

NEW BOOKS AND PUBLICATIONS.

ANNUAL REPORT OF THE DEPARTMENT OF MINES, NEW SOUTH WALES, FOR 1880. Sydney: Thomas Richards, Government Printer. 7s. 6d.

Gives with great fullness of detail the mining operations and discoveries of the year. A valuable geological sketch map accompanies the report. A summary of the mineral products will be shown in another column of this paper. The total value of the gold, silver, coal, shale, tin, copper, iron, antimony, lead, and other less important minerals raised in New South Wales down to the beginning of 1881 was something like \$250,000,000. Gold, coal, tin, and copper are the chief minerals.

SPONSOR'S ENCYCLOPEDIA OF THE INDUSTRIAL ARTS, MANUFACTURES, AND COMMERCIAL PRODUCTS. Edited by G. G. Andre. London and New York: E. & F. N. Spon. In 30 parts. 75 cents each.

Parts 18 to 25 of this encyclopedia cover the subjects Hair and its applications, hats, honey, ice, India-rubber, ink, ivory, jute, knitted fabrics, lace, leather, linen manufactures, manures, matches, mordants, narcotics, nuts, oils and fatty substances, paper, perfumes, photography, photometry, paints and pigments, pottery, etc.

CIRCULARS OF INFORMATION OF THE BUREAU OF EDUCATION. 1881. Washington.

No. 1. "On the Construction of Library Buildings," by William F. Poole. No. 2. "The Relations of Education to Industry," and "Technical Training in American schools," by E. E. White. No. 6. A report on the Teaching of Chemistry and Physics in the United States, by F. W. Clarke. No. 7. Spelling Reform.

[OFFICIAL.]

INDEX OF INVENTIONS

FOR WHICH

Letters Patent of the United States were Granted in the Week Ending

August 30, 1881,

AND EACH BEARING THAT DATE.

[Those marked (r) are reissued patents.]

A printed copy of the specification and drawing of any patent in the annexed list, also of any patent issued since 1866, will be furnished from this office for 25 cents.

In ordering please state the number and date of the patent desired and remit to Munn & Co., 37 Park Row, New York city. We also furnish copies of patents granted prior to 1866; but at increased cost, as the specifications not being printed, must be copied by hand.

Table of inventions with descriptions and patent numbers. Includes items like Acid, apparatus for concentrating sulphuric; Air and gas, reducing valve for, R. Hardie; Alkali balls, apparatus for the manufacture of, M. M. Smith; Amalgamator, R. M. McDermott; Animal trap, self-acting, W. S. Campbell; A. P. R. Smith; Bar, See Grate bar; Bed, bottom, spring, J. C. Hubinger; Bed, folding cot, J. Turner; Beds, cot or sucking for camp, E. A. Barrett; Bedstead, bureau, A. S. Burnham; Bell, kong, P. McMahon; Bellows, J. E. Roeder; Belt fastener, H. D. Hicks; Belt, therapeutical galvanic, I. Gray; Belting, G. Andrews; Bit brace, F. W. Ireland; Block, See Pulley block. Sketching block; Blotting pad, J. H. Chataigne; Board, See Electric switch board; Boat, See Torpedo boat; Bobbin binder for mules, T. H. Greenwood; Boot and shoe brushing machine, A. S. Clark; Boot crimping machine, J. W. D. Fifield; Boot tree, J. W. D. Fifield; Bottle, dropper, F. M. Dixon; Bottle stopper, C. Sneider; Brace, See Bit brace; Broom, G. Hall; Broom hanger, W. Mills; Broom holder, J. P. Magl; Button, H. Bartle; Button, W. McCleery; Can, See Sheet metal can; Car coupling, E. J. Clark; Car coupling, S. J. Ford; Car coupling, E. S. Perry; Car coupling, H. L. Robertson; Car coupling, H. Smith; Car door, grain, B. R. Lewis; Car seat, E. E. Elston; Card setting machines, tension device for, J. J. Hoey; Carpet lining machine, B. G. Luther; Carpet sweeper, G. W. Gates; Carriage clips, machine for making, Rauschenberger & Dean; Carriage, side bar, J. Howell; Carriage spring, R. L. Doble; Carriage top, child's, I. Cole; Cart, D. C. Putnam; Case, See Organ case. Spectacle case. Toilet case; Caster, S. T. Lamp; Casting chains, F. H. Schweiger; Center board for vessels, A. F. Parker; Chair, See Folding chair. Reclining chair; Chair seat, J. C. & P. M. Guerrant; Churn, See Cotton chopper; Churn, C. W. Emerson; Churn, J. W. Jones; Churn motor, J. N. Crotcher; Cigars and cigarettes, glass mouth piece for, A. Demuth; Clasp, See Album clasp; Clip, See Single and double tree clip. Single tree clip; Clock pinions, machine for polishing, E. Horton; Closet, See Insect-proof closet; Clothes washer, W. Watlington, Jr; Coal drilling machine, T. Aitken; Cock, compound cut-off, J. Mullaney; Cock, stop, C. Callahan; Cock, three way, M. Cridge;

