

with the latch 54, in combination with the stud O, and disk F; 22nd. The fin G, having two free ends 42, in combination with the disks F, E, and cam 39; 23rd. The plate 38, provided with the studs 43, in combination with the stud 54, and cam 39 for changing the ends of the fin G; 24th. The sliding plate 75, provided with the stud 44, and cam E; 25th. The spring pin 36, in combination with the plate 75, and bracket C; 26th. The plate 75, provided with the stud 44, and cam E, in combination with the plate 38, and studs 43; 27th. The plate 75, provided with the dog 51; 28th. The cam 15, having the rounded ends 127, for assisting in revolving the plate 38, on its axis; 29th. In combination with the plate 75, the rod 34, and lever 30; 30th. The bar 91, provided with the groove V, and feather W, in combination with the carrier T; 31st. The feather W, provided with the cross-bar 28; 32nd. The cross bar 28, provided with the ridge 27; 33rd. The lever 25, provided with the studs 22, and 28; 34th. The sliding bar 24, provided with the bracket r and rod t, in combination with the lever 25; 35th. The bent arm 23, in combination with the sliding bar 24, and arranged in respect to the bar 1; 36th. The bar 1, gauges 1, 14, and arm 23; 37th. The gauge 1, provided with the projection 33, in combination with the dog 51, of the plate 75; 38th. The gauge 14, provided with the projection 33, in combination with the lever 25; 39th. The sliding bar 24, provided with the spring jaw 12, in combination with the index wheel k; 40th. The index wheel k, provided with the screw 3, in combination with the spring 4, and counter bored hub 9; 41st. The pointer i, in combination with the wheel h, and screw 8; 42nd. The wheel k, provided with the blank 100; 43rd. The pointer i, provided with the wheel k; 44th. The combination of the wheel h, pointer i, screw 8, and wheel k; 45th. The indicator 109, in combination with the wheel h, and pointer i; 46th. The disk F, provided with the stud 102; 47th. The stop lever l, provided with the projection m, in combination with the wheel k, and stud 102; 48th. The stop lever l, provided with the arm n, and spring z; 49th. The stop lever p, provided with the bent arm 112; 50th. The lever p, pivoted directly to the lever l, and provided with the spring 53, in combination with the stud 102; 51st. In combination with the arm 112 of the lever p, the hook y; 52nd. The combination of the tension plate u, guide f, and arm 112; 53rd. The tests 37, in combination with the discs F, F.

No. 5810. Board for Ironing Shirt Fronts.

(*Planche à glaiser les devants de chemises.*)

Isidre Ducharme, Sherbrooke, Que., 20th March, 1876, for 5 years.

Résumé.—La forme de la planche et la manière dont elle est construite; 2o La combinaison de la planche A, avec son cadre B, le tonnement du cadre B, et la manière de s'en servir pour glaiser.

Claim.—1st. The shape of the board and the manner in which it is made; 2nd. The combination of the board A, with its frame B, the working of frame B, and the manner of using it for ironing.

No. 5811. Wringing and Mangling Machine.

(*Machine à essorer et calandrer.*)

Charles A. Mallory, Oshawa, Ont., 20th March, 1876, for 5 years.

Claim.—The use of a pair of India Rubber springs compressed from two clips B, B, in which are cut threads so as to form nuts and which clips B, B, act as fuchra to the two set screws C, C, which traverse them and bearing on the iron plates G₁, G₂, press on the rubber spring D, D, which in their turn force the bearings E, E, on to the spindle F, F, and impart the required pressure to the top roller.

No. 5812. Stove-Pipe Fastener.

(*Joint de tuyaux de poêles.*)

Robert Mainer, Orillia, Ont., 20th March, 1876, for 5 years.

Claim.—The application of the metal hooks A, the slots B, and the catches C, to stove pipes.

No. 5813. Horse-Shoe Nail Finishing Machine. (*Machine à finir le clou à cheval.*)

Charles W. Woodford, Montreal, Que., 20th March, 1876, for 5 years.

Claim.—1st. The combination of the dies, punch and forked guide h; 2nd. The combination of the dies e, punch c, forked guide h and jaws t; 3rd. The combination of the spring u, ring f, extremity i, and extremity k, having recess l; 4th. The guide h, having the extremity i, in combination with the extremity k, provided with recess l; 5th. The guide h, having the extremities i, and k, in combination with the spring b; 6th. The combination of the sub-frame r jaws t, and adjustable block y; 7th. The combination of the jaws t, ring z and guide h; 8th. The recess i, or its equivalent arranged to lubricate the lower part of the nail; 9th. The recess i, or its equivalent, arranged to lubricate the lower part of the nail in combination with the part K; 10th. The combination of the dies a₁ and b₁, either made separately and held together or made all in one piece, rollers u and y, and die m; 11th. The combination of the roller u, with the roller y; 12th. The combination of the ring f, die a₁, b₁, rollers u, y, and die m; 13th. The combination of the ring f, die a₁ b₁, and roller u, and y; 14th. The combination of the rod t, having rollers u, and y, die m and spring k; 15th. The combination of the mechanism for rolling and elongating blanks with the mechanism for bevelling and clipping the points; 16th. The combination of the rolling and elongating mechanism lubricating devices h, k, and bevelling and clipping mechanism.

No. 5814. Self-Acting Car-Coupler.

(*Attelage de wagons automatique.*)

John B. Winters and Porter Williams, London, Ont., 20th March, 1876, for 5 years.

