

Recent American and Foreign Patents.

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

APPARATUS FOR FORCING WATER.—James M. Rucker, Forrest Depot, Va.—This invention consists in the combination of a subterranean reservoir, so situated that it may receive water from the surrounding earth, with a pipe for introducing air under pressure into the upper part of the reservoir, a pump for supplying such air and putting the requisite pressure upon the same, and with a second pipe for conducting the water forced out the reservoir by the pressure of the introduced air to the spot where it is needed.

HOLDING JACK.—Frank Hollenberry, Frizellburgh, Md.—This invention consists of a stationary upright frame provided with a centrally vertical sliding bar, which is raised and lowered by means of two levers, one of which serves to hold the bar at the height to which it had been raised, while the other is taking a fresh hold, both levers operating upon the bar through the medium of clamps which bite the bar, one when pressure or weight is applied to the bar and the other when pressure is applied to the lever.

MACHINE FOR CUTTING SLATS FOR WINDOW BLINDS.—John W. Heller, Shannon, Md.—This invention has for its object to cut from a piece of wood of any dimensions a splint or slat of the proper width and thickness, such slat passing off through the stock in the same way that shavings are conducted away in an ordinary plane.

SHEAVE BLOCK.—Thos. H. Rice, Baltimore, Md.—This invention consists of friction rollers, mounted in boxes, which are placed in both the inner sides of a pulley block in such manner that the rollers project inward beyond the surfaces of the sides, so as to prevent the sheaves from coming in contact with the block, and wearing the same away.

TILE-CUTTING MACHINE.—Oscar F. Monfort, Dearborn, Mich.—This invention relates to improvements in machines for cutting the tile as it issues from the tile machine in continuous form into short sections, and consists in the application to the carrying table between two endless belts of a fine wire or steel-plate cutter, stretched between an arm and a shaft, by which the arm is revolved so as to be revolved around the shaft and forced through the tile while moving along, the cutter being arranged to move with the tile, while cutting, and back again after cutting, and the arm which supports the swinging end of the cutter being arranged to pass between the cut sections. The invention also comprises a carrying table, for passing the cut pieces beyond the arm which supports the cutter suspended on the shaft, and held in position by a weight, so that the arm which carries the cutter may pass around it.

RAILROAD SWITCHES.—J. H. Stockton, Thompson, Ga.—This invention relates to improvements in railroad switches, and consists in the application to the switch rails or the bars, for moving them of a weight, and suitable levers or gears, and a holding and tripping lever, so that the tripping bar or lever being moved by the wheel of the advancing locomotive will trip the weight and let it fall to close the switch.

MAINSRING WINDER.—Michael D. Kelly, Cadiz, Ky.—This invention relates to improvements in tools for winding the mainsprings of watches and inserting them in the barrels, and consists in a pair of bars pivoted together at one end by a compass or rule point, and having a semicircular recess at the free ends for the reception of the spring, to be coiled therein by a winding shaft of any kind, and the said bars are provided with gaging springs to vary the depth of the recesses; also with pins for gaging the recess to receive the spring and for controlling the relation of the winder with the winding shaft. The said bars are also provided with an opening spring and closing screw.

DIAPER PINS.—Isaac W. Stewart, New York city.—This invention relates to improvements in the construction of diaper pins, and consists in an improved mode of constructing the shield and attaching it to the pin.

PRESSES.—G. W. Swinebroad, Bolivar, Tenn.—This invention relates to improvements in hay, cotton, and other presses, and consists in operating the follower by means of levers, links, gripping blocks, and vertical bars, the gripping blocks working on the vertical bars.

WATCHMAKERS' TOOL.—Michael D. Kelly, Cadiz, Ky.—This invention relates to improvements in tools for watchmakers' and repairers' use, for holding the watch plates and other articles, also for holding the tools with which the work is done in all operations now commonly done in a lathe, such as drilling, milling, jewel setting, freeing, gaging, pinion centering, uprighting, and the like. The said improved tool is also applicable for the uses of an anvil.

MACHINE FOR TURNING AXLETREES.—William H. Heffley, Rochester, Ind.—This invention has for its object to construct a machine for turning the ends of axletrees so that the same will correspond exactly with the pinholes or thimbles into which they are to be fitted. The invention consists chiefly in providing a mechanism, whereby the inner form of the thimble is exactly transferred to the outer side of the axle, that is to say, a set of levers whose ends are pressed against the inner face of the thimble control the cutters which turn the axle.

