 734
Murray, H. G. 146
Murray, P. E. 358
*Musick Mine, Oregon 360
Mustang Mine, Cal. 708
Mynbouw Maatschappij Kajanjan, Borneo 279
Mysore Mine Inspector's Report 875
Mystic Mill, S. D. 875

N

Nacosari Gas Producer Plant 687
Naef's Pat. Gas Plant 591
Naef's Pat. Lixiviating Ores 836
Naef's Pat. Manufacturing Coke 837
Nagel's Pat. Making Spelter 768
Nail, Wire and Wire Rod Production, U. S. 614
Nanaimo Colliery, B. C. 416
Nancy Gold Mg. and Milling Co., Colo. 148, 286
Napa Con. Quicksilver Mg. Co., Cal. 326
Napa Con. Quicksilver Mg. Co., Cal., Report 555
Napa Junction Limestone Deposits, Cal. 770
Napoleon Mine, Cal. 147
*Nason, Frank L., Disseminated Lead Ores of Southeast Missouri 478
Nason, Frank L., Geological Relations and Age of St. Joseph and Potosi Limestones of Mo. 861
Natal, Coal Mining Industry 226, 330, 811
Natal, Coal Production 500
Natalie Anthracite Coal Co., Pa. 119
Natalie Mine, Pa. 151
*Natal and Zululand Geological Survey Report 485, 566
Nathan, Thomson and Rintoul's Pat. Manufacture of Nitro-Glycerine 901
National Abrasive Mg. Co., N. Y. 114
National Asphalt Co. 1, 58
National Association of Manufacturers 422, 645
National Association of Shafting Makers of National Bureau of Standards 67
National Cape Nome Gold Mg. and Transportation Co., Alaska 115
National Dynamite and Exploration Co., America 538
National Bell Mine, Colo. 61
"National Iron and Steel, Coal and Coke Bluebook" 698, 834
National Lead Co. 428, 597, 874
National Lead Co., Report 317
National Meter Co., N. Y. 115
National Mica Co., S. Dak. 225
National Mine, Cal. 807
National Mg. Co., Pa. 119, 192, 359
National Oil and Gas Co., Wyo. 290
National Paint and Color Co., Cal. 670
National Park Gold Mg. Co., Mont. 191
National Portland Cement Co., Ont. 59, 634
National Salt Co. 284, 493
National Salt Co., Report 484
National School Slate Co., Pa. 499
National Smelting Co., S. D. 88, 226, 566
National Steel Co. 707, 740
National Tube Co. 284, 669
National Tunnel and Mg. Co., Colo. 361, 671
Natividad Mg. Co., Mexico 62
Natrona Grant, Cal. 595
Natural Gas, California 9
Natural Gas in Iron and Steel Works 661
Natural Gas Production, Canada 387
Nauhart's Pat. Tin Recovery 901
Nau's Pat. Furnace for Heating Ingots 421
Nayr Mg. Co., Colo. 117, 698, 705, 771, 841
Neal's Pat. Vacuum Tank 837
Nebraska Coal 481
Neel, Carr B. 146
Neegaunee Iron Mine, Mich. 86, 118, 532
Neigold Mine, Colo. 85, 324
Neill, James W. 146, 324
Nelson, William G., Bauxite in 1901 39
Nellie Mine, Colo. 556
Nelson District, B. C. 43
Nelson, John W. 284
Nelson Mine, Oregon 499
Nemaha Mine, Colo. 85
Netherlands, Bank Statement Weekly
Neuberger, Dr. A., "Kalender für Elektrochemiker sowie Technische Chemiker und Physiker für 1902" 142
Neukirch's Pat. Coal Mining Machine 323
*Neumann's Pat. Feeding Blast Furnaces 283
Neumann's Pat. Liquid Fuel Burner 667
Nevada Construction Co., Nev. 776
Nevada County, Cal., New Gold Discovery 254
Nevada, Gold and Silver Production 66
Nevada Mine, Colo. 596
Nevada Mine, Utah 193, 534
Nevada, Mining Developments in Lincoln County 446
*Nevada, Oseola Tungsten Deposits 304
Nevada, Saving Flood Waters 245
Nevada, Tonopah District 697
Nevegold's Pat. Reverberatory Smelting Furnace 491
Neversweat Mine, Cal. 455
Never Sweat Mine, Mont. 875
Nevills, W. E. 453
Newbold & Lowry's Pat. Separating Gas from Water and Oil 58
New Caledonia Chrome Ore 32
New Caledonia, Chrome Ore Exports 364, 876
New Caledonia, Coal 76
New Caledonia, Cobalt Ore Exports 258, 364, 876
New Caledonia, Nickel Ore Exports 258, 364, 876
New Central Coal Co., W. Va. 193, 534
New Century Mine, Ariz. 147
New Century Mine, Nev. 225
*New Century Ore Feeder 835
*New Chum Mine, Western Australia 46
New Colorado Coal Co., Colo. 395
New Elkhorn Mg. Co., Colo. 223, 327, 841
Newell, S. V. 805
New England Copper Co., Ariz. 454
New England Gas and Coke Co., Mass. 529
New Era Mine, Cal. 635, 705
New Era Mg. Co., Nev. 447
Newfoundland, Brick Production 726
Newfoundland Copper Production 726, 787
Newfoundland, Gold Production 726
Newfoundland, Iron Ore Production 726
Newfoundland, Iron Pyrites Production 726
Newfoundland, Limestone Production 726
Newfoundland, Slate Production 726
Newfoundland, Stone Production 726
*Newfoundland, Some Pyrites Deposits at Port au Fort 626
New Guadalupe Quicksilver Mines, Ltd., Mexico, Report 141
New Hope Mine, Cal. 737
New Hope Mine, Oregon 427
Newhouse, Samuel 58, 702
Newhouse Tunnel, Colo. 60, 531, 543, 595, 610, 767
*Newhouse Tunnel, Driving, Colo. 552
New Idria Quicksilver Mg. Co., Cal. 148, 326
New Idria Quicksilver Mg. Co., Cal. Report 588
New Independence Mine, Cal. 635, 671, 872
New Jersey Gold-Copper Reduction Co., Colo. 531, 738
New Jersey, Iron Mining 136
"New Jersey Labor Statistics" 765
New Jersey Zinc Co. 560, 673, 874, 906
New Jersey Zinc Company's Palmerton Plant 480
New Jersey Zinc and Iron Co., Pa. 593
Newkirk, Northcutt & Quigley Mine, Cal. 906
*Newland, D. H., Mining Methods in the New York Subway 174
New Leadville Gold Mg. and Milling Co., Colo. 496, 672
New Leadville Home Mg. Co., Colo. 60, 223, 327, 394, 496, 531, 563, 666, 705, 771, 841
New Mexico, Briquette Plant 313
New Mexico, Coal Production 791
New Mexico Gold Ore Treating Co., N. M. 707
New Mexico, Gold and Silver Production 66
New Mexico Iron and Copper Ore Shipments 810
New Mexico School of Mines 902
New Mexico Sm. & Refining Co., N. M. 773
New Mg. Co., Ariz. 871
New Mohawk Mine, Cal. 494
New Monarch Mg. Co., Colo. 425, 873
New National Tunnel Mg. Co., Colo. 905
New Northern Mg. Co., Colo. 327
New Orleans, Through Water Route from Alabama Coal-Fields 235
New Pittsburg Coal Co. 225, 772
*Newport Mine, Oregon 239
Newport & Nevada Mg. Co., Nev. 446
New Prime Western Zinc Co., Kas. 874
New Process Rawhide Co., N. Y. 187
New Rambler Copper Mine Smelter, Wyo. 539
New Sapphire Syndicate, Mont. 538
New South Wales, Alumina Production 586
New South Wales, Bauxite in 763
New South Wales, Bismuth Production 586
New South Wales, Chrome Ore Production 586
New South Wales, Coal Mining 267
New South Wales, Coal Mining in Sydney Harbor 139
New South Wales, Iron Industry in 583, 609
New South Wales, Diamond Production 586
New South Wales, Discoverer of Gold in 754
New South Wales, Gold Production 300, 459, 586, 741, 821
New South Wales, Iron Industry in 583, 609
New South Wales, Lead Production 586
New South Wales, Limestone Production 586
New South Wales, Mineral Production 586
"New South Wales Mines Report" 216
New South Wales, Oil Shale 529
New South Wales, Opal Production 539
New South Wales, Platinum Production 586
*New South Wales, Report on Yalwat Gold-field 450
New South Wales, Silver Production 586
New South Wales, Tin Mining 212
New South Wales, Tin Production 586
*New South Wales, Volcanic Pipes 111
New Standard Concentrator Company's Pat. Concentrator 901
New State Mine, Utah 500
New State Mg. Co., Mont. 86
Newton's Pat. Pumping Power for Oil Wells 888
New Valentine Mg. Co., Colo. 841
New Western Mine, Cal. 530
New Year Gold Mg. Co., Mont. 191, 254
New York Antimony Market in 1901 32
New York Assay Office, Silver Receipts Weekly
New York Bank Statement Weekly
New York & Brooklyn Tunnel, Colo. 223
New York, Buffalo & Susquehanna Coal Co., Pa. 119
New York Chemical and Mineral Market Weekly
New Colorado Oil and Gas Co., Colo. 635
New York Coner Market in 1901 24
New York Delegates to the International Mining Congress 860

New York Exports.....52, 315, 483, 623
New York Export Trade.....161, 165
New York Gold and Silver Imports and Exports.....Weekly.
New York & Honduras Rosario Mg. Co., Report.....215
New York Iron Trade.....Weekly
New York Lead Market in 1901.....28
New York Metal Exchange, Meeting.....506
New York Metal Market.....Weekly
New York Mica Co., S. Dak.....235
New York Mill Co., Colo.....453
New York Mine, Cal.....562, 770
New York Mining Law.....419
New York Mining Stock Market.....Weekly
New York Mining Stocks in 1901.....52, 73
New York Rapid Transit Line, and Petroleum Fuel.....853
New York Silver Prices.....7
New York Spelter Market in 1901.....30
New York State Geologist's Report.....279, 318
New York Subway, Acetylene Lamps in.....420
New York Subway Explosion.....161, 164
New York Subway Mining Methods in.....161, 174
New York Tin Market in 1901.....30
New Zealand, Black Sands Treatment.....313
New Zealand Gold Dredge for Brazil.....518
New Zealand, Gold Dredging.....88, 364, 566, 599, 877
New Zealand, Gold Production.....321
New Zealand, Gold and Silver Exports.....63, 85, 258, 331, 459, 534, 676, 775, 857
New Zealand, Iron Sand in.....657
New Zealand, Knollin Exports.....676
New Zealand Mines Department Papers and Reports.....450, 525
New Zealand Official Year Book.....486
New Zealand, Scheelite.....630
New Zealand, Silver Exports.....534
New Zealand Statistics.....765
New Zealand, Stockholder's Right to Inspect Mine.....129
Next President Mine, Colo.....189
Niagara Falls Power Plant, Cost of.....590
Niagara Iron Co., Minn.....597
Niagara Mine, Cal.....286, 393, 671
Niagara Mine, Utah.....744
Niagara Mg. and Developing Co., B. C.....741
Niagara-Summit Mg. Co., Cal.....705
Niagara vs. United States Mining Co., Utah.....639
Nicholas, F. J., Wolverine Copper Mine.....582
Nicholas, G. H.....633
Nicholson, George B.....492
Nicholson, Hudson H.....114, 735
Nicholson, S. D.....735
Nickel-Ammonium Salt, Frasch's Pat.....357
Nickel, Changes in Sudbury District.....413
Nickel and Cobalt in 1901.....31, 794
Nickel-Cobalt Ores.....866
Nickel Combination.....129, 131, 474, 512, 543
Nickel Corporation, Ltd., New Caledonia.....122, 428
Nickel Report.....109
Nickel Exports, New York.....52
Nickel Exports, U. S.....63, 198, 369, 506, 646, 781
Nickel, Frasch Process.....144
Nickel Market and Prices.....Weekly
Nickel Mines of Northern Ontario.....694
Nickel Mines, Sudbury.....663
Nickel Mining in Silesia.....455
Nickel in Nickeliferous Pyrrhotite from Sudbury, Notes on the Condition of.....660
Nickel and Nickel Oxide.....250
Nickel Ore Exports, New Caledonia.....258, 364, 876
Nickel Ore Imports, Germany.....713
Nickel Ore Production, Germany.....549
Nickel Oxide.....250, 599
Nickel Plate Mine, B. C.....62, 193
Nickel Process, Mond.....685
Nickel Production, Canada.....387, 414
Nickel Production, U. S.....433
Nickel Salt Production, Frasch's Pat.....81
Nickel Steel, Thermo Electric Tests.....352
Niederbruck's Pat. Deep Boring Apparatus.....58
Nielson's Pat. Pumping Engine.....837
Niewerth's Pat. Reducing Ores.....283
Nighthawk Mine, Ariz.....670
Niles-Bement-Pond Co., Pa.....492, 634, 669
Nimsford Gold Mg. Co., Cal.....904
Nineteen-hundred-One.....1
Ninety-Four Mg. Co., Colo.....287
Niobium.....250
Nipper Mine, Mont.....118, 457, 801
Nipple Holder, Armstrong.....801
Niprius Mine, Colo.....83, 261
Nitrate Companies, Dividends.....712
Nitrate of Soda.....731
Nitrate of Soda Bags, Uniform Weight for.....505
Nitrate of Soda, Central Selling Agency Plan.....780
Nitrate of Soda, Chile, Labor Troubles.....267
Nitrate of Soda Combination.....602, 780
Nitrate of Soda Company Dividends.....746, 848
Nitrate of Soda Consumption.....645, 746, 980
Nitrate of Soda Deliveries, U. S.....880
Nitrate of Soda Export Duties in Chile.....294, 401, 505
Nitrate of Soda Exports, Chile.....92, 262, 335, 505, 602, 680, 780, 880
Nitrate of Soda Imports, Great Britain.....156
Nitrate of Soda Imports, U. S.....230, 335, 505, 645
Nitrate of Soda Industry, Chile.....717
Nitrate of Soda Land Sales.....432, 463
Nitrate of Soda Market and Prices, Chile.....197, 335, 463, 602, 645, 680, 689, 780, 815, 880
Nitrate of Soda Market and Prices, New York.....Weekly
Nitrate of Soda in 1901.....40
Nitrate of Soda, Production, Chile.....92, 463, 645, 746, 780, 880
Nitrate of Soda Steamship Disasters.....880
Nitrate of Soda Stocks and Statistics, Europe.....40, 124, 432, 570, 645, 746, 880
Nitrate of Soda Stocks and Statistics U. S.....40, 92, 230, 505, 680, 815
Nitric Acid Making, Chemische Fabrik Rheinania's Pat.....283
Nitric Acid Making, Ostwald's Pat.....701
Nitric Acid Making, Plith's Pat.....837
Nitro-Glycerin Manufacture, Nathan, Thomson and Rintoul's Pat.....901
Nittany Iron Co., Pa.....561
Niverton Coal Co., Pa.....151
Niverton Mine, Md.....596
Noble, Alfred, "Tables for Obtaining Horizontal Distances and Differences of Level from Stadia Readings".....705
Noble Mine, Cal.....671
Nogales Mg. Co., Mexico.....428
Nome Mining Conditions, Alaska.....762
Nome and Norton Bay Regions of Alaska.....727
Nonpareil Mine, Cal.....905
Non-Suit, Right to in Contest for a Mine.....214
Noonday Mine, Cal.....116, 807
*Norcross & Mitchell's Pat. Blast Furnace.....894
Nordberg, B. V.....220, 525
Nordberg Mfg. Co., Wis.....220, 525
Nordheimer Mine, Cal.....84
Norman, Charles.....186
Norris, C. V.....633
Norris Mg. Co., Mont.....843
Norris's Pat. Hoisting Bucket.....734
North American Iron Co., Minn.....673
North Bloomfield Mine, Cal.....670
North Carolina, Coal Production.....791
*North Carolina Exhibit, Charleston Exposition.....693
North Carolina, Gold and Silver Production.....66
North Carolina, Sapphires in.....445
North Champlon Mine, Mich.....118
North Dakota, Coal Production.....791
North, Edward.....422
North Georgia Dredging Co., Ga.....86
North Hill Mine, Cal.....393, 670
North Moccasin Mg. Co., Mont.....191, 224, 329, 638
North Pole Mine, Oregon.....740, 875
North San Poll Mg. Co., Wash.....566, 640
North Star Mine, B. C.....909
North Star Mine, Colo.....149, 326, 728
North Star Mines Co., Cal.....904
North Star Mine, S. Dak.....61, 289, 427, 598, 773
Northern Belle Gold Mg. Berner's Bay Co., Alaska.....285
Northern Consolidated Copper Co., Wyo.....774
Northern Electrical Mfg. Co., Wis.....392
Northern Light Mg. Co., Utah.....259
Northern Mg. Co., Colo.....496
Northern Montana Oil Co., Mont.....224
Northwestern Development Syndicate, B. C.....500
Northwestern Gold and Sapphire Mg. Co., Mont.....118
Norton Bay and Nome Regions of Alaska.....727
Norton Emery Wheel Co., Mass.....58
Norton Lumber Co., Mich.....426
Norton's Pat. Rolling Metal Ingots into Thin Sheets.....219
*Norwalk Locomotive Changer.....376
Norway, Concentrating Iron Ore in.....696
Norway, Copper Production.....787
Norway, Iron Ore Deposits of Dunderland.....651
Norway Iron Ore Deposits, Working.....717
Norwegian Iron Mine Railroad.....558
Norwegian Mine, Cal.....286
Nowell Mines, Alaska.....871
Norwood, B. H., "National Iron and Steel, Coal and Coke Blue Book".....834
Norwood, C. J., Western Kentucky Coal Fields in 1901.....178
No Sabe Mine, Cal.....84, 562
Notaway Mg. Co., Colo.....561
Nourse Deep Mine, Transvaal.....428
Nova Scotia, Barytes Production.....444
Nova Scotia, Coal and Coke Production.....444
Nova Scotia, Copper Ore Production.....444
Nova Scotia, Dominion Steel Plant at Sydney, Cape Breton.....892
Nova Scotia, Gold Production.....444
Nova Scotia, Grindstones Production.....444
Nova Scotia, Gypsum Production.....444
Nova Scotia, Iron Ore Production.....444
Nova Scotia, Limestone Production.....444
Nova Scotia, Manganese Ore Production.....444
Nova Scotia, Mineral Production.....444
"Nova Scotia, Mines Report".....485
Nova Scotia, Pig Iron Production.....444
Nova Scotia, Silica Production.....444
Nova Scotia Steel Co., N. S.....634
Nova Scotia, Triploid Production.....444
Noyes, Arthur H. and Cape Nome Conspiracy Case.....84
Noyes, Dr. W. A.....324
Nuevo Austral Mine, Mexico.....226, 459, 599
Nugent, Paul C., "Plane Surveying".....525
Nugget Gulch Mines, Mont.....907
Nugget Mg. Co., Colo.....393
Number Nine Mine, Cal.....529
Nuttall, R. D. Co., Pa.....303, 640
O
Oak Bar Mg. Co., Cal.....85
Oak Flat Mine, Oregon.....499
Oatka Mg. Co., N. Y.....638
O'Brien, S. Co., O.....593, 805
O'Brien Ranch, Cal.....563
Obsidian.....51
Occidental Coal Co., Wash.....445
Occidental Development Co., Colo.....189, 738
Oceanic Mine, Cal.....286, 424, 495
Ocean Island, Phosphates on.....380
Ocean View Mine, Cal.....360
Ocean Wave Mine, Colo.....563, 562
Ocher Production, Alabama.....387
Ocher Production, Canada.....827
O'Connell's Pat. Air Compressor.....451
Ottawa Mine, Ariz.....188
Oddie, T. L.....114
Offer and Acceptance, Rights Under.....662
Official Reports, Abstracts.....Weekly
Ogden's Pat. Gravitric Ore Roaster.....251
Ogilvy's Pat. Making Paint.....868
O'Harra, Cleonhas C., "Mineral Wealth of the Black Hills".....524, 588
Ohio, Coal, Freight Rates on.....430
Ohio, Coal, Land Sales.....639
Ohio, Coal Miners' Wages.....427
Ohio, Coal Production.....791
Ohio & Colorado Smelting and Refining Co., Colo.....563, 671
Ohio, Co-Operative Topographic Survey.....178
Ohio-Deadwood Mine, S. Dak.....192, 289, 599, 740, 875, 908
Ohio Gold Mg. Co., Colo.....117, 255, 361, 596, 771, 841, 906
Ohio & Indiana Mine, B. C.....909
Ohio, Necessity of Witness to Oil Lease.....108
Ohio & Pennsylvania Coal Co., O.....119
"Ohio Society of Surveyors and Civil Engineers, Proceedings".....317, 417
Ohio Steel Works.....252
*Ohm's Pat. Cement-Gravel Crusher and Separator.....452
Oil Burning, Badger's Pat.....667
Oil Burning Furnace, Ward's Pat.....591
Oil Business, Parties only by Express Agreement in.....416
Oil Concentrating Process.....144
Oil in Contra Costa County, Cal.....770
Oil, Crude, Burner, Lewis, Bay and Weston's Pat.....900
Oil, Crude, Burner, Wilson's Pat.....803
"Oil, Crude, Burning for Steam Purposes".....524, 556
*Oil Cup, Badger.....281
Oil Distilling, Dubb's Pat.....421
Oil Dividends.....813
*Oil Fields of Uinta County, Wyo.....720
Oil Filters, Sales of "Famous".....488
*Oil Filter, White Star.....696
Oil as Fuel in California.....609
Oil Fuel, Foreign Uses.....517
Oil and Gas Engines, Demand for.....282
Oil and Gas in Kansas.....37
*Oil and Gas in the Kansas-Indian Territory and Texas Fields.....100
Oil and Gas Lease, When it will not be Enforced.....416
Oil Gushers in Beaumont, Texas.....685
*Oil Gushers, New at Jennings, La.....860
Oil Lease, Liability on.....522
Oil Lease, Nature of Property Conveyed Under.....416
Oil Lease in Ohio, Necessity of Witness to Oil Lessee Protected by Good Faith.....108
Oil Refinery, Large in California.....704
Oil Refining, Douillet's Pat.....803
Oil Refining, Rocca's Pat.....734
Oil Refuse for Sprinkling Streets in Indiana.....772
*Oil Saver.....490
Oil Shale in New South Wales.....520
Oil Shale Production, Great Britain.....413, 827
Oil Stock Sales in California.....642
Oil Storage, California.....736
Oil Well Casing Head, Frye's Pat.....185
Oil Well Flooder, Howell's Pat.....112
Oil Well Pump Red Guide, Rigby's Pat.....559
Oil Wells, Colorado.....659, 672
Oil Wells, Indiana.....706
Oil Wells, Paying.....828
Oil Wells, Protecting from Fire, Cochran's Pat.....452
Oil Wells, Pumping Power for, Newton's Pat.....868
Oil Well Supplies, Liability for.....864
Oil Well Supply Co.....668
Oil Well Tubing Protector, Tail's Pat.....145
Oklahoma Delegates to International Mining Congress.....869
Oklahoma Mine, Pa.....458
O. K. Mine, Cal.....222
O. K. Mine, Utah.....500
Olalla Copper Mg. & Sm. Co., B. C.....429, 556, 898
Old Abe Mine, N. M.....533
Old Amber Mg. Co., Mont.....307
Old Bill Mine, Oregon.....773
Old Bill Mine, S. Dak.....61, 119, 329, 674
Old Channel Mines, Oregon.....319
Old Colony Copper Co., Mich., Report.....179
Old Colony Mg. Co., Mich.....86, 190, 426, 497, 564, 739, 809
Old Cowboy Mine, Cal.....540
Old Dominion Copper Mg. and Sm. Co., Ariz.....259, 342, 494, 511, 529, 567
Old Dominion Copper Mg. and Sm. Co., Ariz., Report.....449
Oldham's Pat. Conveyor.....632
Old Hickory Mine, Utah.....844
Old Home Con. Mine, Cal.....60, 286
Old Iron City Mine, Pa.....289
Old Ironsides & Knob Hill Mines, B. C.....302
*Old Ironsides Mine, B. C.....500, 617
Old Jordan Mg. and Milling Co., Utah.....839
Old Keys Mine, Cal.....286
Old Price Mine, Cal.....635
Old Town Mg. and Milling Co., Colo.....189, 563, 841
Oleo-Naphthal Co., N. Y.....839
Olive Creek Placers, Oregon.....598
Olive Mine, Ont.....775
Olive, D. B., Co., Minn.....637, 874
Olive Reduction Co., Colo.....223
Olive-Snyder Mg. Co. Minn.....150, 809
Ollie Reed Mine, Colo.....771
Olympia Mine, Ont.....120
Olympia Mg. Co., Wash.....445
Oneco Mine, Mich.....190
Onelia Mine, Cal.....423, 807
O'Neill & Brown Contracting Co., Texas.....875
Oneta Mg. Co., Minn.....673
Onions's Pat. Rolling Mill.....390
Ontario, Actinolite Production.....414
Ontario, Arsenic Production.....414
Ontario, Brick Production.....414
Ontario, Building Stone Production.....414
Ontario, Calcium Carbide Production.....414
Ontario, Cement Production.....414
Ontario-Colorado Gold Mg. Co., Colo.....808
Ontario, Copper Production.....414
Ontario, Corundum Production.....414
Ontario, Drain Tile Production.....414
Ontario, Feldspar Production.....414
Ontario Gold Production.....414
Ontario Government Assay Office.....850
Ontario Graphite Co., Ont.....258
Ontario, Graphite Production.....414
Ontario, Gypsum Production.....414
"Ontario, Iron Ore Deposits along the Kingston & Pembroke Railway".....485
Ontario, Iron Ore Production.....414
Ontario, Iron Pyrites Production.....414
Ontario, Lime Production.....414
Ontario, Mica Production.....414
Ontario Mine, Ont.....741
Ontario, Mineral Production.....414
Ontario Mg. Co., Utah.....152, 290
Ontario, Natural Gas Production.....414
Ontario, Nickel Mines.....694
Ontario, Nickel Production.....414
Ontario, Petroleum Production.....414
Ontario, Pig Iron Production.....414
Ontario, Platinum in.....110
Ontario, Pottery Production.....414
Ontario Provincial Assay Office.....624
Ontario, Salt Production.....414
Ontario, Sewer Pipe Production.....414
Ontario Silver Mg. Co., Utah.....331
Ontario Silver Mining Co., Utah, Report.....698
Ontario, Silver Production.....414
Ontario, Steel Production.....414
Ontario, Tale Production.....414
Ontario, Zinc Ore Production.....414
Onyx, California.....9
Opal Production New South Wales.....586
Opal Production, Queensland.....623
Open-Hearth Steel Making, Elimination of Silicon in.....829
Open-Hearth Steel Process, Smith & Bedford's Pat.....185
Ophir Con. Mg. Co., Colo.....11, 287, 327, 563, 672, 873
Ophir Mine, Mont.....596
Ophir Mg. Co., Nev.....870
Ophir Mg. and Development Co., Mont.....619
Ophir Queen Mg. Co., Utah.....110
Oranoke Gold Mg. and Milling Co., Colo.....795
Orbiston, Francis F.....668, 702
Ore Bucket, Dumper and Chute, Collier's Pat.....836
*Ore Car, Automatic Dumping Snow's Pat.....652
*Ore Car, Smith's Pat.....482
Ore Chute and Trap Door, Lindall and Mattson's Pat.....896
*Ore Classifier, Klein's Pat.....559
*Ore Concentrator, Dodd's Pat.....900
*Ore Concentrator, Kimball's Pat.....667
*Ore Concentrator, Lee's Pat.....113
*Ore Concentrator, Look's Pat.....452
*Ore Concentrator, McDermott and Elmore's Pat.....491
*Ore Concentrator, Stebbin's Pat.....559
*Ore Concentrator, Thurmond's Pat.....421
Ore Concentrator, Unzicker's Pat.....58
*Ore Crusher, Aiken's Pat.....87
*Ore Crusher, Calkin's Pat.....632
*Ore Crusher, Hanna's Pat.....185
*Ore Crusher, "Perfection".....420
*Ore Crushing and Pulverizing, Beam's Pat.....219
*Ore Deposits, Genesis of.....70
Ore Deposits, Nationalization in Sweden.....180
Ore Deposits, Recent Progress in the Study of.....106
Ore Dump, Fairbanks-Morse Automatic.....590
*Ore Feeder, New Century.....595
Ore Knob Mine, N. C.....499
Ore-Leaching Apparatus, Graves's Pat.....81
*Ore Pulp Distributor, Sherman's Pat.....491
*Ore or Pulp Sampler, Dodd's Pat.....357
Ore Roaster, Hopper's Pat.....901
Ore-Roasting Furnace, Capnean's Pat.....185
*Ore-Roasting Furnace, Merton's Pat.....632
Ore Sack, Morris's Pat.....491
Ore Sampler, Foster's Pat.....421
*Ore Sampler, Johnson's Automatic.....514
Ore Separating, Frolich's Pat.....251
*Ore-Separating Machine, Hoefler's Pat.....357
Ore Separator and Classifier, Culver's Pat.....900
Ore Separator, McClave, Kirby & Cumbe's Pat.....591
Ore Separator, Snider's Pat.....251
Ore Separator, Waters's Pat.....804
Ore-Treating Furnace, Beam & Bailey's Pat.....112
*Ore Treatment, Best's Pat.....837
*Ore Treatment, Dorr & Spang's Pat.....794
*Ore Treatment, Eilershausen's Pat.....803
Ore Treatment, Keith's Pat.....836
Ore Treatment, McKnight's Pat.....559
Ore Treatment, Miller's Pat.....804
Ore Treatment, Parnell's Pat.....323
*Ore Treatment, Potter's Pat.....323
Ore Treatment, Sharnneck's Pat.....591
*Oregon, Bohemia Mining District.....889
Oregon Bonanza Mine, Oregon.....427
*Oregon Borax Mine.....581
Oregon & Brunswick Mine, Wash.....193
Oregon & California Gold Fields, Ltd., Oregon.....639, 740
Oregon, Coal Production.....791
Oregon Con. Mg. Co., Oregon.....151
*Oregon-Cracker Mg. Co., Oregon.....238, 270, 674
Oregon Development Co., Oregon.....736
Oregon, Eastern, Gold Mining in.....136
Oregon, Gold and Silver Production.....66
Oregon Mine, Wash.....774
Oregon Quicksilver Mining.....151
"Oregon, Sumpter Gold-Fields".....588
Oregonian Mine, Wash.....290
Ores, Crushed, Screening, McDermott's Pat.....591
*Ores, Pig Iron and Steel Laboratory Analyses".....109
Ores, Treating, Currie's Pat.....113
Orford, E. V.....114
Oriental Con. Mg. Co., Ltd., Korea.....640
Oriental Mine, Cal.....84, 424
Orient Mine, Utah.....844
Original Mine, Mont.....598
Original Mine, Cal.....530, 562, 770, 871
Oriens Bar Gold Mg. Co., Cal.....871
Oriens Con. Mg. Co., Cal.....567
Orme Mine, Oregon.....707
Oro Cache Mine, Idaho.....117
Oro City Mine, Colo.....905
Oro Fluo Mine, Cal.....595, 770, 841, 872, 905
Oro Grande Mg. Co., Ariz.....254
Oro Grande Mg. Co., Idaho.....190
Oro Hondo Mg. Co., S. D.....875, 908
Oro-Lapata Combination, Colo.....771
Oronoco Mg. Co., Wash.....193
*Oronogo Zinc Mines, Mo.....476
Oroville Dredgers, Cal.....562
Oroville Gold Producing and Exploration Co., Cal.....770, 840
Orr's Pat. Recovering Cyanides.....87
Orr's Pat. Regenerating Waste Cyanide Solutions.....57
Osborne, F. M.....430
Osceola Gravel Mg. Co., Nev.....151
Osceola Mill Tailings, Mich.....302
Osceola Mg. Co., Mich.....150, 227, 288, 291, 398, 407, 425, 575, 596, 637, 739, 776, 842, 874
Osceola Mg. Co., Mich., Report.....416, 571
Osceola Mining District, Nevada.....304
*Osceola, Nev. Tungsten Deposits.....528
O'Shaughnessy, M. M.....528
Oshkosh Mg. Co., Cal.....360, 454

