

Inventions Patented in England by Americans.

[Compiled from the "Journal of the Commissioners of Patents."]

PROVISIONAL PROTECTION FOR SIX MONTHS.

- 604.—MANUFACTURING YARNS AND FABRICS CONTAINING HORSEHAIR.—H. Hayward, Paterson, N. J. March 1, 1870.
409.—SUBMARINE TELEGRAPH CABLES.—James Story, Paris, Ky. February 11, 1870.
424.—GENERATING GAS.—A. I. Ambler, Washington, D. C. February 12, 1870.
510.—MACHINERY FOR SPLITTING ROCKS.—John Robb, New York city. February 24, 1870.
544.—MACHINERY FOR MAKING NAILS.—D. Reed, R. M. Bassett, and T. S. Bassett, Birmingham, Conn. Feb. 24, 1870.
549.—STEAM BOILER AND ENGINES.—F. B. Blanchard, New York city. February 24, 1870.
550.—MANUFACTURE OF NEEDLES.—R. J. Roberts, New York city. Feb. 24, 1870.
551.—WINDMILLS.—Edward Savoral, New York city. February 24, 1870.
563.—MACHINERY FOR MANUFACTURING SCREWS.—J. A. Ayres, Hartford, Conn. February 25, 1870.
564.—MECHANISM FOR ACTUATING MACHINES.—C. H. Wilcox, New York city. February 25, 1870.
568.—MANUFACTURE OF HAIR CLOTH AND LIKE FABRICS AND LOOMS THEREFOR.—I. Lindsay, Pawtucket, R. I. February 25, 1870.
592.—SEWING MACHINES.—Charles Lennig, Philadelphia, Pa. February 28, 1870.
636.—RAILWAY.—D. R. Pratt, Worcester, Mass. March 3, 1870.
976.—CARPET SWEEPER.—A. J. Haggood, New York city. March 7, 1870.
605.—RAILWAY CARRIAGE WHEELS.—H. W. Moore, Jersey City, N. J., and F. Bloodgood, C. B. Wood, and F. Wood, New York city, March 1, 1870.
631.—FLUID METER.—J. F. de Navarro, New York city. March 3, 1870.
635.—JOURNAL LUBRICATOR.—W. A. Wood, Hoosick Falls, N. Y. March 3, 1870.
663.—DEVICE FOR HOLDING LETTERS, ETC.—F. T. Ferguson, Boston, Mass. March 5, 1870.
700.—ETCHING PLATES FOR PRINTING.—J. McLoughlin, Morrisania, N. Y., and E. McLoughlin, New York city. March 9, 1870.
709.—BURNING OIL FROM PETROLEUM.—J. A. Tatro, Hartford, Conn. March 10, 1870.
725.—TYPE-SETTING MACHINE.—J. T. E. Slingerland, New York city. March 11, 1870.
744.—WATER INDICATOR AND REGULATOR FOR BOILERS.—R. N. Pratt and F. Berryman, Philadelphia, Pa., and F. A. Pratt and S. Colt, Hartford, Conn. March 14, 1870.

Answers to Correspondents.

CORRESPONDENTS who expect to receive answers to their letters must, in all cases, sign their names. We have a right to know those who seek information from us; besides, as sometimes happens, we may prefer to address correspondents by mail.

SPECIAL NOTE.—This column is designed for the general interest and instruction of our readers, not for gratuitous replies to questions of a purely business or personal nature. We will publish such inquiries, however, when paid for as advertisements at \$1.00 a line, under the head of "Business and Personal."

All reference to back numbers should be by volume and page.

A. G. B., of Pa.—The effective horse power of steam engines is determined by the dynamometer. The absolute horse power, or indicated horse power, by multiplying the mean effective pressure in the cylinder, by the velocity of the piston in feet per minute, and dividing the product by 33,000. The nominal horse power of ordinary condensing engines is found by multiplying the square of the diameter of the cylinder in inches by the velocity of the piston in feet per minute, and dividing the product by 6,000. In the application of this rule, the speed of piston is fixed according to the length of stroke, that is, the speed for a 2 feet stroke is assumed to be 160 per minute, and speeds for other lengths of stroke to be to this speed as the cube roots of their lengths. Nominal horse power is only a conventional expression for the measure of the dimensions of an engine. It does not give any idea of the actual power of which the engine is capable. The Richards Steam Indicator is the best instrument for testing the power of steam engines.

S. H. W., of Conn.—It is evident that your logic is not able to draw any distinction between the statement that matter moves, and your own statement that it moves itself. You will doubtless admit that the earth moves constantly in its orbit. Because you make that admission, we shall not consider it legitimate to charge you with believing that it moves itself. You admit the existence of matter, which admission of course allows the existence of the essential properties of matter. What violence is done to just logical inference by supposing that matter was originally endowed with motion, as it was endowed with impenetrability? Such a supposition does not imply self-creation, or power to endow itself with motion, as you illogically assert.

O. S. M., of Va.—The protection afforded against the injurious effects of white lead in grinding would at best, we think, be so partial as not to render it of great practical value. The injury resulting from this substance has been much reduced by modern modes of manipulation. There is no other harmless white pigment known, that could be generally used as a substitute for lead and zinc white. Oxide of zinc, however, is now largely used as less injurious than white lead, and not turning black by the action of sulphureted hydrogen.

H. W. S., of Ohio.—According to Dalton's investigations, it appears that when different gases are mixed, they only act mechanically to retard each other in their occupation of a given space. Thus, if a gallon of oxygen be placed in a jar, a gallon of any other gas that will not chemically combine with it may be introduced into the same jar, and still a third gallon of some other gas, etc. The experiment could not be performed with air and oxygen, as air contains oxygen.