TRUSS PADS.—Dr. S. S. Ritter, Philadelphia, Pa.—This invention consists in a new method of manufacturing pads for trusses, whereby the time and expense of the same are materially reduced as compared with that attending the ordinary method.

SPRING WAGON SEAT.—G. W. Diller, Odell, Ill.—The object of this invention is to furnish an improved device for attaching springs of wagon seats to wagon boxes or bodies, whereby the strain upon the springs and box shall be greatly lessened and also other obvious advantages obtained.

FENCE.—William Bartlett, Little Hocking, Ohio.—This invention relates to a zigzag or worm fence, and consists in posts planted at an inclination all leading inward or toward the vertical plane cutting centrally lengthwise of the fence for the purpose of rendering the fence firmer than as though the posts were upright.

CORN HUSKER.—S. L. Bligh, Sandy Lake, Pa.—The object of this invention is to construct an instrument by means of which the husking of corn can be accomplished in an easy and expeditious manner.

HAIR TRIGGER ATTACHMENT TO FIRE-ARMS.—Joseph Deutz, San Antonio, Texas.—This invention relates to a new hair trigger attachment which is applicable to fire-arms of all kinds, and of such simple construction that it will be reliable and durable.

BARBER'S FURNITURE.—Otto Stoelker, Montgomery, Ala.—This invention relates to a new apparatus which is to be set up in barber shops with an object of economizing time and labor, and preventing waste of material.

MOLDING CUTTER HEAD.—Darius Stevens, Danbury, Conn.—This invention has for its object to furnish an improved cutter head for holding the cutters for forming moldings, which shall be simple in construction, convenient in use, and will hold the cutters securely.

FAN BLOWER.—John Ericsson, New York city.—This invention relates to a new multiplying fan blower of that class in which a series of wings are rotated between a series of diaphragms for compressing the air by centrifugal force, and utilizing it in the compressed state for suitable purposes. The invention consists chiefly in the use of a rotary case and stationary shaft instead of the rotary shaft and stationary cases heretofore employed. The necessity of constructing the case in sections, so as to enable the introduction of the several wings that are mounted upon the shaft, is thus overcome and the case may be made in one single piece, and consequently much cheaper than the ordinary blower now in use. The amount of rotating surface gained by the case revolve adds also considerably to the efficiency of the machine.

CAR COUPLING.—J. H. Johnson, Dresden, Mo.—The object of this invention is to provide a coupling for railroad cars whereby the inconvenient links and the necessity of handling the same can be dispensed with. The invention consists in making the coupling boxes or main and saw heads serve the purposes of links, so that those of two cars can be locked together by means of a horizontal coupling pin dropped in from above

LATH SAWING MACHINE.—J. J. Knowlton, Philadelphia, Pa.—This invention relates to a new construction of machine for sawing laths, pickets etc., and consists in the application of vertically adjustable guides, which hold the sawed pieces and prevent them from springing or twisting on the saws. The invention consists also in setting the feed rollers at an angle, *i. e.*, slightly oblique, so that they will crowd the stuff against the stationary guide or fence, and thereby the requisite straight guidance will be obtained.

FENCE POST.—O. L. Larkin, Otto, N. Y.—This invention has for its object to reduce the expense and increase the durability of fence posts, and consists in making the foot or lower part of each post of metal, while the upper part is made of wood to allow the nailing on of planks, etc.

DRAIN AND WATER-PIPE MACHINE.—John W. Stockwell, Portland, Me.—This invention has for its object to furnish a simple and convenient machine for forming drain and water pipes, which shall be so constructed and arranged as to pack the material uniformly throughout the length of the pipe.

GUIDE FOR CIRCULAR SAWS.—Alexander Middlebrook, Glasgow, Mo.—This invention relates to a new guide for circular saws, which is so constructed that the pins can be simultaneously moved in the same direction, without requiring to be directly handled. The hands of attendants will thereby be kept from dangerous contact with the saw.

STEAM GENERATOR.—Joseph A. Miller, New York city.—The object of this invention is to construct a steam generator, which will insure a thorough circulation of the water, to expose the same to all the heating surfaces, and in which the steam will be effectually separated from all water that may arise with it into the upper steam passage. The invention consists in the application to a vertical or inclined water and steam chamber of a series of continuous circulating pipes, of which each enters the chamber with both ends. Each pipe receives water at the lower, and discharges steam at the upper end, and the steam is therefore produced by the circulation of the water through the said pipes.