110	Osmium Filament for Lamps.....	719	Patent, Issue of on Mining After Notice is	799	Petroleum Deposits in Mexico.....	758	Pick, Davies's Pat.....	357
414	Ostergren's Pat. Air Compressor and Cooler	390	Conclusive.....	799	Petroleum Development.....	529, 670,	Pick, Mathias and Ray's Pat.....	219
414	Ostrand, W. B. & Co., N. Y.....	493	Patent to Mineral Land Will not be Canceled	388	Petroleum Explorations, Indiana.....	497	Pick, Smith's Pat.....	666
414	Oswald's Pat. Nitric Acid Making.....	701	Patent Office in Australia.....	511	Petroleum Exports, New York.....	52, 147	Piedmont Georgia Creek Coal Co., Md.....	288
631	Oswald's Pat. Converter Lining.....	323	Patent, Protest Against Issue of by Adversary	484	Petroleum Exports, U. S., 191, 214, 423, 704,	371	Pierce-Crouch Engine Co., Pa.....	59
398	Otago Gold Dredging, New Zealand.....	304	Patent, Claimant.....	484	Petroleum Field, Beaumont, Tex.....	616	Piez & Beaumont's Pat. Storage Apparatus	527
910	Otis Steel Co., O.....	293	Patents, British.....	832	Petroleum Fields, Boulder, Colo.....	445	Pigment Making, Jacobs' Pat.....	112
414	*Ottumwa Box Car Loader at Cumberland, Wyo.	631	Patents not Conclusively as to Date of Locations	77	*Petroleum Fields, Texas, Geological Survey	471	Pigment Production from Ferrous Liquors,	185
414	Ottumwa Box Car Loader Co., Iowa, 83, 220,	257	Patents, Guarantee.....	251	*Petroleum Fields of Wyoming.....	720	Damage's Pat.....	219
9	*Ottumwa Box Car Loaders for Dock Work	480	Patents to Land Within Jurisdiction of Department	353	Petroleum Fuel in California.....	235, 609	Pilbarra Gold-Field, Western Australia.....	46
566	Ottumwa Iron Works, Iowa.....	525	Impervious to Collateral Attack.....	353	Petroleum Fuel, Foreign Uses.....	517	Pilgrim Mine, Mont.....	565
623	Oudin, Maurice A., "Standard Polyphase Apparatus and Systems".....	628, 800	Patents.....	Weekly	Petroleum as Fuel for the New York Rapid Transit Line.....	853	Pilling Machine, Brophy's Pat.....	323
829	Ouray County Mining Transfers, Colo.....	286	Patent Title and Guarantee Co., N. Y.....	251	*Petroleum Fuel, Tests of Beaumont Oil for	169	Pilling & Crane, N. Y.....	325
185	Ouray Electric Light and Power Co., Colo.	61	Patriarche & Bell, N. Y.....	146	Petroleum and Gas in Kansas.....	37	Pilot Knob Copper Mfg. Co., Nev.....	151
873	Ouray Tunnel Mines Co., Colo.....	425	Patrick Quartz Mfg. Co., Cal.....	840	Petroleum in Greece.....	240	Pinal County, Ariz., New Copper Discovery	781
9	Ouro Presto Gold Mines of Brazil, Report.	247	Paving Bricks, California.....	9	Petroleum in Japan.....	448	Pine Creek District, Colo.....	327
873	Ouvrovite.....	315	Paving Flag, Steinbach's Pat.....	666	Petroleum in Kansas.....	37	Pine Creek Power Co., B. C.....	844
596	Overland Limited.....	806	Pawling & Harnischfeger, Wis.....	221, 594	Petroleum in Northern Russia.....	802	Pine Hill Mine, Cal.....	872
596	Overland Mine, Ariz.....	87	Paymaster Mine, Ariz.....	186	Petroleum in Open-Hearth Steel Furnaces.....	140	Pinkham Mine, Ariz.....	559, 736
87	Overland Mine, Mont.....	152, 330	Payne Mfg. Co., B. C.....	641	Petroleum in Open-Hearth Steel Furnaces.....	140	Pinton Mine, Cal.....	286, 737
610	Overlook Mine, Idaho.....	637	Peace River Phosphate Mfg. Co., Fla.....	230	Petroleum in Open-Hearth Steel Furnaces.....	140	Pinton, W. H.....	633
690	Overstrom, G. A., "Concentrator".....	81	Peak Hill Gold-Field, Western Australia.....	46	Petroleum in Pennsylvania.....	802	Pioneer Iron Co., Mich.....	594
702	Overstrom's Pat. Concentrator.....	81	Pearce, Arthur.....	702	Petroleum in Pennsylvania.....	802	Pioneer Mine, Cal., 222, 393, 562, 704,	737
829	Oviatt Mine, Oregon.....	427	Pearce Mine, Minn.....	457, 809	Petroleum in Pennsylvania.....	802	Pioneer Mine, Minn.....	150
829	Owattona Mine, Colo.....	872	Pearl Coal Co., W. Va.....	258	Petroleum in Pennsylvania.....	802	Pioneer Mfg. and Reduction Co., N. M.....	565
452	Owens Cave Mine, Ky.....	673	Pearl District, Wyo.....	741	Petroleum in Pennsylvania.....	802	Pirate Mine, Cal.....	116
890	Owl Mine, N. M.....	810	Pearl Mfg. Co., W. Va.....	193	Petroleum in Pennsylvania.....	802	*Piston-Valve for Air-Compressors, Brinton's Pat.	185
559	Ozark Mine, Cal.....	423	Pearse, Arthur L.....	391	Petroleum in Pennsylvania.....	802	Pit Fires, Recovery Work After.....	834
900	*Ozark Region, Lead and Zinc Deposits.....	475	Peat Converting into Fuel, Green and Martin's Pat.	803	Petroleum in Pennsylvania.....	802	Pitt Mfg. Co., Minn.....	150, 288, 426, 809
452	Ozokerite in Finland.....	67	Peat, Electric Treatment of.....	516	Petroleum in Pennsylvania.....	802	Pit River Copper Mines, Cal.....	635
			Peat, Gas from.....	859	Petroleum in Pennsylvania.....	802	Pittsburg, Bessemer & Lake Erie Railroad.....	561
			Peat for Locomotive Fuel.....	269	Petroleum in Pennsylvania.....	802	Pittsburg Boiler Scale Resolvent Co., Pa.....	115
			Peat Press, Dobson's Pat.....	867	Petroleum in Pennsylvania.....	802	Pittsburg Coal and Iron Trade.....	Weekly
			Peat Press, Dickson's Pat.....	900	Petroleum in Pennsylvania.....	802	Pittsburg Coal Co., Pa., 87, 90, 260, 289,	279
			Peat, Producing Half-Stuff from, Esser's Pat.	113	Petroleum in Pennsylvania.....	802	Pittsburg Coal Co., Report.....	279
			Peat Production, Canada.....	387	Petroleum in Pennsylvania.....	802	Pittsburg Fluorspar Mfg. and Mfg. Co., Ky.	497
			Peck Cyanide Co., Colo.....	672, 808	Petroleum in Pennsylvania.....	802	*Pittsburg Gage and Supply Co., Oil Filter.....	666
			Peckover's Pat. Stone Saw.....	823	Petroleum in Pennsylvania.....	802	Pittsburg Gage and Supply Co., Pa.....	634
			Peerless Maud Mine, Colo.....	771	Petroleum in Pennsylvania.....	802	Pittsburg Iron Market in 1901.....	17
			Peerless Mine, Cal.....	60	Petroleum in Pennsylvania.....	802	Pittsburg Reduction Co., 114, 325, 359, 623,	830, 498
			Peerless Rubber Mfg. Co., N. Y.....	634	Petroleum in Pennsylvania.....	802	Pittsburg Steamship Co.....	730
			Pecker, Charles G., "Easy Lessons in Mechanical Drawing and Machine Design"	524, 588	Petroleum in Pennsylvania.....	802	Pittsburg Terminal Railroad and Coal Co., Pa.	643
			Pellow-Harvey, W.....	422	Petroleum in Pennsylvania.....	802	Plute County Mines, Utah.....	12
			Pelton Water Wheel Co., N. Y., 221, 325, 903	903	Petroleum in Pennsylvania.....	802	Pixley & Abell's Statement of London, Eng., Silver Shipments.....	Weekly
			Pemberton's Pat. Cement Mill.....	837	Petroleum in Pennsylvania.....	802	*Placer County Mines and Minerals, Cal.....	629
			Pena Blanco Mfg. Co., Ariz.....	529	Petroleum in Pennsylvania.....	802	Placer County Stamp Mills, Cal.....	254
			Penberthy Injector Co., Mich.....	423, 483	Petroleum in Pennsylvania.....	802	Placer Locations in California.....	326
			Pendleton Mine, Colo.....	841	Petroleum in Pennsylvania.....	802	Placer and Lode Claims.....	108
			Pengilly, F. W. C.....	358	Petroleum in Pennsylvania.....	802	*Placer Mining, Coleman Apparatus.....	144
			Penakoff's Pat. Purifying Aluminous Ores.....	491	Petroleum in Pennsylvania.....	802	Plane Surveying.....	485, 525
			Penman Steel and Iron Works, Texas.....	359	Petroleum in Pennsylvania.....	802	Planet Mine, Ariz.....	325
			Penman Tank and Boiler Works, Ind.....	359	Petroleum in Pennsylvania.....	802	Planet Mine, Cal.....	360
			Penn Gas Coal Co., Pa.....	639	Petroleum in Pennsylvania.....	802	Plantinga's Pat. Extracting Tar from Gas.	734
			Penn Mine, Mich.....	288, 426	Petroleum in Pennsylvania.....	802	Plaster of Paris Hardening, Brodsky's Pat.	557
			Penn Mfg. Co., Cal.....	423	Petroleum in Pennsylvania.....	802	Plath's Pat. Nitric Acid Making.....	838
			Penn Mfg. and Leasing Co., Colo., 327, 361,	873	Petroleum in Pennsylvania.....	802	Platinum in Australia.....	793
			Pennsylvania, Anthracite Coal Mine Workers Nationality.....	138	Petroleum in Pennsylvania.....	802	Platinum in British Columbia.....	249
			Pennsylvania, Anthracite Coal Production.....	396, 887	Petroleum in Pennsylvania.....	802	Platinum, California.....	9
			Pennsylvania, Anthracite Mine Floods, Some Lessons from.....	378	Petroleum in Pennsylvania.....	802	Platinum Combination, Rumor.....	157
			Pennsylvania Anthracite Mine Laws.....	97	Petroleum in Pennsylvania.....	802	Platinum Discoveries, B. C.....	534
			Pennsylvania, Anthracite Miners' Demands.....	458, 753	Petroleum in Pennsylvania.....	802	Platinum in Wyoming.....	203
			Pennsylvania, Anthracite Miners' Strike.....	578, 821,	Petroleum in Pennsylvania.....	802	Platinum Finds in California.....	871
			632, 707, 747, 751, 785, 788, 821,	885	Petroleum in Pennsylvania.....	802	Platinum Imports, U. S., 63, 198, 369, 626,	781
			875, 853, 885	885	Petroleum in Pennsylvania.....	802	Platinum and Its Associated Metals, Notes on.....	512
			Pennsylvania Bituminous Coal Land Sales.....	639	Petroleum in Pennsylvania.....	802	Platinum Market and Prices.....	Weekly
			Pennsylvania, Bituminous Coal Land Sales.....	639	Petroleum in Pennsylvania.....	802	Platinum in 1901.....	31
			Pennsylvania, Bituminous Coal Land Sales.....	639	Petroleum in Pennsylvania.....	802	Platinum in Ontario.....	110
			Pennsylvania, Bituminous Coal Land Sales.....	639	Petroleum in Pennsylvania.....	802	Platinum Ores, Wyoming, Nature of.....	580
			Pennsylvania, Bituminous Coal Production.....	639	Petroleum in Pennsylvania.....	802	Platinum Production, New South Wales.....	586
			Pennsylvania, Bituminous Miners' Strike.....	598	Petroleum in Pennsylvania.....	802	Platinum in South Africa.....	218
			Pennsylvania, Coal Mine Accidents.....	686	Petroleum in Pennsylvania.....	802	Platinum and Tin Discovery, Bonus for.....	732
			Pennsylvania, Coal Miners' Wages.....	122	Petroleum in Pennsylvania.....	802	Platinum in Wyoming.....	143, 418
			Pennsylvania Coal Production.....	652, 791	Petroleum in Pennsylvania.....	802	Platt & Gilson Mine, Cal.....	495
			Pennsylvania, Development of the Indiana County Coal Fields.....	134	Petroleum in Pennsylvania.....	802	Plews' Pat. Antimony Ore Treatment.....	357
			Pennsylvania Gold Mfg. Co., S. D.....	427, 740	Petroleum in Pennsylvania.....	802	Ploeg's Pat. Removing Antimony from Ores	901
			Pennsylvania Iron and Steel Workers' Wages.....	123	Petroleum in Pennsylvania.....	802	Pluma Mfg. Co., S. Dak.....	192, 427, 707, 875
			Pennsylvania, Liability of Coal Mining Company In.....	316	Petroleum in Pennsylvania.....	802	Plumas Copper and Smelting Co., Cal., 254,	705
			Pennsylvania, Maryland & West Va. Coal and Coke Co., Pa.....	598	Petroleum in Pennsylvania.....	802	Plumbago Mine, Cal.....	424
			Pennsylvania Mine, Minn.....	288	Petroleum in Pennsylvania.....	802	Plumbago (See Graphite).....	578
			Pennsylvania Mine, Mont.....	674	Petroleum in Pennsylvania.....	802	*Plumbing Tamarack Mine Shafts.....	763
			Pennsylvania Mfg. Co., S. Dak.....	363, 565	Petroleum in Pennsylvania.....	802	Plummer, John, Bauxite in New South Wales.....	703
			Pennsylvania & Northwestern Railroad Co., Pa.....	363	Petroleum in Pennsylvania.....	802	Plummer, John, Copper in New South Wales.....	703
			Pennsylvania, Belmont Plant of New Jersey Zinc Company.....	480	Petroleum in Pennsylvania.....	802	Plummer, John, Platinum in Australia.....	793
			Pennsylvania Railroad Co.....	191	Petroleum in Pennsylvania.....	802	Plymouth Block Coal Co., Ind.....	407
			Pennsylvania Slate Workers' Strike.....	458	Petroleum in Pennsylvania.....	802	Plymouth Coal Co., Pa.....	427
			Pennsylvania, Snow Shoe and Broad Top Coal Fields.....	177	Petroleum in Pennsylvania.....	802	Plymouth Rock Gold Mfg. Co., Cal., 635,	704
			Pennsylvania Steel Co., Pa.....	908	Petroleum in Pennsylvania.....	802	Plymouth vs. Silver King Mine, Mont.....	457
			Pennsylvania Steel Co., Report.....	799	Petroleum in Pennsylvania.....	802	Pneumatic Cyanide Process Co., Colo.....	282, 669
			*Pennsylvania, Western, Recent Geological Work.....	245	Petroleum in Pennsylvania.....	802	Pneumatic Ore Concentrating Co.....	528
			Penn Yan Mine, Mont.....	224	Petroleum in Pennsylvania.....	802	Pocahontas Coal and Coke Co., Report.....	835
			Penobscot Mine, S. D.....	427, 598, 674, 773, 908	Petroleum in Pennsylvania.....	802	Poland, H. F.....	82
			Penoles Mfg. Co., Mexico.....	459, 599, 909	Petroleum in Pennsylvania.....	802	Poland, Zinc Production.....	405
			Penrose, R. A. F.....	668	Petroleum in Pennsylvania.....	802	Poleta Mine, Cal.....	183
			Penrose, R. A. F., Jr.....	838	Petroleum in Pennsylvania.....	802	Poling Molten Copper, Savelsberg's Pat.....	247
			Penrose, W. H.....	735	Petroleum in Pennsylvania.....	802	Polk, Rufus King.....	391
			People's Mutual Mfg. Co., Cal.....	849	Petroleum in Pennsylvania.....	802	Pollard Mine, Idaho.....	149, 395
			Perazzo Mine, Cal.....	393	Petroleum in Pennsylvania.....	802	Pollard's Pat. Operating Blast Furnace	452
			Perin, Charles P.....	869	Petroleum in Pennsylvania.....	802	Pollo, W.....	492
			Perrine, F. A. C., "Power Plants of the Pacific Coast".....	705, 807, 909	Petroleum in Pennsylvania.....	802	Pollution of Streams by Coal Refuse in Indiana.....	772
			Perry Creek Placers, B. C.....	257	Petroleum in Pennsylvania.....	802	*Polymet's Pat. Precipitant for Treatment of Copper Water.....	801
			Perry & Rachel Mine, Oregon.....	769	Petroleum in Pennsylvania.....	802	*Polymet's Pat. Precipitating Copper from Water.....	801
			Perry, R. E.....	759	Petroleum in Pennsylvania.....	802	Pool, Herman.....	701
			Perry's Pat. Culin Drier and Separator.....	396	Petroleum in Pennsylvania.....	802	Pope, C. E.....	869
			Peru, Copper Production.....	787	Petroleum in Pennsylvania.....	802	Pope, Graham.....	735
			"Peru, Eastern and Bolivia".....	109, 216	Petroleum in Pennsylvania.....	802	Porphyry Dike Mine, Cal.....	905
			Peru, United States Mining Syndicate In.....	99	Petroleum in Pennsylvania.....	802	Portage Lake Ship Canal.....	240
			Pete Mann Mine, Oregon.....	598	Petroleum in Pennsylvania.....	802	*Porter Compressed Air Locomotive.....	377
			Petersburg Oil Industry, Indiana.....	594	Petroleum in Pennsylvania.....	802	Porter, H. K. Co., Pa.....	633
			Peterson Mine, Cal.....	116	Petroleum in Pennsylvania.....	802	Porter, J. F.....	902
			Pethybridge's Pat. Gold Ore Treatment.....	452	Petroleum in Pennsylvania.....	802	Port Henry Iron Furnace, N. Y.....	252
			Petroleum Brimstones in France.....	108	Petroleum in Pennsylvania.....	802	"Portland Cement, Chemical and Physical Examination.....	179, 216
			Petroleum in Burma.....	473	Petroleum in Pennsylvania.....	802	Portland Cement Industry in Michigan.....	357
			"Petroleum Burning for Steam Purposes".....	556	Petroleum in Pennsylvania.....	802	Portland Cement Making, Torell's Pat.....	657
			Petroleum, California.....	7, 9	Petroleum in Pennsylvania.....	802	*Portland Cement Works of Edison Company, N. J.....	724
			Petroleum on California Steamers.....	438	Petroleum in Pennsylvania.....	802	Portland Gold Mfg. Co., Colo., 257, 256, 398,	497, 535, 543, 564, 567, 678, 808, 877, 909
			Petroleum and Coal in Locomotives.....	795	Petroleum in Pennsylvania.....	802	Portland Mfg. Co., Idaho.....	456
			Petroleum in Cuba.....	347	Petroleum in Pennsylvania.....	802		