Table of inventions with descriptions and patent numbers. Includes items like Collar, horse, Grabel & Staufenbell; Color, methyl blue, C. A. Martins; Comb, See Currycomb; Cooker, steam, T. F. Dean; Cooler, See Milk cooler; Cotton chopper, B. S. Wilder; Coupling, See Car coupling. Thill coupling. Wire coupling; Crushing mill ore feeder, F. A. Huntington; Crushing roll mill, A. F. Wendt; Cultivator, M. S. E. Pittman; Cup, See Drip cup; Currycomb, C. A. Manker; Cut-off valve gear, A. A. Stewart; Cutter, See Plow cutter; Cutter head, D. Griffin; Desk, writing, A. Frank; Digger, See Potato digger; Dish, butter, J. A. Eades; Door hanger, C. Brinton; Door spring, I. B. Lockwood; Door spring, F. S. Taggart; Drawing table, H. Probst; Dredging machine, H. B. Angell; Dress protector, E. R. Turner; Drill, See Grain drill. Ratchet drill. Rock drill; Drilling machine work holder, D. C. Stover; Drip cup, H. Fellows; Drive gate, W. McAdams, Jr; Electric light, N. S. Keith; Electric lock, Manierre & Porter; Electric signaling apparatus, J. B. Currier; Electric switch board, J. S. Ross; Electrical conductors, manufacture of, T. J. McTighe; Electro-mechanical signal apparatus, I. Fisher; Elevator, See Hydraulic gravel elevator; Engine, See Rotary engine. Wind engine; Envelope or wrapper, open, W. L. Eckman; Fabrics, composition for preserving, G. S. Pape; Farm gate, A. L. Pierce; Farm gate, J. A. Wolfgram; Feather renovator, S. Gibson; Feed water heater, H. Coker; Fence, Colbert & Monical; Fence, J. L. Neville; Fibrous ware, making, Stevens & Chisholm; File, bill, S. Thompson; Filter, water, T. C. Candlish; Firearm, breech-loading, Bonehill & Matthews; Fire escape, J. R. Day; Flower pots and other pottery, machine for moulding, F. Herrmann; Flue lining and die for forming the same from clay, C. A. Freeman; Folding chair, J. E. Cotton; Foot, protecting covering for the human, E. C. Bruen; Fruit press and chopper, combined, G. H. Backmire; Furnace, See Hydrocarbon furnace. Portable furnace; Furnace, J. B. Boulicault; Gate, See Drive gate. Farm gate. Sliding gate. Generator. See Steam generator; Glass manufacture, J. Dobinson; Glassware, manufacture of hollow, M. Herrmann; Goods for dress linings having pattern printed thereon, H. Moschoowitz; Governor, R. S. Werotte; Governor, steam engine, M. Waters; Grain drill, D. R. Dean; Grain drill conductor tube, A. E. Armstrong; Grate, J. S. Van Buren; Grate bar, W. J. Ward; Grinding mill, F. Wilson; Guard, See Luggage guard; Hanger, See Broom hanger. Door hanger; Harness attachment, D. P. Applewhite; Harrow, C. O. Nason; Harrow and sod cutter, B. F. Rix; Harrow, sulky, G. W. Miller; Harrow teeth, making, E. D. & O. B. Reynolds; Harvester, Miles & Eddy; Harvester, G. Sweet; Harvester binder, S. D. Locke; Harvester rake, L. Erpelding; Hat ironing machine, A. De Laski; Hay rake and loader, combined, W. T. Vallandigham; Heater, See Feed water heater; Eddie, doup, Cocker & Greenwood; Hinge, B. S. Atwood; Holder, See Broom holder. Drilling machine work holder. Lead and crayon holder. Map holder. Music holder. Rein holder. Sewing machine attachment holder; Horses, spring knee boot for, E. W. Noyes; Horseshoe, E. A. Hills; Horseshoe, J. K. O'Neill; Hydrant, fire, A. J. Fuller; Hydraulic gravel elevator, Cranston & Willson; Hydrocarbon furnace, Litchfield & Renshaw; Ice and for other cooling purposes, apparatus for the manufacture of, F. M. McMillan; Insect-proof closet and safe, C. H. Larrabee; Iron, dephosphorizing crude cast, L. G. Laureau; Joint, See Pipe joint; Knitting machine, C. Callahan; Knitting machine needles, making, L. T. Whitten; Lamp, A. H. Jones; Lamp, electric, W. S. Hill; Latch, locking, Woolaston & Priddy; Lead and crayon holder, F. B. Powers; Leather pebbling machine, E. C. Allison; Light, See Electric light; Liquors, process of and apparatus for purifying and maturing, Cushing & Osgood; Lock, See Electric lock; Locket, J. Rothschild; Loom for weaving saddle girths, etc., T. Downward; Loom shuttle box mechanism, L. J. Knowles; Lubricating compound for car axles, etc., G. H. Merrill; Luggage guard, B. M. Arms; Mandrel, tube drawing, C. H. Scheermesser; Map holder, F. B. Ginn; Measuring heat conveyed through pipes, apparatus for, L. Sherman; Milk cooler, J. B. Moore; Milk receptacle, M. P. Allen; Mill, See Grinding mill. Saw mill; Mill burr, G. Derby; Millstone dressing machine, A. L. Teeter; Millstone mounting, B. D. Sanders; Mouldings and picture frames and the manufacture of light hollow ware, toys, etc., composition of matter to be used in the ornamentation of, J. R. Howell; Motor, See Water motor; Music holder, Phelps & Partridge;

