

NEW BOOKS AND PUBLICATIONS.

A PRACTICAL HANDBOOK OF THE CARE AND MANAGEMENT OF GAS ENGINES. By G. Lieckfeld, C.E. Authorized translation by G. Richmond, M.E. With instructions for running oil engines. New York: Spon & Chamberlain. London: E. & F. N. Spon. 1896. Pp. xiv, 103. Price \$1.

The subject of this book, which is very concise, is really the running of an "Otto" gas engine and of a "Hornsbly-Akroyd" oil engine. It is fair to say that one who has mastered these two engines will be in good condition to cope with any motor placed before him, as they are typical and standard machines. The "Testing Card" and "Treatment of Derangements" are samples of the headings. We note especially that the section on the oil engine is written by Mr. George Richmond, M.E., of the De la Vergne Company, an engineer of high standing, who has been identified with the development of oil engines in this country.

DR. JAMESON'S RAID: ITS CAUSES AND CONSEQUENCES. By Rev. James King. New York and London: George Routledge & Sons. Pp. 180. Price, paper, 50 cents.

This is a concise handbook on the political situation in South Africa, supplying information respecting the Boers and their country, as well as treating of the Jameson raid. The story is told from the time of the first Dutch colonization, and the book also has an account of the diamond and gold fields of the Rand.

CHRISTIANITY AND OUR TIMES. By R. P. Brorup. Chicago: International Book Company. 1895. Pp. 228. Price 25 cents.

THE PSYCHOLOGY OF ATTENTION. By Th. Ribot. Authorized translation. (Third revised edition.) Chicago: The Open Court Publishing Company. 1896. Pp. viii, 120. Price 75 cents. Paper 25 cents.

OBSERVATIONS OF A BACHELOR. By Louis Lombard, author of "Observations of a Musician," "Love's Sufferings," composer of the opera "Juliet," and founder and director Utica (N. Y.) Conservatory of Music and School of Languages. Utica, N. Y.: L. C. Childs & Son. Pp. 151. Price 50 cents.

Beginning May 24, the American Wheelman, whose name is symbolic of originality and enterprise, will begin the publication of a daily cycling paper in New York City. There are now more than one hundred thousand cyclists in the metropolitan district, so that there will undoubtedly be adequate support. The weekly edition will not be injured by the daily; in fact, it will be improved. It is evidently the intention of the publishers to conduct it upon a high plane, for the editor says: "It will be our aim to make the weekly American Wheelman a high class literary and technical journal, combining the characteristics of Harper's Weekly and the SCIENTIFIC AMERICAN." We wish our contemporary every success in their new venture.

TO INVENTORS

An experience of nearly fifty years, and the preparation of more than one hundred thousand applications for patents at home and abroad, enable us to understand the laws and practice on both continents, and to possess unequalled facilities for procuring patents everywhere. A synopsis of the patent laws of the United States and all foreign countries may be had on application, and persons contemplating the securing of patents, either at home or abroad, are invited to write to this office for prices, which are low, in accordance with the times and our extensive facilities for conducting the business. Address MUNN & CO., office SCIENTIFIC AMERICAN, 361 Broadway, New York

INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted

May 5, 1896,

AND EACH BEARING THAT DATE

[See note at end of list about copies of these patents.]

Table listing inventions with patent numbers, including items like Advertising device, Air cushioning apparatus, Alarm, Alum lock, Armature for electric motors, etc.