Portland Smelting and Refining Corporation, Oregon 492
 Porto Fino Mine, Cal. 286
 *Port Townsend, Wash., Iron Making 137
 Portugal, Antimony Ore Production 245, 761
 Portugal, Arsenic Production 245, 761
 Portugal, Coal Production 245, 761
 Portugal, Copper Production 245, 761
 Portugal, Gold Production 245, 761
 Portugal, Iron Ore Production 245, 761
 Portugal, Lead Ore Production 245, 761
 Portugal, Manganese Ore Production 245, 761
 Portugal, Mineral Production 245, 761
 Portugal, Pyrites Production 245, 761
 Portugal, Tin Ore Production 245, 761
 Portugal, Wolfram Ore Production 245, 761
 Portugal, Zinc Ore Production 245, 761
 Portuguese East Africa, Gold in 799
 P. O. S. of A. Mine, Colo. 194
 Posey, O. P. 114, 146
 Possession, Exclusive, Essential to Right of 77
 Possible Mine, Cal. 116
 Postlethwaite's Pat. Excavating Mechanism for Dredges 251
 Potash Salt Production, Germany 549
 Potash Salts Imports, U. S. 749
 Potash Salts Industry in Germany 645, 785
 Potash Salts Market and Prices 40, 746, 880
 Potassium Chloride as an Explosive 313
 Potassium-Magnesium Carbonate Making, Precht's Pat. 112
 Potassium Prussiate, Market in 39
 Potassium Salt Treatment, Recht's Pat. 185
 Potosi and St. Joseph Limestones of Missouri, Geological Relations and Age of 861
 Potter vs. Kirby 670
 Potter's Pat. Manufacturing Pig Iron 323
 *Potter's Pat. Ore Treatment 323
 Poverty Flats Mine, Colo. 361
 Poverty Hill Mine, Cal. 286
 Potter's Pat. Sulphide Ore Treatment 591
 Powell Mine, Cal. 223
 Pottery Production, Canada 387, 414
 Potut's Pat. Sulphuric Acid Manufacture 804
 Potter, William C. 220
 *Power, Fred. Danvers, Saddle Reefs of Bendigo 898
 "Power Plants of the Pacific Coast" 765, 897
 "Power and Power Transmission" 109
 Power Specialty Co., N. Y. 250, 453
 *Power Specialty Company's Mechanical Scale Remover 250
 "Power Transmission, Electric" 229
 Power Transmission, Electric, in Mines 299
 Power Transmission, Long Distance Electric 166
 Power Transmission, Long Distance Electric, Power Without Puel. 299
 Powhataa Mg. Co., Colo. 287
 Prairie Diggings Mine, Oregon 773
 Prairie Flower Mine, Cal. 286
 Pratt, Francis A. 252
 Pratt, G. A. 735
 Prince of India Mine, Utah 876
 Pratt, J. H. 492
 Pratt, Joseph Hyde, Gold Deposits of Arizona 795
 Precht's Pat. Making Potassium-Magnesium Carbonate 112
 Precious Metals, Extraction from their Ores, Kendall's Pat. 901
 Precious Metals, Extraction from their Ores, Davis's Pat. 283
 Precious Metals Recovering from Solutions, Hunt's Pat. 58
 Precious Stones in U. S. in 1901 38, 548
 *Precision Level, New 320
 Prellwitz's Pat. Regulator for Air-Compressors 81
 Prescott, Fred. M., Steam Pump Co. 698
 President Mine, Colo. 906
 Presler's Pat. Sinking Tubular Wells 763
 Pressed Steel Car Co., N. J. 221
 Pressed Steel Car Co., Pa. 493
 Prest & Cabot's Pat., Slag Treatment 257
 Preston No. 2 Colliery, Pa. 325
 Preston No. 3 Mine, Pa. 397
 Prestrich's Pat. Miners' Lamp 701
 Prestrich's Pat. Miner's Lamp Lock 145
 Prife of the West Mine, Ariz. 254
 Prime Western Smelter, Kan. 673
 Primrose Mine, Wash. 193
 Prince Albert Mine, Ariz. 806
 Prince Albert Mg. Co., Colo. 906
 Prince Henry of Prussia 341
 Prince of India Gold and Copper Mg. and Milling Co., Utah 289
 Princess Alice Con. Gold Mg. Co., Col. 456, 497
 Princess Maud Mine, Wash. 193, 459
 Princeton Mine, Cal. 326, 904
 Princeton University 284
 Pringle Gold Discovery, S. D. 289, 329
 Printer Boy Gold Mg. Co., Colo. 85, 223, 287, 456, 496, 531, 706, 738, 808
 Pritchard, J. H. 560
 Pritchett, C. W. 220
 *Pritchett, C. W., Ancient Copper Smelting in Mexico 246
 Probert, Frank H. 758
 Processes, Encouraging New 720
 Proctor, Wilford 638
 Producers' Oil Exchange, Cal. Trading, Weekly 706, 873
 Progressive Mg. & Investing Co., Colo. 563, 722
 Prospecting Dredging Land in California 423
 Prospect Mountain Mining, Colo. 117
 *Prospector's Pick, Goldsmith's Pat. 185
 Prosperity Gravel Mg. Co., Cal. 393, 562, 872
 Prosperity Signs in the South 67
 Providence Gold & Conner Co., Cal. 454, 662
 Providence Mountain Mg. Co., Cal. 222, 455
 "Providence, R. I., Report of City Engineer" 588
 Prudhomme Mine, Cal. 188, 255, 455, 595
 Pruzkowsky's Pat., Steel Making 421
 Prussian Government Coal Contract 878
 Puddling Furnace, Swindell's Pat. 452
 *Puddling Machine, Roe's 755
 *Pueblo Mine, Yukon 167, 592
 Puerbaugh, J. G. 499
 Puget Sound Mine, Oregon 499
 *Pulp Sampling Machine, Brynes' Automatic Pulverizing, McClellan's Pat. 488
 *Pulverizing Mill, Wallace's Pat. 323
 Pumice-Stone Bricks, Duty on 278
 Pump, Differential, Corryell's Pat. 57
 Pumpelly Explorations, Mich. 150
 Pumping Engine, Delaney's Pat. 452
 Pumping Engine, Nielsen's Pat. 837
 Pump, Johnson's Pat. 836
 "Pumps, Their Construction and Management" 317, 355
 Punch Creek Mine, Cal. 771
 Purcell, W. H. 186
 *Purissima Mine, Mexico 612
 Puschek Mine, Cal. 494, 562
 Putnam Mg. Co., Utah 741
 Putnam, N. H. & Co., Minn. 736
 Putsch, Albert, "Gas and Coal Dust Firing" 534
 Puy-de-Dome Mine, New Caledonia 428
 Puzzle Mg. Co., Colo. 394, 496, 636
 Pyramid Mine, Cal. 862
 Pyrenees, Arsenic and Lead Mines 910
 Pyrenees Minerals, Ltd. 138
 Pyrenees Rainfall, Utilization of 9
 Pyrites 626
 Pyrites, California 896
 *Pyrites Deposits, Port au Port, Newfoundland 620
 Pyrites Exports Spain 620
 Pyrites Imports, Germany 620
 Pyrites Imports, Great Britain 156, 602, 746, 912
 Pyrites Imports, U. S. 368, 504, 645, 779
 Pyrites, Iron from 144
 Pyrites, Iron, Production, Great Britain 827
 Pyrites Market and Prices, Weekly 779
 Pyrites Mining, Alabama 39
 Pyrites in 1901 387
 Pyrites Production, Canada 549
 Pyrites Production, Germany 413
 Pyrites Production, Great Britain 245
 Pyrites Production, Portugal 450
 Pyritic Smelting 80
 *Pyrometer, Queen Electrical 50

Q

Qualey, Joseph 633
 Quarries in Italy 101
 Quarry Accidents in Great Britain 162
 Quartette Mine, Ariz. 188
 Quartette Mg. Co., Nev. 447
 Quartz Crystals, California 9
 Quartz Hill Mine, Cal. 393
 Quartz as an Industrial Material 798
 Quartz Valley Mine, Cal. 116
 *Quebec, Copper-Bearing Volcanic Rocks 412
 Quebec Mine, Oregon 598
 Quebec Mineral Production 694
 Quebecillias Mine, Mexico 775
 Queen Bee Mine, S. Dak. 89
 *Queen Electrical Pyrometer 150
 Queen of the Hills Mine, Mont. 427
 Queen Mine, B. C. 640
 Queen Oil Co., Cal. 188
 *Queensland, Bendigo District 440
 Queensland Gold Production 120, 226, 300, 599, 741, 821, 844
 Queensland, Mineral Production 623
 "Queensland, Mines Report" 805
 Quicksilver, California 9
 Quicksilver in China 557
 Quicksilver Exports, U. S. 63, 198, 214, 369, 506, 646, 781
 *Quicksilver Furnace, Scott's Pat. 768
 Quicksilver Imports, Great Britain 157, 336, 464, 605, 747, 913
 Quicksilver Land Sales, California 254
 Quicksilver Market and Prices, Weekly 50
 Quicksilver Mining in California 151
 Quicksilver Mining, Oregon 31
 Quicksilver in 1901 415
 Quicksilver Prices in 1901 415
 Quicksilver Production, Austria 415
 Quicksilver Production, Italy 415
 Quicksilver Production, Russia 415
 Quicksilver Production, Spain 263, 415
 Quicksilver Production, U. S. 415
 Quicksilver Production of the World 415
 Quicksilver Receipts, San Francisco 157, 295, 433, 849
 *Quicksilver Separating and Continuous Ore Furnace, Fitzgerald's Pat. 527
 Quigley Ranch, Cal. 188, 771
 Quigley, William 902
 Quilp Mine, Wash. 640
 Quinan's Pat. Manufacture of Concentrated Sulphuric Acid 701
 Quincy Copper Co., Mich. 809, 842
 Quincy vs. Daly West Mg. Co., Utah 364, 458, 500
 Quincy, Josiah 391
 Quincy vs. Little Bell Mg. Co., Utah 428
 Quincy, Mass., Granite Shipments 305
 Quincy Mg. Co., Mich. 194, 259, 288, 398, 426, 497, 564
 Quincy Mining Co., Mich., Report 278
 Quincy Mg. Co., Utah 121, 329, 428, 458, 534, 741
 Quintaine's Pat., Obtaining Tin by Electrolysis 701
 Quito Mine, Colo. 394

