Claim—1st. In a pressure recorder, an indication receiver, constructed substantially as described, operated by the force of gravity acting on its mass, as and for the purpose set forth. 2nd. In a pressure recorder, in combination, an indication receiver operated by the force of gravity, a locking device for holding the indication receiver stationary, an indicating device for marking indications thereon, and means actuated by variable pressure, by which the locking device is caused to release the indication receiver and the indicating device is operated, substantially as set forth. 3rd. In a pressure recorder, a cylindrical indication receiver, in combination with means, substantially as described, by which it is caused by the action of gravity thereon to move helically, as set forth. 4th. In a pressure recorder, in combination, a helically moving indication receiver, means for holding it and causing it to rotate as it is acted upon by gravity, a locking device for holding the indication receiver stationary, an indicating device for marking indications thereon, and a pressure actuated device connected to the locking and indicating device, substantially as set forth. 5th In a pressure recorder, in combination, a cylindrical indication receiver provided with a ratchet wheel at its lower end, and a releasable nut at its upper end, a vertical shaft upon which the cylinder is fitted to slide, having a helical groove in which the nut works, and a vertical escapement pawl arranged to engage the teeth of the ratchet wheel, substantially as set forth. 6th. In a pressure recorder, in combination, an indication receiver, an indicating device composed of a disc having a flat formed thereon and marking needles in its periphery, vertical guides having inclined recesses and located in front of the receiver, an inclined plate upon which the flat of the disc works when its bearings move into the inclined recesses, and means for imparting vertical motion to the disc, whereby it is first caused to move forward towards the receiver and then to rotate thereon by its needles puncturing the same, substantially as set forth. 7th. In a pressure recorder, the cylinder *g* provided with the paper covering *f*, and having the nut *i* clamped on its upper end, in combination with the vertical shaft *h* provided with the helical groove h^2, substantially as set forth. 8th. In a pressure recorder, the combination, with the cylinder *g*, nut *i*, helically grooved shaft *n* and ratchet wheel *k* secured to the lower end of the cylinder, of the vertically arranged escapement pawl *j*, having long retaining edges adapted to engage with the teeth of the ratchet wheel *i*, in all positions of the cylinder *g* on the shaft *h*, substantially as set forth. 9th. In a pressure recorder, in combination, the piston *b* provided with a groove in an arm projecting therefrom, the escapement pawl having a flange j^2 inclined at its lower end and embraced by said groove, the ratchet *k*, the cylinder *g* and the vertical shaft *h*, substantially as set forth. 10th In a pressure recorder, in combination, the cylindrical indication receiver *g*, g^1, *f*, the guide shaft *h*, puncturing disc l, l^2, guides *n*, n^1, links *m*, *m* and piston *b*, substantially as set forth.

No. 24,663. Envelope Machine.

(*Machine à Enveloppes.*)

Louis P Bouvier, John F. Ellis, Philip T. Perrott and Thomas J. Clark Toronto, Ont., 5th August, 1886, 5 years.

