

wetting glass?—J. A. ... 1. Is the disease called ... 2. Will it produce ... death unless cured? 2. What is the remedy therefor?

COMMUNICATIONS RECEIVED.

The Editor of the SCIENTIFIC AMERICAN acknowledges, with much pleasure, the receipt of original papers and contributions upon the following subjects:

- On Tempering Steel and Copper. By J.S.M.
On the Nickel Plating Patents. By A. D.
On the Atmosphere. By H. W.
On Moles. By W. S. N.
On Hardening and Tempering Tools. By J. P.

Also enquiries and answers from the following:

- A. D. H.—W. E. K.—F. L.—F. A. R.—W. D. P.—A. J. Q.—S. M.—A. D.—R. Y.

HINTS TO CORRESPONDENTS.

Correspondents whose inquiries fail to appear should repeat them. If not then published, they may conclude that, for good reasons, the Editor declines them. The address of the writer should always be given.

Enquiries relating to patents, or to the patentability of inventions, assignments, etc., will not be published here. All such questions, when initials only are given, are thrown into the waste basket, as it would fill half of our paper to print them all; but we generally take pleasure in answering briefly by mail, if the writer's address is given.

Hundreds of enquiries analogous to the following are sent: "Please to inform me where I can buy sheet lead, and the price? Where can I purchase a good brick machine? Whose steam engine and boiler would you recommend? Which churn is considered the best? Who makes the best mucilage? Where can I buy the best style of windmills?" All such personal enquiries are printed, as will be observed, in the column of "Business and Personal," which is specially set apart for that purpose, subject to the charge mentioned at the head of that column. Almost any desired information can in this way be expeditiously obtained.

[OFFICIAL.]

Index of Inventions

FOR WHICH

Letters Patent of the United States WERE GRANTED IN THE WEEK ENDING

July 14, 1874,

AND EACH BEARING THAT DATE.

[Those marked (r) are reissued patents.]

Table listing inventions granted, including Alcohol, purifying, L. Louragny; Amalgamator, J. P. Comins; Ammonia from coal gas, P. Munzinger; Auger, earth, D. Page; Bale tie, cotton, A. Baldwin; Basket, flower, Van Allen & Carroll; Beam end protector, N. McLellan; Bed bottom, J. Harper; Bedstead, cabinet, C. A. Leitch; Beef, cooked corn, L. D. Chemloux; Bell, door, W. E. Sparks; Bilge water gage, W. G. Conklin; Blower, steam, Smith & Harvey; Boiler, sectional steam, G. Higgins; Boiler, wash, W. S. Johnston; Boilers clear of scale, keeping, W. O'Brien; Boiler incrustation compound, I. Bernhard; Bolts, making split, S. M. Wilson; Boot legs, cutting, D. Lynahan; Boots, tacking, Thompson et al.; Boots, lasting, Pocock et al.; Brush holder, Mason & Baker; Butter worker, S. L. Latta; Button fastening, S. Gore; Cabinet for ladies' use, M. M. Crummer; Cage, bird, G. T. Peters; Cage feed cup, bird, Osborn et al.; Can holder, B. F. Bean; Can, self-measuring, J. McKimlin; Can stopper, oil, J. F. Donkin; Candy, manufacture of, D. G. Chase; Cane, umbrellas, etc., ferrule for, O. M. Smith; Car brake, T. McBride; Car coupling, F. J. B. Bowman; Car coupling, J. Curran; Car coupling, W. Coulter; Car coupling, J. J. Lahaye; Car coupling, W. H. Wilson; Car coupling, A. Zeigler; Car, railroad, J. Coyne; Car starter, J. A. Davis; Car starter, J. H. Sherman; Card stripper rack and piston, J. F. Foss; Carpets, cleaning, Coulter et al.; Carriage, child's, J. H. Brown; Carriage, child's, J. A. Crandall; Carriage, child's, A. Helm; Carriage tops, operating, A. McKenzie; Carriage wheel, C. R. Jenne; Cartridge primer, F. Winchester; Caster, furniture, W. S. Deming; Chair, cradle, and lounge, C. H. Levy; Churn, W. Brower; Churn, R. B. Wilson; Clamp, S. S. Van Wagoner; Clothes dryer, S. Segur; Clothes frame, J. Kram; Clothes wringer, G. S. Walker; Collar box, ornamented, J. L. Libby; Compound for cleaning metals, etc., T. C. Smith.