R

Rabbit's Foot Mine, Yukon 168
 Race Track Creek, Mont. Power from 843
 Racine Hardware Co., Wis. 559
 Radcliffe Mining Co., Cal. 494, 670
 Rademacher District, Cal. 904
 Rader & Smeeth's Pat. Blast Furnace 591
 *Rader's Pat. Blast Furnace 491
 Radu's Pat. Mine Trolley 527
 Railroad Extension in U. S. in 1901 17
 Railroads in the Yukon 611
 Rails, Steel, Specifications for 689
 Railway Construction in Guatemala 858
 Rainbow Conner Mg. Co., Cal. 770
 Rainfall, Utilization of in the Pyrenees 136
 Rainy River District, Canada 775
 Ralston Divide Mg. Co., Cal. 424, 454
 Ramon Mg. Co., Cal. 770, 871
 Ramon's Pat. Pigment Production from Ferrons Liquors 185
 Rambler-Cariboo Mg. Co., B. C. 500, 909
 Rambler Mine, Wyo., Occurrence of Rare Metals in 696
 Ramsay's Pat. Revolvable Car Dumping Structure 868
 Ramsay, William 769
 Ranchita Mine, Cal. 905
 "Rand Deep-Level Mines and their Future Development" 765
 Rand Drill Co., N. Y. 220
 Randsburg Coal and Power Co., Cal. 770
 Randsburg Mills, Cal. 222
 Ranier Investment Co., Minn. 597
 Ranson Copper Mg. Co., Ont. 775
 Ranz Hill Mg. Co., Ga. 86, 224
 Rapid River Mg. Co., S. D. 707, 908
 Rara Avis Mine, Colo. 872
 Rare Elements, Chemicals and Minerals. Prices Table, Weekly 696
 Rare Metals, Occurrence of in the Rambler Mine, Wyo. 82
 Rarig Engineering Co., O. 286
 Ratcliff Mine, Cal. 81
 Rattak's Pat. Rock Drill 222
 Rattler Mine, Cal. 152
 Raven Mine, Mont. 872
 Raven Mg. Co., Utah 188, 494, 671, 737, 872
 Rawhide Mine, Cal. 735, 902
 Raymond Brothers Impact Pulverizer Co., Ill. 902
 Raymond, C. W. Co., O. 698, 869
 Raymond, Robert M. 788
 Raymond, R. W., Anthracite Strike 236
 Raymond, R. W., Improvement of the Erie Canal 823
 Raymond, R. W., Industrial History of the Anthracite Regions 886
 Raymond, R. W., Mitchell's Appeal to the Public 106
 Raymond, R. W., Origin of Extra-Lateral Right in U. S. Mining Law 180
 Raymond, R. W., Popular Lectures on Civil Engineering 280
 Raymond, R. W., Tunnar Memorial 856
 Raymond, R. W., What are the "Intolerable Conditions" of the Anthracite Region? 544
 Raymond, R. W., What is the Apex-Right Worth? 840
 Rayo Mg. and Development Co., Cal. 325
 Reading Iron Co., Pa. 774
 Readsboro Mg. Co., Vt. 281
 Realization Mine, S. D. 427
 Receiver for Mining Company, When he will not be Appointed 729, 832
 Receptacle or Tank, Stewart's Pat. 185
 Recht's Pat. Potassium Salt Treatment 81
 Recording Gage, Wolfe's Pat. 87, 119
 Recovery Gold Mg. Co., S. Dak. 424
 Red Bird Mine, Cal. 85, 116, 288, 424
 Red Bird Mine, Idaho 149
 Red Bluff Gold Mg. Co., Mont. 363, 740
 Red Boy Con. Gold Mines Co., Oregon 363
 Red Cap Mine, Cal. 222
 Red Chief Mine, Mont. 638
 Red Cloud Mine, Cal. 495, 594, 670, 737
 Red Cross Mine, Cal. 148, 530, 635
 Reddington, H. G. 702
 Red Elephant Mg. and Milling Co., Colo. 359
 Red Haugh Mg. Co., Cal. 737
 Red Hill Mine, Mexico 775
 Red Hood Mine, Colo. 608
 Redjang Leborg Gold Mine, Sumatra, 120, 290, 775
 Red-Lead Furnace, Gabel & Kearns's Pat. 112
 Red Lodge Coal Mines, Mont. 638
 Red Mountain Mg. and Milling Co., Colo. 287
 Red Oak Mg. Co., Colo. 286
 Red Oaks County Tunnel, Colo. 189
 Redpath, Charles 633
 Red Point Mine, Cal. 704, 807
 Red River Mine, N. M. 810
 Red Rover Mine, Cal. 283
 Reducing Ores, Newirth's Pat. 87
 Redwater Mg. Co., S. Dak. 675
 Red, White and Blue Mine, Wash. 192
 Red Wing Mine, Utah 591
 Reeder & Freville's Pat. Air Compressor 869
 Reed, John A. 365
 Reed Oil Co., Cal. 734
 Reed's Pat. Electrolytic Apparatus 534
 Reefton Gold-fields, New Zealand 527
 Reeves' Pat. Miners' Axe 593
 Reeves Engine Co., N. J. 421
 Reeves Composite Metals, Ulke's Pat. 534
 Reforma Mg. Co., Mexico 708
 Refugio Mine, Mexico 667
 Regenerative Gas Furnace Reversing Valve, Hyatt & McGeorge's Pat. 324
 Regenstein, E. A. 81
 Regulator for Air-Compressors, Prellwitz's Pat. 490
 Reid's Pat. Wire Drawing Machine 497
 Reindner Mg. Co., Idaho 222, 840
 Reliance Mine, Cal. 214
 Re-Location and Contested Claims 286
 Remington Hill Mining, Cal. 252
 Remington, W. H. 598
 Rend, W. P. & Co., O. 357
 Rendor's Pat. Fuse 563, 706, 771
 Reno Mg. Co., Colo. 595, 705, 872
 Republican Mine, Cal. 148, 255, 424, 495, 595, 705, 872
 Republic Con. Mg. Co., Wash. 267
 Republic District, Wash., Railroad for 187
 Republic Iron Co., O. 150, 229, 256, 288, 395, 400, 423, 503, 637, 643, 673, 778, 814, 847, 870
 Republic Iron and Steel Co., New Blast Furnace in Alabama 558
 Republic Iron and Steel Co., Report 247
 Republic Mine, Mich. 328, 673
 Republic Mining District, Wash. 258
 Reservation Mill and Mg. Co., Wash. 290
 Restauradora Mines, Mexico 62, 459
 Resurrection Mine, Colo. 60, 496, 771, 873
 Rethybridge's Pat. Treating Tellurides 185
 Retort Furnace, Laird's Pat. 559
 Retort, Hopkins's Pat. 900
 Reucau Drainage Tunnel, Colo. 456
 Revenue Leasing and Mg. Co., Colo. 528
 *Reverberatory Furnace, Adobe 528
 Reverberatory Furnace, Kent's Pat. 451
 Reverberatory Furnace, Wood as Fuel 419, 525
 Reverberatory Smelting Furnace, Nevergold's Pat. 491
 Revett, Ben Stanley 284
 Reward Mine, Cal. 148, 590, 770
 Rex Mine, Cal. 254, 360, 454, 494, 562, 670
 Reyer, H. A. 146
 Reynolds, Irving H. 252
 Reynold's Pat. Brick Press 836
 Reynold's Pat. Converters 81
 Rhenisch-Westphalian Coal Industry 865
 Rhetta Mg. Co., Cal. 670, 840
 Rhine's Pat. Air Compressor 734
 Rhode Island Copper Co., Mich. 86, 224, 259, 532, 874
 Rhode Island Copper Co., Mich. Report 247
 Rhodes, Cecil, Bequest of 511
 *Rhodes, Cecil John 430, 439
 Rhodesia, Copper Mines 430
 Rhodesia, Gold Mining 373
 Rhodesia, Gold Production 88, 193, 330, 459, 500, 640, 774, 811
 Rhodesian Coal 762
 Rhodesia, Southern Information for Intending Settlers 485
 Rhodos Mg. Co., Minn. 457
 Rialto Mg. and Leasing Co., Colo. 117, 149, 255, 327, 361, 496, 738, 808
 Riblett, B. C. 82
 Rice's Pat. Separator 421
 Richard's Custom Cyanide Plant, Cal. 455
 Richards, D. S. 220
 Richards Iron Mg. Co., Mich. 118
 Richards, Joseph 630
 Richardson Brothers Mine, Ariz. 535
 Richardson, Clifford, Determination of Paraffin in Petroleum Residues 653
 Richardson, Clifford, Free Sulphur in Beaumont Petroleum 352
 Richardson Mine, Nova Scotia 193
 Richardson's Pat. Miner's Squib 58, 591
 Richelleu Mg. Co., Cal. 771
 Richelieu & Anaconda Mg. Co., Utah 89
 Richmond Hill Mine, S. Dak. 289, 500
 Richmond Mine, Mich. 637
 *Richmond, Wm. H., Plan for Enlarging or Making a Canal 419
 Rickard, Edgar 698
 Rickard, T. A. Recent Progress in the Study of Ore Deposits 106
 *Rickard, T. A., Saddle Reefs of Bendigo 440
 Ricker, N. C. 186
 Rickett, Julius, Coal in Alberta, Can. 767
 Ricketts, Pierre de P. 633
 Ricketts's Pat. Compressed Air Water Elevator 591
 Rico Mine, Ariz. 325
 Rico Mine, Colo. 116
 "Rico Mountains, Colo., Ore Deposits" 485
 Rider-Ericsson Co., N. Y. 634
 Ridgeway, C. D. 592
 Ridgway, A. C. 563
 Ridley Phosphate Co., Tenn. 566
 Riechenbach, S. H. 82
 Ries, Dr. Heinrich 902
 Rigby's Pat. Guide for Oil Well Pump Rods 159
 Rio Grande Gold Mg. Co., Costa Rica 220
 Rio Tinto Co., Ltd., Spain 437, 461, 511
 Rio Tinto Co., Ltd., Spain, Report 523
 Rio Tinto Company's Metallurgical Practice 575
 Rio Vista Copper and Gold Co., Cal. 807
 Risch, J. Z. 592
 Risdon Iron Works, Cal. 423, 633, 639, 903
 Risk, Assumption by one not an Employee 416
 Risk, Assumption of as to Unsafe Place in Mine to Work 247
 Rite, A. E. 702
 Ritter-Conley Manufacturing Co., Pa. 870
 Rittenhouse Mine, Cal. 393
 Rittenhouse Mine, Colo. 362
 Ritter, Homer P. 492
 River Bed Mg. Co., Cal. 423
 Riverdale Coal Co., W. Va. 640
 River Hill Mine, Cal. 116, 360, 454, 736
 Riverside Mine, Cal. 148
 Riverside Mine, Colo. 361
 Riverside Oil Co., Colo. 116
 Riverston Coal Co., Ill. 906
 Riverview Mine, Idaho 395, 706
 Roach's Pat. Coloring Marble Stone, etc. 768
 Roasting and Cooling Ores, Davis's Pat. 803
 *Roasting Furnace, Chase 797
 Roasting Furnace, Davey's Pat. 145
 *Roasting Furnace, Klepetko and Evans's Pat. 803
 *Roasting Furnace, Lorenz's Pat. 251
 *Roasting Furnace, Wright's Pat. 590
 Robert Emmet Mine, Colo. 287
 Robert, Samuel F., Spain 324
 Roberts, George F. 58
 Roberts Iron Co., Minn. 810
 Robertson, J. Roderick 186, 422
 Roberts, Peter, "Anthracite Coal Industry" 250
 Roberts's Pat. Producing Carbides 113
 Roberts, W. 422
 *Robins Conveying Belt Co., Belt Conveyors on Gold Dredges 184
 Robins Conveying Belt Co., N. Y. 284, 358, 668
 Robinson, Cyrus 590
 Robinson, G. J. 391
 Robinson Gold Mg. Co., Transvaal 88, 152, 193, 330, 459, 741, 908
 Robinson, J. K. 358, 838
 Robinson Machine Co., Pa. 82
 Robinson Mine, Colo. 149
 Robinson Smelter, Colo. 672, 772
 Robinson's Pat. Boiler Cleaning Compound 868
 Robinson, T. W. 58
 Rob Roy Mine, Utah 192
 Rocca's Pat. Refining Oil 734
 Rochester & Pittsburg Coal & Iron Co., Pa. 220, 499, 598
 *Rochford's Pat. Concentrator 701
 *Rock Breaker, Gates & Canen's Pat. 185
 *Rock Breaker, Lowry's Pat. 323
 Rock Creek Mg. Co., Mont. 426
 Rock Crusher, Young's Pat. 357
 *Rock Drill Ballou's Pat. 145
 *Rock Drill, Bates's Pat. 145
 Rock Drill, Burnside's Pat. 734
 *Rock Drill, Chutek, Terry's Pat. 251
 *Rock Drill, Lefneweber's Pat. 219, 632
 Rock Drill, Rattak's Pat. 81
 Rock Drill, Sharmening, Glossop's Pat. 491
 Rock Drill, Sicks's Pat. 697
 Rock Drill Stand, Hodgkinson & Cook's Pat. 559
 Rock Drill Tool, Glossop's Pat. 591
 *Rock Drill, Warren's Pat. 112
 Rock Drill, Wrightson & Morison's Pat. 837
 Rockmart Slate Co., Ga. 873
 Rockmart Slate Quarries, Ga. 328
 Rock Pulverizer, Luckenbach's Pat. 631
 Rock's Pat. Zinc Oxide Pigment 283

*Rockwell, Cleveland, Coos Bay Coal Fields, 238, 270
 Rockwell, George J., 58
 Rocky Fork Coal Co., Mont., 565, 597
 Rocky Mountain Concentrator and Mill, Colo., 671
 Rocky Mountain Mill, Colo., 531
 Rocky Mountain Oil Co., Mont., 191
 Rocky Mountain Smelter, Colo., 841
 Rodgers, J. Herman, 902
 Rodgers, W. B., 902
 Rodman, Julius, 735
 Roehling, John A. Sons Co., N. J., 634
 *Roe, James P., Puddled Iron and Mechanical Means for the Production of Same, 755
 Roepner & Scholl's Pat. Electrolytic Apparatus, 768
 *Roe's Puddling Machine, 755
 Rogers, A. B., 590
 Rogers, Andrew, 838
 Rogers, Brown & Co., 593
 Rogers, George E., 735
 Rogers Locomotive Works, N. J., 325
 Rogers & Oswald's Pat. Sulphide Ore Treatment, 145
 Roger's Pat. Conveyor, 527
 Rogers, S., 528
 Rogers's Pat. Stone Grinding and Polishing, 527
 Rohlfing, T. P., 391
 Rolling, Continuous, from Fluid Metal, Bildt's Pat., 184
 Rolling Metal Ingots into Thin Sheets, Norton's Pat., 219
 Rolling Mill Feeding Apparatus, Sheldon's Pat., 81
 Rolling Mill, Kennedy's Pat., 323
 Rolling Mill, Onions's Pat., 590
 Rolling Mill, Williamson's Pat., 113
 Rolling Solid or Hollow Bodies, Glesholdt's Pat., 219
 Rome Petroleum & Iron Co., Ga., 362
 Roney Mechanical Stokers, 488
 Roofing Material, Wright's Pat., 251
 Roosevelt & Teddy Mine, Wash., 459
 Root, Gilbert J., 492
 Repes, Wire, 761
 Roseberry Zinc Co., Tenn., 908
 Rosebrook, L. R., 769
 Rose Deep Mine, Transvaal, 428, 459
 Rosenberger, Andrew F., 902
 Rease Polytechnic Institute, 735
 Rossiter Cyanide Plant, S. Dak., 192, 590
 Rossiter's Pat. Cyanide Making, 811, 875
 Ross, James, 358
 Ross-Kootenay Co., Ltd., B. C., 642
 Rossland District, B. C., 43
 Rossland Great Western Mg. Co., B. C., 502
 Rossland Miners' Strike, 204
 Rossland Ore Production, B. C., 290, 364, 523, 511
 Rossland Shipments, B. C., 62, 640
 Ross Mine, Cal., 84
 *Rotary Pump, Kirkwood's Pat., 357
 Rott's Pat., Artificial Stone, 389
 Rouchleau-Ray Iron Land Co., Minn., 874
 Rough and Ready Mine, Cal., 223
 Rowan Gold and Copper Mine, N. C., 191, 499, 773
 Rowley, J. G., 592
 Royal Mine, Utah, 120
 Royal Mg. Co., Colo., 223
 Royal Oak Mine, Pa., 289, 397
 Royalties, Right to an Abandonment, 627
 Royalty, Minimum, Operator Bound by Provision, 388
 Roy & Eaton Mine, Idaho, 906
 Roy Mg. Co., Idaho, 497
 Rubble, California, 906
 Rubel's Pat. Alloy, 631
 Rubel Mine, Colo., 327, 808
 *Rubach's Pat. Agitating Machine for Cyaniding, 113
 Ruby King Mg. Co., Colo., 286
 Ruby Mine, Colo., 772
 Ruby Mg. Co., S. Dak., 329, 875
 Ruby Trust Mine, Colo., 287, 636
 Rucker's Pat. Fireproofing Wood, 251
 Rudolphs & Landin's Pat. Extracting Metals from their Oxide Ores, 701
 Rueff's Pat. Magnesia Compound, 421
 *Rueger's Pat. Stamp Battery, 282
 Ruger, J. W. Mfg. Co., N. Y., 285
 Rumely Mine, Mont., 224
 Rumsey & Co., Ltd., N. Y., 635
 Russell Gulch Mg. & Development Co., Colo., 280
 Russell Mine, N. C., 206
 Russell, T. D., 186
 Russia, Bank Statement, Weekly, 826
 Russia, Coal Exports, 799
 Russia, Coal Rates in, 803
 Russia, Coke in, 783
 Russia, Copper Production, 544
 Russia, Gold Production, 5
 Russia, Manganese in the South of, 470
 Russia, Mining Schools in, 761
 Russia, Mining in the Ural, 140
 Russia, Northern, Petroleum in, 802
 *Russia, Petroleum Production in the Baku Field, 613
 *Russia, Quicksilver Production, 415
 Russian vs. American Petroleum in Germany, 135
 Russian Coal Rates, 309
 "Russian Empire Budget for 1902", 179
 Russian Petroleum in Greece, 891
 Rust, E. G., 220
 Rutherford, J. A., 528
 Ruth Mine, B. C., 909
 Ruth Mine, Idaho, 395
 Ruttle Mining in Virginia, 351

S

Sabbathe & Killian Mill, Cal., 454
 Saco's Pat. Treating Gold Ore, 113
 Sacramento Mg. Co., Utah, 459, 774, 844
 *Saddle Reefs of Bendigo, 440, 689
 Sadtler, B., 688
 Sadtler's Pat. Extracting Metals from Ores and Scrap, 804
 Sadtler Zinc Retorts, 487
 Saegmuller, George N., Washington, D. C., 59
 *Safety Appliances and Accidents Reports, 58
 Safety Lamp Key, Treharne & Roberts's Pat., 81
 Safety Lamp, Simon's Pat., 81
 Safety Lamps, Williams's Pat., 837
 Sage's Pat. Door for Dumping Cars, 768
 Saginaw Mg. & Milling Co., S. Dak., 151, 707
 St. Clair Mine, Cal., 116, 222
 St. David's Gold & Copper Co., Great Britain, 258, 342
 St. Elmo Mg. Co., S. Dak., 192
 St. Eugene Mg. Co., B. C., 193
 St. Francois County Lead District, Mo., 426
 St. Francois County, Mo., New Railroad for, 597
 St. Francois Mg. Co., Mo., 190
 St. George Mine, Cal., 494
 St. Helens & Gallice Mg. Co., Oregon, 674
 St. Joe Lead Co., Mo., 61
 St. Johns Mine, Cal., 188
 St. Joseph Lead Co., Mo., 697
 St. Joseph and Potosi Limestones of Missouri, Geological Relations and Age of, 861
 St. Louis Clay Burning Co., Mo., 634
 St. Louis Engineers' Club, 114, 186, 284, 324, 391, 492, 590, 592, 735, 839, 869
 St. Louis Hydraulic Press Brick Co., Mo., Weekly, 361, 841
 St. Louis Lead Market, 875
 St. Louis vs. Montana Mg. Co., Mont., 875
 St. Louis Plate Glass Co., Mo., 324
 St. Louis & San Francisco Railroad Co., 561
 St. Louis Spelter Market, Weekly, 563, 706
 St. Louis Stock Quotations, Weekly, 187
 St. Louis Vitrifed & Fire Brick Co., Mo., 839
 St. Louis Well Machine & Tool Co., Mo., 805, 839
 St. Mary's Canal Co., Mich., 842
 St. Mary's Canal Mineral Land Co., 224, 291, 328
 St. Paul Civil Engineers Society, 146
 St. Paul-Idaho Mg. Co., Idaho, 362
 St. Paul & Montana Mg. Co., Mont., 907
 St. Vincent Disaster, 685
 Salamon's Pat. Refractory Building Material, 57
 Salar del Carmen Nitrate Syndicate, Chile, "Sale" or "Transfer" of Mining Property Construction of, 246
 Salida Smelter, Colo., 361, 495
 Salisbury Building & Estates Co., Ltd., Rhodesia, 845
 Salmon City, Idaho, Mining Opportunities, 801
 Salmon Mine, S. Dak., 119
 Salmon River Mg. Co., Cal., 495, 841, 872
 Salmon River Railway, Idaho, 149
 Salt, California, 9
 Salt, Cost of at St. Louis, Mo., 548
 Salt Exports, Spain, 301, 806
 Salt Exports, U. S., 214
 Salt Lake City Mining Stock Market, Weekly, 13
 Salt Lake City Sampling Works, Utah, 822
 Salt Lake City as a Smelting Center, 54
 Salt Lake City Stock Exchange in 1901, 12
 Salt Lake County Mines, Utah, 58, 325
 Salt Lake Hardware Co., Utah, 58, 325
 Salt Lake Ore and Bullion Settlements, Utah, 62, 152, 257, 289, 329, 363, 427, 458, 500, 534
 Salt Lake Stock Exchange, Utah, 845
 Salt Lake & Tonapah Mg. Co., Nev., 257
 Salt Lake Valley Smelters, Utah, 12
 Salt Manufacturing, Weddell's Pat., 113
 Salt Production, Canada, 587
 Salt Production, Germany, 549
 Salt Production, Great Britain, 413, 827
 Salt Production, Ontario, 414
 Salt, Triple, Making, Courant's Pat., 357
 Salt Union, Ltd., Great Britain, 845
 Salt Well in Georgia, 672
 Saltwater Imports, Great Britain, 155
 Saltwater Market and Prices, 680
 Saltwater Stocks and Statistics, 294, 680, 815
 Salvator Mine, Cal., 116, 454
 Salvator Mine, Utah, 61
 "Salzberghau and Salinenkunde", 79
 Samoon Mine, Ariz., 325, 704
 Samples Coal & Mg. Co., Ind. Ter., 190
 *Sampling, Automatic System of, 514
 Sampling Machine, Byrnes' Automatic Pulp, 488
 Sampling, Question of, 623
 Sampling Works Consolidation, Colo., 496
 Sampling Works, Independent in Gilpin County, Colo., 531
 San Bernardino Mountains, Cal., New Gold Discoveries, 807
 San Bernarde Mine, Colo., 527
 Sanborn, J. H., 114
 San Bruno Mine, Cal., 326
 San Carlos Mine, Mexico, 62
 Sand, California, 9
 Sand Coulee Mine, Mont., 843
 Sand Creek District, Mont., 674
 Sanders, Dr., 528
 Sanders's Pat. Manufacture of Compound Wire Bars by Electrodeposition, 527
 Sandford, C. A., 805
 Sand Molds, for Steel Castings, Atha's Pat., 701
 Sand Production, Great Britain, 413, 827
 Sand-Reel for Wells, Eaton & Benson's Pat., 897
 Sand, Saving Pine Gold from, 145
 Sandstone, Artificial, Engbert's Pat., 868
 Sandstone, California, 9
 Sandstone Production, Great Britain, 413, 827
 Sandy Ridge Coal Co., Va., 500
 San Francisco Coal Market, 461, 678, 710
 San Francisco Coal Receipts, 90, 290, 400, 643
 San Francisco District, Arizona, 188
 San Francisco Mining Stock Market, Weekly, 394
 San Francisco Oil Exchange Sales, 743, 845
 San Francisco Quicksilver Prices in 1901, 31
 San Francisco, Quicksilver Receipts, 157, 295, 433, 849
 San Francisco, Specie Imports and Exports, 93, 156, 231, 848
 San Francisco, Specie Receipts from Mexico, 156
 San Francisco, Specie Shipments, 294, 402
 San Francisco Stock Exchange, 877
 San Francisco Stock Exchange Sales, 89
 San Gabriel Electric Co., Cal., 903
 Sangamon Coal Co., Ill., 149
 Sangamon County Coal Mines, Ind., 772
 San Isabel Mine, Colo., 496
 San Joaquin Mg. Co., Cal., 84, 530, 770
 San Jose del Carmen, Mine, Mexico, 775
 San Jose Mine, Mexico, 459
 San Juan County, Colo., Expense of Mining and Milling Gold Ore, 696
 San Juan County, Colo., Mining Transfers, 85, 223
 San Juan Electric & Railway Co., Colo., 61
 San Juan Fleece Gold Mg. Co., Colo., 223
 San Luis Mg. Co., Mexico, 534