Main table listing inventions with patent numbers, including items like Armature for electric motors, Automobile, Axle box lubricator, Baby walker, Baking pan attachment, Bale tie, Bearing, antifriction shaft, Bed lounge, Bed insects, device for protecting, Bee smoker, Belt, bicycle, M. L. Carpenter, Belt, electric, Moore & MacCulloch, Bicycle, C. G. Dieterich, Bicycle and vehicle, combined, J. Trancie-Armand, Bicycle attachment, A. H. Winger, Bicycle or tricycle wheel, A. J. Wolff, Bicycle pedal, S. O. Jones, Bicycle pump attachment, L. G. Spencer, Bicycle rest or support, J. M. Gaston, Bicycle support, F. J. Werneth, Bicycles, change speed gearing for, J. Munden, Billiard table, pocket, P. M. Cunningham, Bleaching agents, process of and means for producing, C. Kellner, Blower, rotary, T. W. Green, Boiler, See Steam boiler, Bolt, street, A. H. Winger, Bolt spring, H. L. Holmes, Bolting or clamping device, J. T. Swain, Book, check sales or order, S. Shoup, Book cover, C. L'Enfant, Boot or shoe pulling-over machine, C. P. Lawrence, Bottle filling apparatus, F. E. McKay, Bottle stopper, A. G. Carlson, Bottle, two compartment, H. Gallagher, Bowling alley indicator, F. Becker, Box, See Car sand box, Journal box, Music box, Spoon box, Bracket, See Door guide bracket, Brake, See Elevator brake, Breaching strap, B. P. M. Lang, Bridge flooring, C. E. Fowler, Key, O. Stoddard, Knitting machine stop motion, D. F. Sullivan, Lacing book, M. N. Bray, Bung, adjustable stop, W. V. Stephenson, Ladder, extension, D. Snell, Lamp electric arc, A. Jordan, Lamp, electric arc, C. E. Scribner, Lamp, electric arc, R. Seegerdahl, Lamp, electric arc, M. Whelless, Lamp socket, H. C. Wirt, Last, H. G. Locke, Lathing machine, C. P. Lawrence, Latch and lock, combined, A. Watson, Lathe, automatic, Wells & Wiltzie, Lathe, hollow mandrel, J. Harley, Lathe tool carriage, Cornell, Letter carrier's register, J. D. Miller, Lifter and carrier, D. Broderick, Lifting jack, L. D. Hathaway, Lifting jack, H. E. & H. Z. Youtz, Liquid raising apparatus, E. I. Nichols, Lock, button lock, Car door lock, Railway switch lock, Sash lock, Locomotive tender, W. F. Richards, Loom, A. Monti, Loom take up and drop box governing mechanism, T. A. Brady, Lubricating apparatus, H. Watson, Mail collector, pneumatic, H. Fleckl, Match machine, B. T. Steber, Match making machine, G. M. Hathaway, Measuring and proportioning machine, A. G. Collins, Measuring device, S. O. Jones, Meter, indicating and registering apparatus, P. Marx, Military equipment and accouterment, J. Zinn, Moulding device, A. M. Thompson, Moulding machines, cutter head for variety, C. W. P. B. Moulding machine, endless chain cutter, C. Loetscher, Motor, See Electric motor, Water motor, Music box, P. T. A. Rodeck, Music leaf turner, W. H. Frye, Music turning machine, Boothman & Bushong, Music sheet driving gear, F. E. P. Ehrlich, Musk, making artificial, A. Muller-Jacob, Napkin holder, A. Dormitzer, Needle cutting machine, F. Kahler, Nut and lock, nut, A. Mosley, Nut lock, J. Funkhouser, Nut lock, C. Rohrbach, Nut lock, L. D. Spragg, Nuts, machine for manufacturing, J. H. Sternbergh, Ore crushing machinery, G. Johnston, Pad, See Copying pad, Pan, See Cake pan, Paper paraffining machine, L. G. Reynolds, Paper sheets, cabinet for, Thorn & Austin, Paper, spindle for reeling or rolling, W. L. Coulter, Paper, water motor, Pecking machine, W. W. Kelly, Pen, fountain, L. E. Waterman, Pen guide and finger rest, I. Bergmann, Pencil holder, W. R. Kromer, Pessary, H. M. Ryman, Photographic camera, Fleming & Gennert, Photographic case for monuments, H. F. Gray, Photographic fabric, sensitized, R. A. Anthony, Physician's portable case, A. Hoff, Piano action, grand, J. Herbruerer, Piano case, E. N. Orden, Picture moldings, machine for coating, A. Sparr, Pipe, See Tobacco pipe, Pipes, tool for expanding ends of lead, J. Anderson, Pistol for shooting marbles, spring, W. J. Siefel, J. F., J. L. Meyer, Plant protector, G. Peace, Planter, E. A. Ovenshire, Platform, See Truck platform, Post, See Fence post, Potato digger, G. H. Kidney, Powder, making smokes, M. von Forster, Power distributing mechanism, E. H. Probstfeld, Precious metals, extraction of, G. A. Schroter, Press, See Copying press, Printing press, Printing press, J. Weimar, Propeller, N. French, Pump, See Bicycle pump, Pump governor, air, W. H. Green, Pump regulator, G. W. Wright, Push button, electric, G. J. Soper, Puzzle, O. Belsheim, Rack, See Sprocket rack, Railway crossings, switch and signal mechanism for, J. G. Schreuder, Railway, electric, H. Brandenburg, Railway signal system, electric, L. J. Everest, Railway switch, J. Christiansen, Railway switch, W. C. Mullin, Raud, rotary, E. F. White, Rat trap, J. S. Randall, Reclining chair and couch, O. P. Breithut, Recorder, See Speed recorder, Refrigerating machine, Knox Sharpneck, Register, See Letter carrier's register, Regulator, See Electric current regulator, Feed water regulator, Feed water regulator, Pump regulator, Rheostat, W. S. Andrews, Rhomboid, H. P. Davis, Rock and ore pulverizer, C. C. Birum, Rock drill rotating device, H. C. Sergeant, Rolling mill feed table, P. Berg, Rope clamp, safety, W. H. Duhy, Rope and bed, traveling or camp out, S. E. Walsh, Safe, T. M. Brintall, Sand distributing apparatus, C. W. Buckley, Sand papering and buffing machine, T. E. Keavy, Sap gathering tank, W. E. Burt, Sash fastener, H. A. Bennett, Sash