Claim.—1st. In an envelope-machine, the vertically reciprocating picker arranged to gum and raise one side of the top blank, in combination with the reciprocating auxiliary gummer constructed to fall directly upon the edge of the seal flap, and mechanism, substantially as described, for drawing said auxiliary gummer off the flap while the picker is resting on the blank, as set forth 2nd. The gum-dish Q located immediately over the pile of blanks, and the vertically reciprocating picker supplied with gum from said gum-dish, and arranged to carry the gum to one flap of the blanks, in combination with the second gum-dish located in front of the pile of blanks, and provided with a gum-supplying surface, as W, on a level with the upper blank, and an auxiliary gummer arranged to be carried from said gum-dish to a point directly over the seal flap of the blank and dropped thereon, and then drawn therefrom in a horizontal plane while the said picker is resting upon and holding the blank, substantially as described. 3rd. In an envelope-machine having a gumming-dish located over the pile of blanks, a vertically reciprocating picker arranged to gum and pick up one side of the top blank sufficiently high to permit the carriers to pass below it, in combination with a spring finger or fingers placed on the bottom of the gum-dish, so that the blank carried up against it by the picker is pushed off the picker onto the carriers with a positive, yet gentle elastic force. 4th. In an envelope-machine, the vertically reciprocating gummer arranged to gum one side of the top blank, in combination with the auxiliary reciprocating gummer for gumming the seal-flap, and mechanism, substantially as described, constructed to carry said gummer from the gum-dish to the edge of said flap, and then lower it directly upon the same and draw it off while the gummer is resting on the blanks, substantially as set forth. 5th. In an envelope-machine having a gum dish located over the pile of blanks, the vertically reciprocating picker, constructed and arranged to gum and raise one side of the top blank, and the roller arranged to convey the gum from the gum dish to the underside of the picker, in combination with the reciprocating auxiliary gummer, the second gum-dish located near another edge of the blank and carrying a roller whose upper surface is substantially on a level with the top blank, and mechanism, substantially as described, for carrying said auxiliary gummer over the edge of the blank and free from contact with the same, and then dropping said gummer upon the blank and drawing it therefrom in a horizontal position while the picker is resting on the other edge, as set forth. 6th. In an envelope-machine, the elevator-frame B^2 carried in suitable guides formed in the bracket C^2, and supporting the elevator plate or table A^2, in combination with mechanism, substantially as described, arranged to impart a continuous upward movement to the table during the operation of the machine, and an adjustable friction-roller, as P^2, operating on the cones M1 and N^2, as described, and varying the speed of the feeding mechanism, as and for the purposes specified. 7th. In an envelope-machine, the plate or table A^2 carrying the envelope-blanks, and attached to, or forming part of the frame B^2 held in suitable guides within the bracket C^2, a screw D^3 fastened to said frame, and split-nut E^2 arranged to grasp the screw D^3 and pivoted to the worm-gear G^2 through which the screw D^3 passes, in combination with a horizontal spindle L^2 having a worm on it to mesh with the worm-gear G^2, and deriving motion from adjustable mechanism, substantially as described, by which the speed of the spindle L^2 may be increased or decreased without stopping the machine, substantially as and for the purpose specified. 8th. In an envelope-machine, the plate or table A^2 attached to, or forming part of the frame B^2 held in suitable guides within the bracket C^2, a screw D^3 fastened to said frame, and a pivoted split-nut E^2 made to grasp the screw D^3, in combination with the cone-shaped collar H^2 arranged to open the split-nut E^2, substantially as and for the purpose specified. 9th. In an envelope-machine, the plate or table A^2 attached to, or forming part of the frame B^2 held in suitable guides within the bracket C^2, a screw D^3 fastened to said frame, and a pivoted split-nut E^2 made to grasp the screw D^3, in combination with a cone-shaped collar H^2, the apex of which extends between the ends of the split-nut E^2, and the pivoted lever I^2 supported by the spring J^2, substantially as and for the purpose specified. 10th. In an envelope-machine, the plate or table A^2 attached to, or forming part of the frame B^2 held in suitable guides within the bracket C^2, a screw D^3 fastened to said frame and, a pivoted split-nut E^2 made to grasp the screw D^3, in combination with a cone-shaped collar H^2 arranged to open the split-nut E, which is held against the screw D^3 by a rubber band or spring a^2, substantially as and for the purpose specified. 11th. In an envelope-machine, the elevator-frame B^2 carried in suitable guides formed in the bracket C^2, and supporting the elevator plate or table A^2, and a screw D^3 arranged to support the frame B^2, when grasped by a nut secured to the worm-gear G^2 supported by bracket K^2, in combination with the spindle L^2 provided with a worm to mesh with the worm-gear G^2, and a cone M^2 connected by the adjustable friction-roller P^2 to the cone N^2, which is attached to the spindle O^2 deriving motion from some convenient moving part of the envelope-machine, substantially as and for the purpose specified. 12th In an envelope-machine, the elevator-frame B^2 carried in suitable guides, formed in the bracket C^2 and supporting the elevator-plate or table A^2, a screw D^3 fastened to the frame B^2 having a bastard thread cut upon it, with a nut E^2 arranged to grasp the said thread, in combination with mechanism, arranged substantially as described, to impart a revolving motion to the nut in order to convey a continuous upward movement to the elevator frame B^2, and means, as the rack T^2, pawl U^2 and lever V^2, for rising said frame independently of the regular feed, as set forth. 13th In an envelope-machine, the vertically adjustable elevator-table supporting the envelope blanks, the spindle L^2 connected to the elevating mechanism, and having attached to it a cone M^2 and a spindle O^2 running parallel with the spindle L^2, and having attached to it a cone N^2, the apex of the cone N^2 being opposite to the base of the cone M^2, the two cones being similarly tapered, in combination with a friction-roller P^2 arranged to form a connection between the two cones, and carried in a bracket capable of being adjusted toward either end of the cone, substantially as and for the purpose specified. 14th. In an envelope-machine, a table carrying the envelope-blanks and attached to a frame carried in guides so as to be vertically adjustable in them, and a ratchet rack T^2 formed upon, or attached to the elevator-frame, in combination with the pawl U^2 pivoted on the end of the lever V^2, and having a rounded tail e^2 arranged to extend beyond the adjustable bracket W^2, substantially as and for the purpose specified.