San Martin Mines, Mexico, 62
 San Miguel County, Colo., Mines in 1901, 10
 San Miguel County, Colo., Mining, 906
 San Miguel County, Colo., New Railroad for, 672, 738
 San Miguel County, Colo., Snow Slides, 425
 San Pedros Mine, Mexico, 460
 San Pof Mine, Wash., 640
 San Rafael Oil Co., Utah, 329
 San Vicente Capusilla Mine, Mexico, 364
 Santa Ana Tin Co., Cal., 326
 Santa Barbara District, Mexico, 775
 Santa Fe Mg. Co., N. M., 191
 Santa Rita Mine, Cal., 60
 Santa Rosa Mine, Cal., 326
 Santa Teresa Mine, Cal., 840, 905
 Santa Teresa Mountains, Ariz., Mining in, 840
 Santa Ysabel Mine, Cal., 188, 255, 595, 600
 *Santo Domingo Mill, Mexico, 910
 Sapphire Corundum Co., Ltd., Ont., 58
 Sapphires, Montana, 58
 Sapphires in North Carolina, 445
 Saqui Grande Mines Co., Mexico, 534
 Saratoga Mine, Colo., 455, 906
 Saratoga Mine, Mont., 119
 Saratoga Pyritic Smelting Co., Colo., 327
 Sargeant Mine, Cal., 704, 904
 Sargent Co., Ill., 392, 422
 Sargent, E. H. & Co., Ill., 58, 902
 Sartin, Emil, 528
 Sartiaux, Maurice, 902
 Sartin, Emil, 358
 Sault Ste. Marie Canal, Semi-Centennial, 246
 Sault Ste. Marie Canal Traffic, 694, 821
 Saunders, D. Sons, N. Y., 736
 Savage Fire Brick Co., Pa., 593
 Savage, Governor, 453
 Savage Mg. Co., Nev., 89
 Savannah Mine, Cal., 530, 670
 Savelberg's Pat. Poling Molten Copper, 283
 Sawyer Mine, N. C., 773
 Sawyer's Pat. Amalgamator, 390
 Saxhug, O. O., 391
 Saxton, F., 492
 Scaife, W. B. & Sons Co., Pa., 82, 634, 903
 Scheelite in New Zealand, 630
 Scheide's Pat. Lixivation Process, 885
 Schenck's Pat. Brake for Uphauls for Mines, 701
 Schenck's Pat. Downhaul for Mines, 701
 Schauer, J., 324
 *Schleichel's Pat. Magnetic Separator, 184
 Schilling, J. D., 902
 Schiltz's Pat. Cyanide Process, 527
 *Schluter Safety Appliance for Hoisting Engines, 356
 Schmitz, E. J., 838
 Schnatterbeck, C. C., Chemical Market in 1901, 59
 Schneider, E. & Co., Manufacture of Miners' Candles, 700
 Schneiwind's Gas Manufacture, 666
 Schuelfeld, J. W., 492
 Schvolien's Pat. Tamping Blast Holes, 901
 School Girl Mine, Cal., 326
 Schradler, F. C., 252
 Schrenk, Herman von, "Decay of Timber and Methods of Preventing it", 765
 Schroedter, E., "Iron-making and Ship-building Interests in Germany", 807
 Schuler and Vogel Mines, Mexico, 599
 Schulte, Joseph, 422
 Schultz, A. L., 324
 Schultz, Clarence B., N. Y., 903
 Schultz Winder Tunnel, Colo., 327
 Schuyll Mine, Ariz., 147, 188, 704, 871
 Schumacher, L. M., 82
 Schwab, Charles M., 668
 Schwartz's Pat. Treating Coal for Coking, 734
 Schwarz, T. E., 838, 869
 Scieffard Mine, Cal., 84
 Scientific Research Institution, Carnegie, 236
 Seabee, Jesse C., 391
 Scotch Bonnet Mg. Co., Mont., 597
 Scotch Coal Trade, Weekly, 269
 Scotch Oil Trade, Combination in, 378
 Scotch Pig Iron Trade, Changes in, 437
 Scotch Pig Iron Warrants, 271
 Scotland, American Ore Cars in, 413
 Scotland, Foreign Miners in, 413
 Scott, Dunbar B., "Evolution of Mine Surveying Instruments", 698
 Scott, Gilbert & Rowe Mine, Ariz., 840
 *Scott's Pat. Amalgamating Machine, 591, 804
 Scott's Pat. Amalgamator, 390
 *Scott's Pat. Quicksilver Furnace, 768
 Scott-Strevell Hardware Co., Utah, 593
 Scott, T. S., 805
 *Scranon Steam Pump Co., Lead-Lined Mine Pumps, 183
 Scrap Metals, Duty on, 353
 Screen and Chute Combined, Holmes's Pat., 421
 *Screen, Revolving, Mason's Pat., 770
 Seaboard Air Line, 635
 Sea Level Mg. Co., Alaska, 838
 Seaman, A. E., 803
 Seamless Tube Making, McTeer's Pat., 220
 Seamon, W. H., 252
 Search, Charles E., 396
 Searchlight Mine, Nev., 563
 Searchlight Oil Co., Colo., 394
 Seal Placer Colo., 326
 Seaton Mg. & Milling Co., Colo., 445
 Seattle Electric Co., Wash., 445
 Seattle & San Francisco Railway and Navigation Co., Wash., 769
 Sebben, Edward W., 803
 Sebill's Pat. Sulphuric Acid Making, 840
 Secret Diggings Mine, Cal., 532
 Section Thirty Suit, Minn., 118, 190, 873
 Sedalla Mine, Colo., 328
 Sedan Gold Mg. Co., Colo., 422
 Seddon, W. C., 841
 Seeley Mine, Colo., 767
 *Seitz Portable Coal Loader and Screen, 889
 Sella, Mine, Cal., 840
 Semet-Solvay By-product Co., Ala., 228
 Semet-Solvay Coke Co., Pa., 87
 Seminole Mine, Cal., 85
 *Separating Mineral Substances by Oil, Elmore's Pat., 57, 283
 Separator, Jessup's Pat., 323
 Separator, Rice's Pat., 421
 *Separator, Sturtevant Toggle, 558
 Sergeant's Pat. Regulating Device for Air Compressors, 539
 Serpentine, California, 9

*Seumenichts Pat. Shaft Furnace for Burning Cement, 768
 Seven-Thirty Mine, Colo., 563, 696
 Sewer Pipe Production, Canada, 387
 Sewer Pipe Production, Ontario, 414
 Seyfert, William M., 186
 Shady Run Mine, Cal., 393
 Shady Run Quartz Mg. Co., Cal., 188
 Shafter Mine, Colo., 671, 841
 *Shaft Lining, Steel Braces for, 661
 *Shaft, New Drop, 583
 Shaft Sinking, Cost of in California, 904
 *Shaft Sinking, Maas's Pat., 868
 Shale Rock Plow, Butler's Pat., 559
 Shales of Western Kansas, 891
 Shamrock, S. Dak., 329
 *Shamrock Mine, Westphalia, 212
 Shanghai, China, Coal and Oil Market, 90, 333
 Shannon Copper Co., Ariz., 742
 Shannon, J. J., 422
 Shannon, M. B., 633
 Sharon Foundry Co., Pa., 422
 Sharon Ore Co., Minn., 190, 426
 Sharloss, P. F., 735
 Sharpneck's Pat. Ore Treatment, 591
 Shasta County, Cal., New Smelter for, 635
 *Shasta County Copper Deposits, Cal., Map, 857
 Shasta County Sm. & Ref. Co., 871
 Shasta May Blossom Copper Mg. & Sm. Co., Cal., 635
 Shasta Mineral Belt Railway Co., Cal., 84
 Shaw, George W., Silver in Africa, 589
 Shaw Mine, Mexico, 428
 Shawmut Mine, Cal., 188
 Shawmut Mg. Co., S. Dak., 363
 Sheba Gold & Silver Mg. Co., Nev., 810
 Sheba Mine, Cal., 455
 Sheep Creek Mines, Alaska, 871
 Sheba Mg. Co., Utah, 192, 329
 Sheep Ranch Gold Mg. Co., Cal., 530
 Sheeptrall Mine, Ariz., 84
 Sheet-Heating Furnace Bottom, Smith's Pat., 698
 Sheldon, Samuel, "Alternating Current Machines", 834
 Sheldon's Pat. Feeding Apparatus for Rolling Mills, 81
 Shenandoah Mine, Cal., 285
 Shepherd, Amos, 114
 Sheridan, Capt. John, 252
 Sheridan Mine, Colo., 425, 873
 Sherman & Macon Mg. and Milling Co., Colo., 148
 Sherman's Pat. Ladle, 700
 *Sherman's Pat. Ore Pulp Distributer, 491
 Shipman, H. A., 82
 Shockley, Joseph H., 560
 Shockley, J. W., Origin of Fine Gold in Snake River, Idaho, 280
 Shoemaker, Robert, 391
 Shoeburg Mg. and Milling Co., Cal., 841
 Shorty-Hone Mg. Co., Oregon, 639
 Shovel, Pneumatic, Hanchett's Pat., 768
 Shriver, T. & Co., N. Y., 769, 870
 Shroter, J. M., 186
 S. H. Sunly Co., Colo., 137
 Shuler's Pat. Copper-Nickel Sulphide Ore Treatment, 591
 Shuman, P. L., 492
 Siberia, Coal in, 762
 Siberia Gold Mining, 609
 Siberian Gold Fields Railroad, 513
 Sicular, H., "Traite de Cinematique Theoriques", 279, 730
 Sibley, Brimstone Exports, 401, 679, 848
 Sibley Brimstone Industry in 1901, 40, 240
 Sibley, Brimstone Market and Prices 186, 335, 463, 570, 603, 779, 860
 Sibley Brimstone Stocks and Statistics, 92, 538
 Sicks's Pat. Hand Rock Drill, 667
 Sida K., 186
 "Siderologie, Grundzuge der", 248
 Sider Steel Scraper Co., O., 906
 Siebert, F. J., 114, 590
 Siemens & Halske's Pat. Sterilizing Water, 837
 Siemens & Halske's Pat. Thorium Filaments for Electric Lights, 901
 Sierra Madre Exploration Co., Mexico, 364
 Sierra Nevada Mine, Colo., 496, 636, 672, 772
 Sierra Ouen Mine, Cal., 148, 254, 390
 Sifting Pulverized Ores, Jamieson & Odling's Pat., 184
 Silent Friend Leasing Co., Colo., 531, 706
 Silesia, Nickel Mining, 135
 Silesian Spelter Market, 125, 231, 402, 713, 849
 Silica Brick Manufacture in Nova Scotia, 392
 Silica Bricks, Gibson and Westlake's Pat., 808
 "Silica, Common Errors in the Determination of", 588
 Silica Graphite Paint for Bridges, 184
 Silica Production, Nova Scotia, 444
 Silicon in Cast Iron, 631
 Silico, Elimination of in Open-Hearth Steel Making, 829
 Silver in Africa, 557, 589
 Silver Age Mine, Ariz., 390
 Silver Bar Mg. Co., N. M., 396
 Silver Belt Mine, Mont., 843, 907
 Silver Bullion Certificates, Sale, 398
 Silver Cable Mg. Co., Mont., 733
 Silver, California, 9
 Silver Cell Mine, N. M., 674
 Silver Coinage in Venezuela, 825
 Silver, Commercial Movement, 6
 Silver and Copper Values of Ores, 80
 Silver Creek Mines, Cal., 840, 905
 Silver Cup Mine, B. C., 566
 Silver, Demand for in France, 156
 Silver, Determination of in Residuum from Zinc Distillation, 380
 Silver Dollar Mine, Wash., 599, 675, 844
 Silver Exports, New Zealand, 63, 88, 531, 534
 Silver Exports, Tasmania, 876
 Silver Imports and Exports, Great Britain, 6, 7
 Silver Imports and Exports, U. S., 741
 Silver King Mg. Co., Utah, 121, 194, 457
 Silver King vs. Plymouth Mine, Mont., 223
 Silver Lake Mine, Colo., 708
 Silver-Lead Exports, South Australia, 876
 Silver-Lead Production, South Australia, 828
 Silver Losses in Cuelling with Various Amounts of Lead and Silver, 829
 Silverman Mine, Minn., 637, 874
 Silver Market and Prices, Weekly, 605, 747
 Silver Movement, France, 194, 332, 502, 677, 849
 Silver Movement, Great Britain, 156, 464, 605, 747
 Silver in 1901, 5

Silver Plume Board of Mines and Trade, Colo. 393, 424	Smuggler Mine, Colo. 572	Sovereign Gold Mfg. and Reducing Co., Ga. 456	Stassfurter Chemische Fabrik's Pat. Cyanide Briquettes 357
Silver Prices 629	Smokeless Powder and Nitro Explosives Stability Tests for 661	Spain, Bank Statement 896	Stassfurter Chemische Fabrik's Pat. Furnace for Refining Cyanide 632
Silver Prices and Demand 575	Smuggler Mine, Nev. 87, 288	Spain, Chemical Trade 896	State Ledge Mine, Cal. 188
Silver Prices, New York and London Weekly 612	Smuggler-Union Mfg. Co., Colo. 10, 117, 223, 327, 425, 456	Spain, Coal and Coke Imports 896	State Line Copper Mines Co., Wyo. 741
Silver Production, Alabama 66	Smyrna, Possibilities for American Coal in 448	Spain, Copper Ore Exports 301, 896	Stayton Mine, Cal. 595, 840
Silver Production, Alaska 66	Snake River Fine Gold, Origin of 143, 280	Spain, Copper Production 787	Steamboat Mine, Cal. 905
Silver Production, Arizona 66	*Snake River Gold Dredging, Idaho 241	Spain, Iron Ore Exports 301, 896	Steam Hammer, Bethlehem 581
Silver Production, British Columbia 173	Snider's Pat. Ore-Separator 251	Spain, Lead Ore Exports 301, 896	Steam Pump, Duplex, Worthington's Pat. 527
Silver Production, California 8, 66	Snowden Slate Co., Pa. 151	*Spain, Linares Lead Mining Industry 68	Steam Pump, Freyhold's Pat. 323
Silver Production, Canada 387	Snowflake Mine, Cal. 223, 285	Spain, Manganese Ore Exports 211	Steamships, Petroleum Fuel on 438
Silver Production, Colorado 60, 66, 373, 548	Snow Shoe and Broad Top Coal Fields, Pa. 177	Spain, Market for Phosphates 305	*Steam Shovel in Tunnel Work 520
Silver Production, Georgia 66	Snowshoe Mine, B. C. 303	Spain, Mineral Imports and Exports 112, 301, 616, 679, 728, 896	*Steam Stamp, American 182
Silver Production, Guanajuato, Mexico 299	Snowshoe Mine, Mont. 86, 288, 329, 362, 597, 707	Spain, Mineral Resources 610	Steam Trap, Brett's Pat. 58
Silver Production, Idaho 66, 497	*Snow's Pat. Automatic Dumping Ore Car 632	Spain, Pyrites Exports 896	Steam Trap, The H. H. 419
Silver Production, Maryland 66	Snow Steam Pump Co. 630	Spain, Quicksilver Production 263, 415	*Steam Trap, Wright Emergency 321
Silver Production, Michigan 66	Snyder, Grant 324	Spain, Salt Exports 301, 896	*Steam Tube Cleaner, Dean 250
Silver Production, Montana 66	Snyder-Oliver Mfg. Co., Minn. 673	Spain, Zinc Ore Exports 301, 896	Stearic Wax Miners' Candles 487
Silver Production, Nevada 66	Snyder's Pat. Clay-Separating Apparatus 112	Spain, Zinc Production 405	*Stebbins's Pat. Ore Concentrator 559
Silver Production, New Mexico 66	Snyder's Pat., Coupling for Well Drilling Tools 491	Spanish Anthracite 242	Steel Alloys, Hadfield's Pat. 667
Silver Production, New South Wales 586	Snyder, Willard F. 491	Spanish Lead Market 681, 713, 781, 849	Steel Bars, Prices 196
Silver Production, North Carolina 66	Soapstone, California 844	Spanish Mine, Cal. 807	*Steel Braces for Shaft Lining 661
Silver Production, Ontario 414	Societe Miniere, B. C. 844	Spanish R. Mine, S. Dak. 87, 192, 458, 500, 740	*Steel Concrete Arches and Vaulted Structures, Theory of 663, 834
Silver Production, Queensland 623	Society of Chemical Industry, New York Section 633	Spanish Tin Mining Corporation, Ltd., Spain 194	*Steel Converter, Bohrend's Pat. 701
Silver Production, South Australia 66	Society for the Promotion of Engineering Education 869	Sparrowhawk Mine, Cal. 704	*Steel-Copper Plate, Thomson's Pat. 452
Silver Production, South Carolina 66	*Socorro Gold Company, Arizona 796	Sparta Iron Co., Minn. 118, 395	Steel, An English Record 387
Silver Production, South Dakota 66	Socorro Mine, Ariz. 254	Spaulling Coal Co., Ill. 154	Steel Forgings and Castings, Specifications for 659
Silver Production, Tennessee 66	Socorro Mfg. and Milling Co., Cal. 705	Spearfish Mfg. and Reduction Co., S. Dak. 152, 289, 329, 427, 458, 533, 674, 707, 773, 875	*Steel Girders in Tunnel Work 519
Silver Production, Texas 66	Socrates Mine, Cal. 530	Specific Gravity Scale, Bogue's Pat. 531, 671	Steel Hardening, Davis's Pat. 491
Silver Production, U. S. 6, 66	Soda, California 9	Spectator Mine, Mont. 363	Steel Hardening, Kolb's Pat. 667
Silver Production, Utah 66, 152	*Soda, Electrolytic Production, Hargreaves-Bird Process 471	Speculator Mine, Mont. 119, 862	Steel Hardening, New Method in Germany 51
Silver Production, Virginia 66	Sodalite 446	Spelter Exports, U. S. 781	Steel Making, Open-Hearth, Elimination of Silicium in 820
Silver Production, Washington 66	Soda, Natural 767, 801	Spelter Imports and Exports, Germany 125	Steel, Magnetic Movements of 301
Silver Production of the World 6	Soda Production, Brochet & Ranson's Pat. 591	Spelter Making, Nagel's Pat. 768	Steel Making, Andrew's Pat. 452
Silver Receipts, New York Assay Office Weekly 156	Soderberg & Chambers Mine, Cal. 148	Spelter Market, London in 1901 74	Steel Making, Fattelay's Pat. 559
Silver Rubie Mine, Colo. 808	Sodium Amalgam Making, Smart's Pat. 112	Spelter Market New York in 1901 30	Steel Making, Johnson and Griener's Pat. 527
Silver (See also Gold)	Sodium Bichromate Making, Spence, Hood and Craig's Pat. 357	Spelter Market and Prices Weekly 713	Steel Making, Pronzkowski's Pat. 421
Silver Shield Mfg. Co., Utah 258, 329	Sodium Silico-Fluoride Precipitation Enoch's Pat. 452	Spelter Quotations 389	Steel Making, White's Pat. 452
Silver Shipments to the East 130, 299, 438, 717, 821	Solids, Comminuted, Machine for Delivering, Treadwell's Pat. 257	Spelter Refining, Wessell's Pat. 666	*Steel Making, Willis's Pat. 700
Silver Shipments, London, Eng. Weekly 287	Somersett Coal Co., Pa. 325	Spelter (See also Zinc)	Steel Manufacture, Hughes's Pat. 421
Silver Tip Gold Mfg. Co., Colo. 495	Somersett Coal Co., Pa., Coal Mining 151	Spence, Hood, and Craig's Pat., Sodium Bichromate Making 357	Steel, Open-Hearth Production, U. S. 537
Silverton Mine, Pa. 192	Somersett Smokeless Coal and Coke Co., Pa. 363	Spencer Mine, Pa. 674	Steel Production, Ontario 414
Silver Wave Mine, Cal. 495	*Somerville, Mass., Reports for 1901 897	Spencer Tunnel, Cal. 770	Steel Production, U. S. 415
Silver Wave Mine, Colo. 40	Sonoma Gold Mfg. and Milling Co., Cal. 705	Spenceville Mfg. Co., Cal. 507	Steel Mine Props, Fowler's Pat. 357
Simons, G. 838	Sonora, Mexico, Census of 100	Sperry's Pat. Concentrator 868	Steel, Nickel, Thermo-Electric Tests 352
Simon Carves Company's Pat. Coke Oven 452	Sonora Mine, Idaho 532	Sperry's Pat. Improving Alloy Castings 307	Steel in 1901 16
Simonds & Walnwright, N. Y. 560	Sonora Mfg. and Milling Co., Mexico 120, 258, 534	*Spilshury, E. G. 633	Steel, Open-Hearth Furnaces, Liquid Fuel in 146
Simonds, W. H. 324	Soulshy Mine, Cal. 85, 188, 530, 563, 872	Splndle Top Oil Gushers, Texas 681	Steel, Quick Speed Self-Hardening 322
Simon's Pat. Pit Safety Lamp 81	Sour Le Springs Oil Co., Texas 875, 707	Spritzberg Coal Deposits 687	Steel Rail Exports, Great Britain 178
Simontown, W. L. 186	Sour Lake Springs Oil Wells, Texas 875, 707	Spritzberg Coal Deposits 687	Steel Rails, Large Mexican Contract 123
Sims, W. L. 83	South Africa, American Electrical Machinery for 52	Spritzberg Mine, B. C. 640	Steel Rails, Specifications for 689
Sinbad Mine, Mont. 363	"South Africa, American Engineers in" 765	Split Expansion Bit for Drilling Oil Wells, Burt's Pat. 113	Steel Rails for Turkey 791
Sioux Mine, Utah 428	South Africa, American Trade in 685	Spokane and Montana Mfg. Co., Mont. 224	*Steel, Review and Test of the American Standard Specifications for 588
Sioux Mfg. Co., Colo. 85	"South Africa, Annals of" 485	Spokane Smelter, Wash. 397	Steel Sawing Machine, Hill's Pat. 57
Siskiyoun County Placer Mines, Cal. 424	South Africa, Commercial 893	Spokane Stock Quotations Weekly 397	Steel (See also Iron and Steel)
Siskiyoun Hydraulic Mfg. Co., Cal. 455	South Africa, Cyanide Patents in 785	Spotted Horse Mine, Mont. 362	Steel Sheet Association, Proposed 229
Siskiyoun Mfg. and Development Co., Cal. 705, 905	South Africa, Gold Mine Tax 910	Sprague Electric Co., N. Y. 83, 561	Steel Sheet, Independent Manufacturers' Organization 290
Sisty Leasing Co., Cal. 872	South Africa, Gold Production 5	Springborn's Pat. Artificial Fuel 145	Steel, Soft and Wrought Iron 451
Sizer, Frank L. 902	South Africa, Mining 97	Springfield District Coal Combination, Proposed, Ill. 637	Steel Tempering, Bennett's Pat. 357
Sizing Screen, MacDermott's Pat. 421	South Africa, Peace in 787, 845, 853	Springfield Mine, S. D. 397	Steel Trade, English Consolidations 268
Skagit Coal and Coke Co., Wash. 445	South Africa, Platinum in 218	Spring Gap Mine, Oregon 740	Steel Treatment, Jamison's Pat. 184
Skels, Arthur 805	"South Africa Railway Map" 248	Spring Garden Tunnel, Cal. 840	Steel Tubes, Duty on 863
"Keena River District and Bulkley Valley Settlement" 588	"South African Mines, Wilson's Handbook" 834	Spring Mountain District, Idaho 842	Steel Welding, Pangborn's Pat. 837
S'inner Mine, Cal. 286	South America, Australian Coal for 248	Springs's Pat. Amalgamator and Concentrator 81	Steel Works, Reorganization of English 575
S'g Treatment, Prest, and Cabot's Pat. 357	"South Australia Agricultural Statistics" 248	*Spring Valley Oil Field, Wyo. 722	Steele Mine, N. C. 191
S'te, California 9	South Australia, Copper Exports 826	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stegall Mine, Ga. 224
S'te Exports, New York 52	South Australia, Copper Production 826	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Steifer Mfg. Co., Cal. 254, 454, 562, 904
S'te Exports, U. S. 214	South Australia, Gold Exports 708	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	*Steiger, George, New Government Laboratory and Its Work 654
S'te Ledge Mine, Cal. 116	South Australia, Gold Production 708	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Steinbach's Pat. Paving Flag 666
S'te Production, Canada 387	South Australia, Handbooks of Mining 216	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Steinweg's Pat., Forming Bodies by Electrodeposition 390
S'te Production, Great Britain 413, 827	South Australia, Lead Exports 708	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stella Mine, Cal. 604
S'te Production, Newfoundland 726	South Australia, Lead Production 826	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stent, W. A. 186
S'te Quarries, Cal. 222, 562	South Australia, Manganese Exports 708	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stevens, C. A. 453
S'te & Galloway's Pat. Amalgamator 113	South Australia, Mineral Exports 708	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Sterilizing Water, Siemens & Halsk Pat. 837
S'te Workers' Strike, Pa. 458	South Australia, Silver-Lead Exports 708	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Sterling Exchange Weekly 900
S'tok's Pat. Dumping Bucket 113	South Australia, Silver-Lead Production 826	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Sterling Mine, N. Y. 287
S'tok's Pat. Ejecting Metal Pigs from their Molds 251	South Australia, Silver Production 826	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stevens, Horace J., "Copper Hand Book" 418, 450
S'te Rule, Thacher's Pat. 837	"South Australia, Statistical Register" 485	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stevens, F. S. 838
S'times Treatment, Duncan & Sheriff's Pat. 632	South Australia, Tin Exports 708	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stevens, Mark 391
S'tan Mine, Cal. 904	South Australia, Wolfram Ore Production 826	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stevens Mine, Idaho 497
S'tan & Rudoff Mine, Cal. 871	South Boulder Mfg. Co., Mont. 427	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stevens Mine, Minn. 190, 498, 673, 810
S'tan's Pat. Bit for Well Drilling Apparatus 667	South Carolina, Gold and Silver Production 60	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stevenson Mfg. Co., Minn. 362, 772
S'tean District, B. C. 43	South Carolina, Phosphate Industry in 1901 150	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stevens' Institute of Technology, N. J. 252
S'tean Ore Shipments, B. C. 62, 193, 330, 501, 641, 909	South Carolina, Phosphate Shipments 780	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stevens's Pat. Artificial Stone 734
Stess-Sheffield Steel and Iron Co. 431, 568, 594, 601, 643, 677, 678, 743, 814, 838, 878	South Chicago Furnace Co. 634	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Steward Iron Co., Minn. 498
Stess-Sheffield Steel and Iron Co., Report 484	"South Dakota, Cyanide Process in the Black Hills" 663	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stewart Gold Mining Co., Colo. 255, 394, 531, 705
Sly's Pat. Iron Scrap Treatment 452	South Dakota, Cyaniding in the Black Hills in 1900 14	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stewart Mine, Cal. 737
Small, G. W. 560, 668	"South Dakota Geological Survey Bulletin" 897	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stewart's Pat. Receptacle or Tank 632
Small Hopes Con. Mfg. Co., Colo. 496, 672, 738, 906	South Dakota, Gold and Silver Production 66	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stevens Gulch Mine, Oregon 598
Smart's Pat. Making Sodium Amalgam 112	South End Tailings Co., Cal. 360	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Steltz's Pat. Working Silver 768
Smelter at Monterey, Mexico 611	South Eureka Mine, Cal. 423, 904	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Steltz's Pat. Working Stone Surface 901
Smelter's Deductions from Copper Weights 217	South Evans & Ball Mountain Development Co., Colo. 527	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stellman's Pat. Conveyor 527
Smelters' Troubles in California 414	South Jackson Mine, Mich. 637	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stellwag Mine, Cal. 807
Smelting Company of Australia 299	South McAlester Electric Car Line, Ind. Ter. 194	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stilwell-Bierce & Smith-Valle Co., O. 115, 220, 325, 392, 453, 493
Smelting Corporation, Ltd. 438	Southport Phosphate Field, Tenn. 124	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stilwell, J. W. 528
*Smelting Furnace, Auman's Pat. 283	South Prairie Coal Co., Wash. 445	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stirling Co., Ill. 805
Smelting, Losses of Metals in 355	South Signs of Prosperity in 67	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stirrer, Mechanical for Gas Producers, Dougherty's Pat. 558
Smelting with Oil 281, 355	South Slope Mfg. Co., Cal. 393	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stock Contracts, Liability of 278
Smink, F. C. 324	South Spring Hill Mine, Cal. 454, 670, 840	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stockholder, Right to Inspect Mine in New Zealand 129
Smith & Bedford's Pat. Open-Hearth Steel Process 185	South Swansea Mine, Utah 639	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stockholders, Information for 342
Smith, B. L. 252	South Wales, Combinations 430	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stockholders, Rights of Minority 854
Smith Cyanide Works, Cal. 188	South Wales, Electric Power 723	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stocks, Auction Sales Weekly 88
Smith, F. D. 324	South Wales Electrical Power Distribution Co. 718	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stockton Copper Co., Mont. 87
Smith, George Otis, Criticism of Dr. Jenner's Paper on the Mineral Crest 826	South Winnie Leasing Co., Colo. 117, 149, 223, 394	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stockton Creek Mine, Cal. 737
*Smith, George Otis, Mount Baker Mining District, Washington 379	Southern Bauxite Mining and Mfg. Co. 528	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stockton Gravel Co., Cal. 84
Smyth, Henry L. 869	Southern Car and Foundry Co. 155	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stockton Mine, Utah 500
Smith, J. D. Foundry Co., O. 392	Southern Cement Co., Ala. 493	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stockton Shipments, Utah Weekly 869
Smith, John S. 220	Southern Nevada Mfg. Co., Nev. 447	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stolter, E. G. 488
Smith, Louis 902	Southern Oil Co., La. 809	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stokers, Use of Mechanical 458
Smith-Neely Oil and Mfg. Co., Ind. 362	Southern Pacific Railway Co. 147, 599, 806	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stone, Artificial, Emerson's Pat. 289
Smith River Conner Co., Cal. 423	Southern Rolling Mills Co., Ala. 325	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stone, Artificial, Rott's Pat. 359
Smith River Gold and Platinum Discoveries, Cal. 454	Southern States Portland Cement Co., Ga. 328	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stone, Artificial, Stevens's Pat. 734
Smith, S. A. 633	Southern Wyoming Tramway Co., Wyo. 226	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stone, A. W. 362
Smith's Pat. Bottom for Sheet-Heating Furnaces 666	Southwestern Mfg. Co., Nev. 447	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stone Canyon Coal Co., Cal. 494
*Smith's Pat. Ore Car 452	Southwestern Smelter, Colo. 148	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stone Crusher, Lowry's Pat. 323
Smith's Pat. Pick 696	Southwest Miners' Association 869	Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stone, George C., Palmerton Plant of New Jersey Zinc Co. 450
Smith, Thomas N. 82		Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stone Grinding and Polishing, Rogers's Pat. 527
Smith, W. K. 220		Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stone Mfg. Co., Colo. 531
Smokehouse Mine, Mont. 329, 598		Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stone, Molding, Artificial, Palmer's Pat. 490
		Spurr, J. E., Gold Mines of Phillip of Macedonia 272	Stone Production, Newfoundland 726

