

**Claim.**—1st. The double brackets A, A, having the spring B, B, as a new article of manufacture, for attachment to platform rocking chairs, substantially as described. 2nd. In a platform rocking chair, the combination, with the rocker and base rail, of double brackets, each bracket having a coil spring, one of said springs being constructed of lighter wire than the other, substantially as described and for the purpose set forth. 3rd. In a platform rocking chair, the combination, with the rocker and base rail, of double brackets, each bracket having a coil spring, one of said springs having a greater number of coils than the other, substantially as described and for the purpose set forth. 4th. The combination, in a platform rocking chair, of the brackets A, A and coil-wire spring B, said brackets provided with a lug C, substantially as described and for the purpose set forth.

### No. 21,609. Perforating Machine.

(Machine à Perforer.)

Edward B. Stimpson, Brooklyn, N.Y., U.S., 6th May, 1885; 5 years.

**Claim.**—1st. In a punch-holder, the combination, with a bar or body having a rebate in its side, of a plate secured to the under side of the bar or body, and receiving header punches through it, and packing pieces fitted to said rebate and serving to prevent upward movement of the punches, substantially as herein described. 2nd. The combination, with the header punches, H, of the punch-holder consisting of the plate G<sub>1</sub>, and the bar or body G, to the under side of which the said plate is secured, and in the point of which is a rebate of such depth that the punches may be withdrawn entirely from the plate G<sub>1</sub>, by an upward movement, and packing pieces fitted to said rebate and serving to prevent the rising of the punches, substantially as herein described. 3rd. The combination, with the punch-holder composed of the bar or body G, having a rebate in the front, and the plate G<sub>1</sub> secured to the bottom of said bar or body, of the punches H, a continuous packing strip fitted to the rebate, and a packing strip or strips fitted between said continuous strip and said plate, and composed of separately removable sections, substantially as herein described. 4th. The combination, with a punch-holder composed of the bar or body G, rebated at the front, and the plate G<sub>1</sub> secured thereto, of the punches H or continuous packing piece fitted in said rebate, and a packing piece or pieces fitted between said continuous piece and the said plate, and composed of separately removable sections of different lengths, substantially as herein described. 5th. The combination, with the punch-holder composed of the bar or body G, and the plate G<sub>1</sub>, of the punches H of different lengths, a packing piece *h* provided in its edge with recesses or depressions *h'* opposite the longer punches, and a packing piece or pieces removably fitted between said piece *h* and the punches, substantially as herein described. 6th. The combination, with a punch-holder and stripper capable of being removed together from the perforating machine and inverted, of a support upon which said punch-holder may be secured when inverted, and supports for the inverted stripper capable of adjustment to bring the stripper to a position in which it will serve as a gauge for sharpening the punches, substantially as herein described. 7th. The combination, with the cross-head and vertical guide, of a perforating machine, of a cross-bar connecting said guides at their upper ends, a punch-holder and stripper capable of being together removed from the machine and inverted, the punch-holder being supported on said cross-bar and the latter having supports for the stripper capable of vertical adjustment to bring the stripper into position to serve as a gauge for sharpening the punches, substantially as herein described. 8th. The combination, with the cross-head E, guides D and cross-bar D<sub>1</sub>, provided with studs or pins *n* and nuts *o*, of an invertible punch-holder and invertible stripper and stripper-beam provided with eyes K removable together from said machine, substantially as herein described. 9th. The combination, with a punch-holder, provided with punches of different lengths, a packing piece provided in its under side with recesses or depressions opposite the longer punches, and a stripper fitted to the punches, and punch-holder and stripper being together removable from the perforating machine, and capable of being inverted, of a support for the punch-holder when inverted, and supports for said stripper capable of adjustment to raise and lower the stripper relatively to the ends of the punches, substantially as herein described.

### No. 21,610. Furnace for Heating Water.

(Calorifère à Eau.)

Julius Leduc, Montreal, Que., 7th May, 1885; 5 years.

**Claim.**—1st. In a furnace, the combination, with the back sides and top containing water chambers, of pipes set in pairs in the fire chamber, as and for the purpose described. 2nd. The combination of the pipes H, secured to the back C, set in pairs obliquely to each other, and connected by bends K, all substantially as herein described.

### No. 21,611. Machine for Purifying Middlings.

(Machine à Epurer les Gruaux.)

Andrew Hunter, Chicago, Ill., U.S., 7th May, 1885; 5 years.

**Claim.**—1st. The combination of the shaker C, and a series of interrupted or open brushes E, E, E, which operate successive upon different parts of the upper surface of said shaker, substantially as described. 2nd. The combination of the shaker C, side bars F and bolts H, and a series of interrupted or open brushes E, E, E, having extension ends adapted to slide on said bars, substantially as described. 3rd. The combination of the shaker C, sectional graded silk D, having the ends fastened to clamps *b*, *b*, and said clamps fastened to the cross piece of the shaker C by bolts *di*, substantially as described. 4th. The combination of the shaker C, sectional graded cloth D, the sides of which are fastened to strips *c* and *ct*, and strip *ct* fastened to stationary strip *c<sub>111</sub>* by bolt *c<sub>111</sub>*, substantially as described. 5th. In a middlings purifier, shaker C, suction fan O, the casing and walls forming the space I, tubes *d*, *d* and *m*, *m*, substantially as described. 6th. In a middlings purifier, suction fan O, in combination with shaker C, eccentric P and butting bar P<sub>1</sub>, substantially as described. 7th. In a middlings purifier, suction fan O, shaker C, tubes *d*, *d*, and tubes *m*, *m*, valve V and valves N and *vi*,

substantially as described. 8th. The combination, in a middlings purifier, of the shaker C, a series of interrupted or open brushes E, E, E, tubes *d*, *d* and *m*, *m*, feed hopper B, graded silk D, eccentric P and butting bar P<sub>1</sub>, substantially as described.

