

### No. 24,439. Metal Support for Suspending Drawers in the Bottom of a Table. (*Coulisseaux Méalliques pour Tiroirs de Tables.*)

Charles Raymond, Guolph, Ont., 6th July, 1886; 5 years.

*Claim.*—1st. The metal frames B, C, in combination with the metal bars A, notched as specified, and having the lugs a, substantially as and for the purpose specified. 2nd. The bars A having lugs a at one end, and the lugs c at the other, and notched as specified, in combination with the metal frames B and C, notched and connected to the bar A, substantially as and for the purpose specified.

### No. 24,440. Furnace Grate.

(*Grille de Fourneau.*)

John Smoad, Toledo, Ohio, U.S., 6th July, 1886; 5 years.

*Claim.*—1st. A grate for furnaces, consisting of one or more plates or sections A, provided with a series of ribs or projections on its upper surface, with vertical holes extending through said plates, and the ribs or projections thereon, substantially as shown and described. 2nd. The plate or section A, provided with the ribs d, having holes c formed therein, and provided with the locking lug g on one edge, substantially as and for the purpose set forth. 3rd. A grate for furnaces, consisting of a plate A, having a series of ribs d on its surface with holes c formed in and extending through said ribs and plate, and having a series of strengthening-ribs formed on the under side of said plate, substantially as shown and described. 4th. A grate consisting of a plate A, having a series of ribs d or equivalent projections formed on its upper surface, with holes c extending vertically through said projections and plate, and having cavities between said ribs or projections on the upper side of said plate for the reception of ashes or other protecting material, as set forth.

### No. 24,441. Brick Machine. (*Machine à Briquer.*)

Gustav Haub, Perham, Minn., U.S., 6th July, 1886; 5 years.

*Claim.*—1st. Combined with movable carriage in a brick machine, a plunger having a cross timber carrying spring-surrounded rods, toothed wheels on the plunger supporting frames and connected to the said rods, and rack-teeth on the said carriage operating said wheels, substantially as specified. 2nd. In a brick-machine, a drive-shaft with a clutch-connection to the transmitting mechanism, a lever for operating said clutch, a reciprocating carriage, a catch on said carriage and a lever pivoted to the frame connected to the clutch-lever and adapted to engage the catch on the carriage substantially as specified. 3rd. The combination, with the reciprocating carriage D, mounted and actuated substantially as described, of a sliding frame thereon having an elevated floor, and a depression in front of it to receive the mould-boxes, the stationary pressing-box located over said slide, and provided with a plunger connected to a vertically-movable guided cross-head, the rods c vertically movable through this cross-head and bearing sprocket wheels tapped on them and connected by an endless chain and seated on springs, the toothed wheels G connected by pitman to said rods c, and the racks H on the carriage, all constructed and adapted to operate substantially as described. 4th. In a brick-machine, the combination, with the press-box, its plunger and a carriage bearing rack-teeth, of the spring-actuated rods passed freely through the cross-head of the plunger, the toothed wheels actuated by said rack teeth and connected to the said rods by pitman, and the sprocket-wheels tapped on said rods and connected by an endless chain, substantially as described. 5th. In a brick-making machine of the character described, the combination, with a press-box, a rolling carriage and a sliding frame thereon, of the spring-actuated angular pawls K pivoted to said sliding frame, the stops M on the end of the carriage, and stops L on the main frame, substantially as described. 6th. The combination of the carriage D, actuated by cranks on the horizontal shaft G, and provided with a bent spring-actuated rod T, the lever N on the main frame, located as described, the clutching device on the main driving-shaft, the actuating lever for the clutch, and the chain connecting this lever with the lever N, all constructed and adapted to automatically stop the movement of the carriage at the proper times for removing the mould boxes, substantially as described.

### No. 24,442. Car Brake. (*Frein de Char.*)

Earl A. Westcott and Edmond R. Bristol, Minneapolis, Minn., U.S., 6th July, 1886; 5 years.

*Claim.*—1st. The combination, with the supply pipe, of an atmospheric brake system of a suspended post, and a lever connecting it with a valve of the supply pipe. 2nd. A post suspended from the truck of a railway car or engine truck over the rail, in combination with the supply pipe of an atmospheric brake, a valve leading to the supply pipe, and mechanism connecting the post with said valve, whereby the lifting of the post by contact with the rail or other obstruction will open the valve and apply the brakes, substantially as set forth. 3rd. The combination, with the supply pipe of an atmospheric brake system, of a valve leading therefrom, a link d, lever D and a post suspended from the short arm of lever D over the rail, as and for the purpose set forth. 4th. The combination, with the pipe H, of tubes G and their valves levers D, links d, posts F and guides E, as and for the purpose set forth.

### No. 24,443. Bottle. (*Bouteille.*)

Henry R. Bothwell, Toronto, Ont., 6th July, 1886; 5 years.

*Claim.*—1st. A bottle A, having a chamber B formed in its neck, and communicating with the interior of the bottle, with an aperture made through its side. 2nd. A bottle A, having a chamber B formed in its neck, and having a recess d made in its bottom, together with an aperture a made through its side to communicate with the interior of the bottle, substantially as and for the purpose specified.

### No. 24,444. Tire Upsetter and Welder.

(*Machine à Refouler et Souder les Bandages des Roues.*)

Thomas Stylos, Fenelon Falls, Ont., 6th July, 1886; 5 years.