Stone Saw, Peckover's Pat. 323
Stone's Pat. Cooling and Absorbing Sulphuric Anhydride. 452
Stone Surfaces, Working, Stiglitz's Pat. 901
Stonewall Mine, Cal. 495, 595
Storage Apparatus, Piez & Beaucont's Pat. 527
Storage Battery Plates, Forming, Chamberlain's Pat. 734
Straits Settlements, Tin Exports. 231, 506, 605
Straits, Tin Exports. 816
Stratton's Independence, Ltd., Colo. 291, 394, 497, 501, 535, 543, 564, 567, 637, 672, 676, 776, 808, 812
Stratton's Independence, Ltd., Colo., Report. 65, 78
Stratton, W. S. 838
Stray Horse Mine, Wash. 844
*Stretch, R. H., Independent Mine at Silverton, Wash. 832
Strode Mine, Cal. 60
Strong Gold Mg. Co., Colo. 842
Strontium Sulphate Production, Great Britain 827
Structural Iron Workers Strike. 711
Structural Steel Car Co., O. 870
Stubail Mine, Colo. 705
Sturgeon Lake District, Ont. 330
Sturtevant Mill Co., Mass. 83, 147, 493, 529
*Sturtevant Rotary Fine Crusher. 322
*Sturtevant's Pat. Crushing Mill. 145
*Sturtevant Toggle Separator. 558
Stuurman's Pat. Diamond Cutting Machine. 282
Stuyvesant Cyanide Mill, N. S. 193
Sublette, G. W., "Report of City Engineer of Minneapolis, Minn." 588
Suburban Gas Co., Pa. 839
Sudbury District, Ontario. 41
Sudbury Nickel District, Changes in. 413
Sudbury Nickeliferous Pyrrhotite, Condition of Nickel in. 660
Sudbury Nickel Mines. 663
Suffolk-Globe Mg. Co., Colo. 906
Sugar Bowl Mine, Cal. 736
Sugar Pine Mine, Cal. 222, 254, 393, 594
Sugar Pine Mine, Oregon. 191
Sullivan Machinery Co., Ill. 114, 252, 669, 703
Sullivan, S. J. 633, 668
Sullivan, S. J., Jr. 528
Sylvan Smelter, B. C. 500
*Sullivan's Pat. Concentrator. 559
Sulman-Picard Zinc-Lead Sulphuric Process in Australia. 751
Sulphates and Chlorine Making, Clemm's Pat. 81
Sulphide Corporation, New South Wales, 640, 751
Sulphide Ores Containing Zinc, Treatment by Hydrometallurgical Processes. 620
Sulphide Ores, Extracting Metals from Swinburne & Ashcroft's Pat. 452
Sulphide Ore Treatment, Carmichael's Pat. 421
Sulphide Ore Treatment, Hoff's Pat. 452
Sulphide Ore Treatment, Potter's Pat. 591
Sulphide Ore Treatment, Rogers & Oswald's Pat. 145
Sulphide Ore Treatment, Swinburne & Ashcroft's Pat. 251
Sulphides, Metallic, Treating, Gernot's Pat. 591
Sulphides Reduction, Ltd. 568
Sulphide Treatment, Gernot & Flevet's Pat. 323
Sulphide Treatment, Wallis's Pat. 632
Sulphur, California. 9
Sulphur Dioxide Generating, Moore & Martin's Pat. 804
Sulphur, Free in Beaumont Petroleum. 352
Sulphur, Oil and Quicksilver in Trans-Pecos Texas. 450
Sulphuric Acid Concentrating, Webb's Pat. 357
Sulphuric Acid Concentrating, Zanner's Pat. 357
Sulphuric Acid Making, Badische Anilin und Soda Fabrik's Pat. 185, 491, 734, 837
Sulphuric Acid Making, Briegleb's Pat. 804
Sulphuric Acid Making by Contact Process. 481
Sulphuric Acid Making, Meyer's Pat. 57
Sulphuric Acid Making, Sebill's Pat. 803
Sulphuric Acid, Manufacture of Concentrated, Quinn's Pat. 701
Sulphuric Acid Manufacture, Potud's Pat. 804
*Sulphuric Acid and Sulphur Anhydride Making, Krauss & Berneck's Pat. 804
Sulphuric Anhydride Cooling and Absorbing, Stone's Pat. 452
Sulphuric Anhydride Making, Blackmore's Pat. 837
Sulphuric Anhydride Making, Clemm & Hasenbach's Pat. 113
Sulphuric Anhydride Making, Verein Chemische Fabriken's Pat. 357
Sulphuric Anhydride Making, Knetsch's Pat. 251
Sulphuric Anhydride Making, Knetsch's Pat. 112
Sultana Mine, Cal. 454, 494
Sultana Mine of Canada, Ltd. 332
Sultana Mg. Co., Colo. 636
Sumatra, Petroleum Production. 413
Summit Mine, Cal. 593
Summit County Mines, Utah. 12
Summit Placer Mg. Co., Utah. 152
*Sumpter Gold-Fields, Oregon. 588
Sumpter Smelter, Oregon. 598
Sunbeam Mg. Co., S. D. 675
Sunday Hill Mine, Oregon. 499
Sunday Mine, Mont. 224
Sunflower Mine, Cal. 188, 770
Sunlight Mine, Cal. 286, 405
Sun & Moon Mg. and Milling Co., Colo. 394, 705, 737, 905
Sunnyside Mine, Cal. 495, 593
Sunnyside Mine, Colo. 223
Sunrise Iron Mines, Wyo. 397
Sunrise Mine, Ariz. 84, 325, 360, 736
Sunrise Mine, Cal. 84, 222, 736
Sunrise Mine, Colo. 531
Sunrise Mg. Co., Mont. 191
*Sunset Mine, B. C. 303, 617
Sunset Mine, Colo. 672
Sunset Mining Co., Cal. 448, 454
Sunset Railroad Co., Cal. 188
Sunshine Mine, Utah. 152, 330, 675, 811
Superintendent of Mining Company, Ratification of Act of. 483
Superior Copper Co., Ont. 775
Superior Mine, Mo. 255, 873
Superior Mine, Utah. 602
Superior Oil Co., La. 96
Superphosphate Combination in Belgium. 463
Superphosphate Making, Burnard's Pat. 559
Superphosphates, Disintegrating, Merk's Pat. 837
Suppes & Crooker's Pat. Heating Furnace. 559
Supply & Jean Mines, Cal. 84
Sure Shot Placer Mg. Co., Mont. 740
Surething Mine, Mont. 843
Surface and Underground Rights. 141
Surprise Mine, Wash. 576
Surveying Instrument, Beal's Pat. 901
Surveying Instrument Bracket, Berger's Pat. 112
Susquehanna Coal Co., Pa. 192, 223
Susquehanna Mine, Colo. 872
Susquehanna Township Coal Land Sale, Pa. 257
Swan, A. M. 252
Swan, Charles. 560
Swank, James M., "Iron and Steel Works Directory" 417
Swank, James M., Iron and Steel Works of the U. S. 347
Swansea Mine, Cal. 326
Swansea Mg. Co., Utah. 192, 290, 329, 458, 774
*Swart and Blake's Pat. Separating Conductors from Non-Conductors. 868
Sweden, Copper Production. 443
Sweden, Iron and Steel Production. 70
Sweden, Nationalization of Ore Deposits in. 893
Sweden, Water Power in. 767
Swedish Feldspar. 767
Swedish State Railways, Canadian Coal for. 333
Sweeney Mine, Cal. 595
Sweetstake Mine, Cal. 188, 393, 455
Sweetser-Burroughs Dredge, Idaho. 497
*Sweet's Pat. Gold Separating Machine. 145
Swenson Explorations, Minn. 224
Swenson's Pat. Mining Dredge. 283
Swift & Co. Pyrites Mine, Ala. 779
Swift's Pat. Brick and Kiln Furnace. 490
Swigert, L. V. 668
Swinburne & Ashcroft's Pat. Electrolyzing Zinc Chloride. 591
Swinburne & Ashcroft's Pat. Extracting Metals from Sulphide Ores. 452
Swinburne & Ashcroft's Pat. Sulphide Ore Treatment. 251
Swindell's Pat. Conveyor for Rolling Mills. 452
Swindell's Pat. Gas Producer. 81
Swindell's Pat. Puddling Furnace. 452
Sylb Mine, Cal. 737
Sycamore District, Cal. 704
Sydney Harbor Collieries. 139
Sydney Steel Products Co., N. S. 525
Sykes Mine, Cal. 286
Sylvania Gold Mines Corporation, Colo. 738
Synder, William P. 633
Syndicate Mine, Cal. 300, 704, 877

T

Table Mountain Mine, Cal. 595
Tabor-Grand Mines, Wyo. 364
Tacoma Automatic Scales Co., Wash. 221
Tacoma Mg. Co., Wash. 226
Tacoma & Oro Fino Mg. Co., Cal. 424
Tadpole Con. Gravel Mg. Co., Cal. 254, 530
Tadpoles Handling, Blaisdell's Pat. 251
Tait's Pat. Tubing-Protector for Oil Wells. 145
Talbott, Benjamin. 590, 902
Tale Mine, Cal. 254
Tale Production, Canada. 387
Tale Production, Ontario. 414
Talk Mg. Co., Cal. 222
Tamarack Mine, Cal. 495
*Tamarack Mine, Divergence of Long Plumb Lines at. 578
Tamarack Mg. Co., Colo. 255
Tamarack Mg. Co., Mich. 150, 395, 429, 544, 739, 776
Tamarack Mg. Co., Mich., Report. 555
Tambourine Gold Mg. Co., Colo. 361
Tamping Blast Holes, Scholvin's Pat. 355
Tanana River Navigation, Alaska. 244
Tankage Capacity of Beaumont Oil Fields. 690
Tanner, M. W. 391, 838
Tanzu Mine, Cal. 85
Taos County, N. M., New Mining Camp. 707
*Tapping Jacket, Barrett's Pat. 868
Taquet's Pat. Zinc Production. 527
Tarantula Mine, Cal. 495
Tarbell Mine, Oregon. 427
Tarbet, A. H. 186
Tarbox Mg. Co., Mont. 329
Tar Extraction from Gas, Plantinga's Pat. 734
Tar, Producing Solid Materials from, Dorr's Pat. 251
Tarshish Mg. Co., Colo. 255, 267
Tasmania, Copper Exports. 876
Tasmania, Gold Production. 300, 821
Tasmania Mine, Colo. 495
Tasmania, Mineral Exports. 330, 459, 876
Tasmania, "Report of Secretary of Mines" 389
Tasmania, Silver Exports. 876
Tasmania, Silver-Lead Exports. 876
" Tasmania, Statistics" 450
Tate, Jones & Co., Pa. 221
Tatum, L. W. 391, 453, 560, 633, 769, 902
Taunton Locomotive and Mfg. Co. 405
Taxation of Mines in Colorado. 374
Tasting Mines. 672
Taylor & Brunton Sampler, Colo. 224, 394, 672
Taylor, C. L. 186
Taylor, F. H. 220
Taylor & Hull Mines, Cal. 495
Taylor Iron and Steel Co., N. J. 325
Taylor, N. & G. Co., Pa. 220
Taylor's Pat. Producing Chemicals in Electric Furnaces. 901
Taylor, W. E. 186, 560
Tea Mine, S. D. 740
Teats Flat Dredge, Cal. 807
*Technical Analysis, Handbook of" 730
Tecumseh Mg. Co., Mich. 874, 907
*Technical Training, Need of for Southern White Boys" 450
Teclotes Mine, Mexico. 742
Tecumseh Mg. Co., Mich. 590
Tedrow Mine, Oregon. 458
Telegrafer's Pat. Hot Blast Stove. 591
Telegraph Mine, Ariz. 325
Telluride Coal Mg. Co., Colo. 906
Telluride Iron Works, Colo. 560
Telluride Mill, Colo. 873
Telluride Power Co., Colo. 11, 117
Telluride Reduction Co., Colo. 555, 873
Tellurides, Treating, Rethybridge's Pat. 188
Tempest Mine, Colo. 456
Temple Iron and Coal Co., Pa. 151, 397
Tenant in Mining Property, Liability for Accounting of. 522

