

C, while the inner underlapped rounded free edge i, of said strip m, presses firmly downward upon the base of the flexible tubular cushion C, without cutting the same, when nailed upon the door or window, substantially in the manner and for the purpose set forth.

No. 28,814. Letter and Bill File.

(*Serre-papier*)

Louisa Lawrence (assignee of George F. Chappell), New York, N.Y., U.S., 4th April, 1888; 5 years.

Claim.—1st. In a letter file, an arm having one or more wires affixed thereto, pivoted vertically at or near one end, and adapted to vibrate in a plane parallel with the board or tablet. 2nd. In a letter file, an arm having one or more wires affixed thereto, pivoted vertically at or near one end, to vibrate, as set forth, and provided at its other end with a handle or extension. 3rd. In a letter file, the combination of an arm having one or more wires affixed thereto, pivoted vertically at or near one end, to vibrate, as set forth, and a catch or retaining device to keep said lever in its closed position. 4th. In a letter file, the combination of the base-plate 5, the duplex puncturing wires, the arm 9 pivoted vertically at or near one end beyond said wires, to vibrate as set forth, and having affixed thereto the duplex transfer wires.

No. 28,815. Measuring or Invoicing Machine.

(*Machine à mesurer ou facturer*)

John C. Dale, Bennington, Kan., U.S., 5th April, 1888; 5 years.

Claim.—1st. The combination of the drawing roll, with a tension roll, which forces the material being measured against the drawing roll, and which tension roller is journaled in the upper ends of the springs D, substantially as shown. 2nd. The combination of the frame, the bracket A mounted thereon, with the stationary revolving clamps and the revolving outside moving clamps, substantially as set forth. 3rd. The combination of the supporting brackets A, G, the stationary and adjustable clamps for holding the boards, the drawing roller F, the tension roller E carried by the springs D, the tooth H upon the roller, the cog-wheel I with which the tooth engages, and the dial plate, substantially as shown and described.

No. 28,816. Reel Bolt, etc.

(*Blutoir, etc.*)

Oliver P. Hurford, Chicago, Ill., U.S., 5th April, 1888; 5 years.

Claim.—1st. The combination of a reel, provided with bolting cloth, an interiorly arranged brush for sweeping the inner surface of said cloth, and a device secured on the inside of the reel frame and adapted, during the revolutions of the reel, to periodically disturb or agitate the outer end of the brush, and free it of matter which may have lodged thereon, as set forth. 2nd. The combination of a reel, provided with bolting cloth, an interiorly arranged brush, having an opening in its base between the rows of bristles, and means for holding said brush at the upper part of the reel, whereby the said brush may sweep the inner surface of said bolting cloth at the upper part of the reel, and a portion of the sweepings descend through said opening to the bottom of the reel, thus avoiding a clogging of the brush, as set forth. 3rd. The combination of a reel, provided with bolting cloth, an interiorly arranged brush, having an opening in its base between the rows of bristles, means for holding said brush at the upper part of the reel, and a clearing strip secured to the interior of the reel frame and revolving therewith, as and for the purposes set forth.

No. 28,817. Coupling of Railway Cars.

(*Attelage de chars.*)

John W. Chisholm, Liverpool, N.S., 5th April, 1888; 5 years.

Claim.—The combination of the rod A, link J, pin G, dog E and slotted rod H, substantially as and for the purposes hereinbefore set forth.

No. 28,818. Carriage Circle.

(*Rond d'avant-train.*)

James Woods, Stratroy, Ont., 5th April, 1888; 5 years.

Claim.—1st. A carriage circle consisting of a top circle A, F, having extended bearings J, d, at each end and in combination therewith, the bottom plate B having extended bearings e, e, constructed and operating substantially as shown and specified. 2nd. The reach-iron H, bolted at rear and at front to top circle A, F, substantially as shown and specified.

No. 28,819. Spark-Arrester.

(*Garde-tincelle.*)

William J. Ussory, LaSalette, Ont., 6th April, 1888; 5 years.

Claim.—A spark-arrester for smoke stacks and pipes, consisting of a drum A, having a pipe section B entering through the bottom, and an outlet at the top, and two cones C united at their bases and provided with a downward flange D, projecting from said united bases, and a wire screen E or braces G, supporting said cones from the wall of the drum, whereby the cones will be directly above the smoke-section B, substantially as and for the purpose set forth.

No. 28,820. Device for Transmitting Power.

(*Appareil de transmission du mouvement.*)

Wallace H. Dodge, Mishawaka, Ind., U.S., 5th April, 1888; 5 years.

Claim.—As an improvement in the devices for transmitting power, the pulleys B, C, provided with a series of double grooves, and pulley D, in combination with the rope A wound thereon double throughout, substantially as described, whereby are attained a given strength with a smaller rope, capacity to pass smaller pulleys, and a divided strain on the splice, as set forth.

No. 28,821. Railway Gate.

(*Barrière de chemin de fer.*)

John A. Lidback, Portland, Me., U.S., 5th April, 1888; 5 years.