S. & S., of Ohio.—Much obliged for the club of subscribers you have obtained among the workmen in your establishment. Similar efforts on the part of heads of other establishments, would, without doubt, result in mutual benefit. Your first query is answered at length in an article on "Mean Effective Pressure," which will shortly appear. Friction is a variable quantity even in the best constructed engines. No two will agree in this particular.

M. C., of Mass.—Carbonic oxide gives out but a small proportion of heat in its combustion, compared to that produced by the burning of carbon. We do not think it could be applied to brazing, etc., with advantage, and never heard of its being specially prepared to be used as fuel. In ordinary coal stoves a certain amount is generated, which is consumed in those stoves known as gas-burners.

A. P., of N. Y.—The mixture named would not injure leather in any way. On the contrary, we think it would undoubtedly act to preserve it. The different materials have been used, but we do not think they have all been used in a similar combination. We judge the mixture is patentable. Sugar cannot be made in the way you propose.

E. G. S., of Minn.—Water inevitably hardens in a new cistern lined with water-lime cement. You may soften it by adding a little quick lime in the form of milk of lime, see article on page 217, Vol. XXI., of the SCIENTIFIC AMERICAN.

W. M. L., of Pa., wishes a solution of the following problem.—Given the length of belt, distance between the centers of two cone pulleys, and ratio of their diameters to determine the diameters.

C. B. F., of Brockport, N. Y., will find the information he desires in the Encyclopedia Britannica, Vol. XVI., page 54; also, by a visit to the Morris & Essex canal at Rockaway and other points.

J. M. E., of Pa.—What is generally understood by the term atmospheric engine, is one in which the piston is actuated by steam on one side and air on the other.

B. C., of N. H.—A gas, or mixture of gases, absorbs as much heat in expanding after compression, as it evolves when compressed.

A. F. H., of W. Va.—The metallic appearance of the mineral you send is due to the presence of iron pyrites.

Business and Personal.

The Charge for Insertion under this head is One Dollar a Line. If the Notices exceed Four Lines. One Dollar and a Half per line will be charged.

The paper that meets the eye of manufacturers throughout the United States—Boston Bulletin, \$4.00 a year. Advertisements 17c. a line.

Steel Makers' Materials—Wolfram ore, oxide manganese, Speigel iron, borax, titanium, chrome, lubricating black lead, for sale by L. & J. W. Feuchtwanger, 55 Cedar st., New York.

For the best Alarm Money Drawer, address Robbins, Froutz & Co., Hughesville, Pa. Agents wanted.

Machines for manufacturing Screw Bolts and Nuts of all kinds. Makers will please send price lists and other information to C. G. Berryman, Saint John, N. B.

Superior Lacing made under Page's Pat't. Address J. Sweetman, Utica, N. Y.

Missouri Globe Valve—Best in use. Can be ground tight at any time. Send for circular. J. W. Brown, Manu'r, Baltimore, Md.

Egg Hatching.—Parties having any device, patented or not, for hatching eggs, will address C. C. Runyan, Mansfield, Ohio.

Astronomical Transit, second-hand, and perfect, wanted by T. & E. Dickinson, 254 Main st., Buffalo, N. Y.

For Sale—A Roper Caloric Engine, 1-Horse Power. Nearly new. Address C. F. Werner, Orange, N. J.

Spools of all kinds, and spiral shade tassel molds made by H. H. Frary, Jonesville, Vt.

Peck's patent drop press. For circulars, address the sole manufacturer, Milo Peck & Co., New Haven, Ct.

Millstone Dressing Diamond Machine—Simple, effective, durable. For description of the above see Scientific American, Nov. 27th, 1869. Also, Glazier's Diamonds. John Dickleson, 54 Nassau st., N. Y.

Harry Hammond Augusta, Ga., wishes to communicate with parties who furnish devices for sinking wells.

Jno. A. Hafner's (Commerce, Mo.) Pat. Eureka Coil Spring for Horse-powers will save 20 per c. power and 90 per c. breakage, positively.

Wanted to buy—A good 2d-hand Band Sawing Machine, in good order. Address C. W. Hyde, Springfield, Mass.

Kelly's Eclipse Hay Elevator—Best in use. Rights for sale cheap. Apply soon. Address T. C. Kelly, West Liberty, Pa.

Manufacturers of Calf and Lamb Roller Skins, Roller and Clearer Cloths. Please send address to P. O. Box 3,756, Boston.

Belting—See advertisement of Page's Patent Tanned Belting on page 273. Page Brothers, Franklin, N. H.

Wanted—Four good second-hand milling machines. Address Thos. H. White & Co., 23 Canal st., Cleveland, Ohio.

Wanted—A Situation by an electro gold and silver plater. Address Box 178, Waterbury, Conn.

An experienced mechanical and railway engineer wishes a position as Master of Machinery, or Manager. Address "Engineer," Station "G," Philadelphia, Pa., Postoffice.

Bartlett's Street Gas Lighter. Office, 569 Broadway, N. Y.

For description of the best lath and blind slat sawing machine in use, address W. B. Noyes, Gen'l Ag't, P. O. Box 558, Manchester, N. H.

Important advance on the draft and easement of carriage. See Jackson's Patent Oscillating Wagon, with tests of draft, models, etc., No. 149 High st., Newark, Essex Co., N. J. See Scientific American, Sept. 25, 1869.

Kidder's Pastilles.—A sure relief for Asthma. Price 40 cents by mail. Stowell & Co., Charlestown, Mass.

Needles for all sewing machines at Bartlett's, 569 Broadway, N. Y.

Pat. paper for buildings, inside & out, C. J. Fay, Camden, N. J.

For Sale—An old established Malleable and Gray Iron Foundry, doing a large trade in hardware. Cause of selling, failure of health of the proprietor. Address "Malleable Iron," Newark, N. J.