Ten Mile Mg. Co., Colo. 361, 563, 672, 841
Tennessee Coal, Iron and Railroad Co. 293, 400, 462, 503, 603, 678, 703, 778
Tennessee Coal, Iron and Railroad Co., Report. 704
Tennessee Coal Land Sales. 192
Tennessee, Coal Production. 791
Tennessee Copper Co., Tenn. 258
Tennessee, Gold and Silver Production. 66
Tennessee, Iron and Steel Shipments. 19, 155, 293, 431, 569, 878
Tennessee Mill, Ariz. 635
Tennessee Mine, Ariz. 360, 736
Tennessee, New Phosphate Deposits. 815
Tennessee Phosphate Shipments. 40, 124, 230, 401, 538, 570, 712, 364
Terrenatis Mine, Mexico. 364
*Terry's Pat. Rock Drill Chuck. 251
Tesla, Nikola. 805
Tetra Mine, Utah. 364, 458, 500
Tetro Mine, Utah. 61, 428
Tetrad Gold Mines Co., B. C. 62
Texas, Beaumont Oil-Field. 599, 616, 675, 681
Texas, Beaumont Oil as Fuel, Tests. 169
Texas, Beaumont Oil Gushers. 685
Texas, Chalk Deposits. 675
Texas, Cinnabar Discoveries. 639
Texas, Coal Production. 791
Texas Flat Mine, Cal. 424, 670
Texas, Gold and Silver Production. 66
Texas Gulch Mines, Cal. 393
Texas, Iron Making. 656
Texas Mine, Cal. 222, 286, 455, 495, 705
Texas Mine, Colo. 255
Texas Mining Claims. 77
Texas, New Smelter at El Paso. 549
Texas Oil Companies, Consolidation of. 844
Texas Oil Fields, Geological Survey Work in. 471
Texas Oil and Gas in. 100
Texas Oil and Royalty. 342
Texas Petroleum, Free Sulphur in. 352
Texas, Sulphur, Oil and Quicksilver. 450
Texas, Tankage Capacity of Beaumont Oil Field. 660
Texas University Mineral Survey. 211
Thacher's Pat. Slide Rule. 837
Thalsherrnau nebst einer Beschreibung Auefuhrter Thalsperren". 216, 525
Tharsis Mg. Co., Spain. 502
Tharsis Sulphur and Copper Co., Spain, Report. 764
Thatcher, P. E. 902
Thawing Dynamite. 180
Thayer Mg. and Milling Co., Costa Rica. 120
Theisen's Pat. Gas Purifying. 58
Thelma Mine, N. M. 87
"Thermite" for Welding. 250
Thermit for Making Repairs. 909
Thermo-Electric Tests of Nickel Steel. 352
Thew Automatic Shovel Co., O. 82, 594
Thiele, Parker & Fincke's Pat. Petroleum Refining. 185
Thio District, New Caledonia. 428
Thistle Mine, B. C. 62
Thistle Shaft, Cal. 223
Thofen's Pat. Treating Copper Sulphide Ores. 901
Thomas Blast Furnace, Ala. 858
Thomas, F. R. 592
Thomas, J. A. 633
Thomas, J. M. 702
Thomas, R. Gray Coal Co., Ill. 532
"Thomas Steel, Laboratory Analysis of". 628, 800
Thomas, W. C. 453
Thomas, W. H. 869
Thompson, A. W. 528, 838, 869
Thompson, C. S. 76
Thompson's Pat. Measuring Air Currents. 185
Thompson, William. 114
Thompson, William Hale. 528
Thomson, Elibu. 592
Thomsonite. 526
Thomson's Pat. Copper Recovery. 113
Thomson's Pat. Steel-Copper Plate. 452
Thonindustrie Kalender, 1902". 109
Thorium. 664
Thorium Filaments for Electric Lights, Siemens & Halske's Pat. 901
Three Chimneys Mine, Cal. 871
Thunder Mountain, Idaho, Geology of. 791
*Thunder Mountain Mining District, Idaho 135, 395, 511, 531, 672, 731, 785, 873
Thunder Mountain Mg. and Milling Co., Idaho. 189
Thurman's Pat. Blast Nozzle. 527
*Thurmond's Pat. Ore Concentrator. 421
Thurston, R. H., Laboratory of Engineering Research. 557
Thwaites's Pat. Blast Pressure Gauge. 81
Thwaites's Pat. Cooling and Cleansing Blast Furnace Gases. 145
Thyng, W. S., Tungsten Deposit in Washington. 418
Tibbals, W. H. 146, 869
Ticonderoga Graphite Co., N. Y. 493
Tidewater Iron and Steel Co., Pa. 423, 703, 839
Tiewaukee Mine, Utah. 330
Tiffany, O. C. 735
Tiger Combination, Colo. 906
Tigner-Colquhitt Co., Texas. 639
Tile, Drain, Production, Ontario. 414
Tile or Plate Manufacture, Gebree's Pat. 251
Tilton Mine, Colo. 455
"Timber, Decay of and Methods of Preventing It". 765
Timbering in Deep Mines. 610
Timber Land, Evidence as to Whether it was Mineral. 763
Tin in Alaska. 143, 373
Tin in Bolivia. 218
Tin, California. 9
Tin Consumption in the World. 30
Tin Cup District, Colo. 255
Tin, Electrolytic Separation. 213
Tin Exports, South Australia. 708
Tin Exports, Straits. 231, 506, 605, 816
Tin Imports and Exports, Great Britain. 157, 336, 464, 605, 747, 613
Tin Imports, U. S. 30, 63, 198, 369, 506, 646, 781
*Tin and Lead Oxide Making, Lomax's Pat. 527
Tin Market, London in 1901. 72
Tin Market in 1901. 50
Tin Market and Prices. Weekly. 212
Tin Mining in New South Wales. 212
Tin in 1901. 30
Tin, Obtaining by Electrolysis, Quintaine's Pat. 701

Tin Ore Deposits of North Dundas". 705, 897
Tin Ore Production, Great Britain. 413, 827
Tin Ore Production, Portugal. 245, 761
Tin-Plates, Feeding, Hammond & Dennis's Pat. 837
Tin Plate Workers' Wages. 91
Tin and Platinum Discovery, Bonus for. 732
Tin Production, New South Wales. 586
Tin Production, Queensland. 623
Tin Production, South Australia. 826
Tin Production in the World. 30
Tin Recovery, Nubhart's Pat. 901
Tin, Regaining, Bergsoe's Pat. 185
Tin Stocks. 506, 681, 816
Tin Supplies. 231, 506
Tin Waste and Clippings, Duty on. 63
Tin Workers' International Protective Association. 879
Tintic Mine, Ariz. 147, 736
Tintic Shipments, Utah. Weekly. 88
Tioga Mine, Wash. 88
Tiptop Mine, Idaho. 906
Titanium, New Use for. 249
Titcomb's Pat. Hoisting and Conveying Apparatus. 401
Titles to Mining Property. 204, 654
Tittmore, J. N. 314
Tobacco Mine, Colo. 496, 636
Tobb's Pat. Testing Firing Cables. 559
Todd, William R. 391
Tod, H. N. 869
Toledo Avenue Mg. Co., Colo. 772
Toil House Mine, Cal. 360
Toltec Mine, Ariz. 806
Tomboy Gold Mines, Ltd., Colo. 10, 327, 361, 564, 636, 672, 738, 808, 873
Tombstone Con. Mines Co., Ariz. 781
*Tombstone Mining District, Arizona. 584
*Tombstone Mining Revival, Ariz. 314
Tomlinson's Pat. Utilizing Hydrocarbon Oils. 145
Tommins, Vincent P. 284
Tom Mitchell Mine, Cal. 804
Tom Reid Mine, Ariz. 325
Tom Thumb Mine, Wash. 258, 290, 534, 599, 675, 844
Tong, George H. 592
"Tonkin and China, Exploration of". 834, 897
Tonopah District, Nevada. 707, 810
Tonopah Mg. and Milling Co., Nev. 697, 810
Tonopah, Nevada, Notes on. 697
Tonto Reservoir, Proposed. 413
Tooele County Mines, Utah. 11
Toohey, Redmond. 50
Tool for Oil Wells, Hendershot's Pat. 803
Tooth and Base for Phosphate Logs, Cline's Pat. 667
"Topographical Record and Sketch Book for use with Transit and Stadia". 765
Topographic Survey, Co-Operative in Ohio. 178
Torch Lake Mine, Mich. 190
Torrell's Pat. Portland Cement Making. 357
Tornado Damages in Missouri Zinc-Lead Fields. 637
Toronto Engineers' Club. 252
Toronto Stock Quotations. Weekly. 277
Torpedoes for Oil Wells in Colorado. 428
Torreon Mining Exposition, Mexico. 428, 534
Torreon Smelter, Mexico. 428, 534
Torrey Coal Co., Ind. 497, 637
Tortette Mine, S. D. 289
Tossazzi's Pat. Electrolysis of Copper Salts. 868
Toston Mine, Mont. 739
Tourmaline, California. 9
Tourmaline, Composition. 482
Tourmaline, U. S. 38
Townsend, Clinton Paul, Acker Electrolytic Alkali Process. 658
Townsend, O. 735
Town Topics Mg. Co., Colo. 189, 636, 872
Towrauna Gold Mg. Co., Western Australia. 47
Trace Mine, Cal. 455
Trade Combination, Right of Action and to Injunction Against. 388
Trade Dollar Mine, Wash. 152, 258, 290, 599, 640, 706
Traders' Iron Mine, Mich. 706
Trafford Power and Light Supply, Ltd., England. 437
Trail Creek Coal Mines, Mont. 843
Transfer of Mining Property by Locators to Company. 483
"Transfer" or "Sale" of Mining Property, Construction of. 246
*Transit Compass, Lalle's Universal. 487
Transit, Hoadley & Packard, Mont. 87
Transits, Attachment for, Berger's Pat. 112
*Transmission Plant, Missouri River Power Co. 789
Transvaal, Cyanide Patents in. 785
Transvaal, Deep Boring. 301
Transvaal Gold Mine Tax. 910
Transvaal, Gold Production. 5, 161, 226, 330, 459, 566, 774, 908
Transvaal Mining. 97, 203, 428, 599, 687, 690
Transvaal Mining Returns. 908
Transvaal, Peace in. 787, 845, 853
Transvaal, Present Mining Conditions. 210
Transvaal Proprietary, Ltd., South Africa. 910
Traylor, J. A. 358
*Traylor's Pat. Concentrator. 527
Treadgold Concessions, Yukon. 641
Treadgold Water and Mining Syndicate, Yukon. 299, 330
Treadway Oil Co., Mich. 811
Treadwell, M. H. & Co., N. Y. 870
Treadwell, M. H. & Co., Pa. 253
Treadwell Mine, Ariz. 494, 670
Treadwell's Pat. Machine for Delivering Comminuted Solids. 357
Treasure Hill Mg. Co., Ariz. 325
Treasure Mine, Cal. 872
Treasure Mine, Oregon. 707
Treat Ditch, Cal. 147
Treharne & Roberts's Pat. Safety Lamp Key. 81
Trent Engineering and Machinery Co., Utah. 529, 561
Trent, L. C. 735
Trent Mg. Co., S. D. 289
Trenton Iron Co., N. J. 83, 146, 634
Trevathan, R. A. 902
Trewick, Nick. 735
Trimountain Mg. Co., Mich. 86, 89, 150, 153, 190, 227, 259, 291, 395, 429, 498, 564, 596, 739, 842, 874
"Trimountain" Mg. Co., Mich., Report. 317
"Trimountain". 299
Trinity Copper Co., Cal. 393, 455
Trinity Gold Placer Mg. Syndicate, Cal. 60

Trinity Toll Road Co., Cal.	807	United Metals Selling Co.	194, 567	U. S. Pig Iron Production	16, 123, 162, 211, 717, 778	Ventilating Tubes, Zaczek's Pat.	357
Tripp, H. T.	444	United Mines Co., Colo.	738, 742	U. S. Potash Salts Imports	746	Venture Mine, Colo.	808
Triumph Mine, Colo.	60, 906	United Mine Workers	622	U. S. Precious Stones in 1901	38, 548	Venus Gold Mg. Co., Minn.	396
Trojan Mine, Colo.	148	United Mine Workers' Convention	187, 221, 877	U. S. Pyrites Imports	368, 504, 645, 779	Verein Chemische Fabriken's Pat. Sulphuric Anhydride Making	357
Tromp, H. M.	186, 702	United Mine Workers' Organizers' Troubles in Virginia	459	U. S. Quicksilver Exports	63, 198, 214, 369, 646, 781	Vermehren, Pablo	592
Trough Mine, Cal.	807	United Mine Workers, Pittsburg District	399	U. S. Quicksilver Production	415	Vermillion Placer Mg. Co., Mont.	707
Trough Mfg. Co., Colo.	286, 496	United Oil Co., Colo.	671	U. S. Railroad Extension in 1901	17	Vernon District, B. C.	44
Troup, H.	608	United Mines Co., Colo.	116, 148	United States Reduction and Refining Co., Colo.	227, 429, 676	Vernon Mine, Yukon	168
Trowbridge Mine, Cal.	455	United Smelting and Refining Co., Mont.	749	U. S. Salt Exports	214	Vesper Mine, Mexico	226
Troy Copper Co., Ariz.	188, 285, 418, 800	U. S. Acetate of Lime Exports	214	U. S. Salt-peter Stocks and Statistics	680	Viceroy Mg. Co., Mexico	812
Troy District, Ariz.	904	U. S. Acid Exports	214	United States Shipbuilding Co.	294, 680	Victor Assay Offices, Colo., Destruction	336
Troy Steel Co., N. Y.	220	U. S. Aluminum Production	31	U. S. Silver Imports and Exports	6	Victor Gold Mines, Cal.	705
*Trux's Pat. Draw-Bar for Ore Cars	357	U. S. Ammonium Sulphate Imports	294	U. S. State Exports	214	Victoria Copper Co., Mich.	194, 256, 456, 507, 637, 676, 907
Trumbull, G. H.	902	U. S. Anthracite Coal Shipments	34	United States Smelter, Utah	599	Victoria Gold Production	226, 300, 459, 741, 821
Truscott, S. J., Matte Smelting in Celebes	522	U. S. Antimony Imports	63, 198, 369, 506, 646, 781	United States Smelting Co., Colo.	596	*Victoria, Report of the Secretary for Mines and Water Supply	142, 210
*Tube Cleaner, Weiland Water Power	807	U. S. Asbestos Production	760	*U. S. Statistical Abstract	317	Victoria, Saddle Reefs of Bendigo	440
Tube Mill Guide, Dicks's Pat.	357	U. S. Asphalt and Bituminous Rock Deposits	279, 699	United States Steel Corporation	65, 118, 119, 123, 150, 190, 204, 256, 288, 293, 328, 426, 431, 438, 456, 457, 467, 538, 604, 611, 653, 809, 874, 879	Victor Mine, Cal.	144, 188
Tubes, Conical, Manufacture, Bock's Pat.	323	U. S. Barytes Production	268, 563	United States Steel Corporation's First Year	474	Victor Mine, Utah	152, 363, 811, 848, 876
Tubes and Pipes, Flexible, Duty on	278	U. S. Bauxite Production	860	U. S. Steel Production in 1901	544	Victor Quarry, Cal.	771
Tubes Welding, Bray's Pat.	219	U. S. Bessemer Steel Production	415	United States Sulphur Reduction Co.	634	Vidler, B. C.	453, 538
Tubular Wells, Sinking, Preslar's Pat.	708	U. S. Brick Exports	214	U. S. Tin Imports	30, 63, 198, 506, 646, 781	Villorola's Pat. Copper Cementation	804
Tucker, A. W.	838	U. S. Brimstone Imports	40, 368, 504, 645, 779	U. S. Tungsten Production	190	Vindicator Con. Gold Mg. Co., Colo.	256, 607, 637, 738, 873
Tucker & Cory's Pat. Artificial Fuel	804	U. S. Capital in Mexico	685	*U. S. Twelfth Census	355, 417	Vindicator Con. Gold Mg. Co., Colo., Report	215
Tucker Mine, Colo.	531, 705	U. S. Cement Exports	214	U. S. Uranium Production	760	Vidone Mine, Mont.	427
*Tungsten Deposits, Nevada	304	U. S. Cement Production	129	U. S. Vanadium Production	760	Virgilia District, N. C.	396
Tungsten Deposits in Washington	418	U. S. Census Statistics of Selected Industries	520	U. S. White Lead Production	268	Virginia Bridge & Iron Co.	453
Tungsten Production, Colorado	548	U. S. Chemical Imports	91, 504, 679	U. S. Wire Rod and Nail Production	616	Virginia-Carolina Chemical Co.	252, 566, 645, 680, 746, 785
Tungsten and Its Uses	835	U. S. Civil Service Commission Report	524	U. S. Zinc Exports	63, 198, 214, 369, 506, 646, 781	*Virginia-Carolina Chemical Company's Exhibit, Charleston Exposition	759
Tungsten Production, U. S.	760	United States Coal and Coke Co.	254, 676, 908	U. S. Zinc Smelting in 1901	405, 476	Virginia Coal & Ore Co., Va.	640
Tunja Phosphate Sales	230	U. S. Coal and Coke Exports and Imports	33, 195, 214, 366, 503, 611, 643, 777	U. S. Zinc Smelting Production	268	Virginia, Coal Production	791
Tunneling Machine, Emis's Pat.	113	U. S. Coal Fields	470	U. S. Zinc Smelting in 1901	405, 476	Virginia Copper Co., N. C.	396
Tunner Memorial	280	U. S. Coal Production	32, 756, 790	U. S. Zinc Smelting in 1901	405, 476	Virginia Delegates to International Mining Congress	869
Tuolumne County, Cal., Stamp Mills	807	U. S. Coal Production, Precision Level	320	U. S. Zinc Smelting in 1901	405, 476	Virginia, Gold and Silver Production	66
Tuolumne County Water Supply, Cal.	872	*U. S. Commissioner of Education Report	248	U. S. Zinc Smelting in 1901	405, 476	Virginia Iron, Coal & Coke Co.	456
Tuolumne River Mining, Cal.	393	U. S. Coinage	93, 230, 368, 505, 681, 816	United Verde Copper Co., Ariz.	115, 529, 562	Virginia Mine, Ariz.	806, 871
*Turbine Installation at Cuautitlan, Mexico	802	U. S. Commercial Relations with Foreign Countries	834, 897	United Verde Extension Mg. Co., Ariz.	259	Virginia Mine, Cal.	494
*Turbines and Motors, Hydraulic	698	*U. S. Commissioner Internal Revenue Report	109	Universal Automobile Co., Cal.	593	Virginia Mine, Oregon	875, 908
Turkey, Coal in	892	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	University Gold Mg. Co., S. D.	280, 534, 875, 908	Virginia Pochontas Coal Co., Va.	258
Turkey, Copper Production	787	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	*Unloading Apparatus, Hulett's Pat.	421	Virginia, Rutile Mining	351
Turkey Creek Mines, Colo.	672	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Turkey, Emery	178	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Turkey, Steel Rails for	791	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Turner, Daniel Lawrence, "Topographical Record and Sketch Book for Use with Transit and Stadia"	765	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Turner, F. B.	186	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Turner, Francis J.	324	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Turner, H. W.	146	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Turner, J. H., "British Columbia of To-Day"	588	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Turquoise, California	9	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Turquoise, Composition of	444	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Turquoise, U. S.	38	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Turret District, Colo.	872	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Tutweller, Temple	668	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Tuyere, Behrend's Pat.	700	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
*Tuyere for Cupola Furnaces, Watt's Pat.	591	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
*Tuyere, Doan's Pat.	390	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Tuyere, Foster's Pat.	145, 700	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Tweedy, George A., Quicksilver Mining in California	50	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Twelveteens, W. H., "Report on Coal Discovery near Outlands"	765	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Twentieth Century Mg. Co., Ont.	900	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Twin City Mine, Colo.	872	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
*Twin Creek Oil-Field, Wyo.	722	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Twin Lakes District, Colo.	808	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Twin Lakes Gold Mg. Co., Colo.	636, 706	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Twin Lakes Gold Mining Syndicate, Colo.	636	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Twin Lakes Placers, Colo.	498	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Twin Peaks Mg. Co., Colo.	735	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Twin Vein Coal Co., O.	119	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Two Bit Gulch Mg. Co., Colo.	496	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Two Bit Mg. Co., Colo.	257, 596, 723	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Two Brothers Mine, Cal.	360, 530, 671, 771, 905	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Two Johns Mine, S. Dak.	87, 289	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Tycoon Mg. Co., S. Dak.	192, 363, 397, 599, 740, 875	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Tyler's Pat. Compressed Air Water Elevator	591	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Tyrer & Co. Mines, Cal.	495, 671	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Tyrer Mill, Cal.	872	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Tyreshire Coal Co., Ind.	532	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Tyro Mine, Cal.	530, 770	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351
Tyser Mg. Co., Cal.	255	U. S. Commissioner of Labor Report on Strikes and Lockouts	588	Unloading Ships' Cargoes, Mullan's Pat.	836	Virginia, Rutile Mining	351