apparatus, H. S. Asay, Sash fastener, Fallows & Moore, Sash lock, I. W. Lewis, Saw locking device, D. C. London, Saw mill carriage, W. M. Wilkin, Sawmill dog, W. M. Wilkin, Sawmill trimmer, W. M. Wilkin, Sawing machine, slab, A. W. Goodell, Scale beams, knife edge pivot for, F. H. Richards, Scale pan, G. H. Chaitillon, Scale, price, Flood, J. Mather, Scourer, See Window scourer, Screen, See Window screen, Seal, bottle, W. D. Bittel, Self lubricating wheel, H. B. Dierdorff, Separator mechanism, W. E. Sharples, Sewing apparatus, S. G. Over, Sewing machine, W. A. Mack, Sewing machine, L. Muther, Sewing machine, C. F. Skinner, Sewing machine, L. W. Tracy, Sewing machine feeding mechanism, C. McNeil, Sewing machine following guide, L. Muther, Sewing machine pull of device, M. Weiss, Sewing machine, shoe, W. Carey, Shade holding device, H. H. & H. Forsyth, Jr., Sharpener, scissors, C. B. Corbin, Sharpening machine, razor, Laganke & Marbach, Shaving stand, A. E. Devoe, Sheet metal, treating and annealing, W. E. Harris, Shingle sawing machines, spat dropper for rotary, F. Challoner, Shoe counter finishing machine, W. H. Taylor, Shoe finishing machine, H. Pratt, Sifter, ash, W. J. O'Neill, Sifting machine, W. D. Gray, Signaling apparatus, electric, T. G. Morse, Sign, making artificial, F. Lehner, Sign apparatus, H. S. Asay, Snap hook, I. Walker, Soda water fountain, C. H. Bolend, Sole rounding machine, L. E. Ericson, Speed indicator, G. White, Speed recorder, J. Spence, Jr., Sprocket, A. Rosenber, Sprocket box, C. Christens, Sprocket, See Bolster spring, Stacker, pneumatic, Huber & Miller, Stage scenery support, T. H. Andrews, Stamp, hand, P. G. Giroud, Stand, See Spaving stand, Supporting stand, Stay, dress, J. S. Crotty, Steam and hot water heater, F. Tudor, Steam, apparatus for superheating, G. Sinclair, Steam boiler, G. W. Johnson, Steam boiler, A. W. Morrell, Steam engine, R. H. Mather, Steam engine, G. S. Strong, Steam engine, oscillating, H. Mullen, Steam generator, W. Eaves, Steamboat Jack, S. R. Judd, Steamer, wheat, F. F. Quito, Steel, manufacture of, J. I. Carpenter, Steel sheet, A. B. Dick, Stone cutting and dressing machine, Davidson & Walker, Stonesaws, variable feed for gang, L. T. Cook, Stool, R. L. Bent, Stopper, See Bottle stopper, Straw stacker, pneumatic, A. Fraizer, Stove and water heater, combined, F. L. Rice, Stove gas conducting device and damper, Carroll & Brooks, Stovepipe, C. A. Drumm et al., Stovepipe jointing machine, A. Kaiser, Strainer, coffee pot, Massey & Stallings, Strap, See Breaching strap, Straw stacker, pneumatic, A. Fraizer, Supporting device, F. H. Chamberlin, Supporting stand, A. Sommerfeld, Surgical instrument, R. A. Bagnall, Suspender rack, E. K. Zaring, Switch, See Railway switch, Syringe, W. B. Spencer, Syringe, vaginal, A. C. Eggers, Table, See Billiard table, Work table, Tank making machine, G. H. Ryan, Tank, See Sap gathering tank, Tap, C. H. Bitter, Telegraphic relay, C. G. Burke, Telemeter, A. C. Dunn, Telephone apparatus and circuit, Scribner & McBERTY, Telephone circuit for police boxes, C. E. Scribner, Telephone exchange switchboard, J. P. Davis, Telephone exchange switching apparatus, J. P. Davis, Telephone switchboard apparatus, Scribner & McBERTY, Telephone transmitter, L. D. Appleman, Telephones, systems of current supply for, C. E. Scribner, Theater apparatus for producing eclipse effects, scenic, Oehring & Tucker, Thrasher, box, J. P. Birchall, Ticket, See Ticket, Ticket, See Ticket, Tile machine, Van dermolten & Veen, Time recording instrument, automatic, H. F. Eaton, Tobacco pipe, J. M. Grau, Torch, See Blow torch, Toilet stand, folding kitchen, W. G. Price, Torpedo guard, G. H. Jones, Torpedo, marine, L. F. Johnson et al., Toy bird, flying, J. Nesbit, Trap and holdback and shaft connection therefor, combined, D. Stanley, Trap, See Rat trap, Trap for waste pipes for bowls, etc., T. J. Sullivan, Treadle attachment, band, D. Curtin, Trolley wheel, J. McKenna, Truck carriage for handling heavy articles, E. H. Tarnes, Tub, See Cooling tub, Twisting machine, L. Briggs, Type justifying machine, C. F. Hilder, Type writer desk, Tyler & Olmer, Type writing machine, F. P. Gorin, Type writing machine, H. Shuler, 559,755, 559,756, Type writing machine attachment, W. E. Derick, Umbrella, F. Hadfield, Underskirt, M. J. Colver, Upper, A. Sawyer, H. J. Cannon, Valve apparatus, J. N. Sangster, Valve, slide gate, J. T. Christie, Vehicle and motor power, automatic, A. B. Andrews, Vessel, marine, W. King, Vessel, sailing, W. King, Wagon, dump, J. Neumann, Washer, See window or buggy washer, Washing machine, J. Bany, Washing machine, W. Thornton, Washing machines, roller adjusting mechanism for, J. Jefferson et al., Water closet and hinge therefor, W. Bunting, Jr., Water closet tank siphon, T. J. Sullivan, Water motor, A. D. Moore, Weather strip, S. S. Demann, Wheel stretcher, W. C. Ward, Weighing machine, automatic, F. H. Richards, Wheel, See bicycle or tricycle wheel, Self lubricating wheel, Trolley wheel, Wheel rim clamp, C. Schalles, Wheel, rim clamp, C. Schalles, Window, W. Williams & Bremer, Window, S. C. Taylor, Window, J. Wolfson, Window cleaner's safety support, H. K. Whitner, Window or buggy washer, C. C. Bridwell, Window screen, W. Scott, Wire stretcher, W. C. Ward, Work table, folding, J. H. Ormsby, Wringer, Clothes Wringer, Zinc and lead by electrolysis, apparatus for producing, R. O. Lorenz