Brick and Tile Drain Machine—First Premium in Ohio, Indiana, and Missouri; also Fair of American Institute, New York. Address Thos. L. Cornell, Derby, Conn.

Asbestos—Wanted by J. N. Clarke, 126 Dearborn st., Chicago, Ill.

For solid wrought-iron beams, etc., see advertisement. Address Union Iron Mills, Pittsburgh, Pa., for lithograph, etc.

For first-quality new 14, 17, and 20-in. screw lathes, milling machines, and one-spindle drills, at small advance from cost, apply to Geo. S. Lincoln & Co., Hartford, Conn.

Hackle, Gill Pins, etc., at Bartlett's, 569 Broadway, New York.

Portable Pumping or Hoisting Machinery to Hire for Coffer Dams, Wells, Sewers, etc. Wm. D. Andrews & Bro., 414 Water st., N. Y.

Keuffel & Esser, 71 Nassau st., N. Y., the best place to get 1st-class Drawing Materials, Swiss Instruments, and Rubber Triangles and Curves

For tinmen's tools, presses, etc., apply to Mays & Bliss, Brooklyn, N. Y.

Glynn's Anti-Incrustator for Steam Boiler—The only reliable preventative. No foaming, and does not attack metals of boiler. Liberal terms to Agents. C. D. Fredricks, 587 Broadway, New York.

Two 60-Horse Locomotive Boilers, used 5 mos., \$1,300 each. The machinery of two 500-ton iron propellers, in good order, for sale by Wm. D. Andrews & Bro., 414 Water st., New York.

To ascertain where there will be a demand for new machinery or manufacturers' supplies read Boston Commercial Bulletin's manufacturing news of the United States. Terms \$4.00 a year.

Cold Rolled—Shafting, piston rods, pump rods, Collins pat. double compression couplings, manufactured by Jones & Laughlins, Pittsburgh, Pa.

For mining, wrecking, pumping, drainage, and irrigating machinery, see advertisement of Andrews' Patents in another column.

Pictures for the Parlor.—Prang's Chromos, sold in all art and bookstores throughout the world.

Caveats are desirable if an inventor is not fully prepared to apply for a patent. A Caveat affords protection for one year against the issue of a patent to another for the same invention. Patent Office fee on filing a Caveat, \$10. Agency charge for preparing and filing the documents from \$10 to \$12. Address MUNN & CO., 37 Park Row, New York.

Recent American and Foreign Patents.

Under this heading we shall publish weekly notes of some of the more prominent home and foreign patents.

SCROLL SAWING MACHINE.—Eliphlet A. Tripp, Newark, N. J.—This invention has for its object to furnish an improved scroll-sawing machine simple in construction, easily and conveniently operated, and effective in operation.

WASHING MACHINE.—James D. Royle and John Royle, Cane Valley, Ky.—This invention has for its object to furnish an improved washing machine simple in construction, strong, and durable, which will not rub the clothes and which will, at the same time, wash them quickly and thoroughly.

COTTON SEED AND CORN PLANTER.—Joshua B. Godwin, Williamston, N. C.—This invention has for its object to furnish a simple, convenient, effective, and accurate machine for planting cotton seed and corn, which shall be so constructed and arranged that it may be easily adjusted for work in either capacity.

TIN CAN.—John Joseph Burkert, New York city.—This invention has for its object so to construct the covers and fastenings of sheet-metal cans, that such covers, after having been cut open, shall not have become entirely useless.

MONEY SAFE.—Philipp Schreyer, New York city.—This invention relates to a new manner of constructing iron safes, and to a novel method of applying the same to articles of furniture. The invention consists in so constructing a safe of an outer and inner metal case, that the two cases are only connected by a bolt or bolts, passing through their bottoms, no other fastening being required. The invention consists, also, in constructing such safes so that they can be applied as supports or central standards to tables.

PICTURE NAIL.—John H. Squiers and Ezra J. Warner, Newark, N. J.—This invention relates to a new device for fastening the porcelain knobs to the ends of nails or screws, which are used for suspending pictures, and for other purposes. The invention consists in the application of wire-spring fastenings to the porcelain knobs or heads, the springs being so formed as to catch readily over the heads of the nails or screws, to which they are to be secured.

MULTIPLE SPONGE.—Hamilton Erastus Smith, Newark, N. J.—The object of this invention is to make small sponges more useful, and to increase their value. At present, large sponges, such as are used for washing coaches, etc., are very expensive, the value increasing with the size, while small sponges are comparatively useless. This invention consists in uniting a suitable number of small pieces of sponge into one large sponge by means of fastening devices, which are entirely concealed. The entire sponge surface of this multiple sponge is, therefore, applicable to use.

COMBINED COUNTER AND SHOWCASE.—L. F. Vienot, New York city.—The object of this invention is to reduce the cost of counters and show cases by combining them, and thereby saving the expensive counter tops.

PHOTOGRAPHIC PRINTING APPARATUS.—J. H. Hamilton, Sioux City, Iowa.—This invention relates to improvements in apparatus for making mezzotint photographs, and consists in the employment of a large box containing several square tubes, and supported on pivots, in a frame mounted on casters, so that it may be adjusted in vertical and horizontal planes to cause the tubes to receive the rays of light from the sun in the lines of their axis at all times and so as to fall on the negative perpendicular to it, the negative with the printing frame being placed at the bottom of the tubes.

TUG FASTENING FOR WHIFFLETREES.—L. A. Johnson, Candor, N. Y.—This invention relates to improvements in fastenings for connecting the tugs to whiffletrees, and consists in the combination with the tug hooks projecting from the ends of the whiffletree, of slides preferably arranged in grooves in the rear sides of the whiffletrees to slide forward and back, and having bent up ends provided with holes coinciding with the ends of the hooks to receive the said ends when slid inward to prevent the escape of the tug, and strengthen the said hooks. The said slides are provided with spring stops, which hold them in the open position for the reception of the tugs, or in the closed position for retaining them.