Claim.—1st. The draw-head A, having upper and lower recesses for the reception of the two links C, F, and provided with shank iron band T; 2nd. The combination, in a draw head, of a pair of coupling hooks or dogs D, G; 3rd. In combination with the spring and pin a, b, the movable metal plate R; 4th. The lower lever L, upper lever N, and connecting rod Q, in combination with the stud K, and coupling hooks D, G, as a means of operating and controlling the same.

No. 5815. Upright Piano-Forte.

(*Piano droit.*)

Charles E. Rogers, Boston, Mass., U. S. A., 20th March, 1876, for 5 years.

Claim.—1st. The string frame A, as provided with the related, notched and cushioned ledge A; 2nd. The combination of the slotted slide E, its straining pin F, and operative screw G; 3rd. The combination of the slotted slides L, E, their straining pins F, F, and screws G, G, with the string frame B, and the lugs J, J, to extend from it, or a separate bar applied to it as described; 4th. The separate bar D, provided with the hook z, and the series of lugs f, all arranged as and for application to the string frame A, and the slides E.

No. 5816. Clover Thrasher and Huller.

(*Machine à battre et écaler le trèfle.*)

Garrat J. Utendorf, Ottawa, Ohio, U. S., 20th March, 1876, for 5 years.

Claim.—The discharge trough N, attached to the hopper B, below the sieves by means of a triangular brace O, and hooks P, R, thereby adapted to be turned in either directions.

No. 5817. Improvements on Steam Pumping Engines. (*Perfectionnements aux pompes à vapeur.*)

William H. Law, Riverside, Pa., U. S., 20th March, 1876, for 5 years.

Claim.—1st. The combination with a pumping apparatus of the pump cylinder a, made removable; 2nd. In combination with the pumping apparatus, the stalk k, cover h, and valves and seats f, and g, j, and g₁; 3rd. The arrangement of the vacuum chamber G, within the air chamber F; 4th. The arrangement of the cylinder H, mounted upon the air chamber F; 5th. The combination of the air chamber F, cylinder H, and pillow block I, all formed in one; 6th. In combination with the cylinder cover, and made in one with it, the slides K; 7th. The pumping apparatus formed in two castings, with diaphragm b, and containing upper and lower chambers c, and A, connected by valve g, pump chamber a, supply chamber B (opening by valve f, into chamber A), discharge chamber D, air chamber F, and vacuum chamber G; 8th. In combination with the plunger d, the double cross head V, V, operated by crank shaft U, and provided with extension V₁, working in guide W.

No. 5818. Improvements on Filters.

(*Perfectionnements aux filtres.*)

John F. Crease, Eastney, Eng., 20th March, 1876, for 5 years.

Claim.—1st. The filter composed of the vessel a, ledge b, false bottom c, ring d, rod e, handle f, metal cross f, filtering material g, perforated plate h, upper chamber i, main k, cock l, lower chamber m, pipe n, cock o, cock p, and plug s; 2nd. The modification consisting of the main vessel a, arranged within the reservoir of unfiltered water ledge b, false bottom c, rod a, handle f, metal cross f, filtering material g, perforated plate h, upper chamber i, with perforated cover and lower chamber m, with its syphon r, or pipe t; 3rd. The modification consisting of the main vessel a, arranged within the reservoir of unfiltered water ledge b, false bottom c, rod e, filtering material g, perforated plate h, unfiltered water chamber i, with its perforated cover, filtered water chamber m, syphon r, ring e, packing w, and thumb screws z; 4th. The modification consisting of the main vessel a, with its projections a₁, air-pipe a₂, loose cover a₃, ledge b, false bottom c, rod e, with its projections e₁, and packing s₁, handle f, filtering material g, perforated plate h, unfiltered water chamber i, and filtered water chamber m.

No. 5819. Whipping Frame Needle.

(*Aiguille à faire le point de chaînette.*)

William W. Clay, Paris, Ont., 20th March, 1876, for 5 years.

Claim.—A needle for operation in whipping frame having the shank A, spring barb B, and pointed end C.

No. 5820. Improvement in Sheet Metal Shearing Machines.

(*Perfectionnement des machines à tailler la tôle.*)

Anson O. Kittridge, William H. Clark & William J. Clark, Salem, Ohio, U. S., 20th March, 1876, for 5 years.

Claim.—1st. In combination with the squaring shears, the adjusting screws, A, A, miter gear B, gear C, shaft D, hand wheel E, gauge S, and frame Q; 2nd. The rails d, of the clamps F, when sunk in the surface of the table A, so that said rails shall be level or flush therewith, clamps t, i, fitted to said rails, so that the lower part of the clamp shall be below the surface of the table and secured to the rails by bolts h, to admit of their being adjusted on said rails in combination with the squaring shears; 3rd. The shaft D, having eccentric journals e, and handle K, in combination with the bar G, connected therewith by the yokes J, and hangers H, operating and cooperating in combination with a squaring shear P.

No. 5821. Improvement in Fire-Pots for Coal Stoves and Coal Furnaces.

(*Perfectionnement de boîtes à feu des poêles et fourneaux à charbon.*)

John F. Stewart, Hamilton, Ont., 21st March 1876, for 5 years.

Claim.—In combination with a self-feeding coal stove Fire Pot A, or a fire pot of a coal furnace, an opening B, for removing clinkers, &c., and closed by a door C, or slide or their equivalent.

No. 5822. Improvements in Umbrellas.

(*Perfectionnements dans les parapluies.*)

John P. Onderdonk, Philadelphia, Pa., U. S., 21st March, 1876, for 5 years.

Claim.—1st. An umbrella or parasol in which sectors or portions of covering are attached at one and the same time to each other, and to the frame by clamps, clutches, catches, springs, teeth or wires, without sewing