Table of inventions with descriptions and patent numbers. Includes items like Musical instruments, transposing action for key board, J. A. Lutz; Necktie shield, C. E. Damon; Nut lock, Imperatori & Bilowius; Nut locking tool, J. De Pew; Organ case, reed, L. Mason; Organ stop action, reed, L. K. Fuller; Oven, steaming, E. Jordan; Pad, See Blotting pad; Pants, spring bottom for, S. Gosdorfer; Paper bag machine, W. C. Cross; Paper pulp, machine for grinding wood for, N. Kaiser; Paper, sand trap and button catcher for the manufacture of, E. Mather; Pens, etc., building perforated iridium tips for stylographic, W. W. Stewart; Pipe joint, Cooman & Dallard; Plaiting, guide for making scalloped, J. Amaden; Plaiting machine, M. F. Sallade; Planter, corn, F. C. Frost; Plow, W. Richards; Plow beam, A. Ball; Plow cutter, rolling, E. D. & O. B. Reynolds; Plow standard, I. R. Gilbert; Plow, sulky, I. R. Gilbert; Poke, animal, I. F. & R. G. Ward; Pool ball rack and tray, W. F. Whitney; Portable furnace, Sassinet & Huët; Potato digger, A. Ansel; Pottery ware, former for hollow, M. Walz; Press, See Fruit press; Pressure regulating valve, fluid, W. M. Sloane; Pressure regulator, steam, H. A. Cummins; Printer's galley rest, G. Scales; Printing and other presses, automatic feeder for, H. Dredoux; Printing machine sheet delivery apparatus, C. B. Cottrell; Propeller, screw, H. Hirsch; Protector, See Dress protector; Pruning implement, J. H. Layman; Pulley block, J. W. Norcross; Pulleys or drums, construction of, James & Jackson; Rack, See Pool ball rack; Railway collisions, machine for neutralizing the effects of, C. Rutimil; Railway rails, machine for cutting frogs and switches of, F. C. Weir; Railway signal apparatus, I. Fisher; Railway signaling apparatus, electric, O. Gasset; Railway switch and signal, interlocking, I. Fisher; Railway, wire rope, J. B. Low; Railways, device for turning curves in endless cable, A. L. Anderson; Railways, traction apparatus for wire rope, H. Root; Rake, See Harvester rake. Hay rake; Ratchet drill, E. G. Felthousen; Reclining chair, T. Hofstatter, Jr; Reclining chair, J. Reich; Reel, See Torpedo reel; Refrigerator car, A. W. Zimmerman; Rein holder, L. Pentz; Rein drill, hand power, L. W. Tracy; Rocker or device for the healthful amusement of children, G. T. Chandler; Rocking chair, rotary, C. Vieman; Roofing composition, W. B. Alliman; Rotary engine and pump, A. Stamm; Saccharine juices or other liquids, and apparatus employed therein, preparing, evaporating, and concentrating, F. A. Bonnegn; Safe, provision, G. Pothin; Sash pivot, automatic, T. J. Morgan; Saw filing machine, gin, A. A. Wood; Saw gummer, J. J. Lowe; Saw jointer and gauge, R. E. Poindexter; Saw mill, band, C. Meiners; Saw mill, steam, A. J. Emlaw; Saw mills, air buffer for, J. Waters; Sawing machine, J. Augspurger; Sawing machine, L. D. Noblitt; Sawing machine for cutting down standing timber, J. Augspurger; Scale, platform, Kleinsteuber & Huebner; Screw, wood, J. W. Campbell; Seat, See Chair seat; Seeder and roller, combined, W. J. Morgan; Selecting device, J. E. Munson; Sewing machine, Altmann & Pommer; Sewing machine, G. A. Hayden; Sewing machine, A. L. Parcellle; Sewing machine, C. R. Scott; Sewing machine, C. A. Sjoberg; Sewing machine attachment, C. M. Banks; Sewing machine attachment holder, G. H. Bedient; Sewing machine corder, W. McCabe; Sheet delivery apparatus, G. L. Jaeger; Sheet metal can, A. H. Fancher; Shingle, metallic roofing, H. S. Northrop; Shoe, F. Euphrat; Shovel and ash sieve, combined, C. H. Starin; Single and double tree clip, H. McCoy; Single tree clip, H. McCoy; Sketching block, C. R. Lamb; Sliding gate, B. L. Rex; Snow plow, J. Wood; Soldering machine, C. W. O'Neill; Sole cutting machine, tap, J. W. D. Fifield; Sound transmitter, H. B. Porter; Spectacle case, J. & H. G. Chase; Speed regulating device, H. Borchardt; Spinning machine, R. B. Daly; Spinning machine, H. B. Estes; Spring, See Carriage spring. Door spring. Vehicle spring; Steam boiler, upright, E. B. Butterworth; Steam generator, W. E. Kelly; Stool for barbers' use, F. Kammerer; Stove, N. Compton; Stove, gas, J. R. Hare; Stove grate, E. Hayner; Stove pipe thimble, J. M. Lauby; Stove, vapor burning, J. P. Hayes; Stoves, extension top for oil and gas, O. N. Kyle; Straining or filtering fluids, machine for, Gale & Avery; Sucker rod wrench and elevator, W. S. Roberts; Surveying instruments, solar reflector for, W. Schmolz; Suspenders, W. & H. Turner; Switch, See Railway switch; Table, See Drawing table; Tacking machine, E. Woodward; Target, flying, G. Lisowsky; Telegraphic sander, G. S. Mott; Telephone exchange system and apparatus, Eldred & Durant; Telephone lines, switch for district, A. M. Frankenberg;