Table listing inventions granted, including Conformer, J. W. Miller; Cooler, corpse, J. J. Slevin; Cultivator and harrow, combined, W. Spurgin; Curtain, J. C. Perkins; Curtains, device for drying lace, L. Nolan; Door and drawer plate, E. S. Hotham; Doors, securing knob roses to, J. Kedey; Drawing frame stop, P. C. Dawson; Drawing frame stop, D. W. Hayden; Drawing implement, W. Smith; Drawing pin, H. Esser; Egg and fruit carrier, W. Wels; Elevator for wells, water, W. Mason; Elevator, water, J. Chenoweth; Elevator, water, E. Evans; Engine balanced valve, steam, C. H. Hutchinson; Engraving, fluid for, T. Difany; Explosive or dynamite, C. L. Kalmbach; Fare box, H. R. Gillingham; Fertilizing compound, S. D. Shepard; Firearm, breech loading, A. Karutz; Firearm, breech loading, O. Snell; Fire escape, J. B. Gathright; Fire escape, A. M. Smith; Fireplace, H. Bleska; Flower pots, bracket for, M. D. Jones; Fluting iron, C. Anderson; Fork, table, J. B. Smith; Fruit can, A. Stewart; Fruit jar cap, G. H. Perkins; Fruit dryer, A. W. Sweeny; Fruit jar cap, T. Hipwell; Furnaces, boiler, L. Stevens; Furnace, puddling, J. L. Penneck; Gas retort, etc., H. J. Dunseth; Gate, farm, A. Hall; Generator, gas, N. H. Edgerton; Glass panes, polishing, J. Schuster; Gold, etc., from lead, separating, Webster et al.; Governor, E. Adams; Grate, W. S. Flory; Grate, fireplace, J. Bawden; Grate for fireplaces, etc., J. A. Kernochan; Gun lock, J. M. Grisham; Halter clasp, pastern, J. C. Ford; Hame, J. Thornton; Hame staple, J. Thornton; Hame strap attachment, J. Thornton; Hammer, tack, S. Barker; Harvester, Corning & Curtis; Hat ironing machine, R. E. Brand; Hatchway guard, J. Wayland; Hatchway, self-closing, A. B. See; Hay loader, J. J. Gregory; Hides, softening, J. D. Marshall; Hoisting machine, J. Rushworth; Hoops, cutting locks in, Albertson et al.; Horse power, O. Himmelberger; Horse shoe, india rubber, A. J. Dean; Hose attachment, J. Fairchild; House, portable, J. W. Justice; Ice, production of, Newsham et al.; Indicator, M. H. Piper; Iron and steel, C. J. Eames; Kila, brick, J. G. Eberhart; Knitting burrs, adjusting, G. Campbell; Knitting machine, J. Leonard; Lantern, D. Lodon; Lathe tool post, T. and E. Bonner; Lead, desilvering and refining, G. Luce; Lead, refining, etc., A. H. Everett; Leather, etc., waterproofing, A. C. McKnight; Looms, selector for hair cloth, W. H. Drew; Lozenge, shaping, T. Kober son; Lumber setting guide, P. Berry; Mail bag, H. Gross; Mail bag fastening, H. Dempsey; Match safe, L. Jarchow; Matches, making friction, J. J. Machade; Medical compound, C. Austin; Medical compound, S. Dixon; Medical compound, H. M. Hoyt; Medical compound, L. Hutter; Medical compound, J. W. Miller; Medicinal extract, C. A. Bihl; Mercury, manipulating ores of, Eames et al.; Mildew and decay, preventing, Gender et al.; Milk strainer, J. F. Donkin; Moldings, making metallic, W. H. Wiggin; Mop head, J. Simpson; Motion, transmitting, A. H. Kennedy; Orans, stamping, W. J. & S. Willoughby; Organ, pneumatic action, T. Winans; Packing, piston, R. Wetherill; Padlock, F. Egge; Paper boxes, making, Keating et al.; Paper, perforating, L. A. Upson; Photographic pictures, R. H. Chinn; Piano action, A. Moeller; Piano sound insulator, W. R. Miller; Piano stool, G. A. Ramseyer; Pipes, etc., manufacturing, Bingam et al.; Piston for steam cylinders, S. D. Keens; Plane, L. Shance; Planter, corn, G. W. Brown; Plow, gang, W. O. M. Berry; Plow point, J. A. Peek; Pocket book, D. M. Reed; Press, copying, P. S. Abbott; Press, cotton, G. W. Grader; Press, tobacco packing, M. J. Farmer; Printing, etc., relief plates for, M. Joyce; Propeller, screw, J. C. Cross; Pump attachment, chain, E. A. Parker; Pump, rotary, G. Greindl; Pump, steam vacuum, W. Burdon; Radiator, steam, S. R. Wilmot; Radiator, steam, S. R. Wilmot; Railroad switch, Adams et al.; Railroad switch, A. N. Rankin; Railroad truck and locomotive, R. McCully; Rake, horse hay, C. C. Bradley; Rake, horse hay, D. P. Sharp; Range, cooking, G. W. White; Register, hot air, E. A. Tuttle; Rein, driving, S. E. Mathews; Roof, fireproof, F. J. Hoyt; Roofs, battening for, A. P. Anthony; Roofs, composition for, J. C. Hyatt; Roofing tile, L. Hamel; Sad iron, Rathbun & Shaw; Saddles, safety stirrup for, T. Harris; Sash cord fastener, C. B. Clark; Sash fastener, D. C. Goodrich; Sash fastener, A. N. Rankin; Saw, M. Chase; Scaffold, L. A. Steeper; Scale beams, poise for, J. H. Usher; Seat for lawns, schools, etc., J. L. Ross; Separator, middlings, Brennan et al.; Separator middlings, Brennan et al. (r).

