

Recent American and Foreign Patents.

Improved Clothes Dryer.

Conrad Hauser, New York city.—The rod-carrying standard is made with folding legs that may be spread. The clothes-carrying arms are supported at different height and direction in perforations of the standard, and may be readily inserted and taken out as required. A base plate above the folding legs is recessed with as many socket holes as there are rods, for seating one end of the same therein, while the other end is attached, by a suitable fastening device, to the standard.

Improved Joint Support for Street Railway Rails.

C. B. Sheldon, 7 State street, New York city.—This is a splice plate for rails laid on stringers, which is flanged on the under side to conform to the upper side of the stringer. The plate has elongated bolt holes, through which it is firmly bolted to the rails by bolts whose heads are countersunk in the bottom of the groove in the upper side of the rail, so as to hold the rail ends and the plates firmly together to prevent the spring of the rails up and down. By this plan the two rails are firmly bolted to the plate so that one cannot rise without the other.

Machinery for Beating out the Soles of Boots and Shoes.

Seth D. Tripp, Lynn, Mass.—This machine is contrived with a series of lasts for holding the shoes, which are slowly revolved upon a wheel to be presented successively to different smoothing devices, and so that the attendant may take the finished boot or shoe off the last and put on one to be finished while the last is passing; or if needful he may stop the machine while changing the shoes in case it is geared for quick motion. The machine is thus adapted for performing the work expeditiously.

Improved Sash Fastener.

Peter Meyer, Iowa City, Iowa.—This consists of a spring band, attached to the sash frame, and locking by a perforation on pins arranged at suitable distance on the window frame.

Improved Nut Lock.

Walter F. Marthens, Pittsburgh, Pa.—This invention is an improvement in the class of nut locks in which a spring pawl is pivoted to the nut, and engages with a rib or shoulder formed on the bolt to which the nut is applied. The arrangement is such that the spring will hold the locking plate engaged with the bolt, or disengaged from it.

Improved Governor.

William D. Marks, Chattanooga, Tenn.—The pendulum spindle is in two sections, of which the lower one, to which the driving power is geared, is capable of sliding lengthwise a little, at the same time that it turns the upper one. It also screws up and down in the hub of its driving wheel, and is connected to the wheel by a spring, which allows the wheel to overrun the spindle a little, and screw the spindle along when the motion increases to close the valve in advance of any change in the position of the pendulum. When the motion of the engine slackens, the tension of the spring causes the spindle to overrun the wheel, which will screw the spindle along the other way, and open the valve in advance of the changing of the pendulum, thus making a sensitive governor.

Improved Hay Rack.

Joseph Hall, Riverside, Neb.—This improved hay rack is constructed in such a manner that it can be taken to pieces and stored away when not in use, while it may be readily set up and placed on the wagon by one person. It consists of a bed frame, which is placed on the running gear of a wagon, and provided with vertical standards having detachable cross beams, and with inclined side and end ladders attached thereto, and load binding cords stretched by a winlass attachment.

Improved Valve Gear for Steam Engines.

Margaret V. Hewes, Newark, N. J., administratrix of Joseph L. Hewes, deceased.—The invention consists of a cut-off valve geared with the driving shaft by a compensating contrivance to cause the valve to gain on, and fall back of, the motions of the driving shaft at each revolution in the proportion of its variations with the piston by the effect of the different angles of the crank, and thus to cut off exactly alike for each movement of the piston.

Improved Draw Bridge Fastening.

Carroll J. Atkins, Louisiana, Mo.—Spring bolts are arranged on the draw, with sockets on the rests for these bolts to spring into when they come to holes. The bolts are connected by rods or chains with apparatus at the engineer's stand, whereby he may set them to spring into the holes at the proper time, and also to draw them out, to disconnect the draw when it is to be moved.

Improved Hog Trap.

John Murray Kimball, Wyoming, Iowa.—This trap is secured in a doorway of a pen, by means of the hooks attached to the outer side of the posts. The outer end of the lever is then raised to swing the lower end of a board outward, to open a space between boards wide enough for a hog to pass his head through. The hog is then driven to the trap, and as he passes his head through the said space the lever is lowered, swinging the lower end of the board inward, catching the hog by the neck, and holding him securely while being operated upon, a pawl taking hold of a notch in the lever, and preventing the board from being pushed outward by the struggles of the hog.

Improved Flooring Clamp.