Table of inventions with descriptions and patent numbers. Includes items like Telephone signal apparatus, J. S. Rose; Telephone transmitter, H. Hunnings; Tenoning machine, E. H. Sawin; Textile fabrics, apparatus for treating, Patterson & Stewart; Thill coupling, I. C. Burgett; Thill coupling, W. J. Chenoweth; Thill coupling, F. Hoffman; Thill lug, Haas & Beisner; Tobacco casing machine, A. Pearl; Toe weight, E. G. Miles; Toilet case, S. Haslett; Tool, combination, O. G. Rombotis; Torpedo boat, G. H. Reynolds; Torpedo reel, E. G. McClure; Toy wagon, J. Murray; Trap, See Animal trap; Trap, L. Brandeis; Tree, See Bot tree. Whiffletree; Truck, foundry, G. F. Baugher; Trunk, G. Birkmann; Tube, See Grain drill conductor tube; Turn buckles, making, Moore & Smith; Valve, See Pressure regulating valve; Valve motion, steam engine, M. A. Dees; Vehicle running gear, E. Harder; Vehicle spring, W. H. Stickle; Veterinary remedy, E. J. Smith; Wagon stake, W. A. Hanna; Wagon wheel, G. M. Chase, Jr; Wagon wheel and axle, C. Norton; Wall paper from the hanging-up machine, method of and apparatus for removing, T. Henry; Washer, See Clothes washer; Watchmaker's tool, A. G. Linnbaum; Water motor, S. W. Hudson; Water tanks, water column for railway, T. J. McGowan; Well boring and rock drilling machine, J. Atkinson; Wheel, See Wagon wheel; Wheelbarrow, W. C. Wren; Whiffletree, A. A. Pierce; Wind engine, L. H. Sparks; Wire coupling, S. D. Field; Wire stretcher, M. A. Howell, Jr; Wrench, See Sucker rod wrench; Wrench, A. G. W. Foster;