COFFEE MILL.—F. C. Richer, Gilmer, Texas.—The object of this invention is to simplify the construction of upright coffee grinders, so that the same can be made cheaper and stronger than heretofore. The invention consists in constructing the entire mill of three pieces, the grinder being one, while the case or shell is made of two parts.

HAY LOADER.—William H. Gray, Ashfield, Mass.—This invention relates to a new and useful improvement in machines for loading hay, whereby that laborious operation is performed by horse power, and in the most expeditious manner.

SELF-ACTING COMPRESSION FAUCET.—Edward Noble, North Haven, Conn.—This invention relates to a new and useful improvement in faucets, and consists in an arrangement whereby the faucet valve is closed by the pressure of the fluid, and opened by means of a lever and inclined plane.

PORTABLE GAS-PIPE VISE.—Thomas Marshall, Paterson, N. J.—This invention has for its object to furnish an improved portable vise for holding gas pipes, while being cut off or having screw threads cut upon their ends, and which shall be so constructed that the workman can conveniently carry it in his bag, and which may be readily attached to a bench, table, or other support.

VINE CUTTER OR TRIMMER.—H. W. White, Joppa Village, Mass.—This invention has for its object to furnish an improved implement for cutting or trimming the runners from strawberry vines, planted in hills, which shall be so constructed as to cut off all the runners from the hill at a single operation, and which shall at the same time be simple in construction, effective in operation, and conveniently operated.

SLIDE CHUCK FOR LATHES.—C. F. Stackpole, Woburn, Mass.—This invention has for its object to furnish an improved slide chuck for lathes, designed more particularly for holding cranks while being turned, but equally applicable for holding other work, and which shall be simple in construction, and easily adjusted.

SEPARATOR ATTACHMENT FOR THRASHING MACHINES.—Moses A. Keller, Littlestown, Pa.—This invention relates to improvements in grain separating and winnowing apparatus, and consists in a straw carrier, composed of long bars, carrying teeth and short bars, mounted near each end to crank shafts, which move them up and down, and forward and back, over an ascending table, composed of transverse slats or bars with spaces between, made adjustable to vary the spaces, which let the grain and chaff through to an endless carrier, which takes it up to the hopper of the winnower, arranged under the case of the carrier. The said case and the case containing the straw-carrying attachment, are made in two parts, and arranged for detaching the carrying apparatus to use the winnower alone. The invention also comprises a regulating apparatus for the winnower, to open or close the air passages, and a straw-carrying attachment. It also comprises certain improvements in driving gear for working a secondary straw carrier.

AXLE GAGE.—Rollin C. Kelly, Brandon, Wis.—This invention relates to a new and useful improvement in apparatus for obtaining the true bevel for the arms of the axles of wheeled vehicles.

STEAM BOILER.—D. A. Morris, New York city.—This invention relates to new and important improvements in steam boilers, whereby they are made much more safe, durable, and effective than boilers of ordinary construction.

MACHINE FOR MAKING MATCH SPLINTS.—Denslow Burhaus, Burlington, Iowa.—This invention relates to a new and useful improvement in machines for making splints for lucifer matches, whereby that operation is greatly facilitated.

POUNGING MACHINE.—John Rosenkranz, Boston, Mass.—This invention relates to a new and useful improvement for machines for pouncing hats whereby the labor is greatly lessened and the operation is performed in the most thorough and expeditious manner.

BEDSTEAD FASTENING.—P. Maulding and John U. Fraley, Marshall, Texas.—This invention relates to a new and useful improvement in mode of fastening the rails to the posts of bedsteads, whereby many of the objections to the ordinary bedstead fastening are obviated.

TURNING AND SCREW-CUTTING LATHES.—Philip H. Pitts, Waverly, Mo.—This invention relates to improvements in turning and screw-cutting lathes, and consists in a lathe so arranged that, by shifting some of the parts, it may be readily adjusted either for turning or cutting screw threads on bolts.

STEAM PUMPING ENGINE.—Thomas E. Blunt, Brookfield, Ohio.—This invention relates to a new and useful improvement in steam steam pumping engines, and consists in exhausting the steam from the engines into the discharge pipe of the pump, thereby making a condenser of the discharge, and materially increasing the efficiency of the engine.

SLIDING DOOR FOR STREET CARS.—Daniel R. Hart, St. Louis, Mo.—This invention has for its object to furnish an improved sliding door for that class of street cars known as the fare-box car, and which has heretofore been made with a swinging door and covered step, so to render said cars more convenient in use, both for driver and passengers.