No. 24,664. Brake Shoe for Car Wheels.

(*Sabot de Frein pour Roues de Chars.*)

William Gill, Toronto, Ont., 7th August, 1886; 5 years.

Claim—A brake-shoe constructed with a single longitudinal chilled portion in the face thereof, and extending the full length of the face, and portions of said chilled portion reaching to the edges of the shoe, and having soft portions of metal on each side of, and in the middle of said chilled portion, substantially as shown and described as a new manufacture.

No. 24,665. Funnel Thimble.

(*Dé de Cheminée.*)

Sherman C. Hutchins, Chelsea, and Edward F. Macomber, Revere, Mass., U.S., 7th August, 1886, 5 years.

Claim.—1st. As an improved article of manufacture, the metallic funnel thimble guard B provided with a hole for receiving the funnel, and with slots or openings for receiving the plaster, substantially as described 2nd. As an improved article of manufacture, the metallic funnel-thimble guard B, provided with a hole for receiving the funnel, slots or openings for receiving the plaster, and hooks or means for locking it to a thimble, substantially as set forth. 3rd. As an improved article of manufacture, a funnel-thimble, provided with a peripherally disposed flange near its outer end for locking a guard to the thimble, substantially as described. 4th. As an improved article of manufacture, a funnel thimble provided with a peripherally disposed flange near its outer end, for locking a guard to the thimble, and a flange at its outer end for holding the plaster, substantially as set forth. 5th. The thimble A having the flange *x*, and provided with the bars *d* for centering and supporting the guard B, substantially as described. 6th. The thimble A having the flange *x*, provided with the notches *t*, in combination with the guard B, having the hole E, hooks *l* and slots *m*, substantially as set forth. 7th. The thimble A having the flanges *x*, *f* and bars *d*, in combination with the guard B having the hooks *l*, slots *m* and hole E, the flange *x* being provided with notches *t*, substantially as described.

No. 24,666. Stencil. (*Patron.*)

Michael W. Stines, Dayton, Ohio, U.S., 7th August, 1886, 5 years.

Claim.—1st. A wire or wires, the ends of which are bent and embedded in the faces of paper or wood disks, said disks being provided with suitable adhesive substances and constructed to secure together, in parallel or curved lines, two or more edges of paper or other material, substantially as described. 2nd. A stencil plate, wherein the necessary blanks in the letters or figures are held in place by wires and disks, substantially as specified. 3rd. The combination, in a stencil plate and with said plate, of the centre blank, the removable wires, the disks and the metallic tags or clips, substantially as set forth.