### No. 21,612. Neck Tie Fastener.

(Agrafe de Cravate.)

Clayton A. Turner, Milwaukee, Wis., U.S., 7th May, 1885; 5 years.

**Claim.**—1st. As a new article of manufacture, a neck-tie fastener, formed of a single piece of metal having a spiral fastening coil E, adapted to engage in the neck band of a tie, and an upturned hook D adapted to engage beneath the lower edge of a collar, substantially as and for the purpose set forth. 2nd. A neck-tie fastener, consisting of the spiral coil E, upturned hook D and angular bend F, formed of a single piece of wire, substantially as and for the purpose set forth.

### No. 21,613. Roller Skate.

(Patin à Roulettes.)

Cadwallader M. Raymond, Boston, Mass., U. S., 7th May, 1885; 5 years.

**Claim.**—1st. In a roller skate, the combination of the heel plate B, provided with a series of indentations or depressions *p*, *p*, and the toe-plate A, provided with one or more projections *a* adapted to fit in the depressions *p* of the heel plate, as and for the purpose set forth. 2nd. The combination of the toe-plate A, provided with the projections *a*, the slotted heel plate B, provided with the depressions *p*, *p*, and the clamping screw and nut *c* and *D*, substantially as set forth. 3rd. The cap or cover I, in combination with the outer hub of the roller F, as and for the purpose set forth. 4th. The roller K, having a turned down edge, in combination with the inner hub of the roller F, as and for the purpose set forth. 5th. The bearing K, provided with the outwardly-extended rim *h*, in combination with the collar K, as shown and described.

### No. 21,614. Roller Skate.

(Patin à Roulettes.)

Cadwallader M. Raymond, Boston, Mass., U. S., 7th May, 1885; 5 years.

**Claim.**—1st. The combination, with the independent heel and toe plates A, B, of the lever C and bar E, as and for the purpose set forth. 2nd. The combination of the independent heel and toe plates A, B, the lever C, bar E and adjustable heel clamp H, as set forth. 3rd. The separable rubber block O, provided with a depression on the upper side, and a groove on the underside, in combination with the heel plate L, provided with the seat *l* and the hanger Q, substantially as and for the purpose set forth. 4th. The recessed plates M, in combination with the heel and toe plates A, B, as and for the purpose set forth. 5th. The toe plate A, constructed with the curve and slot *d*, in combination with the heel plate A, as and for the purpose specified. 6th. In an extensible skate, I claim the combination, with the toe and heel plates, of means for drawing the two plates together or contracting their length, whereby the shank of the sole of the boot or shoe is arched or increased in curvature so as to constitute a firm support for the shank and instep of the foot.

### No. 21,615. Apparatus for Ventilating Railway Carriages, etc.

(Appareil pour Ventilier les Voitures de Chemin de fer.)

Adam Miller, London, Eng., 7th May, 1885; 5 years.

**Claim.**—For ventilating railway or other carriage, the construction, in or along their roofs, of longitudinal air channels open at the ends, and communicating with the compartments by apertures through their ceilings, these apertures having on each side upwardly inclined cheeks, substantially as and for the purpose herein set forth.

### No. 21,616. Stop and Water Valve.

(Robinet de Retenue et d'Eau.)

Patrick Harvey, Chicago, Ill., U.S., 7th May, 1885; 5 years.

**Claim.**—1st. The combination with a water supply pipe and a wash-pipe, a valve chamber located and affording communication between them, and a valve playing in such chamber and adapted to pass through, and close at one end, the supply port, and at the other end the wash port and longer than the distance between said ports, said valve provided with bearing shoulders, and said chamber provided with bearing seats for said shoulders at the margins of said ports respectively, the distance between said seats being greater than the distance between said shoulders and less than the distance from either shoulder to the opposite end of the valve, substantially as and for the purpose set forth. 2nd. The combination, with water supply pipe and service pipe, and a wash pipe communicating therewith, and a stop and wash valve controlling such communication, of an automatic check valve in the wash pipe beyond the stop and wash valve, substantially as set forth. 3rd. In combination, with the water supply pipe, service pipe and waste pipe, the chamber C communicating between the two, the valve D, playing within said chamber, the supplemental chamber E having the eduction port E<sub>1</sub>, and the automatic valve E<sub>2</sub> closing said eduction port and opening outward, substantially as and for the purpose set forth.

### No. 21,617. Manufacture of Malt Liquors.

(Fabrication des Boissons Brassées.)

William T. Jebb, Buffalo, N.Y., U.S., 7th May, 1885; 5 years.

**Claim.**—1st. The herein-described method of producing a wort suitable for the manufacture of beer or ale, which consists in freeing the starchy portions of the kernels of Indian corn or maize from hulls and germs, by steeping, whipping and sifting, and then mashing the separated starchy material together with barley malt, and draining off the wort, substantially as set forth. 2nd. The herein-described method of producing a wort suitable for the manufacture of beer or