

chamber A, in connection with steam boiler or otherwise; 5th. The smoke receiver B; 6th. The drying chamber with glass covering G, g, q, r, and shelves or bolts of wire cloth; 7th. The escape flue with registers, k, k, H; 8th. The iron pipe I, for super-heating steam; 9th. The blast pipes K, and L, for burning coal dust screenings and heating the case.

No. 3691. GEORGE DOANE and ROBERT L. HARRIS, Grosse Isle, Mich., U. S., 21st July, 1874, for 5 years: "Improvements on Hinges." (Perfectionnements aux pentures.)

Claim.—A yoke-shaped pintle B, formed from a single piece of metal, the lower part bent over to form an attaching brace D, and the upper portion likewise bent at or near right angles thereto, forming an additional arm or brace C, on the opposite side in combination with a strap or leaf A, having an eye piece o, as set forth.

No. 3692. CHARLES E. SEAL, Winchester, Va., U. S., 21st July, 1874 for 5 years: "Gas Cut off and Regulating Cock." (Robinet pour couper et régler le gaz.)

Claim.—1st. The combination of a valve having a complete automatic opening or closing movement, with a controlling mechanism whereby the said valve can be positively moved to and secured at any desired gauge; 2nd. The valve B, having stem b, valve chamber A, and connecting rod L, combined with the lever G, and ratchet and pawl mechanism I, H, h, as described.

No. 3693. JOHN K. MACAULAY, Kingston, Ont., (Assignee of C. H. Williams,) 25th July, 1874, for 5 years: "Brick-Machine." (Machine à brique.)

Claim.—1st. The flaring mouth rim B, fitting on the top of the cylinder A, and having a central hub or cap C, to form a covered bearing for the journal of the shaft D; 2nd. Constructing the wall of the cylinder A, with recesses E; 3rd. The combination and arrangement of the toggle levers for operating the plunger I, by the rod J; 4th. The application of the nuts J, and M, to the toggle lever H, and rod J, for regulating the throw and stroke of the plunger I; 5th. The arrangement and employment of the wheel N, having a peripheral cam groove R, receiving a projection on the rod J, for operating the toggle levers; 6th. The mould wheel S, constructed with a sunk annular face and having mortises to receive the moulds T, separately as set forth; 7th. The combination of the followers U, race bearing ring V, and quadrant W, constructed and operating as set forth; 8th. The arms X, keyed on the shaft D, and engaging with a drop roller or pin Y, on the under side of the mould wheel for operating the same intermittently; 9th. The pressing plungers I, provided with a series of inclined channels Z, distributed over the face, as set forth.

No. 3694. EDWARD M. DAVIES, Alleghany, and FRANCIS G. REBBECK, Pittsburgh, Penn., U. S., 31st July, 1874, for 15 years: "Curtain Fixture." (Ajutage de rideaux.)

Claim.—1st. The combination with the curtain roller cap A, having axle a, of the bracket B, the intermediate tension spring C, with suitable caps or washers and the binding check nut E, arranged and constructed as described.

No. 3695. PATRICK GRIFFIN, Cork, Ireland, 31st July, 1874, for 5 years: "Rectification of Spirits." (Rectification des spiritueux.)

Claim.—The purification of whiskey and other analogous spirit by submitting it in a divided state to the action of atmospheric air in the manner described.

No. 3696. DANIEL FORBES, Cambridge, Mass., U. S., (Assignee of H. Wells,) 31st July, 1874, for 5 years: "Needle Threader." (Enfileur d'aiguille.)

Claim.—1st. A hook to be used in threading needles which is made flat for a part or the whole of its length, the notch giving it the hook shape being cut out from the metal as described; 2nd. A hook for threading needles cut from a notched strip of flattened wire as specified.

No. 3697. NEWCOMBE E. WHEELER, London, Ont., (Assignee of C. D. Blinn) 31st July, 1874, for 5 years: "Window Blind." (Une jalousie.)

Claim.—The notch represented by the letter P, as set forth.

No. 3698. ABRAHAM LORRAIN, Bord-à-Plouffe, Quebec, 31st July, 1874, for 5 years: "Horse Power Wheel." (Roue de manège.)

Claim.—1st. Securing the peripheral transverse floor-boards F within the outer ring E; 2nd. The inner ring D bearing on the floor boards F supported by the outer ring E, said rings being secured to the radial arms C; 3rd. Providing the wheel with doors G at the sides thereof as set forth.