James T. Moss and George J. Moss, Ashborough, Ind.—This consists of a fulcrum for the clamping lever of a flooring clamp, contrived to bear by a plate on the upper side of the joist, and another to bear on the under side. The parts of the clamp are connected by extensible plates, extending along one of the vertical sides of the joists, to adapt them for joists of different sizes, and to hold them so that they gripe the joists, and thereby hold fast on them when the lever is forced against the flooring.

Improved Mousing Hook.

Franklin G. Appley, Providence, R. I.—A band is placed on the shank to hold the hook to the shank and keep a shoulder in a recess in the shank. A lip on the band prevents a rope from catching in the angle, and a lug on the outer end of the hook keeps the ring from slipping off. To make the hook fast, the rings are turned half round, and is provided with a recess beneath the lip, which allows it to slip over a lug to release the hook.

Improved Wagon Brake.

Daniel L. Deffbaugh, Bedford, Pa.—This construction enables the brake to be applied, when the wagon is so loaded that the ordinary brake lever cannot be operated, by a person in the rear of the loaded wagon, in which position he cannot be run over and injured, should he happen to fall.

Improved Heel Polishing Machine.

Leopold Graf, Newark, N. J.—The principal improvements combined in this invention include a cam that can be operated very quickly to fasten and release the work, also an eccentrically rotating slotted plate for turning the surface of the irregular or eccentric heel evenly and uniformly against the polisher, and finally a ratchet wheel and holding pawl, by which the tension of the spring which adjusts the heel forward or backward to the polisher can be increased or diminished at will.

Improved Paper Feeding Machine.

Socrates Scholfield, Providence, R. I., and Charles E. Baker, Mont Clair, N. J.—This is an improved device for raising the edge of the top sheet of a pile of paper from the sheet below, in order that the sheets may be successfully fed to a printing press or other machine a single sheet at a time. The invention consists in the combination of a lifting pin and a separate cutter with each other in such a way that the cutter may make a hole in the top sheet and rise to allow the pin to raise the edge of the sheet, and in the combination of a holder with the cutter and the lifting pin.

Improved Water Wheel.

Charles H. Sturges, Saratoga Springs, N. Y.—This invention consists of blades projecting radially from a vertical shaft in a case employed merely to conduct the water away. A series of jet pipes in the bottom of the reservoir above are inclined to discharge the water against the sides of the blades at little more than a right angle to the line of escape from the buckets. A gate in the reservoir is contrived to open the jets in succession, so as to regulate the amount of water by the number of jets. The invention also consists of a secondary set of jets discharging in the reverse direction, and contrived to be opened by the same gate when the others are closed, to reverse the wheel.

Improved Sofa Bedstead.

Axel Holmers, Boston, Mass.—This improved sofa or arm chair bed can be thrown open in such a manner that the seat or back of the sofa is not used at all for the bed, and consequently is less worn, retaining its form and appearance. The invention consists of four parts, two for the back and two for the seat, hinged together, to be swung open by disconnecting the arm top pieces from the sofa braces, which form the legs of the front part of the bed. The sofa back and seat form the outer side, and a spring bottom the inner and bed part of the sofa bed.

Improved Planing Machine.

Henry C. Holloway, San Diego, Cal., assignor to himself and John S. Harbison, of same place.—This invention consists particularly in attaching angle plates to the slitting saws, whereby they are secured radially to the plane-carrying cylinder. This admits of convenient and quick adjustment of the saws along the cylinder, so that they may be caused to slit the stuff into pieces of any desired width.

Improved Watch Case.

Simon B. Simon, New York city.—This invention consists in making watch cases long and narrow or cylindrical in form, and of such a size that they may be carried in the pocket, worn in a lady's belt, or worn as an ornament or charm.

Improved Manufacture of Artificial Stone.

Luke W. Osborn, Morgan, and Edward D. Merriam and Peter B. Doty, Conneaut, Ohio.—This is a combination of sand, resin, brimstone, and coal tar, with or without oil and plaster of Paris, for the manufacture of artificial stone.

Improved Piano Tuning Pin Lock.

George P. Reeves, Helena, Montana Ter., assignor to himself and Charles Rumley, of same place.—This is an improved fastening device or lock for the tuning pins of pianos or other stringed instruments, for the purpose of rigidly holding the pin in position after the proper pitch of string has been adjusted by the tuner. The invention consists of an outer stationary and interior sliding jaw plate, placed around the tuning pin, and the conical wedge part of a locking pin or key, that forces the jaws around the tuning pin for binding the same firmly after tuning.

Improved Screw-Cutting Die.