TRADE MARKS.

Table listing trade marks with numbers, including items like Adhesive substances, C. J. Breidbach & Son, Belting, leather, Charles Munson Belting Company, Boots and shoes, leather, Little, Maxwell & Company, Cane mills, L. M. Rumsey Manufacturing Company, Cognac, Herbrand Company, Cognac, Archambeau Freres, Colors in oil and dry colors, A. Rich & Company, Corsets and underwaists for ladies and children, Bay State Corset Company, Curney articles and tableware, Popes Island Manufacturing Corporation, Fish, preserved, I. B. Miller, Fruit, especially raisins, dried, J. M. Chapman, Harmonicas, mouth, M. Hohner, Lead, zinc and ready mixed paint, A. Rich & Company, Leads, A. Rich & Company, Leather, White Brothers & Company, Paint and stain remover and cleaning solution, A. Rich & Company, Remedies for stomach, nerve and blood diseases, J. D. Murray, Remedy for consumption, malaria and general diseases, Whitehall Chemical Company, Salt, C. A. Andrews, Soda, saleratus and baking powder, J. Dwight & Company, Starch and its preparations, soap, soap powder, soda, blue, borax and the like, Hoffmann's Starkefabriken, Tires for bicycles and other vehicles, pneumatic, Reading Rubber Tire Company, Waists and hose supporters, boys' or girls', Wm. H. Burns Company, Waterproof clothing and rubber goods of all kinds, Z. T. Lindsey, Whisky and other distilled liquors, J. D. Murphy, Wind instruments, brass and other, Besson & Company

DESIGNS.

Table listing designs with numbers, including items like Antirattler, S. H. Morton, Badge, F. Lucking, Badge, campaign, J. S. Blinn, Brush, J. K. Robinson, Can opener, S. R. Jennings, Carpet, G. Marchetti, Carpet, A. F. Reddie, Cigar box cover, N. Whitely, Pump head, rotary, E. D. Johnston, Stove front, oil, C. Lederbos, Stove, oil, C. Lederbos, Tire shield, bicycle, T. Furlong, Vegetable cutter, frame, J. F. Mittel, Jr., Water supply fixture, F. Macklin, Wrenches, handle for fruit jar, J. P. Derr

A printed copy of the specification and drawing of any patent in the foregoing list, or a patent in print issued after 1889, will be furnished from this office for 25 cents. In ordering please state the name and number of the patent desired, and remit to Munn & Co., 361 Broadway, New York.

Canadian patents may now be obtained by the inventors of the inventions named in the foregoing list, provided they are simple, at a cost of \$40 each. If complicated the cost will be a little more. For full instructions address Munn & Co., 361 Broadway, New York. Other foreign patents may also be obtained.