*Claim.*—1st. The herein described method of upsetting and welding tires, which consists in subjecting the heated ends of the tire to pressure upon each of the four sides of the meeting ends, substantially as described. 2nd. The herein described method of upsetting and welding tires, which consists in placing the tire upon a bed or anvil, and subjecting the ends so placed to a vertical and lateral pressure, substantially as described. 3rd. In a tire upsetter and welder, the combination, with a curved plate 16, rigidly connected to a stationary frame, of a movable plate 31, a means for advancing the plate 31 toward the plate 16, a horizontally-arranged plate 23, and a mechanism, substantially as described, whereby said plate is moved toward the plate 16, a plate 51 and a mechanism for advancing said plate toward the longitudinal centre of the plate 16, substantially as described. 4th. In a machine for upsetting and welding tires, the combination of the following elements: a plate 16 rigidly connected to the frame of the machine, a plate 31 mounted in ways and carrying a rack 37, eccentric gear engaging with said rack and provided with an operating lever, brackets 59 and 40 carrying eccentrics 41 and 61, two faced blocks connected to the eccentric plate 18, carrying a plate 23 and formed with a slot 8, an eccentric arranged in said slot, a toothed wheel 27 connected with the eccentric, and a lever 23 engaging with the tooth of the wheel 27, a plate 51 formed with a central slot and diagonal side slots, as 5, a wedge shaped block 53 engaging with said slots 5 and held against lateral motion, and a means, substantially as described, whereby said wedge-shaped block may be depressed, as and for the purpose stated.

### No. 24,445. Machine for Forming Pulp into Vessels. (*Machine pour Façonner les Vaisseaux en Pâte à Papier.*)

Gronville M. Stevens, Portland, Me., U.S., 6th July, 1886; 5 years.

*Claim.*—1st. The perforated cylinder G, the rods and the inner and outer sieves of different textures, in combination with the conical bottom I, yoke H, aperture L, and rods J and p and arms I, the same to be operated, as herein set forth. 2nd. In combination with the inner cylinder G and its contained devices, the outer cylinder with scuppers D and the flange B, as herein set forth. 3rd. The combination, with the cylinder G, of the movable part of the yoke H, arms I and rods J and p, to regulate the freight of the vessel to be formed, as herein set forth.

### No. 24,446. Seal Steam Washing Machine.

(*Machine à Laver à la Vapeur Scellée.*)

David Reynolds, Dundas, Ont., 7th July, 1886; 5 years.

*Claim.*—1st. In a steam washing machine, the combination of the tank A and the sealed water compartment B, the flange a of the cover C fitting thereon to make a sealed joint, substantially as specified. 2nd. In a steam washing machine, the cylinder D, provided with buckets E, a series of inlet openings f at the rear end of buckets, a series of side outlet openings g, and a series of tumblers attached to the interior of the cylinder, all constructed and arranged substantially as and for the purpose specified. 3rd. In combination, with the cover C, of the indicator or valve K, substantially as and for the purpose specified. 4th. The combination of the tank A, drip pan I and trap pipe J, substantially as and for the purpose specified. 5th. The combination of the tank A, sealed water compartment B, cylinder D, buckets E, tumblers G, inlet openings f, outlet openings g, cover C with flange a, bearings b, h, spindles c, e, all arranged and constructed substantially as and for the purpose specified.

### No. 24,447. Attachment to Grain Drills.

(*Disposition aux Semoirs en Ligne.*)

Jeremiah Coursen, Prairie View, Ks., U.S., 7th July, 1886; 5 years.

*Claim.*—1st. The combination of the frame, the transverse rocking bar I thereon having the slotted openings i, the beams F hinged to the frame and carrying the trailing colters, and the discharge nozzles and the rods L attached to the hinged beams and passing up through the openings in the rocking bar, substantially as described. 2nd. The combination of the frame, the transverse rocking bar I thereon having the slotted openings i, the beams F hinged to the frame and carrying the trailing colters and the discharge nozzles, the rods L attached to the hinged beams, the bearing springs on the said rods and the nuts M on the upper ends of the rods L, as set forth.

### No. 24,448. Adding Machine.

(*Machine pour Additionner.*)

Peter T. Lindholm, Lincoln, Ks., U.S., 7th July, 1886; 5 years.

*Claim.*—1st. In an adding machine, the combination, with the bed plate A, the shaft D and the loosely revolving ratchet wheel B, having index flange F, of the arm H attached to the said shaft, the pawl G pivoted to the said arm, the arms I attached to the said shaft, the bar J connecting the said arms, the spring pressing key levers L having hooks K engaging with the connecting bar, the elbow levers Q connected with the said key levers, the slides T connected with the elbow levers and having graduated projections X, the recessed bars V carrying the said slides, and the spring Z connected with the pawl carrying arm, substantially as herein shown and described whereby the said ratchet wheel will be turned forward through fixed spaces by operating the said key levers, as set forth. 2nd. In an adding machine, the combination, with the shaft D and the loosely revolving ratchet wheel E, of the arm H, pawl G on the end of the said arm, spring Z, the arms I, the bar J connected to said arms I, and the key levers L provided with hooks K engaging said bar J, substantially as herein shown and described. 3rd. In an adding machine, the combination, with the loosely-revolving ratchet wheel E, the key