SAW PITMAN HEAD.—L. Morrison and A. G. Harms, Allegheny City, Pa.—The object of this invention is to simplify and render more convenient the mechanism connected with a muley saw, having more especial reference to the pitman head, but applying also to the buckle of the saw; and it consists in the method of adjusting the rivet pin of the pitman head, and in the construction of the buckle of the saw.

COVERING FOR STEAM BOILERS, STEAM PIPES, ETC.—James E. Sharp, Eleazer Ainsworth, and F. A. Sabbaton, Troy, N. Y.—This invention relates to a new and useful improvement in the mode of protecting steam boilers, steam pipes, or other articles from the effects of cold air, preventing thereby the condensation of steam and loss of heat.

COLUMNAR MATTRESS.—H. E. Smith, New York city.—This invention has for its object to furnish an improved mattress, which shall be so constructed that the air may pass through it freely to keep it pure; and which shall at the same time, be very elastic and comfortable as a bed.

ROCK DRILL.—Samuel Lewis, Williamsburg, N. Y.—This invention has for its object to improve the construction of an improved drill, patented June 15, 1869, and numbered 91,332, so as to make it more convenient in use and more effective in operation, enabling the length of stroke to be regulated at will, and any one of the drills to be raised and detached without disturbing the operation of the other drills.

KNIFE SCOURER.—J. Q. Adams and S. R. Goodall, Brooklyn, N. Y.—This invention relates to a new and convenient improvement for cleaning and scouring the blades of table knives. The invention consists in the use of a cylindrical box, which has a perforated bottom and is combined with an annular cork, secured against the bottom.

WOOD PULP MACHINE.—S. C. Taft, Mendon, Mass.—This invention relates to a new machine for reducing wood to a pulp, to prepare it for the manufacture of paper.

STEAM GENERATOR.—Michael Ritchey, Paterson, N. J.—This invention relates to a new steam generator, which is so constructed that the water, before it enters the steam boiler, will be thoroughly heated, and that, when the pumping ceases, a complete circulation may be kept up in the same.

TONGUEING AND GROOVING MACHINE.—B. J. Barber, Ballston Spa, N. Y.—This invention relates to a new manner of arranging the cutters on the heads of tongueing and grooving machines, with a view to preventing the tearing of the wooden fiber, and the consequent cracking of the wood, which is frequently occasioned on the ordinary machines now in use.

EASY CHAIR.—William Charles Poppendieche, New York city.—This invention relates to a new adjustable easy chair, which can be set and adjusted at its back and foot rest will be more or less inclined, and the arm rests extended, at the will of the person using it.

COMBINATION TOOL.—W. A. Sharp, Tama City, Iowa.—This invention comprises the combination in one tool, of a sliding hook, or gaze, level plumb, compass, callipers, try square, bevel, foot rule, edging plane, rabbet plane, screw driver, tape measure, and marking gage.

COUNTERSINKS.—Asa Wheeler, Brattleboro, Vt.—This invention relates to countersinks, and in the mode of making them. The bit is formed in the shape of a hollow eccentric cone, with an angular slot at the line from the point to the base of the cone, where the sides of the parts with the greater and lesser radii meet. The base of the bit is united to the handle by a section representing about half, or a little more than half a cone, having its base connected to the inverted base of the bit.

MACHINE FOR STAMPING LACE PAPER.—Ambrose Giraudat, New York city.—This invention relates to a new machine for stamping lace paper either in long strips or circular pieces, and has for its object to do away with the ordinary tedious manual process, and to permit the employment upon the same piece of a number of hammers. Theby the process of stamping will be greatly facilitated, and less labor required for the pro-

HAND DRILLING MACHINE.—James E. Hunter, North Adams, Mass.—This invention relates to a new and useful improvement in hand drilling machines, whereby the same are adapted to all the various purposes for which hand drills are used; and it consists in so constructing and arranging the parts that the drill may be used as a ratchet drill, with an intermittent motion, or with a continuous crank motion, and so that the drill head may be adjusted to drill holes at any angle.

STRAW CUTTER.—John S. Jones, Covington, Ind.—This invention has for its object to improve the construction of straw cutters, so as to make them more convenient and effective in use, enabling them to cut the straw or hay entirely off, and to feed the said straw or hay forward automatically.

SHOVEL HANDLE.—George C. Choate, Wyoming Station, Wyoming Territory.—This invention has for its object to furnish an improved shovel handle, which shall be so constructed and arranged that its end may be used as a tamping iron, or rammer, in leveling and raising railroad ties, in setting fence posts and telegraph poles, and for other purposes where a shovel and rammer are both required.

MOPS, MATS, WIPING CUSHIONS, ETC.—Hamilton Erastus Smith, Newark, N. J.—This invention has for its object to make sponge applicable to the rough usage which mops, mats, wiping pads, or cushions, or similar articles are subjected. The extreme porosity of the sponge makes the same particularly useful for the purposes of absorbing moisture, the weakness, however, has thus far disqualified it for the rough usage, as thereby it would be too rapidly destroyed. The invention consists in strengthening the sponge by inclosing it in porous fabric whereby it will become durable without losing its porous quality.

CLOTHES WRINGER.—Allen Magowan, Trenton, N. J.—This invention relates to improvements in clothes wringers, and consists in an improved arrangement of the pressure springs in connection with the sliding roller. Also in an improved arrangement of the support for the brackets holding the set screws by which the wringer is attached to the tube, or other support.

BELT SHIFTER.—W. E. Leighton, Pembroke, Ill.—This invention relates to improvements in belt-shifting apparatus, and consists in the application to the belt of a pair of clamping pulleys or rollers capable of clamping the belt between them, and of being turned obliquely to the line perpendicular to that of the belt either way, whereby the belt will be caused to move laterally, either to the right or left, as the said clamping pulleys are turned.

