

No. 35,604. Heel Stiffener Machine.*(Machine à renforcer les talons de chaussures.)*

Louis Coté, St. Hyacinthe, Quebec, Canada, 11th December, 1890; 5 years.

Claim.—1st. In a machine for forming boot or shoe counter stiffeners, the combination of a former composed of a fixed heel-section and two side sections pivoted together, and to the bed or table at a point near the heel end of said former, two mold-like jaws having their inner faces shaped to conform to the longitudinal and vertical curves of the side sections of said former, and pivoted at or near the middle of their lengths to slides, one upon each side of said former, a spring or springs arranged to press said slides toward each other, and a revolving wedge, constructed and arranged to pass between the free ends of the pivoted side sections of the former, and move them about their common fulcrum, and compress the forward portions of the counter between said side sections of the former and the mold jaws. 2nd. The combination of the bed L, a former composed of the fixed portion r^2 , and the two pivoted portions r, r^1 , having a portion of their inner or contiguous faces bevelled, as at s, s^1 , the slides M fitted to guideways in said bed, the spring N, the mold-sections O, O', pivoted to the slides M, M', the springs t, t' , the revolving shaft P and the segmental wedge mounted upon said shaft and constructed and arranged to act upon the inner bevelled sides of the pivoted sections of the former, and move them in opposite directions, substantially as and for the purposes described. 3rd. The combination in a machine for forming boot or shoe counter stiffeners, of a pair of fluted rolls for corrugating one edge of the blank, a revolving spherical or spheroidal former, and a fixed mould for imparting to the blank longitudinal and transverse curves in the form of arcs of circles, a revolving disk, having a semicircular edge, and a fixed mould co-operating therewith to reshape the rear portion of the counter-stiffener, a mechanism for reshaping the forward part of the counter-stiffener, comprising a former in sections, two of which are pivoted together at one end, two side molds pivoted to slides pressed towards each other and said former, by a spring or springs and a segmental revolving wedge, constructed and arranged to intermittently act upon said pivoted sections of the former, and force them apart and press the forward portions of the counter-stiffener between said former and the side moulds, and reshape them.

No. 35,605. Furnace for Hot Water.*(Fournaise à eau chaude.)*

Eugene Solomon Manny, Montreal, Quebec, Canada, 12th December, 1890; 5 years.

Résumé.—10. La combinaison avec une fournaise à eau chaud d'un siphon injecteur H, ayant à son intérieur un tube suspendu J, l'espace concentrique K, le passage L, le conduit à la fournaise M et les ouvertures d'entrée superposées N et O, tel que ci-dessus décrit et pour les fins indiquées. 20. Dans une fournaise à eau chaude, la combinaison du pot à feu B, avec la section P, coulée d'une seule pièce, tel que ci-dessus décrit. 30. La combinaison avec les sections C, D, E, F, du passage central R, avec le diaphragme Q et les plaques de divisions S, tel que décrit. 40. Dans une fournaise à eau chaude la combinaison des sections C, D, E, F, traversées au milieu et retenues ensemble à l'aide d'un boulon central V, dont la tête est engagée dans une pièce de résistance X, à l'intérieur de la fournaise et l'écrout au sommet, tel que décrit. 50. Dans une section de fournaise à eau chaude, les passages pour la fumée en forme d'étoile, tel que décrit. 60. Dans une fournaise la combinaison de la grille en trois pièces A, B, C, D, (Fig 5), la pièce du centre reposant sur la barre d'appui E et supportant à son tour à l'aide de son axe D et des coussinets H, H, les deux pièces extérieures B, C, les quelles sont maintenues à la position horizontale par les tenons W, W, emboîtés dans les guides I, tel que décrit et pour les fins indiquées.

No. 35,606. Concentrator for Ore.*(Concentrateur de minerai.)*

Marcelin Castelnau, Paris, France, 12th December, 1890; 5 years.

Claim.—1st. In an ore concentrator, an endless travelling belt placed at an angle in the direction of its width, means for operating the same, means for supplying ore and water thereto, and means for separately removing the different grades of material therefrom. 2nd. In an ore concentrator, the combination, with an endless travelling belt placed at an angle in the direction of its width with means for operating same, and means for supplying ore and water thereto, of a gutter or channel along the length of the belt having pipes passing therefrom, so that the material is separately collected, substantially as described.

No. 35,607. Crutch. (Béquille.)

John Dobney, Toronto, Ontario, Canada, 12th December, 1890; 5 years.

Claim.—1st. The combination, with a crutch, of an adjustable rod B, provided with locking mechanism to lock it in position, substantially as and for the purpose specified. 2nd. The rod B, inserted in the crutch A, having a rubber block C, held in its end, in combination with a spring F, lugs f , and recessed block E, substantially as and for the purpose specified. 3rd. The rod B, inserted in the crutch A, and projecting through a hole made in the rubber block C, which is held in position by the tapered ferrule D, in combination with the lugs f , fitting into the recessed metal block E, a spring F, located between the end of the metal block E, and the collar G, fixed to the rod B, substantially as and for the purpose specified.