SPRING BED BOTTOM.—Chas. T. Baade, Brooklyn, N. Y.—This invention relates to improvements in the construction and arrangement of spring-bed bottoms in which long wood slats or springs are used in combination for the head and center of the bottom, the foot ends of the wood springs being arranged to rest on a wood bolster or cross-piece of frame, and the head ends being bent and suitably shaped to be used in substitution to the stuffed bolsters sometimes used.

DITCHING PLOW.—S. S. Wood, Brooklyn, N. Y.—This invention relates to new and useful improvements in plows for cutting ditches for laying drain tile, draining off water, or other purposes, and consists, firstly, in a device for adjusting the beam vertically, so that the pitch of the plow may be varied as it descends in the process of cutting the ditch; and, secondly, in an adjustable branch handle, on the standard handle, by means of which the attendant is enabled to guide and control the plow, as it descends, while walking on the surface of the ground.

Official List of Patents. Issued by the United States Patent Office FOR THE WEEK ENDING August 14, 1870. Reported Officially for the Scientific American SCHEDULE OF PATENT OFFICE FEES On each caveat. \$15 On filing each application for a Patent (seventeen years). \$20 On issuing each original Patent. \$20 On appeal to Commissioner of Patents. \$20 On application for Reissue. \$20 On application for Extension of Patent. \$50 On granting the Extension. \$50 On filing a Disclaimer. \$10 On an application for Design (three and a half years). \$10 On an application for Design (seven years). \$10 On an application for Design (fourteen years). \$10 In addition to which there are also payable stamp taxes. Residents of Canada and Nova Scotia pay \$500 on application. For copy of Claim of any Patent issued within 30 years. \$1 A sketch from the model or drawing, relating to such portion of a machine as the Claim covers, from \$1 upward, but usually at the price above named. The full Specification of any patent issued since Nov. 20, 1866, at which time the Patent Office commenced printing them. \$1.25 Official Copies of Drawings of any patent issued since 1836, we can supply at a reasonable cost, the price depending upon the amount of labor involved and the number of views. Full information, as to price of drawings, in each case, may be had by addressing Patent Solicitors, No. 37 Park Row, New York