TYPE FOR PRINTING "TYPE RIBBON."—Henry Stephenson, William Thompson, and Wm. G. Blake, Sheffield, England.—This invention relates to a new and improved arrangement of type, whereby "type ribbon," so called, may be printed in various forms by type set up in forms the same as printing type. The invention consists in a set of type of peculiar construction, which, when arranged together in a form, and with a thick and thin brass or other metal rule, will represent the reverse of a design of "type ribbon," that is, a ribbon arranged in space and folded back and forth so as to present two or more rows of plain surfaces, with intervals between, one above another, with diagonal parts between the rows and terminating with waving ends, on which plane surfaces advertisements may be printed by ordinary printing type set up in forms with these improved type.

STREET CAR.—James A. Morrison, Brady's Bend, Pa.—This invention relates to improvements in street cars, and consists in an improved arrangement of means for applying hand-power for propelling them; also in an improved application of track-sweeping or clearing apparatus.

TUBE WELLS.—William R. Hamilton, Oakland, Pa.—This invention consists of semi-elliptic springs attached lengthwise, by means of sliding rings to the tubings of an artesian well, for the double purpose of steadying the tubing in the well, and sustaining, by their pressure against the sides of the bore, part of the weight of the tubing; and further in combining with the tubing, a pipe passing vertically downward for the purpose of conveying hot water to the bottom of the well in order to melt the thick oleaginous matter which always collects there and obstructs the lower orifices of the tubing.

MANUFACTURE OF ICE AND THE REFRIGERATION OF AIR AND SUBSTANCES.—D. L. Holden, New Orleans, La.—This invention relates to the manufacture of ice, and refrigeration of air by means of cold produced by the vaporization of chmogene, or other volatile hydrocarbon in a vacuum, the vapor drawn off in the production of the vacuum being returned to the receptacle again in a liquified form.

SAW-FILING CLAMP.—Platt Merrill, Port Sanilac, Mich.—This invention relates to a new and useful device for holding saws in the process of filing them, whereby files as well as much time and annoyance is saved.

WASHING MACHINE.—Hamilton Erastus Smith, Newark, N. J.—The object of this invention is to provide a rotary machine for washing large quantities of clothes by the employment of a washing cylinder within which the clothes are contained.

CORN PLOW.—M. C. Buffington, La Harpe, Ill.—This invention consists of certain improvements in the construction and management of parts of corn plows.

CONTINUOUS SELF-FEEDING COTTON GIN.—Jules Alfred Chaufourier, New York city.—This invention relates to improvements in machinery for ginning cotton, by means of which a continuous and self-acting feed is obtained. The machines is of simple construction, and is arranged so as to prevent breakage of the fibers of cotton, and does not require and particular attention; one man may easily manage several machines at one time.

UNITED STATES SUPREME COURT.

The United States ex rel. A. O. Bourn vs. Charles Goodyear, Executor.—Appeal from the Circuit Court for the Southern District of New York. A writ of habeas corpus is granted in the name of the United States for the purpose of setting aside the Goodyear patent on the ground of fraud in the procurement of its extension; and the question presented is, whether the alleged fraud in the procurement of the extension can be investigated and the patent canceled and declared void, in a proceeding instituted in the name of the United States, at the relation of one of its citizens directly for that purpose.

It has been decided in other branches of the Goodyear patent litigation that a patent or the extension of a patent cannot be attacked in any collateral proceedings, except in certain cases provided for by the act of 1836. A demurrer was interposed below in this case, on the grounds of want of equity in the relation, want of jurisdiction of the subject matter, the Statute of Limitations, and the expiration of the term of the patent before commencement of suit.

The demurrer was sustained pro forma without argument, and an appeal taken to this Court. The appellee insists, that as the appellant consented to the making of the decree appealed from, he is precluded from questioning it, or reviewing it by appeal. After presenting at length the points of the demurrer, it is submitted that the law makes the Commissioner of Patents the Judge of the merits of the application for the extension. The Relator concedes that the Commissioner is Judge, except in cases of fraud, and contends that in such cases the Courts have jurisdiction to set aside the patent so obtained. It is urged that as the action is brought to declare void the patent, and not to review the action of the Commissioner, in any manner, the Statute of Limitations does not apply.

Injury in his business, suffered by the relator, is submitted, sufficiently to qualify him as a party complainant in the suit. As to the expiration of the patent, it is alleged it has not expired in point of fact; but, if it had, the argument is, if the extension was fraudulent, it was void ab initio, and is as though it had not issued. All that can grow out of it, or come from it, is tainted with fraud.

The expiration of the term cannot prevent the patentee from recovering unpaid bounties and tariffs, or damages for infringement. Yet if the extension was obtained fraudulently, all these claims of the patentee are wholly unfounded, and his right to recover anything absolutely gone. J. H. Parsons, A. Payne, and Caleb Cushing for appellant; E. W. Stoughton and Wm. E. Curtis for appellee.

James C. Stimpson vs. Charles T. Woodman.—Error to the Circuit Court for the District of Massachusetts. This was an action to recover for the infringement of a patent to Woodman for an improvement in ornamenting leather. The description filed contained two distinct claims. One pertaining to raising the table so as to produce certain contact between the roller and the bed on which the leather rests when the pebbled impression is made. The other consists in combining a short metallic roller, having the required figure engraved upon its periphery with the propelling and operating machinery whereby the roller at the end of the radiator is brought in contact with the table of a curvature corresponding to the arc described by the roller in its vibrations on which the leather is placed for pebbling, and is rolled over the leather with suitable pressure to produce the required depression. The defense was, that long prior to Woodman's invention the pebbling roller was a well-known cutter's tool, effectively used in hand devices

and leather-finishing machines, interchangeably with other figuring tools; that Woodman's machine was fully anticipated by the machine of one Green, which had been used to operate not only non-rotating figured cylindrical tools but rotating cylindrical tool differing from the pebbling roller only in having a smooth instead of a figured surface; that the introduction of the pebbling roller into the Green machine was not a matter of invention, but of common knowledge and skill, and that the machine of Stimpson is substantially the same as the Green machine.