U

V

W

Waller, G. A., "Report on Tin Ore Deposits of North Dundas".....705, 897
Waller & Mulling Mine, Cal.....390
Waller's Pat. Sulphide Treatment.....632
Wall Mine, N. C.....396
Walter & Kerner's Pat. Hardening Copper.....868
Walter Scott Mine, Colo.....563, 706
Waltham Mine, Colo.....595, 906
Walton Mfg. Co., S. D.....740
Wandering Jew Mine, Ariz.....115, 222
Wardner, James F.....595
Ward Rose Mine, Colo.....455, 591
Ward's Pat. Oil Burning Furnace.....193
War Eagle Mfg. Co., B. C.....290, 501
Wareleigh Rhodesia Development Co., Ltd., Rhodesia.....332
Warren, B. H.....220
Warren's Pat. Cement Making.....57
*Warren's Pat. Rock Drill.....112
Warren, W.....391
Warrington Mfg. Co., Cal.....904
War-Vessels, Liquid Fuel for.....67
Washington-Alaska Miners' Association.....82
Washington, Coal Industry.....774
Washington Coal Mines in 1901.....445
Washington, Coal Production.....364, 791
Washington County Mfg. Co., Mo.....190
Washington Gold Mfg. Co., Colo.....672, 808, 872
Washington, Gold and Silver Production.....66
Washington & Great Northern Railroad, Wash.....152, 258, 290, 397, 640, 844
*Washington, Independent Mine at Sitka.....832
*Washington, Iron Making at Port Townsend.....137
Washington, Limitations of Time of Suing Under Laws.....864
Washington Mine, Cal.....494, 737
*Washington, Mount Baker Mining District.....379
Washington, Mount Rainier Forest Reserve.....242
Washington, Tungsten Deposit.....418
Washington University.....422
Washoe Copper Co., Mont.....225, 457, 498, 533
Wasp No. 2 Mfg. Co., S. Dak.....152, 289, 458, 533, 566, 875
Waswado Mfg. Co., Colo.....255, 287
Waterbury's Pat. Extracting Copper from Ores.....81
*Water, Electrolysis of.....795
Waterfall & Woods's Pat. Miners' Pick.....868
Water Gas Making, Fleischer's Pat.....868
Water Gas Making, Kramer's & Aart's Pat.....491
*Water Circulating Through Turbines and Coolers of Blast Furnaces, Foster's Pat.....527
*Water Level Gauge, Recorder, Bristol.....557
Waterloo Mine, Cal.....424
Water for Mining Purposes, Rights of Users.....178
Water Power in Iron and Steel Works.....657
Water Power in Sweden.....893
Water Privileges Subject to Prior Vested Rights.....141
Water Purifying, Brueckner's Pat.....323
Water Purifying, Clarke's Pat.....767
Waters, Albert L.....391
Waters, E.....324
Water Softener, Kennicott.....489
Waters's Pat. Ore Separator.....804
*Water Still, McKenna Automatic.....356
Watska Mine, Mont.....707, 875, 907
Watson, A. A., Olalla Copper Mfg. & Sm. Co., B. C.....598
Watson Brothers' Explorations, Minn.....673
Watson, James Otis, Sr.....899
Watson, W. C.....592
Watt, James.....702
Watt Mining Car Wheel Co., O.....703
Watt's Pat. Mine Car Door Fastening.....901
*Watt's Pat. Tycure for Cupule Furnaces.....591
Watts, William.....592
Wauconda Gold Mfg. Co., Wash.....193, 226, 290, 534
Waukegan-Washington Mfg. Co., Wash.....640
*Waukon Iron Co., Iowa.....276
Wauvers's Pat. Diamond Cutter.....185
Waupeca Mine, Colo.....808
Waverly Gold Mfg. Co., N. S.....193
Wayne Arriba Mfg. Co., N. M.....257
Weatherhead's Pat. Brass Founder's Melting Furnace.....185
Weaver Coal Co., W. Va.....397
Webb & Chambers Mfg. Co., S. D.....599
Webb, Lilley & Chapman's Pat. Cyanide Plant.....632
Webb's Pat. Concentrating Sulphuric Acid.....357
Webb's Pat. Concentrator.....357
Webb's Pat. Fume Condenser.....357
Weber, F. & Co., Pa.....83
Weber Gas and Gasoline Engine Co., Mo.....839
Weber Gasoline Engines in the Far North.....51
Webster, Arthur Gordon.....592
Webster, Camp & Lane Co., O.....83, 904
Webster Coal and Coke Co., Pa.....505
Webster Mfg. Co., Ill.....492
Webster, William R., Specifications for Steel Forgings and Castings.....689
Webster, William R., Specifications for Steel Rails.....689
Weddell's Pat. Manufacturing Salt.....113
Weddle, J. H.....668
Weed, Walter Harvey, Elkhorn Mining District, Montana.....583
We Fu Go Co., O.....703
Wegeriff's Pat. Crushing Roller.....323
Wehrhahn & Co., Germany.....712
Weidman & Williams Mine, Cal.....286
Weimer's Pat. Compressed Air Drill.....292
*Weinland Water Power Tube Cleaner.....867
Weirick, U. L.....702
Weir, Thomas.....58
Weist Process in California.....530
Weld, C. M.....869
Welding and Plating, Wachwitz's Pat.....283
Welding, "Thermite" for.....250
Well Boring, Davis's Pat.....868
Well Drilling Tools, Coupling for, Snyder's Pat.....491
Welles, A. M.....869
Wellington Colliery Co., B. C.....409
Wellington District Coal Mines, B. C.....410
Wellman-Seaver Engineering Co., O.....423, 529
Wellman-Seaver-Morgan Engineering Co., O.....805
*Wellman & Seaver's Pat. Coke Oven Charger and Discharger.....185
*Wellman's Pat. Coke Loading.....687
*Wellman's Pat. Coke Oven Lining.....569
Wells, J. S. C., Review of Progress in the Cyanide Process in 1901.....13
Weisbach Incandescent Gas Light Patents in England.....130
Weisbach Light Co.....235
Wencellus, Albert, "Laboratory Analyses of Thomas Steel".....800
Wencellus, Albert, "Methodes d'Analyses des Laboratoires d'Acieries Thomas".....628
Wendigo Mine, Ont.....120, 641
Werle Mine, Cal.....635
*Wernecke's Pat. Filter Press.....803
Wesener's Pat. Chemical Apparatus.....283
Wesley's Pat. Concentrating Table.....323
Wesley's Pat. Concentrator.....666
Wessell's Pat. Refining Spelter.....139
West Africa, Gold Coast.....502
West Africa, New Railroad for.....570
West Africa, Phosphate Discovery.....707
West Altona Mine, Mont.....330
West Argent vs. East Argent Mfg. Co., Utah.....566
West Coast Gold-field, New Zealand.....909
Westcott, Charles T.....422
West End Coal Co., Pa.....151
West Indies, Disaster in.....230
West Indies, Phosphate Shipments.....428, 566
West Morning Glory Mine, Utah.....151, 329
West Olive Branch Mine, Mont.....811
West Ontario Mine, Utah.....739
West Penn Mine, Mich.....602
*West Penn Railroad Coal Field, Miners' Strike, Pa.....46, 47
*West Pilbarra Gold-Fields, Western Australia.....326
West Point Mine, Colo.....757
West Scotland Coal Production.....192
West Side Belt Line Railroad, Pa.....874
West Side Mfg. Co., Mo.....493
West Virginia Bridge and Construction Co., W. Va.....90
West Virginia Central Railway.....459
West Virginia Coal Land Sales.....876
West Virginia Coal Miners' Strike.....791
West Virginia, Coal Production.....410
West Wellington Colliery, B. C.....445
Western American Coal Co., Wash.....48
*Western Australia Coal.....45
*Western Australia Gold-Fields.....120, 290, 300, 428, 595, 708, 821, 876
Western Australia, Kalgoorlie Gold-Field.....213
*Western Australia, Mines Report.....687
Western Australia, Petroleum in.....45
*Western Australia Mining Industries.....83
*Western Austria Statistical Register' 663, 879
Western Chemical Co., Colo.....636
Western Electrical Supply Co., Mo.....58, 115, 636
Western Federation of Miners.....902
Western Gold Mfg. Co., Colo.....636
Western Iron Works, Cal.....704
Western Kentucky Coal Field in 1901.....178
Western Montana Placer Mfg. Co., Mont.....457
Western Pennsylvania Central Mining Institute.....76
Western Pennsylvania Engineers' Society.....252
Western Power Co., Cal.....807
Western Slope Copper Mfg. and Sm. Co., Colo.....873
Western Society of Engineers.....114
Western Union Mfg. and Development Co., Oregon.....773
Western Wheeled Scraper Co., Ill.....221, 703
*Westfall, Apparatus for Testing Miners' Lamps.....320
Westinghouse, Church, Kerr & Co., N. Y., 52, 115, 187, 252, 325, 633
Westinghouse Electrical Works, Russia.....284
Westinghouse Electric and Mfg. Co., Pa., 187, 221, 358, 453, 492, 493, 561, 669
*Westinghouse Electric Motor in Mining, 307, 308
Westinghouse Works, Pa., Further Extension of.....621
Weston, William.....592
*Westphalia, Hibernia Mining Co. of Herne.....212
Weyand's Pat. Hydraulic Air Compressor.....667
Wharton Coke Plant, Pa.....639
Wharton, Joseph.....499
What Cheer Mine, Cal.....904
Wheat Perrin Mine, Cal.....188, 455, 705
Wheatcroft Coal and Coke Co., Ky.....497
Whedon, H. W.....633
Wheeler Condenser and Engineering Co., N. Y.....703
Wheeler, Harry K.....391
Wheeler, Olin D., "Wonderland, 1902".....730
Wheeling & Lake Erie Railroad.....90
Wheel or Rail Thread, Evans's Pat.....803
Whig Mine, Colo.....705
*Whim Well Copper Mine, Western Australia.....16
Whinery's Pat. Blue Printing.....734
Whitaker Iron Co.....538
White, A. S.....284
White Ash Mine, Ind.....873
White Bear Mine, Cal.....562, 872
White Briquetting Press.....803
White Cap Mine, Colo.....394
White, F. C.....633
Whitehead, Cabell.....590
White Horse Coal Prospects, Yukon Territory.....168
*White Horse Mining District, Yukon Territory.....167
White Knob Copper Co., Idaho.....149, 224, 395, 738
White Lead Company in Mexico.....696
White Lead Competition.....268
White Lead Manufacture, Corbett's Pat.....390, 491
White Lead Production, U. S.....268
White Mountain Mfg. Co., Cal.....594, 704
White Pine District, Colo.....116
Whitepine Mine, Mont.....457
White Rock Gold Mfg. Co., Nev.....191
White Rock Mine, Cal.....494
Whiteside Land, Minn.....532
White's Pat. Steel Making.....452
*White Star Gravity Filtering System.....666
White Swan Mine, Oregon.....843
White Wing Mine, Cal.....495, 595, 669
Whiting, George, Co., Ill.....704
Whitlock District, Cal.....220
Whitmore, F. B.....789
Whitmore, G.....186
Whitney, George L.....291
Whitney, H. M.....773
Whitney Reduction Co., N. C.....499, 773
Whitsett Mine, Pa.....499
Whittle Mine, Cal.....285, 562
Wickenburg Smelting and Refining Co., Ariz.....770
Wickes Brothers, Mich.....870
Wide Awake Gold Mfg. Co., Cal.....495
Wide West Mfg. Co., Colo.....808
Wilcox, Ralph.....186
Wild Cat Mine, Cal.....116, 223, 495
Wild Horse Mine, Colo.....117, 564
Wild Horse Placers, B. C.....909
Wild Irishman Mine, Cal.....771
Wildman-Mahoney Mine, Cal.....423, 630
Wiley, Capt. W. Murdock.....735
Wiley's Pat. Hydraulic Crane.....186, 803
Wiley, W. Murdock.....838
Wiley Concentrator Co.'s Pat. Concentrator.....421
Willey Mine, Colo.....287
Willey Ore Concentrating Syndicate's Pat. Concentrator.....283
Wilhelm, Charles.....560
Wilhelmina Mine, N. C.....82
Wilkesbarre Mine, Colo.....117, 496, 563, 636
Wilkeson Coal and Coke Co., Wash.....358
Wilkinson, F. O.....358
Wilkinson, King & Hanks's Pat. Colliery Tub-Brake.....491
Willard, E. A. & Co., N. Y.....92
William Penn Oil Co., Texas.....119
Williams, E. H.....592
Williams Estate, Minn.....150, 362, 673
Williams, Gardner.....82, 560
Williams, Job, Coal Co., Ind.....906
Williams, George.....702
Williams Mine, Cal.....530
Williams Mine, Pa.....192
Williams Patent Crusher and Pulverizer Co., Mo.....492
Williams, Percy.....528
Williams, R.....702
Williams's Pat. Coating Metal Plates.....632
Williams's Pat. Safety Lamps.....837
Williamson, C. P.....186
Williamson Iron Co., Ala.....711
Williamson's Pat. Rolling Mill.....113
Willoughby, Richard G.....838
Willow Creek District, Cal.....770, 807
Willow Creek Mfg. Co., S. D.....458, 499
Willow Creek Placer Co., N. M.....439
Willow Creek Mfg. Co., S. D.....875
Will's Pat. Steel Making.....700
Wilson, James A.....838
Wilson Mfg. & Milling Co., N. Mex.....151, 810
*Wilson's Handbook of South African Mines.....834
Wilson's Pat. Crede Oil Burner.....803
Wilson's Pat. Filter-Press.....701
Wilson's Pat. Producing Chlorine Gas and Caustic Soda from Common Salt.....357
Wilson, W. R.....186
Withman, R. K.....530
Wilton Mine, Cal.....736
Winchester Mine, Cal.....500
Windsor Gold Mfg. Co., Transvaal.....119
Windsor Mine, S. Dak.....772
Winfield Coal and Mfg. Co., Ind.....145
Wing's Pat. Making Hydrogen Sulphides.....145
Wing's Pat. Making Magnesium Sulphite.....730, 800
Winkler, Clemens, "Handbook of Technical Analysis".....303
Winnipeg Mine, B. C.....86, 150, 426, 498, 676, 739, 809
Winona Mine, Mich.....118, 288
Winscott Mine, Mont.....805
Winstow, Arthur.....421
Winterbottom's Pat. Pig Iron Breaker.....967
Wire Drawing, Glover's Pat.....490
Wire Drawing Machine, Reid's Pat.....522, 523
Wire Hawser, Duty on.....616
Wire Mill, Minnequa.....897
Wire Rod and Nail Production, U. S.....761
*Wire Rope.....182
Wirth Mine, Colo.....255
Wisconsin Granhite Products.....389
Wisconsin & Michigan Railroad, Mich.....874
Wisconsin Mine, Colo.....393, 496, 636
Wisconsin University.....869
Wise Boy Mine, Idaho.....256, 672, 738, 873
Wiser Brothers Mine, Cal.....902
Wisner, A. L.....592
*Wisemann's Pat. Coal Mining Machine.....22
Wiseman Mine, Cal.....119
Witberbe, Sherman & Co., N. Y.....391
Witt, G. E., Cal.....302
Witwatersrand, Deep Boring.....301
Witwatersrand Deep Mine, Ltd., Transvaal.....810
*Witwatersrand Deep-Level Mines and Their Future Development".....485, 629
Witwatersrand Gold Mine, Tex.....330, 459, 566, 774, 908
Witwatersrand, Gold Production, 5, 161, 226, 397, 203, 599, 687, 690
Witwatersrand, Present Mining Conditions.....458
W. K. Niver Coal Co., Pa.....358
Woakes, Ernest R.....730
Wolcott, Edson Ray, "Sensitiveness of the Coherer".....390
Wolfe & Engler's Pat.....491
Wolfe & Geiger's Pat. Non-Corroding Alloy.....81
Wolffstein's Pat. Zinc Peroxide Making.....145
Wolfram Ore Production, Portugal.....245, 761
Wolfram Ore Production, Queensland.....625
Wolfram Ore Production, South Australia.....827
Wolfram Production, Great Britain.....413
Wolfskel's Pat. Preparing Asphalt.....591
Wolverine Mine, Colo.....394
Wolverine Mine, Mich.....86, 150, 362, 395, 426, 532, 582, 597, 673, 842, 874, 907
Wolverine Mine, Wyo.....730
"Wonderland, 1902".....220, 253
Wonham & Magor, N. Y.....529
Wood Drill Works, N. J.....902
Woodford, Walter R.....769, 805, 906
Wood as Fuel for Reverberatory Furnace.....281, 419, 525
Wood, J. D.....324
Wood, Joseph K., and Cape Nome Conspiracy Case.....84
Woodman, James F.....453
Woodmansee's Pat. Blowpipe Torch.....283
Wood Mountain Mfg. Co., Colo.....807
Wood, P. K., Cal.....453
Wood Preserving, Chanute's Pat.....87
Wood Preserving Compound, Kleinschmidt's Pat.....632
Wood, R. D. & Co., Pa.....253, 325, 594, 633, 669, 902
Woods Investment Co., Colo.....61, 149, 564, 567
Woods Mine, Colo.....90
Wood's Pat. Working Ores by the Cyanide Process.....837
Woods, W.....146
Woodward Iron Co., Ala.....123, 330
Woodward, Robert Simpson.....562
Woodworth, Todd C.....453
Wooster Tunnel Co., Colo.....255
Worcester Polytechnic Institute.....735
Word, William F.....136
Worthington, Henry R.....527
Worthington's Pat. Duplex Steam Pump.....527
Worth's Pat. Hydraulic Motor.....145
*Wray, Henry Russell, Unwatering Former Bonanza Mines at Guanajuato, Mexico.....612
Wright, C. W.....838
*Wright Emergency Steam Trap.....321
Wright & Fletcher Mine, Cal.....530
Wright, Howard.....809
Wright & Lane Mine, Cal.....116, 562
Wright's Pat. Chemical Roofing Material.....251
Wrightson & Morison's Pat. Rock Drill.....837
*Wright's Pat. Roasting Furnace.....590
Wright, Whittaker and the London & Globe Finance Corporation.....89, 227
Wright, Whittaker and the Standard Exploration Co.....685
W. S. Cheneoweth Mfg. Co., Colo.....455
Wuensch, A. F.....82, 592
Wyandot Mfg. Co., Mich.....150, 285, 597
Wyckoff, A. & Son Co., N. Y.....58, 83
Wyckoff, E. L.....324
Wylie's Pat. Mining Machine.....804
Wyman, Walter.....492
Wynne Mine, Cal.....326
Wyoming, Coal Production.....791
Wyoming, Gold and Silver Production.....66
*Wyoming Industrial Convention, Proceedings".....897
Wyoming, Occurrence of Rare Metals in the Rambler Mine.....698
*Wyoming, Petroleum Fields.....720
Wyoming, Platinum Discovery.....143, 203, 418
Wyoming Platinum Ores, Nature of.....580
Wyoming Shovel Co., Pa.....870
Wyona Mine, Cal.....60
Yagerman, T. A.....186
Yak Mining, Milling & Tunnel Co., Colo., 149, 394, 425, 496, 563, 596, 772, 842
Yale District, B. C.....44
Yale University.....870
Yalgoo Gold-Field, Western Australia.....46
*Yalwal Gold-Field, New South Wales, Report on".....450
Yampa Mine, Utah.....503
Yankee Boy Mine, Mont.....707
Yankee Con. Mfg. Co., Colo.....394
Yankee Con. Mfg. Co., Utah.....121, 259, 429, 534
Yankee Doodle Mine, Colo.....456
Yaqui River District, Mexico.....428
Yavapai County, Ariz., Mining Land Sale.....904
Yawger, I. C., N. Y.....82
Yawler-Lexow Co., N. Y.....148
Yellow Aster Mfg. Co., Cal.....84, 222, 254
Yellow Butte Mine, Cal.....807
Yellow Jacket Mine, Cal.....286
Yellow Jacket Mine, Mont.....875
Yellow Jacket Mine, S. Dak.....392
Ymir Gold Mines, Ltd., B. C.....501, 640, 710
Yogo Sapphire Mines, Mont.....843
Yorba District, Cal.....288
York Mine, Utah.....120, 390
*Yorkshire Philosophical Society Report".....765
Yosemite Mine, Utah.....258
Youghiogheny & Ohio Coal Co., Pa.....568
Youman Combination, Colo.....636
Young, D. A.....633
Young, Dr.....633
Young & Griffith's Pat. Magnesium Carbonate.....901
Young, J. Dunraven.....291
Young, John Alvin.....384
Young's Pat. Mine Door.....58
Young's Pat. Rock Crusher.....357
Youshassett's Pat. Briquetting Ores.....559
Yreka Mfg. Co., Cal.....148, 326, 390
Yuba Mine, Cal.....288
Yuba-Monarch Gold Mfg. Co., Cal.....807
Yuba Oil Co., Cal.....737
Yuba River Dams, Cal.....397
Yukon, Gold Production.....373
Yukon, Government Mining Grant.....290
Yukon, Railroads in.....611
Yukon Trading Companies.....454
*Yukon, White Horse Mining District.....107
Zacek's Pat. Ventilating Tubes.....357
Zals, Con. Mfg. Co., Wash.....428
Zaner's Pat. Concentrating Sulphuric Acid.....857
Zantgraaf Mine, Cal.....222, 393, 454, 840
Zaruma Mines, Ecuador.....719
Zella Mine, Cal.....147, 285, 454
Zelma Bell Mfg. Co., Cal.....254
Zenith Furnace Co., Minn.....874
Zenth Mine, Ont.....258
Ziegler, P., "Der Thalsperrenbau nebst einer Beschreibung Auegeführter Thalsperren".....216, 523
Zimapan Mfg. Co., Mexico.....62
Zinc (See also Spelter).....166
Zinc, American for Germany.....166
Zinc Barium Pigment, International Chemical Co.'s Pat.....421
Zinc Carbonate.....526
Zinc Chloride, Electrolyzing, Swinburne & Aschcroft's Pat.....591
Zinc Distillation, Determination of Silver in Residuum from.....380
Zinc Dust, Duty on.....697
Zinc Dust Market and Prices.....746
*Zinc Dust Production, Coners and De Saules's Pat.....452
Zinc Electrolytic Production.....685
Zinc Exports and Imports, Germany.....231, 402, 713, 840
Zinc Exports, New York.....529
Zinc Exports, U. S.....63, 198, 214, 369, 506, 646
Zinc Extracting from Waste Products, Kellner's Pat.....113

*Zinc Furnace Converters and De Saulles's Pat. 390	Zinc Ore Production, Portugal..... 245, 761	Zinc Production, Italy..... 405	Zinc Sulphate Making, Lucius & Bruning's Pat..... 804
Zinc Imports, Great Britain... 157, 336, 464, 605, 747, 913	Zinc Ore Production, U. S..... 476	Zinc Production, Poland..... 405	Zinc Sulphide Ore Treatment by Hydrometallurgical Processes..... 620
*Zinc and Lead Deposits of the Ozark Region..... 475	Zinc Ore Strikes, Kansas..... 190	Zinc Production, Spain..... 405	Zinc Sulphide Pigments, Lones & Holden's Pat..... 701
Zinc and Lead Districts of Joplin in 1901... 29	Zinc Oxide Pigment, Rock's Pat..... 283	Zinc Production, U. S..... 405	Zinc White Production, U. S..... 268
Zinc and Lead Fields, Arkansas..... 798	Zinc Peroxide Making, Wolfenstein's Pat.. 145	Zinc Production of the World..... 405	Zublate Mine, Mexico..... 534
Zinc and Lead in Iowa..... 586	Zinc Plant, New in Utah..... 675	*Zinc Recovery from Ores or Mattes, Armstrong's Pat..... 868	Zug, Christopher..... 186
Zinc and Lead Ore Market, Joplin, Mo. Weekly	Zinc Precipitates, Assay of..... 143	Zinc Recovery from Sulphide Ores, Kirkpatrick-Pickard's Pat..... 251	Zuni Mine, Colo..... 636
Zinc-Lead Sulphide Process, Sulman-Picard. 751	Zinc Production, Austria..... 405	Zinc Reduction, Taquet's Pat..... 527	Zwicky, W. E..... 838
Zinc in 1901..... 26	Zinc Production, Belgium..... 405	Zinc Removing from Lead, Barton & McGhie's Pat..... 58	Zwoyer's Pat. Conveyor..... 734
*Zinc Obtaining by Electrolysis, Mond's Pat. 837	Zinc Production, Colorado..... 60, 548	Zinc Retort, Hopkins's Pat..... 113	Zinc Smelters Strike..... 816
Zinc Ore Exports, Spain..... 112, 301, 896	Zinc Production, France..... 405, 549	Zinc Silicate Strike, Newton County, Mo.... 190	Zinc Smelting in U. S. in 1901..... 27
Zinc Ore Production, Ontario..... 414	Zinc Production, Germany..... 405, 549		
	Zinc Production, Great Britain..... 405, 413, 827		
	Zinc Production, Holland..... 405		