- 106,302.—LAMP BURNER.—Benjamin F. Adams, Boston Mass.
106,303.—LAMP BURNER.—Benjamin Franklin Adams Boston, Mass.
106,304.—EQUALIZING THE MAINSPRING OF TIME-PIECES.—J. P. Adams, Ipswich, Mass.
106,305.—CUTTING APPARATUS FOR HARVESTERS.—Henry C. Aydelott, Carthage, Ind.
106,306.—HARNESS-OPERATING MECHANISM FOR LOOMS.—John Ashworth, North Andover, Mass.
106,307.—SEWING MACHINE.—M. M. Barnes, North Adams, Mass.
106,308.—STONE-SAWING MACHINE.—Charles Bateman, Baltimore, Md.
106,309.—TOP PLATE OF COOKING STOVE.—Milton Bennet, Dayton, Ohio.
106,310.—CHISEL FOR CUTTING GAIRS.—Hiram Bigelow, Skowhegan, Me.
106,311.—HAND CORN HUSKER.—S. L. Bligh, Sandy Lake, Pa.
106,312.—STEAM PUMPING ENGINE.—T. E. Blunt, Brookfield, Ohio.
106,313.—COMPOUND FOR FERTILIZER.—Gustave Bourgate, New York city.
106,314.—FOOT MEASURE.—John C. F. Bremser, St. Louis, Mo.
106,315.—HINGE.—J. D. Brown, Madisonville, Ohio.
106,316.—SPRING BED BOTTOM.—C. T. Baade, Brooklyn, N. Y.
106,317.—DEVICE FOR LEVELING BILLIARD AND OTHER TABLES, ETC.—B. W. Bull, New York city.
106,318.—TABLE.—Ernst Brucker, Old Tappan, N. J.
106,319.—MACHINE FOR MAKING MATCH SPLINTS.—Denslow Burhaus, Burlington, Iowa.
106,320.—COMBINED DRILL AND SEEDING MACHINE.—J. E. Buxton, Owatonna, Minn. Antedated July 2, 1870.
106,321.—PADDING FOR HARNESS.—James Cormac and Alexander Stobbs, Hector, N. Y.
106,322.—MANUFACTURE OF RESIN SOAP.—D. B. Chapman, New London, Conn.
106,323.—TABLE KNIFE.—Matthew Chapman, Greenfield, Mass.
106,324.—PROTECTING SAFES AND VAULTS FROM BURGLARS.—C. T. Chester, Englewood, N. J.
106,325.—POST-OFFICE CABINET FOR SUNBAY-SCHOOL AND OTHER ROOMS.—Wm. M. Clark and Alexander Clark, Pittsburg, Pa.
106,326.—WELL BUCKET.—Alvens J. Clemens, Aberdeen, Miss.
106,327.—ROOFING FELT.—W. B. Coates (assignor for one half his right to Joseph Leeds), Philadelphia, Pa. Antedated August 4, 1870.
106,328.—GARTER.—Charles Coester, Jr., and Jas. L. Moore, Bridgeport, Conn.
106,329.—STRAW CUTTER.—Samuel Colahan, Cleveland, Ohio.
106,330.—APPROACH GATE.—S. H. Cole, East Enterprise, Ind.
106,331.—PADDLER WHEEL.—R. H. Connelly, Philadelphia, Pa.
106,332.—STRETCHER FOR PICTURE FRAME.—J. D. Crocker, Norwich, Conn.
106,333.—COMPOUND FOR CURE OF COUGHS, ETC.—John Cushions, Wellington, Ohio.
106,334.—LOOM.—H. D. Davis, North Andover, Mass.
106,335.—SHEAVE.—H. D. Davis, North Andover, Mass.
106,336.—HORSE HAY RAKE.—S. L. Denney, Christiana, Pa. Antedated August 5, 1870.
106,337.—GUN LOCK.—Joseph Deutz, San Antonio, Texas.
106,338.—SPRING SEAT FOR VEHICLES.—G. W. Diller, Odell, Ill.
106,339.—PITMAN CONNECTION FOR HARVESTERS.—Joseph Dixon and M. B. Sampson, Edinville, Iowa.
106,340.—EXTENSION TABLE SLIDE.—William Donoghue, Philadelphia, Pa.
106,341.—HAME FOR HARNESS.—Wm. Duncan, Spring Hill, Ind.
106,342.—HARVESTER RAKE.—Wm. T. Eastes, Summitville, Ind.
106,343.—INVALID CHAIR AND LOUNGE.—William T. Eastes, Summitville, Ind.
106,344.—PLOW.—Isaac Eastwood, Lanark, Ill.
106,345.—RECORDING PRESSURE GAGE.—Jarvis B. Edson, Brooklyn, N. Y.
106,346.—INDIA-RUBBER SHOE.—Lewis Elliott, Jr., and George H. Fowler (assignors to L. Canbee & Company), New Haven, Conn.
106,347.—MANUFACTURE OF WROUGHT AND PUDDLED IRON.—William Ennis, Philadelphia, Pa.
106,348.—FAN BLOWER.—John Ericsson, New York city.
106,349.—BENCH VISE.—G. M. Evans, Pittsburg, Pa.
106,350.—RAISIN SEEDER.—H. G. Fiske (assignor to Geo. L. Taylor and Dwight Holland), Springfield, Mass.
106,351.—HINGE.—Charles Gaylord, Washington, D. C.
106,352.—OVEN.—D. J. George, Arcade, Ind.
106,353.—TABLE-LEAF SUPPORTER.—George L. Gerard, New Haven, Conn.
106,354.—CULTIVATOR.—John L. Graham, Bentley Station, Ill.
106,355.—HAY LOADER.—W. H. Gray, Ashfield, Mass.
106,356.—BUCKLE WITH BUTTON-HOLE ATTACHMENT.—B. J. Greely, Boston, Mass.
106,357.—APPARATUS FOR RAKING AND BINDING GRAIN.—T. K. Griffith, Redstone, Pa. Antedated August 4, 1870.
106,358.—STEERING APPARATUS.—Charles Godfrey Gumpel, No. 49 Leicester Square, London, England. Patented in England Nov 2, 1869.
106,359.—MACHINE FOR PREPARING APPLES FOR THE MANUFACTURE OF CIDER.—G. B. Hamlin, Willimantic, Conn.
106,360.—GEARING AND SELF-ADJUSTING SHAFT.—George B. Hamlin, Willimantic, Conn.
106,361.—WHEEL HUB.—J. B. Hards, Chicago, Ill.
106,362.—DOOR FOR STREET CARS.—Daniel R. Hart, St. Louis, Mo.
106,363.—LAMP BURNER.—H. W. Hayden (assignor to Holmes, Booth & Haydens), Waterbury, Conn.
106,364.—MACHINE FOR TURNING AXLE TREES.—William H. Heffley (assignor to himself and David Barb), Rochester, Ind.
106,365.—MANUFACTURE OF IRON AND STEEL.—James Henderson, New York city