

No. 3032. HIMAN FRANK, Pittsburgh, Penn., U. S., 20th January, 1874, for 5 years: "A Furnace Brick." (Une brique à fourneau.)

*Claim.*—The tile or brick A, having transverse openings or passages *a*, and *b*.

No. 3033. HIMAN FRANK, Pittsburgh, Penn., U. S., 20th January, 1874, for 5 years: "Hot Blast Oven." (Fourneau à air chaud.)

*Claim.*—1st. The walls A, constructed as described with vertical passages, and transverse passages, such passages being made through the brick or tile which compose the walls, 2nd. The heating chamber, constructed with alternate walls A, and chambers B, the former having passages *a*, extending between the chamber c, and the fire chamber and stack for the passage of the heated gases, and passages *b*, extending between the chambers B, for the tile which compose the walls as described.

No. 3034. ISRAEL P. MAGOON, and HENRY FAIRBANKS, St. Johnsbury, Vt., U. S., 20th January, 1874, for 15 years: "Locomotive Feed Water Heater." (Chaufeur d'eau d'alimentation de locomotive.)

*Claim.*—1st. The arrangement of a perforated or open woven partition or strainer in the exhaust pipe of locomotives between the mouth or discharge and steam chest; 2nd. The arrangement of a perforated or open woven partition or strainer in the tube *e*, which conducts the exhaust steam to the feed water heating chamber; 3rd. The divided exhaust passage *a, b*, one division leading to the smoke flue and the other to the feed water heating chamber when one or both divisions are provided with a perforated or woven partition or strainer as described.

No. 3035. JOEL WEST and ORREN M. PARKER, Creston, Iowa, U. S., 20th January, 1874, for 10 years: "Steam Bell-ringer." (Sonne-cloche à vapeur.)

*Claim.*—1st. The piston J, I, when constructed as described with an extended end J, opposite to its usual rod end and provided with a tappet L, and arranged to operate with the other parts of a bell-ringing device; 2nd. The valve stem M, when extended through both ends of the steam chest B, and arranged to operate with the other parts of a steam bell-ringing device; 3rd. The tubular valve E, when constructed as described and arranged to operate with the parts G, G'; 4th. The piston I, when provided with a tappet L, L', on each end and arranged to operate with the valve E, steam passages G, G' and relief passages H, H', and bell P; 5th. The cylinder A, and steam chest B, when constructed as described, pipes C, D, valve E, piston I, steam ways G, G', air passages H, H', piston I, tappets L, L', extended valve stems M, M', connecting rod V, crank T, and bell P, when combined and arranged to operate as described.

No. 3036. EDWIN R. WHITNEY, Bolton, Que., 20th January, 1874, for 5 years: "Veneer Cutting Machine." (Machine à couper les bois de placage.)

*Claim.*—1st. The crank beam H, for operating the log connected to the carrying wheel G, by a wrist pin and having a sliding motion on the tail pin I, whereby the log is brought to the action of the knife by a circuitous or crank motion; 2nd. Providing the crank beam H, with adjustable dots J, J', sliding in race slots K, for receiving and holding the log fixedly; 3rd. The friction bar K', applied as set forth for receiving the lateral pressure of the crank beam H; 4th. The knife beam L, having a horizontal lateral adjustment parallel to the log and operated by the screw shafts O, O', bevelled gears Q, R, shaft S, and hand-wheel T, arranged as set forth.

No. 3037. EDWIN R. WHITNEY, Bolton, Que., 20th January, 1874, for 5 years: "Glass Printing Type." (Caractère d'imprimerie en verre.)

*Claim.*—A new article of manufacture, in a glass printing type or block moulded or cut with the design, character, or letter of the impression to be produced either raised or sunk from the surface.

No. 3038. JAMES MCCALLUM, Nepean, Ont., 20th January, 1874, for 5 years: "A Potato Digger." (Un extracteur à patates.)

