

Recent American and Foreign Patents.

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

LETTER ENVELOPES.—Edward S. Ellis, Taunton, Mass.—This invention relates to improvements in envelopes for inclosing letters, and it consists in an arrangement calculated to facilitate the opening of the same; also, to retain the letter after being opened, and the inclosure replaced in it.

SECURING WHEEL TIRES.—Anthony Huegler, Sullivan, Mo.—This invention consists in arranging the ends of the tire to lap each other, for a considerable distance, serrating or grooving the lapping surfaces so as to hold firmly when clamped together, and clamping them together by a bolt, passing radially through them (one of which is slotted), and through a short metal felloe, introduced in a gap prepared between the ends of the wood felloes, the said felloes being secured to them by bolts, passing through flanges on the ends into the ends of the said wood felloes. This invention also comprises the application to the ends of the wood felloes, of corner plates, to protect the corners from crushing or brooming under the action of the concussions of the metal felloe and the tire against them, when in use.

UNIVERSAL MANDREL FOR LATHES.—James Gallatin, Jr., New York city.—The object of this invention is to provide a universal mandrel, which can be placed into lathes to retain different sized tubular articles in exact central positions.

CAR COUPLING.—Godfrey Brenner and George T. Polk, Poughkeepsie, N. Y.—This invention has for its object to furnish an improved car coupling, which shall be simple in construction and effective in operation, coupling the cars automatically, as they are run together, holding them securely when coupled, and uncoupling them automatically, should one or more cars be thrown from the track.

MACHINE FOR FEEDING FUEL TO FURNACES.—Alexander Rodgers and Esau Tarrant, Muskegon, Mich.—This invention relates to a new machine for feeding fuel, such as sawdust, shavings, coal, or other material, capable of pulverization, if not already in a powdered state, to furnaces, with an object of obtaining complete control of such feeding mechanism, to permit perfect regulation of feed.

MECHANICAL MOVEMENT.—Edward G. Russell, Ravenna, Ohio.—This invention relates to improvements in apparatus for imparting a reciprocating motion from an oscillating device, or vice versa, and it consists in a connection of the reciprocating and oscillating devices, by rods arranged in a manner by which the tendency of one rod to force the reciprocating bar out of its right line will be counteracted by the other.

HEATING STOVE.—William Cottingham and John W. Stafford, Troy, Ohio.—This invention relates to a combination of drums, placed within an inclosing acket, and provided with peculiar facilities for supplying the main drum with fuel, and for cleaning the smaller side drums, the whole forming a furnace that can be made to radiate as much or as little heat as required, and is very simple and cheap.

CAN AND VENTILATING STOPPER FOR PRESERVING PURPOSES.—Nicholas H. Shipley, Baltimore, Md.—This invention has for its object to provide a sufficient means for the escape of air, or vapor, from a vessel, from which it may be desirable to expel it for the preservation of its contents, and in new and simple means for enclosing and hermetically sealing the same, while in process of exhaustion, whether the same is effected by heat or the action of the air pump.

WASH BOILER.—Charles W. Powell, Bloomfield, Conn.—This invention relates to a new and useful improvement in apparatus for washing clothes, and consists in a framework made of perforated metal, or woven wire, constructed in size and shape to fit into an ordinary wash boiler.

STIRRUPS.—L. S. Taylor, Sigel, Mo.—This invention relates to improvements in stirrups for saddles, and it consists in the application of springs to the foot-piece, which is jointed to the yoke, so as to oscillate, for assisting in raising the heel as the foot vibrates on the cross-bar of the yoke.

ELEVATOR.—Zebulon C. Favor, Chicago, Ill.—The object of this invention is to provide means for elevating guests and baggage at hotels, goods and customers at stores, and for all purposes to which elevators or elevating machines may be applied.

COATING SHEETS OF IRON.—John D. Grey, Pittsburgh, Pa.—This invention relates to an improved process of coating sheet iron with zinc, whereby many objections to and difficulties in the methods hitherto in use are overcome.