Under the charge of the Court the verdict was for Woodman, and the plaintiff in error brings the case here, contending that the introduction of an old mechanical device into an old machine, in the same mode, and for the same purpose that had been previously introduced into an analogous machine, is not a patentable novelty; and that, viewed as a combination of old elements, it is not new within the meaning of the patent law, and that viewed as a process or mode of operation, it is only what is known in law as a double use of the device on the one hand, and of the machine on the other, and therefore not the subject of a valid patent. It is contended, therefore, that the Court should have submitted to the jury the questions whether the pebbling roller itself was old, and had been used in prior machines; whether the other machinery, apart from the pebbling roller, was not old, and whether the mode of introducing the pebbling roller was not substantially the same as in prior machines, and was within the common knowledge and skill of mechanics; and it is claimed that had these questions been found in the affirmative, then under the rulings of the Court, as a matter of law, the claim of the patent must have failed. B. E. Curtis and George L. Roberts for the plaintiff in error; T. L. Wakefield, for the defendant.

Official List of Patents.

Issued by the United States Patent Office

FOR THE WEEK ENDING April 12, 1870.

Reported Officially for the Scientific American.

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- 101,698.—KNIFE SCOURER.—J. Q. Adams and S. R. Goodsell, Brooklyn, N. Y.
101,699.—DOOR BELL.—Wm. Allport, New Britain, Conn.
101,700.—STREET SPRINKLER.—J. A. Bancroft, Worcester, Mass., assignor to L. F. Bancroft and Andrew B. Yetter, New York city.
101,701.—CUTTER HEAD FOR PLANING MACHINE.—B. J. Barber, Ballston Spa, N. Y.
101,702.—TRUCK FOR MOVING BUILDINGS.—Jesse Barlow, Van Meter, Iowa.
101,703.—INKING APPARATUS.—Henry Barth, Cincinnati, Ohio.
101,704.—FIRE KINDLER.—Charles Batcheller, Des Moines, Iowa.
101,705.—HAY LOADER.—J. M. Boorman, Scarborough, N. Y.
101,706.—CORN PLOW.—M. C. Buffington, La Harpe, Ill.
101,707.—TIN CAN.—J. J. Burkert, New York city.
101,708.—APPARATUS FOR SEALING PIPE JOINTS.—William Cassidy, New Bedford, Mass.
101,709.—SELF FEEDING COTTON GIN.—J. A. Chaufourier, Paris, France.
101,710.—ROTARY SPADER.—James Chenoweth, Shelbyville, Mo.
101,711.—SHOVEL HANDLE.—G. C. Choate, Wyoming Station, Wyoming Territory.
101,712.—CLOTHES DRYER.—J. V. Clark, Camden, N. J.
101,713.—FANNING MILL.—Barnard Cortrite, Norwalk, Ohio.
101,714.—WASHING MACHINE.—W. H. Cox, Knox county, Ill.
101,715.—SASH HOLDER.—T. H. Davis, St. Joseph, Mo. Antedated April 6, 1870.
101,716.—MOP HEAD.—Hezekiah Dodge, Albany, N. Y. Antedated April 4, 1870.
101,717.—EARTH CLOSET.—J. A. Drake and W. R. C. Clark, New Orleans, La.
101,718.—BASE BURNING STOVE FOR A STEAM HEATING BOILER.—W. B. Dunning, Geneva, N. Y.
101,719.—HARVESTER.—Rudolf Eickemeyer, Yonkers, N. Y.
101,720.—SULKY CULTIVATOR.—Frank Farnsworth, Frankfort, Ill.
101,721.—CORN HARVESTER.—Henry Flesher, Springfield, Ill.
101,722.—HAIR MEDICINE.—A. J. Fletcher, Red Bluff, Cal.
101,723.—LAMP.—S. W. Fowler, Brooklyn, N. Y.
101,724.—CAR SPRING.—Carlos French, Seymour, Conn.
101,725.—WATER WHEEL.—J. L. Frisbie, Hillsdale, Mich.
101,726.—SWIVEL FOR TEMPER SCREWS.—Thomas Graham, S.amburg, Pa.
101,727.—WASHING MACHINE.—John A. Hall, Newburg, Canada.
101,728.—PHOTOGRAPHIC PRINTING APPARATUS.—James H. Hamilton, Sioux City, Iowa.
101,729.—DITCHING PLOW AND HEDGE GRADER.—Daniel Harmon, Coles County Ill.
101,730.—CORK-CUTTING MACHINE.—E. F. Harrington, Boston, assignor to himself and John L. Munroe, Woburn, Mass.
101,731.—POTATO SEPARATOR.—Richard Haviland (assignor to himself and Charles Ware), North Branch, Md.
101,732.—MACHINE FOR COLORING PAPER HANGINGS.—John Heist (assignor to himself, C. Zink, and H. Spoehrer), New York city.
101,733.—HEATING STOVE.—M. C. Hull, New York city.
101,734.—PICKER FOR LOOMS.—Joshua Hunt and Albert Stockwell, Providence, R. I.
101,735.—APPARATUS FOR EXTRACTING MADDR.—James Hunter, Philadelphia, Pa.
101,736.—MACHINE FOR SEPARATING FLOUR FROM BRAN.—W. W. Huntley and Alpheus Babcock (assignor to W. W. Huntley and Frank Swift), Silver Creek, N. Y. Antedated February 22, 1870.
101,737.—MANUFACTURE OF GLASS.—C. H. Jenkins, Boston, Mass.
101,738.—TUG-FASTENING FOR WHIFFLETREE.—L. A. Johnson, Candor, N. Y.
101,739.—VIBRATING COLTER FOR PLOWS.—J. S. Johnston, Rockford, Ill. Antedated April 1, 1870.
101,740.—FAN ROCKING-CHAIR.—Geo. R. G. Jones, Memphis, Tenn.
101,741.—STRAW CUTTER.—J. S. Jones, Covington, Ind.
101,742.—TREMULO ATTACHMENT FOR REED OR PIPE ORGANS.—Michael J. Kerigan, Boston, Mass.
101,743.—SPLINT FOR FRACTURED LIMBS.—George S. King, Washington, D. C.
101,744.—SINK APPARATUS FOR DRAINING CELLARS.—Adam Knacker, Meadville, Pa.
101,745.—BELT SHIFTER.—W. E. Leighton, Pembroke, Me.
101,746.—ROCK DRILL.—Samuel Lewis, Williamsburg, N. Y.
101,747.—STEAM ENGINE.—G. E. Long, Harrisburg, Pa.
101,748.—LAMP.—E. E. Lyon, Worcester, Mass.
101,749.—CLOTHES WRINGER.—Allen Magowan, Trenton, N. J.
101,750.—MACHINE FOR CORRUGATING SHEET METAL.—Wm. Mann, Newcastle, Pa.
101,751.—RAILWAY.—E. G. Markley, Sunbury, Pa.
101,752.—HORSE HAY RAKE.—R. W. McClelland, Springfield, Ill. Antedated April 4, 1870.
101,753.—RAILROAD CAR STOVE.—Samuel Meredith (assignor to himself, John Wood, and C. B. Dodd), West Philadelphia, Pa.
101,754.—SAW CLAMP.—Platt Merrill, Port Sanilac, Mich.
101,755.—RAILWAY CAR SEAT.—Ezra Miller, New York city.