Table listing inventions granted, including Sewing machine embroiderers, I. M. Rose; Sewing machine, wax thread, E. E. Bean; Sewing machines, operating, J. H. Race; Sewing machines, operating, A. G. Brewer; Shade cord fastener, M. De Penhoel; Sheep shearing machine, A. H. Kennedy; Shoe blacking apparatus, B. Dutton, Jr.; Shoe laces, making, W. E. Smith; Sign, L. Nielander; Soldering, J. W. Lamb; Spark arrester, locomotive, J. E. Wootten; Sprits, rectifying, M. Dondé; Spoke socket, S. Mitchell; Squares, tempering blades of, I. J. Robinson; Stamps, perforating, Ellsworth & Eaton; Stand and evaporator, C. D. Page; Stereotype composition, Macrone et al.; Stone, artificial, J. L. Rowland; Stove and furnace, W. P. Hall; Stove, cooking, A. Tittel; Stove lining composition, E. H. Richter; Stove pipe flue, H. C. Johnson; Stove, reservoir cooking, G. G. Wolfe; Surface try, H. A. Miles; Taole, folding, J. D. Hall; Table, ironing, St. John & Brunner; Table slide, extension, A. Z. Boda; Telegraphs, electric, Foote & Randall; Tile machine, C. Stange; Tobacco cutter, T. H. Gregory; Tongs, blacksmith's, D. Kunkel; Tool holder, G. W. Schofield; Tool holder for sharpening, H. Barry; Toy, D. Mtnch; Trace carrier, J. Thornton; Treadle mechanism, C. L. Spencer; Tuck marker, F. Henry; Turbine wheel, S. Walton; Tyre tightener, E. H. Wright; Valve plug and seat, G. A. Hines; Vehicle axle, Arnold, Chase & Arnold; Vehicle axle, R. W. & A. W. Davis; Ventilator and chimney, Hinkle et al.; Vessels, propelling and steering, J. C. Small; Violins, combustion tool for, F. W. White; Vise, bench, J. B. Wardwell; Wagon drum, Fulkerson & Guseman; Wagon, dumping, O. Gunnudson; Washing machine, J. C. Burgner; Washing machine, J. A. Rose; Watch key, A. C. Norcross; Water supply regulator, J. Kelly; Wedge, expansible, R. Nesbitt; Whip forming mold, J. J. Bohler; Whip rack, Murphy & Wyckoff; Windmill, S. M. Abbott; Window sash, reversible, J. McNamee; Wire, straightening and cutting, J. Greenwood.