TREADLE MOTION.—G. K. Proctor, Salem, Mass.—This invention relates to improvements in treadle motions for sewing machines, and other light machinery, and it consists in one treadle connected at one end to the crank by a pitman or connecting rod, rising nearly vertical, and another treadle having a rigid vertical bar, about as high as the shaft of the wheel, and connected to the crank by a pitman nearly perpendicular to the other pitman; the said arrangement being calculated to give a more even application of power than other arrangements.

POTATO MASHER.—C. A. Frederick, San Francisco, Cal.—This invention relates to a new instrument for thoroughly mashing potatoes, and other fruit or vegetable substance, and consists in the employment of a sieve and plunger, of which one receives reciprocating motion while the other is stationary.

MODE OF CLOSING WATER COURSES ENCOUNTERED IN DRILLING OIL WELLS.—John R. Hill, Roseville, Pa.—This invention has for its object to furnish a simple, convenient, and effective mode of closing the water courses encountered in drilling oil and other artesian wells, to enable the well to be drilled dry.

COMBINED BRAKE AND STARTER FOR VEHICLES.—Eduardo Bonneval, Boston, Mass.—This invention has for its object to furnish an improved brake, for attachment to cars and other vehicles, which shall be so constructed and arranged that it will stop, and hold the vehicle, when stopped upon an up grade, in such a way as to assist the motive power in starting, and diminish the strain.

REPEATING FIRE-ARMS.—H. J. Drew, Dixon, Ill.—This invention relates to an improvement on the Winchester rifle, the same consisting of a metallic cover for the opening in the breech, through which empty cartridge shells or unexploded cartridges are ejected, said cover being so connected with the vertically sliding cartridge bearer, by means of links or rods, as to be thrown open when the cartridge bearer is raised, and closed, when the same is drawn downwards into the position it occupies when the gun is discharged.

WASH BOILER.—H. R. Robbins, Baltimore, Md.—This invention relates to that class of wash boilers in which the water enters a trap at the bottom of the boiler, and is thereby conducted to pipes passing upwards through the bottom of the boiler, and discharging near the top of the same. The invention consists in a cylindrical trap, provided with holes in its outer shell for the admission of water, and with a series of circular concentric partial partitions, dividing its interior into annular chambers, opening one into another. These permit a free flow of water into and through the trap, but prevent its return into the boiler except through the pipes. The invention also comprises a metal heat-radiating plate, attached to the bottom of the boiler in connection with the trap.

REPEATING FIRE-ARM.—H. J. Drew, Dixon, Ill.—This invention relates to a cover attached to the sliding breech pin of a Winchester rifle, and automatically operated thereby, said cover, when the piece is ready for a discharge, being over the chamber in which is placed the vertically sliding cartridge bearer, and serving, in this position, to protect the eyes of persons using the gun, from injury by back fire, bursting of the cartridge, or leakage, and also to protect the mechanism within the breech from the intrusion of dirt, and from exposure to the weather.

COW'S TAIL HOLDER.—William H. Gray, Ashfield, Mass.—This invention consists essentially in a pair of pliers, which is designed to be applied to the leg of a cow for the purpose of preventing switching of the tail. The pliers shut in front of the cord which is at the rear of the shank of the leg, and are provided with a comb for holding the tail by the tuft of hair at the end thereof.

SHIRT-POLISHING MACHINE.—E. B. Blackwell, Newton, Mass.—This invention relates to a new apparatus for polishing shirt-bosoms, cuffs, and similar articles, made of linen or other fabric, and consists chiefly in the use of a new polishing tool, which has a convex, almost pointed working surface, so that the heat, weight, and friction applied by the same to the fabric are always concentrated at one point, in contradistinction to the extended surface of the ordinary smoothing iron. Most thorough operation is thus effected. The invention also consists in applying said polishing tool adjustably to a pointed, weighted bar or frame, so that it may be used on an ordinary table or suitable plate.

