

plate and trace in position, the outer face of buckle plate c5, provided with the hooks c6 and a depression I therein, the compound angular loop D, with cross bars d1, d2 and an under cross bar d4, with prongs d5 projecting upwardly therefrom, the whole constructed and arranged and operating substantially as and for the purposes set forth.

No. 21,651. Nail Machine. (*Machine à Clou.*)

Porter C. Reed, Kingston, Mass., U.S., 12th May, 1885; 5 years.

Claim.—1st. The combination, with the moving die C1 and bed-die F, of the nepper L2, its adjustable base piece, spring lever L3, links L4 and cam lever L5, substantially as and for the purpose herein described. 2nd. In a machine for making edge-gripped nails, the combination of a vertical nipper, its adjustable base piece and moving die C1, with a single thick die adapted to take the place of a die and back piece, substantially as and for the purpose set forth. 3rd. In a nail machine for making edge-gripped nails, a single thick die F, provided with a groove in its working face for holding the blank, and having a portion of its face bevelled, substantially as described.

No. 21,652. Door Holder. (*Arrête-Porte.*)

Frank L. Rosenketer and George Hasinpfug, Cleveland, Ohio, U.S., 12th May, 1885; 5 years.

Claim.—1st. In a door holder, the combination of a casing secured to the door near its lower edge, and having a vertical director provided with lateral guides, surfaces made on its floor, with a holding bar provided with arms which lie and move on the guide surfaces of the director, and a lever-arm pivoted on the director, and provided with a cam flange eccentric to its pivot, and adapted to bear against a shoulder on the latch bar when the lever arm is turned and force the holding bar out of the casing, substantially as specified. 2nd. In a door holder, the combination of a casing secured to the door near its lower edge, and having a vertical director provided with lateral guide surfaces made on its floor, with a holding bar provided with arms which lie and move on the guide surfaces of the director, and a lever arm pivoted to the director and provided with a recess eccentric to its pivot, and adapted to engage a pin on the holding bar and retract the said bar within the casing when the lever handle is turned. 3rd. In a door holder, the combination of the casing A, provided with the director B having the guide surfaces b, b, with the holding bar D, provided with the arms E, E', shoulder e' and pin c, and the lever handle G made in one piece with the pivoted circular plate G1, and provided with the flange H and recess I, substantially as specified.

No. 21,653. Means for Operating Sewing Machines. (*Moyens de Mœuvrer les Machines à Coudre.*)

Frederick Stromeyer, New York, N.Y. (Assignee of Christian G. Sprenger, Hoboken, N.J.), U.S., 12th May, 1885; 5 years.

Claim.—1st. The combination, with a sewing machine, or like article, of a support for an operator, adapted to descend under the influence of the weight of the operator and transmit motion to the sewing machine or other article. 2nd. The combination, with a sewing machine, or like article, of a support for an operator, adapted to descend under the influence of the weight of the operator, and a train of wheels deriving motion from the support and transmitting it to the sewing machine or like article. 3rd. The combination, with a shaft, adapted to drive a sewing machine, or like article, of a support for an operator, adapted to descend under the influence of the weight of the operator and impart motion to the said shaft in one direction, and a spring for rotating the shaft in the reverse direction. 4th. The combination, with a sewing machine, or like article, of a support for an operator, adapted to descend under the influence of the weight of the operator and transmit motion to the sewing machine, or like article, and an adjustable fan for regulating the speed of the sewing machine, or other article. 5th. The combination, with a sewing machine, or like article, of a support for an operator, adapted to descend under the influence of the weight of the operator, and transmit motion to the sewing machine, or other article, and a lever by which the operator may raise the support when desirable. 6th. The combination, with a sewing machine, or like article, of a support for an operator, of a lever whereby the sewing machine, or like article, may be started and stopped. 7th. The combination, with the wheel w1, of the lever T, treadle J2, link J1 and spring J. 8th. The combination, with the wheel w1, of the lever I having a yielding extensible section. 9th. The combination, with the wheel w1, of the lever I having a spring actuated extensible section, and a spring for operating the lever in one direction.

No. 21,654. Machine for Pulling Pump and Sucker Rods. (*Machine à Retirer les Tiges de Pompes et de Suction.*)

John Rolston, Sr. (Assignee of John Rolston, Petrolia, Ont., 12th May, 1885; 5 years.

Claim.—The combination of the draw-bar, rocking shafts and piston, with spiral spring, cogged wheels, racket wheels and catches, substantially as and for the purpose hereinbefore set forth.

No. 21,655. Machine for Making Wedges. (*Machine à faire les Coins.*)

Joseph R. Bodwell, Hallowell (Assignee of Arthur M. Burnham, Gardiner, Me., U.S., 12th May, 1885; 5 years.