Virginus J. Reece, Greenfield, Mass.—The object of this invention is to control the adjusting devices for the dies of screw cutters intended for cutting the full thread at one operation, so as to hold the dies firmly both on the outer and inner edges, and thus keep them perfectly firm and solid. The invention consists of taper-pointed screws between the dies to open them and regulate their distance apart, in combination with two taper-pointed screws screwing through the die holder against the dies, and holding them firmly thereto.

Improved Tool for Pivoting Watch Wheels.

Frank R. Bucklin, East Tilton, N. H.—This invention consists of a tube with a plug in one end, a handle in the other, a centering spindle in the center of the plug and handle, a cap for confining the wheel on the end of the plug, and an outside centering rod on an outside tube, all contrived for holding a pivot on the squared end of a post from which the pivot has been broken, so as to be soldered on readily.

Improved Machine for Tenoning Spokes.

Joshua R. Coleman and Samuel Myers, Galion, Ohio.—In this improved machine, the spoke is accurately centered in relation to the cutter head by means of angular clamping plates operated by right and left screw-threaded shafts. The jaws of the cutter head have angular faces, which bear upon the tenon, whatever be its form, at four different points, thereby supporting and steadying it under the action of the cutters. The crank shaft, which rotates the cutter head, works in the tubular stem of the cutter head, and a burr or screw collar determines their relative adjustment, and thereby the length of the tenon.

Improved Plow.

Augustus Griggs, La Fayette, Tenn.—The standard is framed to the rear end of the plow beam, and is made with an offset to rest against the lower side of the beam. The forward side of the standard is concaved from its shoulder to its point, to form a seat for the mold board. A cutter passes through a mortise in the beam, the mold board, and the standard, and is adjustably secured in place by pins. This acts also as a brace, to strengthen the standard against the draft strain.

Improved Gas Extinguisher for Street Lamps.

Lewis Boore, Buffalo, N. Y.—By suitable construction, when the pressure upon the gas is increased at the gas house above the amount to resist which a cup is weighted, the said cup will be forced upward, raising the lower end of a tube above mercury, and allowing the gas to pass through said tube to the burner. The tube is held down against the increased pressure by the catch, which is pivoted to a small bracket attached to the cover. As the cup and tube descend upon the decrease of the pressure, the edge of a flange strikes the catch, pushes it back, and passes below it. The said catch immediately swings forward over said flange, preventing the rise of said cup and tube until the said catch has been drawn back. When the time for lighting the street lamps approaches, the pressure upon the gas is increased to the desired point at the gas house. Then, as the lamplighter comes to each lamp post, he pushes back the catch, and, as the tube and cup rise with the pressure, he lights the escaping gas. When the time for putting out the lights arrives, the attendant at the gas house reduces the pressure to the proper point, and all the lights in the street lamps are put out at the same time.

Improved Grain Drill and Planter.

Henry Reutcher and Elias M. Morgan, Belleville, Ill.—A pivoted yoke straddles an eccentric on the axle of the truck, and imparts its own vibratory movement to a rock lever, which reciprocates the grain dropper through the medium of the ordinary connecting rod. The invention also includes certain devices for attaching the truck to the axle and preventing its rotation.

Improved Ice Cream Freezer.

John W. Condon, Baltimore, Md.—This invention relates to certain improvements in ice cream freezers, and it consists in the combination with the top plate of the freezer of a flange to extend over and protect the teeth of the gear wheel upon the cover of the cylinder from the particles of ice, salt, and other obstruction. It also consists in a single coupling collar, which slides laterally and couples or uncouples the actuating shaft of the driving wheel and the shaft of the pinion that operates the freezer cylinder.

Improved Heel-Polishing Machine.

William Westcott, Syracuse, N. Y.—This invention relates to certain improvements in machines for polishing the heels of boots and shoes, and it consists of a branched frame which carries the shoe-holding devices, which frame is located just beneath the polishing tool, and is pivoted upon horizontal pivots to a vertical rod, which is attached to the frame work by a swivel joint, and is held up by a spiral spring. In one end of the branched rod is an adjustable spring-seated rod, regulated by a cam and set screw, which said rod enters a socket of the last and presses the heel of the shoe against a pivoted plate. The invention also consists in the combination with the shoe-holding devices and the branched frame of a hand lever and pawl for withdrawing the shoe from the polishing tool, and in the peculiar construction of the polishing tool, in which a soapstone block is provided with side plates, to which the support is pivoted to prevent wearing the said block.

Improved Telegraphic Circuit.