Claim.—1st. In a gate mechanism, the combination, of an upright cylinder, a duplex piston and a gate-arm pivoted to the cylinder frame or support, and connected with the piston between its heads, by means substantially as described. 2nd. In a gate mechanism, the combination of an upright cylinder, a duplex piston, a rack, a gear and gate-arm pivoted to the cylinder frame or support, substantially as described.

No. 28,822. Barrel Heater.

(*Écluse de tonnellerie.*)

Amos Himo, Rockford, Ill., U.S., 5th April, 1888; 5 years.

Claim.—The herein described drum, closed at the top and open at the bottom, provided with flues extending from its bottom upwardly, the said flues communicating with the interior of the drum at the bottom and with the open air at their upper ends, substantially as set forth. 2nd. The herein described drum, closed at the top and open at the bottom, provided with flues extending from its lower end upwardly along its outer face, the said flues communicating with the interior of the drum at the bottom, and with the open air at their upper ends, substantially as set forth. 3rd. The combination, with the interior or heating drum, and a suitable support for the same, of the removable outer drum, provided with vertical flues opening into the space between the drums at the bottom, and to the open air at the top, and means for elevating and lowering the said outer drum, substantially as set forth.

No. 28,823. Car-Coupling.

(*Attelage de chars.*)

James N. Martin and W. Hamilton Harris, Newberry, S.C., U.S., 5th April, 1888; 5 years.

Claim.—1st. In a car-coupling, the draw-head having a recess and slot provided with a spring latch, a bearing having a pivoted dog provided with a jaw, said dog also having a spring and a screw for connecting the bearing jaw and spring together, as shown and described. 2nd. In a car-coupling, the draw-head having a recess and a slot in its body portion communicating with each other, a latch consisting of a block having an arm engaging the recess and slot, the dog pivoted to a bearing of the draw-head having a spring, said dog also provided with a pivoted jaw, said latch also provided with a spring, and said dog adapted to engage the latch automatically and hold thereto in the recess, substantially as shown and described. 3rd. A car-coupling consisting of the draw-head having a recess and a slot communicating with each other, a latch consisting of a block seated in said recess, said block provided with a spring arm engaging the slot, a spring jaw having a dog engaging the latch, said dog pivoted to a bearing of the draw-head, said jaw also provided with a coupling pin on its outer end, and the arm of the latch provided with a lever, substantially as described.

No. 28,824. Fire-Arm and Cartridge Magazine therefor.

(*Arme à feu et car. touchière.*)

Charles G. Harston, Toronto, Ont., 5th April, 1888; 5 years.

Claim.—1st. In breech loading fire-arms, the combination of a rising and falling breech block having a carrier C actuated by a breech block lever, for conveying a cartridge on the breech block into the chamber of the gun, with a hopper magazine K, with lever P actuated by the breech block lever and connected to a door Q, so that, after the descent of the breech block and the extraction of the empty cartridge case, the door is opened and a cartridge is delivered from the magazine, and is pushed into the gun chamber by the carrier, substantially as herein described. 2nd. In a cartridge hopper, the combination of a door Q, for allowing the top cartridge to pass out, with a lever P, actuated by the breech action for opening the door, a lever W, actuated by the lever P, for ejecting the top cartridge and propelling it so as to pass into the gun chamber, and a pin S, for retaining the second cartridge while the top one is being ejected, substantially as herein described. 3rd. In a cartridge hopper, the combination of a lever P, actuated by the breech action of the gun, with a pin S for retaining the second cartridge, a plate T, a lever W, connected to plate T and serving to impart a rapid motion to a lever W, for propelling the top cartridge into the gun chamber, substantially as herein described. 4th. In a cartridge hopper, the combination of a forwardly inclining top and door Q, an inclined propelling lever W, actuated by a lever P, and an incline K on the front end of the hopper, for imparting to the top cartridge the proper direction for propelling it into the gun chamber, substantially as herein described. 5th. In a cartridge hopper, the combination, with mechanism for delivering a cartridge into the gun, of a propelling lever, or equivalent propelling device, situated within the hopper, for conveying the cartridge directly into the gun chamber, substantially as herein described. 6th. In combination with the rising and falling breech block of a gun, a carrier pivoted to the breech block and actuated by the ordinary breech block lever, so as to automatically convey a cartridge situated on the breech block into the gun chamber, substantially as herein described. 7th. In combination with the breech block of a gun, a carrier lever C, pivoted at its lower end to the breech block A, a carrier head G, having a slotted connection with the carrier lever C and with the block A, and a link F connected at one end to a slot in the carrier lever, and at the other end to the breech block lever E, substantially as herein described with reference to Figs. 1 to 7 of the drawings. 8th. In combination with the breech block of a gun, carriers C, working in slots A of the breech block, and links F connected at one end to slots in the carrier levers, and at the other end to the breech block lever E, substantially as herein described with reference to Figs. 8 and 9 of the drawings. 9th. In a rising and falling breech block having a carrier lever C, connected to the breech block lever E, a notch for the breech block lever to work in, having shoulder b, c and e, operating substantially as and for the purposes herein set forth. 10th. In combination with a gun having a rising and falling breech block, and a fore end magazine, spring shutters