

position by the movement of said float, substantially as described. 2nd. The combination of a float D, provided with magnetic material, with a magnetic circuit-controlling device, substantially as described. 3rd. The combination of a float D with an automatic circuit controlling device, which consists of a pivoted magnetic bar E, provided with circuit-closing contact points F and a permanent magnet, substantially as and for the purposes described. 4th. The combination of electric controlling and alarm devices, and an automatic operating device consisting of a float D, provided with magnetic material, with adjacent devices consisting of a permanent magnet and a movable bar E, having operating connection with the circuit which contains said electric controlling and alarm devices, substantially as described. 5th. The combination of a tube B connected with the main liquid receptacle, with a float D containing magnetic material, an electric circuit and a circuit closer in said circuit, consisting of a pivoted magnetic bar E, substantially as described. 6th. The combination of the liquid-holding tube B and a float thereon, provided with magnetic material with a magnet outside said tube and adjacent thereto, and an armature pivoted behind and either between or to one side of the ends or poles of said magnet, substantially as described. 7th. The casing Q, provided with a sleeve R having a slotted projection T, substantially as and for the purposes described.

No. 24,853. Pipe or Tube made of Glass, etc.
(*Tuyau ou Tube fait de Verre, etc.*)

Carl F. W. Doehring, Leipzig, Germany, 3rd September, 1886, 5 years.

Claim.—1st. A pipe P in combination with a covering D of paper or other material, wound around the same and joined together by a suitable cement applied in a heated and fluid state, substantially as specified. 2nd. The combination of stand A with screw shaft *a*, spindles *b* having cones *d* at their inner ends, and supporting a pipe P and pressure roller P', with a reservoir B heated by steam or fire, containing cement, and an endless roll of paper or other material D, the whole being arranged to operate in the manner and for the purpose set forth.

No. 24,854. Dust Collector for Flour Mills, etc.
(*Aspirateur de Poussière pour Moulins à Blé, etc.*)

The Knickerbocker Company, (assignee of Orville M. Morsol), Jackson, Mich., U.S., 3rd September, 1886, 5 years.

Claim.—1st. In a dust-collector, a conical or tapering separating chamber in which the dust-laden air forms a vortex or whirling body, and which is provided with a tangential inlet for the dust-laden air, a discharge opening for the separated dust, and a discharge opening for the purified air, substantially as set forth. 2nd. A dust-collector composed of conical or tapering separate chambers having a dust discharge opening at its small end, and an air discharge opening at its large end, and an inlet for the dust-laden air connected with the large end of the separating chamber, substantially as set forth. 3rd. The combination, with the conical separating chamber C having a tangential air inlet B, a dust discharge opening *d* and an air discharge opening *e*, of an inclined deflector arranged on the inner surface of the separating chamber, whereby the dust particles are directed toward the dust discharge opening, substantially as set forth. 4th. The combination, with the conical or tapering separating chamber C provided with a dust discharge opening and an air discharge opening, an auxiliary dust separator surrounding the air discharge opening and provided with outlet, through which the dust passes from the auxiliary separator into the main separating chamber, substantially as set forth. 5th. In a dust-collector, a tapering separating case, in which the dust-laden air forms a vortex or whirling body, and provided at its small end with a discharge opening for the light material, and at its large end with a discharge opening for the heavy material, substantially as set forth.

No. 24,855. Vamp for Ladies' Boots.
(*Empeigne pour Chaussures de Dames.*)

Thomas Picoté, Montreal, Que., 3rd September, 1886, 5 years.

Réclame.—Une empeigne pour chaussures de dames composée des pièces montrées aux figs. 1, 2, et 3, des dessins ci-annexés, et ayant la forme toute spéciale y indiquée, le tout tel qu'on ci-dessus décrit et pour les fins sus-mentionnées.

No. 24,856. Weather Strip. (*Bourrelet de Porte.*)

William Harrison, Kingston, Ont., 3rd September, 1886, 5 years.

Claim.—1st. The combination, with a pivoted weather strip, of an upwardly projecting bar on the same, a spring for pressing the bar and strip downward, and of a catch for holding the bar and weather strip raised, substantially as herein shown and described. 2nd. The combination, with a pivoted weather strip, of a bar projecting upward from the same, a spring for pressing the strip and bar downwards and holding the bar and strip, and a catch on a door frame, and a lug on the bar for raising said bar and strip when the door is opened, substantially as herein shown and described. 3rd. The combination, with the pivoted strip A, of the bar B having a prong J, the spring G for pressing the strip A and the bar B downward, the catch K on the door-frame, and the latch M for locking the bolt when raised substantially as herein shown and described. 4th. The combination, with the pivoted strip A, of the bar B, the spring G, the pivoted latch M having an arm O, the spring Q and the beveled lug K on the door-frame, substantially as herein shown and described. 5th. The combination, with the pivoted strip A, of the bar B having the prong J, the pivoted latch M having the arm O, the automatic catch K and the beveled lug R, on the door-frame, and the spring G, substantially as herein shown and described. 6th. The combination, with the casing E having the aperture W, of the bar B having the prong J, the automatic catch K, the hinged strip A connected with the bar B, and of the pin V, substantially as herein shown and described. 7th. The combination, with the pivoted strip A, of the bar

D, the knob S, the casing F and the knob T, substantially as herein shown and described.