APPLICATIONS FOR EXTENSIONS.

Applications have been duly filed and are now pending for the extension of the following Letters Patent. Hearings upon the respective applications are appointed for the days hereinafter mentioned: 30,398.—BURGLAR PROOF SAFES.—J. R. Floyd. Sept. 30 30,594.—DOOR LATCH.—T. Slaight. October 21.

EXTENSIONS GRANTED.

29,137.—CAR COUCH.—W. A. Brown. 29,162.—FLOW.—L. Green. 29,180.—HOISTING APPARATUS.—J. Lemman. 29,200.—STEERING VESSELS.—F. E. Sicksels. 29,212.—SPRING HINGE.—A. Acker.

DISCLAIMER.

29,180.—HOISTING APPARATUS.—J. Lemman.

DESIGNS PATENTED.

7,535.—BAS RELIEF.—T. Kappeler, Cambridge, Mass. 7,536 & 7,537.—MUFFS.—G. H. Prindle, Philadelphia, Pa. 7,538 to 7,540.—LAMP BRACKETS.—F. R. Seidensticker, West Meriden, Conn. 7,541 to 7,546.—CARPETS.—R. R. Campbell, Lowell, Mass. 7,547.—CARPET.—C. S. Lilley, Lowell, Mass. 7,548 & 7,549.—CARPETS.—D. McNair, Lowell, Mass. 7,550 & 7,551.—GLASSWARE.—D. Bennett, Baldwin township, Allegheny county, Pa. 7,552 to 7,557.—CARPETS.—R. R. Campbell, Lowell, Mass. 7,558 & 7,559.—CARPETS.—D. McNair, Lowell, Mass. 7,560 to 7,563.—CENTER PIECES.—J. O'Neil, San Francisco, Cal.

TRADE MARKS REGISTERED.

1,872.—HATS AND CAPS.—J. S. Fayerweather & Co., Danbury, Conn. 1,873.—ALE.—C. P. Hawkins, New York city. 1,874.—BEVERAGE.—G. N. Irish, Brooklyn, N. Y. 1,875.—FLOUR.—Metzger & Co., Platte City, Mo. 1,876.—GREEN PAINT.—Woods, Son & Co., N. Y. city. 1,877.—CIGARS.—C. Brewer & Sons, Boston, Mass. 1,878.—CHEWING GUM.—Curtis & Son, Portland, Me. 1,879.—FLOUR.—Bain et al., St. Louis, Mo. 1,880.—CUTLERY.—Hermann & Co., New York city. 1,881.—TOBACCO.—Beck et al., Chicago, Ill. 1,882.—BOOKS.—McNair et al., Philadelphia, Pa.

SCHEDULE OF PATENT FEES.

