

main frame, having a longitudinal recess in the horizontal member, and spring-actuated cushions secured within the recess of the corner pieces, substantially as shown and described. 3rd. The combination with a main frame, and an auxiliary frame attached thereto adapted to fold therein, of a marginal frame within the auxiliary frame and spring-actuated cushions attached to the inner side of the main frame at or near the corners, substantially as shown and described. 4th. The combination, with a main frame and an auxiliary frame attached thereto adapted to fold therein, of a marginal frame within the auxiliary frame, spring-actuated cushion attached to the inner side of the main frame, at or near the corners, and a small cushion intervening the corner cushions, substantially as and for the purpose specified. 5th. The combination, with a main or body frame and an auxiliary frame attached thereto, adapted to fold therein, of a marginal frame secured within the auxiliary frame, having dovetail transverse grooves produced therein, dovetail pins adapted to enter said grooves, essentially L shaped corner pieces secured to the inner side of the main frame, having a longitudinal recess in the horizontal member, spring-actuated cushions, of a light material held within the recess of the corner pieces, and spring-actuated cushions secured to the said body frame, intermediate of the corner cushions at top and bottom, substantially as and for the purpose specified.

No. 34,473. Flushing Tank for Water Closets. (*Citerne de lavage pour les latrines.*)

Robert S. Galbraith, Toronto, Ont., 4th June, 1890; 5 years.

Claim.—A compartment A, connected to the compartment C by the passageway F, an elbow-shaped chamber E, connected to the flushing pipe D, and having a valve-way I located immediately over the opening into the passageway F, in combination with the valve G, valve rod H, lever I, rod J and spring K, substantially as and for the purpose specified.

No. 34,474. Steam Engine. (*Machine à vapeur.*)

Joseph A. Mumford, Hantsport, N.S., 4th June, 1890; 5 years.

Claim.—1st. The herein described engine, consisting of frame A, high and low pressure cylinders B, valve chest, valve H, pistons, piston rods and crank shaft, all formed and combined substantially as and for the purpose hereinbefore set forth. 2nd. The herein described engine, consisting of frame A, high and low pressure cylinders B, valve chest, valves H and I, pistons, piston rods and crank shaft, all formed and combined substantially as and for the purpose hereinbefore set forth. 3rd. In an engine, an oil receptacle E at the bottom of the cylinder, having raised wall E' around the connecting rod, substantially as described. 4th. In an engine, connecting rod bearing, lubricator or tube F and casing J, substantially as and for the purpose set forth. 5th. In an engine, connecting rod bearing, lubricator or tube F, and casing J and hollow connecting rod G, substantially as and for the purpose set forth.

No. 34,475. Link Driving Belt. (*Courroie de commande à chaînons.*)

John A. J. Shultz and Bruce C. Alvord, St. Louis, Mo., U. S., 4th June, 1890; 5 years.

Claim.—A link-driving belt, composed of a series of independent leathery links and leathery rods, combined substantially as described.

No. 34,476. Combined Spring Hinge and Door Check. (*Ressort de porte et arête-porte combinés.*)

Charles F. Hanington (assignee of James W. Morris), New York, N.Y., U.S., 4th June, 1890; 5 years.

Claim.—1st. The combination, with a door and its casing, of a hinge, means for reciprocating the pintle of the hinge, operated by the movement of the door, means carried by the hinge for checking the movement of said pintle in one direction, whereby the door is checked, and a spring for closing the door, substantially as set forth. 2nd. The combination, with the stationary and moving leaves of a hinge of hollow knuckles, a part adapted to move vertically within said knuckles, and a cushion formed within one of said knuckles for stationary and moving leaves of a hinge of hollow knuckles, a part spring compressed by said part and a cushion formed within one of with the stationary and moving leaves of a hinge of hollow knuckles, a pintle within said knuckles, a head on said pintle, means for reciprocating said pintle, a head on said pintle, means for setting forth. 5th. The combination, with the stationary and moving leaves of a hinge, of hollow knuckles, a pintle within said knuckles, a spring located between said head and one end of the cylinder, and passages in said head to permit the shifting of the working fluid, substantially as set forth. 25th. The combination, with the hinge pintle, of two rollers, a screw for securing each of said rollers on said pintle, and a third screw, substantially as set forth.