DESIGNS.

Table of designs with descriptions and patent numbers. Includes items like Burial caskets, name plate frame for, A. H. Nirdlinger; Carpet, H. Christie; Carpet, Christie & Neil; Carpet, J. Fisher; Carpet, A. I. Halliday; Carpet, C. Magee; Carpet, W. McCallum; Carpet, J. Neil; Carpet, Neil & Christie; Carpet, T. J. Stearns; Electric transducing battery, C. H. Simpson; Pencil case, L. W. Fairchild; Type, font of printing, C. E. Hoyer;

TRADE MARKS.

Table of trade marks with descriptions and patent numbers. Includes items like Agricultural implements, certain, J. H. Barley; Cigars, Engelbrecht, Fox & Co; Cigars, H. R. Kelly; Clothes hanger, Arnett & McClymonds; Corsets, M. Cohn; Flour, J. Mack; Gloves and mittens, I. Parker & Co; Guns, shot, W. W. Greener; Hosiery and knit goods, J. E. Hanifen & Co; Insect powder, T. B. Merrick & Co; Knives, scissors, razors, and other small cutlery for table and domestic uses, Lloyd, Supplee & Walton; Range, bath, and other boilers, J. G. Hibbs, Jr; Restoratives, S. B. Sigesmond; Soap, bar and cake, Schultz & Co; Spirituous liquors distilled from fruits and grain, H. Toser Company; Time detectors, watchman's, E. Imhauser; Tobacco, chewing and smoking, cigars, cigarettes, and snuff, Marburg Brothers; Watch cases, J. C. Dueber;

English Patents Issued to Americans.

From August 26 to August 30, 1881, inclusive.

Table of English patents issued to Americans with descriptions and patent numbers. Includes items like Aerial navigation, A. L. Blackman, Nashville, Tenn; Cooling air, J. P. Burnham et al., Chicago, Ill; Berth, A. M. Crosby, U. S.; Drilling machine, J. W. Tracy, Philadelphia, Pa; Drying apparatus, C. H. Hersey et al., Boston, Mass; Electric light, T. A. Connoly, Washington, D. C; Electric light regulators, S. J. Burrell, Brooklyn, N. Y; Locomotive engine, F. M. Stevens et al., Concord, N. H.; Piston rod packing, G. H. Richards, Boston, Mass; Pocketbook, J. W. Meaker, Auburn, N. Y; Refrigerating apparatus, H. D. Cogswell, San Fran, Cal; Ring, spinning machine, S. A. Jenks, Central Falls, R. I; Steam generator, S. C. Salisbury, New York city; Water closet, Hartford Sanitary Plumbing Company, Hartford, Conn; Watermeter, W. L. Hunt, New York city;

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