- 101,756.—FEED-WATER REGULATOR AND LOW-WATER ALARM.—A. W. Morrell, Niles, Mich.
101,757.—TRACK CLEARER FOR STREET CARS.—J. A. Morrison, Brady's Bend, Pa.
101,758.—TABLE FOR CHANGING GAGE OF RAILWAY CAR TRUCKS.—G. F. Morse, Portland, Me.
101,759.—GRAIN DRYER.—I. Y. Munn, Chicago, Ill.
101,760.—CIRCULAR SAW MILL.—Peter Neeb, Buffalo, N. Y. Antedated April 5, 1870.
101,761.—TANK FOR STORING OIL.—Person Noyes, Lowell, Mass.
101,762.—BOILER FEEDER.—S. J. Parker, Williamsport, Pa.
101,763.—MACHINE FOR BURING AND CLEANING WOOL, ETC.—Ziba Parkhurst, Milford, Mass.
101,764.—EASY CHAIR.—W. C. Poppendieche, New York city.
101,765.—GATE.—Fitch Raymond, Cleveland, Ohio.
101,766.—PLOW FEEDER.—Joseph Richardson, Ballston Spa, N. Y.
101,767.—STEAM GENERATOR.—Michael Ritchey, Patterson, N. J.
101,768.—WASHING MACHINE.—J. D. Roysse, and John Roysse, Cane Valley, Ky.
101,769.—STREET LAMP.—W. G. Schmidlin and J. W. Driscoll, New York city.
101,770.—MONEY SAFE.—Philipp Schreyer, New York city.
101,771.—REGULATING DEVICE FOR GAS BURNERS.—Henry Schultz, assignor to himself and Henry C. Bentley, Milwaukee, Wis.
101,772.—STORE AND HOUSEHOLD GRAPPLE.—John Seltzer, Philadelphia, Pa. Antedated March 28, 1870.
101,773.—IMPLEMENT.—W. A. Sharp, Tama City, Iowa. Antedated April 7, 1870.
101,774.—TUBULAR WELL.—J. Shaw, Bridgeport, Conn. Antedated April 4, 1870.
101,775.—ROOFING TILE.—George Shove, Yarmouth Port, Mass.
101,776.—MULTIPLE SPONGE.—Hamilton E. Smith, Newark, N. J.
101,777.—MOP, MAT, AND WIPING CUSHION.—H. E. Smith, Newark, N. J.
101,778.—WASHING MACHINE.—H. E. Smith (assignor to Mrs. Mary Jane Smith), Newark, N. J.
101,779.—MECHANISM FOR OPERATING THE FEEDING WHEEL IN SEWING MACHINES.—Friedrich Spoehr, Philadelphia, Pa.
101,780.—APPARATUS FOR MOVING THE CARS.—E. Springer, Davis, Ill.
101,781.—PICTURE NAIL.—J. H. Squier and E. J. Warner, Newark, N. J.
101,782.—VENEER CUTTER.—William Steele, Sistersville, W. Va.
101,783.—MANUFACTURE OF SUGAR AND ALCOHOL FROM LICHENS.—Sten Stenberg, Stockholm, Sweden.
101,784.—MILK CAN.—A. Sunderland, Madison, Ohio.
101,785.—WOOD PULP MACHINE.—Stephen C. Taft, Mendon, Mass.
101,786.—PAPER FOR CHECKS, DRAFTS, NOTES, ETC.—G. F. Thomas, Jr., Brooklyn, N. Y.
101,787.—DUST ARRESTER FOR RAILROAD CARS.—W. M. K. Thornton, Rolla, Mo.
101,788.—SCROLL-SAWING MACHINE.—E. A. Tripp, Newark, N. J.
101,789.—FRUIT AND EXTENSION LADDER.—Melzer Tuell (assignor to himself, Lewis D. Young, and B. F. Fenner), Penn Yan, N. Y. Antedated April 9, 1870.
101,790.—COUNTER AND SHOW CASE.—L. F. Vienot, New York city.
101,791.—RAILWAY CAR BRAKE.—Edward P. Vining, Grand Rapids, Mich.
101,792.—PISTON PACKING.—Ellery A. Walker, Hyannis Mass.
101,793.—COAL DIGGING APPARATUS.—William Ward, Pittsburgh, Pa.
101,794.—SHIRT BOSOM AND WEISTBAND COMBINED.—E. H. N. Warner, New York city.
101,795.—GRATE BARS FOR STEAM GENERATORS.—Marshall D. Wellman, Allegheny county, Pa.
101,796.—COUNTERSINK.—Asa Wheeler (assignor to Geo. B. Wheeler), Brattleborough, Vt.
101,797.—DISK STAND.—H. C. Wilcox, West Meriden, Conn., assignor to Woods, Sherwood & Co., Lowell, Mass.