No. 35,608. Method of Cutting Metal by Electricity. (Mode de couper le métal par l'électricité.)

Benjamin C. Tilghman, Philadelphia, Pennsylvania, U.S.A., 12th December, 1890; 5 years.

Claim.—1st. The process of cutting or abrading metals, which consists in heating by an electric current successive small portions of the metal surface, and simultaneously removing the heated metal by an abrading tool. 2nd. The process of cutting or abrading metals, which consists in passing a current of electricity through the successive points of contact of the metal being treated and the abrading tool. 3rd. The process of cutting or abrading metals, which consists in passing a current of electricity through the successive points of contact of the metal being treated and a rotating abrading tool.

No. 35,609. Car Coupler. (Attelage de chars.)

Heinrich Sommerfeld, Canton, Kansas, U.S.A., 13th December 1890; 5 years.

Claim.—1st. In a car coupler, the combination of the draw head B, B, with the orifices G, G, through the walls of the draw head, with the levers g, g , as fully set forth and described. 2nd. In a car coupler, the combination of the draw head, with the semi-circular mouth piece H, extending horizontally across the lower portion of the mouth of the draw head, with the links E, E, connecting levers D, D, to coupling pin F, as fully set forth and described. 3rd. In a car coupler, the combination, with the levers D, D, and the buffers C, C, levers g, g , completing the combination as fully set forth and described.

No. 35,610. Jack for Lifting. (Cric.)

Arthur Harris, Independence, Missouri, U.S.A., 13th December, 1890; 5 years.

Claim.—1st. A lifting jack with hoisting shaft E, side bars I, uprights G, D, as fully set forth and described. 2nd. A lifting jack with hoisting shaft E, lifting lever C, operating, in conjunction with pulley H, so constructed when unfolded in a horizontal position, hoisting shaft is forced upward with pulley H, firmly resting in depression K, holding the combination in a locked position, as set forth and described.

No. 35,611. Wheel. (Roue.)

Alexander Craig Mather, Montreal, Quebec, Canada, 13th December 1890; 5 years.

Claim.—1st. The combination in a wheel and axle of a vehicle, of the axle having grooved collars adapted for anti-friction balls to roll in the grooves of the collars, and pairs of flanges d, d^1 , and d^2 , adapted to form between each pair a groove for the anti-friction balls to roll in, the flanges d^1 , being further provided with projections e , for the spokes to engage with, sleeve 2, adapted to hold the plates d^1 , apart and the spokes tight, with the spokes and rim, the whole substantially as and for the purposes set forth. 2nd. The combination in a wheel and axle of a vehicle, of the axle having grooved collars adapted for anti-friction balls to roll in, with anti-friction balls, hub plates made in two pairs, each plate of the pairs having a portion of a groove adapted for the anti-friction balls to roll in, said hub plates, being further adapted for the spokes to engage with, with a retaining sleeve adapted to hold the pairs of hub plates apart and keep the spokes tight with the spokes and rim, the whole substantially as described. 3rd. The combination in a wheel and axle of a vehicle, of the axle having grooved collars with a set of anti-friction balls provided to each collar and adapted to roll in the grooves of the collars with a pair of hub plates provided with a groove for each set of anti-friction balls to roll in, and adapted to connect with the spokes of the wheel, the whole substantially as described.

No. 35,612. Improved Ballot Paper or Voting Ticket. (Bulletin.)

Thomas Trimble, assignee of Chauncey King Adams, all of Montreal, Quebec, Canada, 15th December, 1890; 5 years.

Claim.—1st. In a ballot paper or voting ticket, the combination of the sheet proper for candidates' names folded over, means for closing same, and a detachable visible certificate forming part of said sheet, all as and for the purposes set forth. 2nd. The combination in a ballot paper or voting ticket, of the ballot paper proper A, with fold at B, line of perforations C, certificate strip D, and gummed corner E, all arranged and operated as herein set forth.

No. 35,613. Suspensory. (Suspensoir.)

Helen Adele Wells (assignee of Arthur James Wells), both of Syracuse, New York, U.S.A., 15th December, 1890; 5 years.

Claim.—1st. The combination, with a suspensory pouch A, of a pouch supporting strap D, a loop E, and a protecting apron F, substantially as and for the purpose set forth. 2nd. The combination, with a suspensory pouch A, of a pouch supporting strap D, a loop E, and an apron F, projecting beyond the loop E, substantially as and for the purpose specified.

No. 35,614. Car Coupler. (Attelage de chars.)

George William Smillie, Newark, New Jersey, U.S.A., 16th December, 1890; 5 years.

Claim.—1st. In a car coupler, the combination, with a draw head provided with two arms or extensions, and with an opening or recess