On each caveat.....\$10
On each Trade Mark.....\$25
On filing each application for a Patent (17 years).....\$15
On issuing each original Patent.....\$20
On appeal to Examiners-in-Chief.....\$10
On appeal to Commissioner of Patents.....\$20
On application for Reissue.....\$30
On application for Extension of Patent.....\$50
On granting the Extension.....\$50
On filing a Disclaimer.....\$10
On an application for Design (3 1/2 years).....\$10
On application for Design (7 years).....\$15
On application for Design (14 years).....\$30

CANADIAN PATENTS.

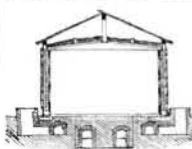
LIST OF PATENTS GRANTED IN CANADA JULY 16 TO 20, 1874. 3,658.—D. M. King, Mantua Station, Portage county, O., U. S. Improvements on potato diggers, called "King's Potato Digger." July 16, 1874. 3,659.—L. Dauze, Montreal, Montreal Dist., P. Q. Improvements on cooking stove, called "Mechanic Stove." July 16, 1874. 3,660.—D. Zeigler, Lewistown, Mifflin county, Pa., U. S. Improvements in Mechanical movements, called "Zeigler's Improved Mechanical Movement." July 16, 1874. 3,661.—W. G. Dunn, Greensburgh, Decatur county, Ind., U. S. Improvements on joints of rails for railways, called "Dunn's Adjustable Combination Railway Joint." July 16, 1874.

3,662.—E. E. Bean, Boston, Suffolk county, Mass., U. S. Improvements in gas lighting apparatus, called "Bean's Pneumatic Electric Gas Lighting Apparatus." July 16, 1874. 3,663.—J. C. Todd, Toronto, Ont. Improvements in toy guns, called "Todd's Improved Dog Gun." July 16, 1874. 3,664.—W. Briggs, Montreal, Montreal Dist., P. Q., and L. Senécal, Coteau St. Augustin, Hochelaga county, P. Q. Improvement on manure and hay forks, called "Briggs' Combined Manure and Hay Fork." July 20, 1874. 3,665.—E. A. C. Pew, Welland, Welland county, Ont. Improvements on peat machines, called "Pew's Peat Coal Machine." July 20, 1874. 3,666.—G. Stacy, Montreal, Montreal Dist., P. Q. Improvements on chisel pointed cut nails and machines for making the same, called "Stacy's Chisel Pointed Nail." July 20, 1874. 3,667.—T. W. Shaler, Brooklyn, Kings county, N. Y., U. S. Improvements on signal lanterns, called "Shaler's Signal Lantern." July 20, 1874. 3,668.—W. Baxter, Jr., Newark, Essex county, N. J., U. S. Improvements on compound engines, called "Baxter's Improved Compound Engine." July 20, 1874. 3,669.—W. E. Kelly, New Brunswick, Middlesex county, N. J., U. S. Improvements on steam generators, called "Kelly's Sectional Boiler." July 20, 1874. 3,670.—G. Forsyth, Seaford, Huron county, Ont. Improvements in the manufacture of picket fences, called "Forsyth's Improved Wire Picket Fence." July 20, 1874. 3,671.—R. Dunlop, St. Thomas, Elgin county, Ont. Improvements on steam and gas fitting wrenches, called "Dunlop's Improved Steam and Gas Fitting Wrench." July 26, 1874. 3,672.—J. E. Harriman, Bangor, Penobscot county, Me., U. S., assignee of M. L. Norton, same place. Improvements on lath machines, called "Norton's Improved Lath Machine." July 20, 1874. 3,673.—I. Palmer, Westminster, Middlesex county, Ont. Improvements on a machine for destroying potato bugs, called "Palmer's Potato Bug Killer." July 20, 1874. 3,674.—C. E. Patric, Springfield, Clark county, O., U. S. Improvements on a machine for sowing grain broadcast, called "Patric Broadcast Seeding Machine." July 20, 1874. 3,675.—R. Benner, Hamilton, Wentworth county, Ont. Improvements on the art or process of veneering, called "Benner's New Process of Veneering." July 20, 1874. 3,676.—A. McCannel, Caledon, Peel county, Ont. Improvements in self-opening gates for railway crossings, called "McCannel's Self-Opening Railway Gate." July 20, 1874. 3,677.—L. O. Cantin, Montreal, P. Q. Improvements in machine for furnishing photographs, called "Cantin's Photograph Business." July 20, 1874. 3,678.—J. Rourk, a gascon, Frontenac county, Ont. Improvements in atmospheric engines, called "Rourk's Automatic Atmospheric Engine." July 20, 1874. 3,679.—J. F. Stairs, Halifax, N. S. Improvements in material for calking, called "Stairs' New Stock Oakum." July 20, 1874. 3,680.—T. J. Blake, Pittsburgh, Allegheny county, Pa., U. S. Improvements in the manufacture of smooth back shovels, called "Blake's Smooth Back Shovel." July 20, 1874. 3,681.—G. B. Cornell, Chicago, Cook county, Ill., U. S. Improvements in wrenches for inserting bung bushings, called "Cornell's Bush Wrench." July 20, 1874. 3,682.—C. V. Jerome, Chicago, Cook county, Ill., U. S. Improvements in moth proof fur cases, called "Jerome's Moth Proof Fur Cases." July 20, 1874. 3,683.—R. P. Colton, Gananoque, Leeds county, Ont. Improvements on harrows, cultivators, and analogous implements, called "Gananoque Improved Harrow." July 20, 1874. 3,684.—J. M. Foss, St. Albans, Franklin county, Vt., U. S. Improvements on railway locomotive engines, called "Locomotive Draft Regulator." July 20, 1874. 3,685.—T. Ford, Plattsville, Oxford county, Ont. Machine for cutting the tapering plug end of well tube joints, called "Ford's Pump Tube Jointer." July 20, 1874. 3,686.—J. D. Richardson, Houston, Harris county, Texas, U. S. Improvements on springs, called "Richardson's Tensile Spring." July 20, 1874. 3,687.—J. Ruthven, Lewis, Lewis county, P. Q. Improvements on carbureters, called "Ruthven's Improved Gas Machine." 3,688.—O. K. Wood, West Chazy, Clinton county, N. Y. U. S. First extension of No. 2,524, for "The Queen of the Harvest Separator." July 20, 1874. 3,689.—O. K. Wood, West Chazy, Clinton county, N. Y. U. S. Second extension of No. 2,524, for "The Queen of the Harvest Separator." July 20, 1874.