No. 3699. FRANCIS M. SNIVELY, Bellaire, Ohio, U. S., 31st July, 1874, for 5 years: "Trace Fastening." (Ajutage des traits.)

Claim.—The socket a for the end of the whistle-tree; having the two slots b c running at right angles to each other, in combination with the cross-head d as specified.

No. 3700. HENRY ING, Hamilton, Ont., 31st July, 1874, for 5 years: "Gas Regulator." (Regulateur à gaz.)

Claim.—1st. The arrangement and combination of the plate A, dial B drum P, pointer C, pulley Q, tube E, pulleys J, K cords H, H, lever L, on the tap of the gas pipe M, all operating to control and regulate gas to the meter O, and indicate the same as specified; 2nd. The arrangement of stopping the pulley Q by means of the stop T, on the said pulley and stop U, on the plate A, also the right and left holes a, b, in pulley Q, to receive wire cords H H, and prevent twisting of the same also the stops c, c, on said pulley as specified.

No. 3701. CHARLES H. WHITE, White's Station, Mich., U. S., 31st July, 1874, for 5 years: "Railroad Switch." (Aiguille de railroute.)

Claim.—1st. The described railway switch wherein the rails A, B, of the main line are stationary, and the shunting is effected by the movement of the internal guide-bars, as set forth; 2nd. The stringers U, C, secured to the track inside the rails A, B, provided with the grooves c for the reception of the frog-point e E E, and having the guide-bars D, D, pivoted thereto; 3rd. The stringers, C, each having a groove e, for the reception of a frog point E, as shown.

No. 3702. WILLIAM VAHEY, Forest, Ont., 31st July, 1874, for 5 years: "Machine for Blocking Horse Collars." (Machine à donner la forme à jour aux colliers de cheval.)

Claim.—1st. The two part blocks B, B, screw C and nut c, constructed and arranged on the table A as set forth; 2nd. The combination of the plate D, with the block B, for holding down the collar while under tension; 3rd. The combination with the table A, and blocks B, B, of the frame E, follower E, screw F, cords G, and ring f, as set forth.

No. 3703. WILLIAM MURPHY, Petitcodiac, N. B., 31st July, 1874, for 15 years: "Reversible Organ Blow Pedals." (Pédales d'orgues mobiles.)

Claim.—1st. The construction and use of "Reversible Pedals" the opposite faces being finished alike or covered with different material, as may be preferred, as described; 2nd. The use of supports C, spring catches D, and hinge screws E; 3rd. The strap fastenings H, cross-bars G, and lugs F, in combination with the above described pedals and their front fastenings for the purpose described.

No. 3704. GEORGE WEBSTER and JOHN F. WEBSTER, Hamilton, Ont., 31st July, 1874, for 5 years: "Improvements on Sewing-Machines" (Perfectionnements aux machines à coudre.)

Claim.—1st. The needle bar N, having an even uniform motion without stop or rest on its upward or downward movement produced by the driving shaft H, acting upon the eccentric A, connecting rod F, and needle bar arm I, in combination with a uniform motion of the shuttle forming a perfect double thread lock stitch; 2nd. The arrangement of an adjustable shuttle race composed of round wires l, l, placed in the slots P, P, and adjusted by the set screws b, b, b, b; 3rd. The arrangement of the pivoted lever I, provided with a ball and socket joint driving the shuttle carrier J, by a crank as shown in fig. 2, or its equivalent; 4th. A positive thread take up produced by the needle arm V, arm levers i, d, j, shanks and disc L, K, in combination with a regular or even motion needle bar.

No. 3705. JAMES DWYER and JOHN VAN B. CARTER, Detroit, Mich., U. S., 31st July, 1874, for 5 years: "Base Burning Heating Stove." (Poêle de chauffage à foyer de base.)

Claim.—1st. The combination of the back flue G, flue strips b, b, the curved partition, and its damper f, with the opening c, in the illuminating section D, and the segment strips g, g, in the base of the stove; 2nd. The arrangement of the segment flue-strips g, g, in the base A, with relation to the flues c c d in the back of the stove; 3rd. The combination of the horizontally vibrating and dump grate J, with the ring I supported by the braces k, k; 4th. The series of slots m, in the section c, each provided with a follower n or its equivalent; 5th. The combination of one or more flue strips in the base chamber, with one or more strips in a flue chamber G, at the back of the stove, as described.

No. 3706. WILLIAM CRAIG, (Assignee of Hiram C. Grover), Nunda, N. Y., U. S., 31st July, 1874, for 5 years: "Washing Machine." (Machine à laver.)