STRETCHER FOR PAINTINGS.—James Fairman, New York city.—The object of this invention is to improve the construction and arrangement of the stretcher frames for oil paintings. The sections which compose the stretchers now in use are jointed at the corners by tenons and mortises, and can be spread by wedges which are forced between the adjoining edges. The construction of the sections, with such tenons and mortises, is expensive, and does not produce reliable articles, as the wood is considerably weakened thereby. To obviate the latter deficiency, and also to reduce the expense of making the stretchers, this invention provides a metallic connecting plate, which enters the slotted or grooved mitered ends of two adjoining sections of the frame, holding the same properly together. This plate has a projecting rib on one face, which, entering transverse grooves, prevents the sections from slipping apart. A forked wedge is interposed between the adjoining sections of the frame, to straddle the joining plate and force the sections apart.

ATTACHING THE HAIR-SPRING COLLET TO THE BALANCE WHEEL STAFF.—C. W. Wadsworth and Carl Gullberg, Peekskill, N. Y.—This invention has for its object to furnish an improved means for attaching the hair-spring collet to the balance wheel staff, by the use of which inexperienced workmen will be less liable to injure fine watches, chronometers, etc., which will enable the hair-spring collet to be removed easily, quickly, and without danger of throwing the balance wheel out of true, and which will enable the spring to be easily put "in beat" after having been removed from the staff.

METHOD OF CONSTRUCTING WELLS.—William Mason, Providence, R. I.—This invention has for its object improvements in dug wells, and aims at lessening the time, labor, and expense involved in constructing the same, as well as removing the liability of deterioration of the water collected in them, by causing "surface water" from any source to permeate the soil to the whole depth of the well, before being admitted thereto. The invention consists in a certain novel application of cement and a cement cylinder.

MACHINE FOR TAPPING BOILERS, ETC.—P. I. Perrin, Taunton, Mass., and J. L. Hewes, Newark, N. J.—This invention relates to a new machine for tapping steam boilers, applying the screw bolts thereto, and perforating or plugging other suitable articles. The invention consists chiefly in the arrangement of a rotary spindle, which is adjustable in every direction, so as to be adaptable for boring or tapping holes horizontally or suitably inclined, and which can, at its end, receive a suitable boring, tapping, or applying tool.

KEYING WHEELS TO SHAFTS.—C. B. Cole, Chester, Ill.—This invention relates to improvements in keying wheels to shafts, and it consists in having the keys divided longitudinally into upper and lower parts, on a line oblique to the bottom of the key seat, so that when the upper one is moved on the other, in the direction opposite to that in which the wheel turns, in which direction the resistance on the wheel tends to make it turn, they will wedge tightly between the bottoms of the key seats; also in having the lower part of the key provided with lugs, which fit in holes in the bottom of the key seat of the shaft, to prevent it from working out, in case it becomes loose.

POWDER FLASK.—J. T. Capewell and G. D. Capewell, Woodbury, Conn.—This invention relates to a new construction of caps or covers for powder flasks, with the object of reducing the expense of making the same; also to a new manner of attaching said caps, so that they can be removed for filling the flasks.

PLASTER SOWER.—C. E. Gladding, Towanda, Pa.—This invention has for its object to furnish an improved machine for sowing plaster, which shall be simple in construction, effective, reliable, and uniform in operation, and easily adjusted to sow more or less to the acre, as may be desired.

COMBINED CORN PLANTER AND CULTIVATOR.—Franklin Underwood, South Rutland, N. Y.—This invention has for its object to furnish an improved machine, simple in construction, inexpensive in manufacture, strong, and durable, and which shall be so constructed that it may be readily adjusted for use as a corn planter or cultivator, doing its work accurately and well in either capacity.

TRIMMING YARN AND THREAD.—Gilman Jaquith, West Concord, Mass.—This invention relates to an improved means of trimming yarn to remove the fowl matter incorporated with it in working it up from the cotton, and consists in the application, preferably to the spooler, whereon the yarn is all handled by separate threads, of corn cobs, in a way to cause the threads to be drawn over the roughened surface, to separate the fowl matter. It is proposed to use the cobs also in all other applications in which it may be useful in dressing yarn.