101,798.—SLATE FRAME.—W. A. Wilde, Malden, Mass.
101,799.—STOVEPIPE SHELF.—Joseph W. Wilder, Leominster Mass.
101,800.—MACHINE FOR TWISTING AND CURLING HAIR.—P. Wisdom, Brooklyn, and J. H. Wilcox, New York city.
101,801.—CHAS. B. Witherington.—Suspended.
101,802.—ROCKER FOR CHAIRS.—Wilhelmina J. Zakrzewska, Berlin, Prussia.
101,803.—PADLOCK.—A. M. Adams, Washington, D. C.
101,804.—WOODEN BOX.—Olif Abell, Wolcott, Vt.
101,805.—WOODEN BOX.—Olif Abell, Wolcott, Vt.
101,806.—APPARATUS FOR LIGHTING AND EXTINGUISHING GAS.—A. N. Allen and R. H. Dewey, Pittsfield, Mass.
101,807.—OIL CUP.—A. C. Ancona, Evansville, Ind.
101,808.—ATTACHING KNOB TO SPINDLES.—M. Andrew, Melbourne, Colony of Victoria.
101,809.—CORN HUSKER.—L. Augustus Aspinwall, Albany, N. Y.
101,810.—CHURN.—Mahlon B. Atkinson, Georgetown, D. C.
101,811.—CLOTH-STRETCHING MACHINE.—Solomon H. Austin, Providence, assignor to W. J. Austin, Smithfield, R. I.
101,812.—APPARATUS FOR TANNING BY INFILTRATION.—J. G. Baker, Wilmington, Del.
101,813.—STAND FOR TEA AND COFFEEPOTS.—J. H. Bigelow, Worcester, Mass.
101,814.—AUTOMATIC RELIEF VALVE.—A. M. Black, Providence, R. I.
101,815.—TUBULAR SHAFT FOR CLOCKS.—G. H. Blakesley, Bristol, Conn.
101,816.—WIRE WORK FOR RAILINGS, ETC.—W. R. Boerner, (assignor to himself and C. R. Boerner), Chicago, Ill.
101,817.—MECHANISM FOR STOPPING THE SHUTTLE IN LOOMS.—S. Boorn, Lowell, Mass.
101,818.—BRAKE BLOCK FOR WAGONS.—Wm. H. Bradt, New Scotland, N. Y.
101,819.—HORSE COLLAR BLOCK.—E. L. Brazenor (assignor to Richard Brazenor), Birmingham, Great Britain.
101,820.—SPECTACLE FRAME.—Chauncey Buckley (assignor to Charles Parker), Meriden, Conn.
101,821.—SPOKE SOCKET FOR CARRIAGE WHEELS.—A. J. Carleton, Springfield, Mass.
101,822.—COTTON AND TOBACCO PRESS.—Nash Cheek, Chapel Hill, N. C.
101,823.—INDIARUBBER CARPETING AND EMBOSSED MATTING.—John H. Cheever, New York city.
101,824.—COMBINED PULLEY AND CLAMP.—Milton W. Clark, Worcester, Mass.
101,825.—SEAT AND CAP FOR TIE AND SILL PLATE.—P. S. Clinger, Conestoga Center, Pa.
101,826.—BREECH-LOADING FIRE-ARM.—J. J. Cloes (assignor to E. De Beaumont), Liege, Belgium.
101,827.—RAILROAD TANK VALVE.—M. Cowing (assignor to himself, John P. Cowing, Philo Cowing, and George Cowing), New York city.
101,828.—MANUFACTURE OF ARTIFICIAL FUEL.—J. F. Crans ton, J. H. Banks, and J. M. Inversoll, Springfield, Mass.
101,829.—MACHINE FOR ARRANGING NEEDLES.—C. O. Crosby, New Haven, Conn.
101,830.—BRONZE-COLLECTING ATTACHMENT TO BRONZING MACHINES.—Samuel Crump, New York city.
101,831.—TOE CALK FOR HORSESHOES.—George Custer, Monroe, Mich.
101,832.—PRESSURE GAGE.—Herman Chwatal, New York city, assignor to W. Staehlen and L. Portong. Antedated April 2, 1870.
101,833.—COAL BOX.—Benjamin Richard Deacon, Montreal, Canada.
101,834.—PERCH SPRING CLIP.—John Deeble, Plantsville, Conn.
101,835.—MANUFACTURE OF BUILDING BLOCKS FROM SLAG.—C. Diebold, Lebanon, Pa., assignor to E. L. Butterfield, trustee, Brooklyn, N. Y.
101,836.—WHEAT DRILL.—Joseph Dillier, Greensburg, Ind.
101,837.—BAG FASTENER.—S. C. Dix, Neponset, Ill.
101,838.—APPLE CORER AND SLICER.—R. J. Dodd, Orth, Ind.