No. 24,857. Moulding Machine.
(*Machine Moulur.*)

Charles Dawson, Peterboro, On, 3rd September, 1886, 5 years.

Claim.—1st. A cross-head C connected to the vertical rod D, the lower ends of which are journaled on the shaft E, in combination with the cranks F fixed to the shaft E and pivoted to the bars G, which are pivoted on the frame A, a horizontal handle H fixed to the shaft E, substantially as and for the purpose specified. 2nd. The combination, with a moulding, of a planing frame I, made substantially the same shape and size of the flask B, substantially as and for the purpose specified. 3rd. A cross-head C having the arms J, in combination with the planing frame I, carried on the arms J, and operated by the rod K, substantially as and for the purpose specified.

No. 24,858. Foot Power Hammer.
(*Marteau à Marche.*)

Minnie Headen, Christiansburg, Va., U.S., 3rd September, 1886, 5 years.

Claim.—1st. In a foot power hammer, the combination of an upright frame having transverse bearings in its side pieces, a rock shaft journaled in the said bearings, and provided with semicircular grooved disks and with a socket, for the reception of the hammer, a foot lever or treadle pivoted with one end upon the rear end piece of the base frame, and having a cord or chain secured to its middle and passed over one semicircular disk, secured to one end of it, a flat, slightly curved spring secured to the forward end piece of the base frame, and having a cord or rope attached to its free end and passed over the other semicircular disk secured at the end of the same, and a flat, slightly curved spring secured at a right angle to the other spring, and bearing with its free end under the free end of the foot lever, as and for the purpose shown and set forth. 2nd. In a foot power hammer, the combination of a rectangular base frame, having two pairs of slightly converging uprights secured to its side pieces, a frame having its converging side pieces secured adjustably by series of perforations between the ends of the uprights upon detachable bolts, and having transverse bearings in the said side pieces, a rock shaft journaled in the bearings and having a socket at its middle, and two semicircular grooved disks secured at both sides of the socket, and provided with a removable crank, a hammer fitting with its handle in the socket, a flat upright spring secured to the middle of the top piece of the adjustable frame and having a concave curved upper portion for the handle of the hammer, a foot lever or treadle pivoted at one end upon the rear end piece of the base frame, and having a cord or chain secured to its middle and passing over one of the semicircular disks secured to one end of the same, a flat, slightly curved spring secured at one end to the forward end piece of the base frame, and having a cord or chain secured to its free end and passing over the other semicircular disk, and secured to its end, and a flat, slightly curved spring secured at a right angle to the rigid end of the other spring, and having its free end bearing under the free end of the treadle, as and for the purpose shown and set forth.

No. 24,859. Machine for Making Wooden Hoops. (*Machine pour Faire les Cercles de Bois*)

John C. Shepherd, South Norwich, Ont., 3rd September, 1886, 5 years.

Claim.—The combination of the fixed knives B and *a*, the movable table C, the arms or rests *d*, the ratchet G and notched to heel H, with the combined pulley and balance to heel E, the levers F, F', and the cranks *k*, substantially as and for the purpose hereinbefore set forth.

No. 24,860. Machine for Pressing and Drying Lumber. (*Machine pour Presser et Sécher le Bois.*)

Heman S. Smith, Brooklyn, N. Y., U. S., 3rd September, 1886, 5 years.

Claim.—1st. In a machine for compressing lumber, the combination of a recessed bed-plate, vertical side bars secured thereto and supporting a cap plate, vertical guide rods and die plates moving vertically upon said rods, and provided with suitable dies having means for applying heat thereto, substantially as set forth. 2nd. In a machine for compressing lumber, the combination, with the hollow die plate G having dies *c*, *d*, of the stand pipe H and flexible pipes or connections *b*, whereby steam or hot water may be conveyed to the interior of said die-plate, substantially as set forth. 3rd. In a lumber pressing and drying machine, the combination of the bed plate A, standards E, E, guide posts F, F, having collars *a*, *a*, the cap G supported by said standards and guide posts, the hollow press plates H, H, supported horizontally on the collars *a*, *a*, and having exit cocks *c* and stops *d*, *d*, the movable platen B carrying the lower press-plate, and the stand pipe I having flexible tubes *b*, *b*, for connecting with each press plate, substantially as described. 4th. In a lumber pressing and drying machine, the combination, with the movable press plates H, H, and the fixed tables *e*, *e*, supported by the standards E, E, at one side of the machine, of the bell crank levers K, K, pivoted to lugs on the bed plate and adapted to be actuated by the lower press plate in its descent, substantially as described.

No. 24,861. Art of and Apparatus for Converting Heat Energy into Electrical Energy. (*Art de Transformer l'Energie de la Chaleur en Energie Electrique, et Appareil pour cet objet.*)

Park Benjamin, New York (assignee of Willard E. Case, Auburn), N. Y., U. S., 3rd September, 1886, 5 years.