Advertisements.

Back Page - - - - - \$1.00 a line.
Inside Page - - - - - 75 cents a line.

Engravings may head advertisements at the moderate per line, by measurement, at the letter press. Advertisements must be received at publication office as early as Friday morning to appear in next issue.



DAVEE'S PATENT DRY KILN, For seasoning wood, cots one half less seasons lumber without splitting, checking, or discoloring it, better and quicker than by any other way, and CANNOT BURN. Address BARBARO & CO., Louisville, Ky.

TO INVENTORS AND PATENTEES. An American mechanic, now resident in England, is in a position to introduce American inventions in England to a great advantage. Having had four years' experience in that line, and having connection with machine-making establishments of the highest standing, that would take up inventions of merit, he could be of great service to Patentees. Special, machinist and engineering tools preferred. Address G. HIVES, 123 Atlantic Ave., Brooklyn, N. Y.

EDISON'S INDUCTORIUM—A powerful electrical induction coil for giving shocks. Useful for medical purposes and amusement. Price only SIX DOLLARS. Sent, C.O.D., by express. Send for circular. EDISON & MURRAY, 10 & 12 Ward St., Newark, N. J.

To Electro-Platers. BATTERIES, CHEMICALS, AND MATE RIALS, in sets or single, with books of instruction, manufactured and sold by THOMAS HALL, Manufacturer, ing Electrician, 19 Bromfield Street, Boston, Mass. Illustrated catalogue sent free on application.