Claim.—1st. In a machine for making wedges, the combination, with two rotary cutters situated in different horizontal planes, and each adapted to be moved toward and away from the other, of a carriage situated between the rollers, and provided with devices for clamping the block therein. 2nd. The combination, with two cutter carriers, pivoted to the machine frame and two revolving cutters, the shafts of which are journaled respectively in the free ends of the carriers, of a reciprocating carriage situated between the cutters,

and provided with devices for holding a block of wood therein. 3rd. The combination, with two cutter carriers pivoted to the machine frame, and two revolving cutters, the shafts of which are journaled respectively in the free ends of the cutter carriers, of a reciprocating carriage running between the cutters and provided with formers, and a single belt for operating the cutters and holding the cutter-carriers in contact with the formers. 4th. In a machine for making wedges, the combination, with two cutter-carriers pivoted to the machine-frame, and cutters journaled respectively in the free ends of said carriers, of a carriage, provided on its opposite faces with formers, against which the cutter's carriers rest, and a belt for holding the cutter-carriers in contact with the formers. 5th. In a machine for making wedges, the combination, with rotary cutters, of a carriage adapted to reciprocate between the cutters, and provided with dogs, which latter automatically engage the block of wood, carry it between the cutters and automatically discharge it. 6th. In a wedge machine, the combination, with a carriage mounted upon ways, and provided with devices for automatically engaging and releasing the blocks, and further provided with formers for regulating the shape of the wedges, of an upper and lower rotary cutter, and devices whereby the cutters are held in vertical adjustment, substantially as set forth. 7th. The combination, substantially as before set forth, of the cutters, the reciprocating carriage, the hopper and a feeding hook secured to the carriage, and adapted to draw a blank from the hopper at each reciprocation of the carriage. 8th. The combination, substantially as before set forth, of the rotary cutters, the reciprocating carriage interposed between said cutters, the hopper and a feeding-hook secured to the carriage, and adapted to draw a blank from the hopper at each reciprocation of the carriage. 9th. In a wedge machine, the combination, with rotary cutters journaled in swinging frames, of a carriage mounted upon ways, and provided with automatic devices for grasping and releasing the blocks, and mechanism whereby the carriage is reciprocated and the cutters rotated, substantially as set forth. 10th. In a wedge machine, the combination of swinging frames having rotary cutters journaled therein, automatically-operated dogs adapted to grasp, feed and release the blocks, and formers for controlling the converging motions of the cutters, substantially as set forth. 11th. In a wedge machine, the combination, with the rotary cutters, driven by a single belt, and having opposite rotary motions, of a carriage adapted to slide upon ways, and provided with an automatic clamping device, a hook adapted to engage the block in the hopper and templates for determining the angle of the wedge and the ways, substantially as set forth. 12th. In a machine for making wedges, the combination, with a suitable frame, a reciprocating carriage and revolving cutters, of a slotted lever pivoted at one end to the frame, a pitman connecting the opposite end of said lever to the carriage, and a crank journaled to the frame and engaging the slotted lever, substantially as and for the purposes set forth. 13th. The combination, with suitable cutters and a reciprocating carriage, the latter provided with an oblong open slot, of sliding bars situated on opposite sides of the slot, and projecting from both ends of the carriage, the said bars being provided with diagonal lugs, and dogs provided with diagonal slots in which the lugs of the said bars rest and move, and the stops secured to the frame against which the bars abut, substantially as set forth.

No. 21,656. Material for Packing Bottles.

(*Matériel pour Empaqueter les Bouteilles.*)

Oliver Long, Brooklyn, N.Y., U.S., 12th May, 1885; 5 years.

Claim.—As an article of manufacture, a packing material for bottles, composed of tubes of paper filled with hay or straw, which are attached to single sheets of paper, substantially in the manner set forth and for the purpose specified.

No. 21,657. Lock for Mail Pouches.

(*Serrure de Valise à Lettres.*)

Gustave Deimel, Hancock, Mich., U.S., 12th May, 1885; 5 years.

Claim.—1st. In a locking device, and in combination with the spring lock bolt K and spring pawl N thereof, the sliding plate U provided with the pin X to engage the pawl N, substantially as and for the purpose set forth. 2nd. In combination with the notched studs F, fastened to the frame of the pouch and constructed to pass through the flap of the same and into the plate I secured to the said flap, the spring lock bolt K secured to said plate and engaging said studs F, and provided with the spring pawl N, the sliding plate U secured on the face of said lock, and carrying the pin X constructed to come in contact with said pawl and bring it within the path of the tooth R on the key spindle Q, substantially as and for the purpose specified. 3rd. In a pouch lock, and in combination with the spring bolt K and spring pawl N, the sliding plate U upon the outer face of the said lock having an opening to display the post office address, and provided with a pin X projecting through the slot V in the face of the said lock to control the pawl N, the movement of said plate being limited by the studs V projecting therefrom and passing through slots in the front of said lock, whereby the said plate serves the double purpose of displaying an address and of throwing said locking mechanism into a fixed position to be operated on by the tooth of the key spindle, substantially as described.

No. 21,658. Harvester Binder.

(*Moissonneuse-Lieuse.*)

John G. Watson, Ayr, Ont., 12th May, 1885; 5 years.

Claim.—1st. In a harvester-binder in which the binding mechanism and binding-table is all connected to the same frame, mechanism arranged to support the said frame to the main frame of the machine, in such a manner that the said frame and its mechanism may be moved bodily from the side of the machine to its rear or front. 2nd. A rod G connected to the frame B and extending from the side to the rear of the machine, in combination with the hooked brackets F and R arranged to detachably connect the frame of the binding-table E to the main frame of the machine. 3rd. The hooked brackets F and R near the top side of the frame of the binding-table E, the