DRY DOCK.—George A. Albertson, New York city.—This invention has for its object to improve the construction of dry docks so that vessels may be raised out of and lowered into the water by the fall and rise of the tide, which shall at the same time be simple in construction.

BROADCAST SEEDER AND CULTIVATOR.—Lymna Wight, Whitewater, Wis.—This invention has for its object to furnish an improved machine, simple in construction, effective in operation, and easily operated, and which shall be so constructed as to adapt it for use as a broadcast seeder or cultivator, as may be desired.

OPERATING HARVESTER RAKE.—David R. Kinyon, Raritan, N. J.—This invention has for its object to furnish an improved device for operating the rake of a harvester, which shall be simple in construction, effective in operation, not liable to get out of order, and which will allow the cutter bar to be brought closer to the side of the machine, and will diminish the side draft.

CASE FOR PRINTER'S USE.—W. H. A. Gersham, Atlanta, Ga.—This invention relates to an improved case for printer's use, designed more especially for use when doing tabular work, for economizing or lessening the movements of the hand, by combining in a small compact case, compartments for type for everything used in the most complicated work.

CONSTRUCTION OF HORSE RAKE.—James Howard and Edward Tenney, Bedford, England.—This invention relates to an improved arrangement of leverage to be applied to self-acting rakes or grass collectors. The object sought is to provide a leverage with a very limited range to be operated either by hand or foot, which leverage, when put in action, will cause friction bands to come in contact with rings or flanges cast upon the travelling wheels, and thereby, as the implement advances, cause the rocking frame, which carries the tines or other operating instruments, to rise and lift them from the ground.

HOSE BRIDGES.—Patrick Dailey, New York city.—This invention relates to improvements in apparatus for use on street and other railroads for passing the cars over the hose of fire engines laid across the track when fires occur near them, which is at the present time a cause of great detention of the cars, for want of convenient means for passing the cars over successfully.

TICKET HOLDER.—Henry Wexel, Providence, R. I.—The object of this invention is to facilitate the operation of conveying and selling tickets to passengers on street railroads, and to provide a check upon the ticket seller or conductor.

REIN HOLDER.—R. J. Achenback, Saddle River, N. J.—This invention has for its object to improve the construction of the improved rein holder, patented, by the same inventor, June 7, 1870, and numbered 103,320, so as to make it more convenient in construction and more effective in use.

CREeping-BABY DOLL.—Robert J. Clay, New York city.—This invention relates to a new doll, which is provided with a concealed clockwork and mechanism, whereby its limbs are moved in imitation of those of a creeping baby, while the doll itself is being propelled on the floor by concealed rotating wheels, which support it. A very amusing toy is thus produced at small cost.

BABY CARRIAGE.—William B. Whitney, Leominster, Mass.—This invention relates to a new and useful improvement in hand carriages, for babies or infant children, and consists in the mode of attaching the springs to the body of the carriage, and in the general arrangement of parts.

CHILDREN'S CRIBS.—George W. Ennis, Orange, N. J.—This invention relates to a new and useful improvement in cribs for children, designed to take the place of the rocking cradles now in use.

GAS BURNER.—Mark Rosenwax, New York city.—This invention relates to a new and useful improvement in burners for illuminating gas, whereby the combustion of the gas is more complete and its illuminating power increased.

CHEESE HOOPS.—Artemus Holdridge, West Burlington, and Benjamin Harrington and Henry H. Harrington, New Berlin, N. Y.—This invention relates to improvements in hoops or pressing cases, to be used in the manufacture of cheese in rectangular form, and it consists in a four-sided case, in two or more horizontal sections, having the sides jointed together at one or two of the corners, and detachably connected at one or both the other corners for opening to release the cheese, after being pressed, each section being provided with locking cleats, adapted for controlling the position of the superposed sections.

New Patent Law of 1870.

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FOR

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