length, and of greater bore in the lower portion thereof, near the close of the stroke of the piston, of a plunger fitting the lesser bore snugly, substantially as set forth. 9th. In a combined spring hinge and door check, the combination, with a pintle and means for reciprocating it, of a dash-pot, of which the pintle forms the plunger, substantially as set forth. 10th. The combination, in a combined spring hinge and door check, of a pintle, means for reciprocating said pintle, a head on the pintle, a cylinder within which said head reciprocates, and means for permitting the shifting of the working fluid in the cylinder, substantially as set forth. 11th. In a combined spring hinge and door check, the combination of a reciprocating pintle, means for moving said pintle directly in each direction, and a check for retarding the movement of the pintle in one direction, substantially as set forth. 12th. The combination in a combined spring hinge and door check, of a pintle, means for moving said pintle in one direction during the opening of the door, a spring compressed by said movement, a head on the pintle forced by said spring in the return direction, and a cylinder within which said head moves, and means for permitting the displacement of the working fluid therein, substantially as set forth. 13th. In a combined spring hinge and door check, the combination of a pintle held from rotating a turning part of the hinge adapted to engage with and move said pintle in one direction, a spring for returning said pintle, and a check for retarding the return movement of the pintle, substantially as set forth. 14th. In a combined spring hinge and door check, the combination of a pintle held from rotating a turning part of the hinge adapted to engage with and move said pintle in one direction, a spring for returning said pintle, and a dash pot, of which the pintle forms part, substantially as set forth. 15th. In a combined spring hinge and door check, the combination of a pintle squared for a portion of its length to adopt it to slide through a square hole in a fixed part of the hinge, a moving part of the hinge adapted to engage with and move said pintle in one direction, a spring for returning said pintle, and a dash-pot, of which the pintle forms part, substantially as set forth. 16th. In a combined spring hinge and door check, a pintle held from rotating a projection or projections on said pintle, an incline surface on a moving part of the hinge, engaging with said projections, a spring for returning said pintle, and a check for retarding the return movement of the pintle, substantially as set forth. 17th. The combination, in a combined spring hinge and door check, with the stationary and moving hinge leaves, of a cylinder attached to said stationary and moving hinge leaves, of a cylinder moving leaf to turn on, and a pintle entering said cylinder and said moving hinge leaf, substantially as set forth. 18th. In a convertible combined spring hinge and door check, the combination, with the spring and checking mechanism, of means for throwing said mechanism out of action, substantially as set forth. 19th. In a convertible combined spring hinge and door check, the combination, with a pintle and means for reciprocating it, of a dash-pot, of which the pintle forms the plunger, and means for throwing the reciprocating mechanism out of action, substantially as set forth. 20th. In a convertible combined spring hinge and door check, the combination of a pintle, means for reciprocating the pintle, and means for throwing the reciprocating mechanism out of action, substantially as set forth. 21st. In a convertible combined spring hinge and door check, the combination, with the pintle squared for a portion of its length, of a piece having a square hole through which said pintle passes, a dog to lock said piece and means for releasing said dog to permit the piece to turn, substantially as set forth. 22nd. The combination, in a combined spring hinge and door check with a pintle rotated by the opening of the door, of co-acting projections on the pintle and acting to produce a return movement of the pintle, a head on said pintle, a cylinder within which said head reciprocates, and means for permitting the shifting of the working fluid in the cylinder, substantially as set forth. 23rd. In a spring hinge, the combination, with a pintle, of inclines and slots on the hinge knuckles, and projections on the pintle, said inclines and slots and said projections being located in such relation as to engage respectively the vertical slots and inclines in said knuckles, substantially as set forth. 24th. In a combination with one leaf of a hinge, having reversely formed inclines, and the other leaf having a vertical slot, of a pintle having projections engaging respectively with said inclines and slots and extending into a cylinder, said cylinder and a head on said pintle, a spring located between said head and one end of the cylinder, and passages in said head to permit the shifting of the working fluid, substantially as set forth. 25th. The combination, with the hinge pintle, of two rollers, a screw for securing each of said rollers on said pintle, and a third screw, substantially as set forth.

No. 34,477. Wire Nail. (*Clou de fil de fer.*)

James Pender and Walter O. Purdy, St. John, N. B., 4th June, 1890; 5 years.

Claim.—1st. The process of roughening the bright, smooth surface of wire nails, by corrosion or oxidation, as set forth. 2nd. A wire nail, having an oxidized or corrosively roughened surface, and dark or bluish appearance, as set forth.

No. 34,478. Pulley. (*Poulie.*)

Averit W. Michael, Benton Harbor, Mich., U.S., 4th June, 1890; 5 years.

Claim.—1st. The combination, with the two halves of the pulley having openings for the passage of the shaft, of the two pieces upon opposite sides of the said openings and formed with wedge shaped projections, the block D, formed upon opposite sides with recesses *h*, and shoulders *g*, and the wedge shaped block having a wedge shaped recess engaging the wedge shaped projections on the opposite sides of the pulley having passage way for the shaft, and the pieces on the outer faces of the pulley having wedge shaped projections, of the block having a longitudinal recess to embrace the shaft and upon its outer longitudinal face formed with a recess having oppositely