William E. Sawyer, Washington, D. C.—The main principle of this invention consists in a division of the transmitting battery current, and the placing of that battery at the receiving end of a line. The result of this application of electric force is not to free a line of tailings or the attenuation of impulses transmitted, which may exist to any degree in the line wire, but to prevent those tailings or attenuations of impulses from producing any effect upon the instrument. In order to produce or cut off action, or discoloration of chemical paper, in the receiving instrument, it is only necessary that the closing of the circuit at the transmitting end of a line shall set the current from the battery at the receiving end to dividing and a part of it flowing in the direction of the transmitting end. It is not necessary, therefore, that an impulse shall ever reach the transmitting end. It is not necessary that the current shall travel any distance upon the line wire, but that we reduce the potential of current acting upon the receiving instrument; and to reduce this potential, it is merely necessary that the current shall begin to flow by divisions toward the transmitting end.

Improved Bale Band Tightener.

John L. Sheppard, Charleston, S. C.—The object of this invention is to provide a device, to be used in connection with baling presses, for the purpose of tightening the bands upon the bales when the latter are being prepared for market. It consists in a large roller journaled in a frame attached to the baling press and driven continuously by power applied through a band and pulley. Journaled in frames by the side of said large roller are a number of smaller rollers, whose peripheries touch that of the larger one. Said smaller rollers are journaled eccentrically in secondary bearings, which latter are also journaled in the framework. To said secondary bearings are attached lever extensions, by means of which the pressure of the smaller roller upon the larger one may be regulated.

Improved Bob Sled.

John J. Sandgren, Ironton, Wis.—This is an improvement in bob sleds with separately moving and adjustable runners, that adapt themselves to the unevenness of the ground. The invention consists of the connection of the runners with the lateral beams by suitable pivot joints, and the lateral brace connection of the runners with the tongue and reach.

Improved Carpet Cleaner.

David B. Scofield, Baker City, Oregon.—In using the apparatus, a small quantity of very hot soap suds, to which may be added a small quantity of other ingredients used for removing grease and dirt, is drawn up into the lower part of tube. The lower end of the tube is then placed upon the carpet over the spot to be cleaned, and a piston is worked up and down below a valve, forcing the suds into and drawing it out of the carpet until the grease or dirt has been removed. The piston is then worked above the valve to draw the suds out of the carpet, a sponge preventing the suds drawn out from flowing out through the lower end of the tube, and the valve preventing it from being forced out by the descending piston. In this way the suds can be drawn out so thoroughly that the wet spot will readily dry.

Improved Oil Can.

Gouverneur K. Haswell, assignor to himself and Charles H. Haswell, Jr., 6 Bowling Green, New York city.—This is a can or other oiler, in the nozzle of which is a valve to shut off the escape of oil and prevent waste, having a spring for closing it, and connected by rods and a lever with a thumb piece upon the outside. The invention also consists of a vent hole, in connection with one of the connecting rods and a stopper on the rod, so contrived that the vent opens and closes with the valve. The oil spout is constructed in sections, one of which has the upper end contracted sufficiently within the base of the next section, which is fitted on it, to form a rest for the spring which closes the valve, and another has its top similarly contracted to form the seat for the valve.

Improved Baling Press.

John C. Stokes, Villanow, Ga., assignor to himself and Joseph W. Cavender, same place.—This invention has for its object to improve the construction of the baling press for which letters patent were granted to the same inventor November 24, 1874. By suitable construction, as the shaft is turned in the direction to wind up the rope and raise the follower, other ropes will be unwound, allowing the outer ends of levers to drop outward beneath plates by their own weight, so that the follower may be free to rise. As the shaft is turned in the direction to wind up the ropes, the upper ends of the levers will be drawn inward; and as they approach the vertical position the levers will act as toggle joints, and press the follower downward with immense power.

Improved Turbine Water Wheel.

James M. Denson, Columbus, Va.—This invention is a turbine water wheel provided with a rotary upwardly-movable gate, enclosing and covering the chutes or water ways. The gate may be raised or lowered to any desired height along the wheel, according to the power required.

Improved Children's Swing.

George A. Fanjoy, Williamsburgh, N. Y.—This invention consists in an elastic back for a swing seat, made of a strip of hard elastic wood, bent into proper form, and having a strip of metal attached to its outer side. There are also straps designed to be passed between the child's legs, to keep him from slipping off the seat forward. The back is connected with the rear and side edges of the seat by other straps so as to be flexible, to allow the back to be drawn together to fit the child.

Improved Plow Colter Cleaner.

Theodore Wallis, Scipio, and Oscar J. Case, Auburn, N. Y.—As the plow moves forward, an arm moves forward and back along the cutter, and pushes off any grass, weeds, stubble, or other rubbish that may lodge upon it.