*Claim.*—1st. The riddle C, having a vertical action imparted to the bars separately or conjointly in combination with an endless apron, both operating within the frame A; 2nd. The arrangement within the main frame at the rear thereof of the endless chain wheels H, tappet bars G, shaft I, and cog gears, for operating the endless apron and riddle conjointly by the ground wheels B; 3rd. The combination of a stop pin P, cam collar flange O, and spring N, with the apron shaft for effecting disengagement of the operating pinion; 4th. The arrangement with the main frame *a*, and front axle of the bifurcated arm Q, for suspending the shovel by the rods S, and for regulating the same at any desired height by a nut and screw adjustment applied as set forth.

No. 3039. WILLIAM S. HUNTER & CHARLES C. COLBY, Stanstead, Que., 20th January, 1874, for 5 years: "Manufacture of Paper." (Fabrication du papier.)

*Claim.*—1st. The manufacture of paper, the incorporation with a textile fabric of paper pulp, in a wet or semi liquid state applied to both sides of the cloth simultaneously whereby the interstices of the cloth are filled with pulp and a surface of pulp formed on both sides of the fabric; 2nd. Fabricated paper or paper cloth, consisting of a textile fabric and paper pulp combined, when dried, callendered or otherwise finished as an improved manufacture.

No. 3040. LEVI SCOFIELD & JUSTIN B. WAIT, Grand Haven, Mich., U. S., 20th January, 1874, for 5 years: "An Ironing Table." (Une table à repasser.)

*Claim.*—1st. The hinged ironing table A provided with cleats I, H, on its under surface, in combination with the frame B, and hinged support G, with or without the swinging brace J, the whole constructed, arranged and operated in the manner set forth; 2nd. The supporting frame B hinged to the table top, in combination with the articulated bars E, E', and F, F', the latter being provided with recesses on the upper ends, which engage with the rod D, as described.

No. 3041. GEORGE W. WHITNEY, Cleveland, Ohio, U. S., 20th January, 1874, for 5 years: "Shoulder Braces and Suspenders Combined." (Harnais et bretelles combinés.)

*Claim.*—1st. In the construction and arrangement of the several parts of the brace and supporter with the interchangeable strap F; 2nd. The described construction of the capsular pads A, concealed or gored and strengthened by stays and water-proof stiffening B.

No. 3042. JOHN HEWITT, Grimsby, Ont., 20th January 1874, for 5 years: "Smoothing, Band, Glossing and Fluting Iron." (Fer à repasser, apprêter et tuyauter.)

*Claim.*—1st. A smoothing iron A pivoted in the handle and provided with a series of ironing faces B, C, D; 2nd. A smoothing iron A pivoted in its handle, and held in position through the medium of a spring latch F; 3rd. A smoothing iron pivoted in its handle and provided with a detachable fluting plate H; 4th. The independent fluting board in combination with an iron having fluting ribs r, formed on it, or on a plate attached to it as described.

No. 3043. JOEL LYONS, Chippewa, Ont., 20th January, 1874, for 5 years: "Improvements in Metal Plates for Boot and Shoe Heels." (Perfectionnements aux plaques métalliques pour les talons de chaussures.)

*Claim.*—The front part with circular side, the three sided or circular reversible plate, solid or with skate adjustment, or with central circular hole filled with leather, the screws equidistant.

No. 3044. JAMES MORRIS, Liverpool, Eng., 20th January, 1874, for 5 years: "Improvements on Machines for Finishing Printed Sheets." (Perfectionnements aux machines à satiner les feuilles imprimées.)

*Claim.*—Under the first part, 1st. coating the ink set-off on the rolls by whitening or other powdery matter supplied in a shower as described; 2nd. The appliances under this head or their equivalents for the purpose set forth. Under the second part enclosing whitening or other powdery matter in a bag of textile fabric, and placing the same in a perforated or open work-container made to vibrate as set forth; under the third part, 1st. the buffing rollers for effectually removing the ink set-off from the rolls B; 2nd. The end nut clamps 10, for securing the discs of calico or other woven fabric on their carrying shaft or spindle. Under the fourth part, the cleaning brushes 12, operating in the manner set forth.

No. 3045. WILLIAM CORRIS, Rochester, N. Y., U. S., 20th January, 1874, for 5 years: "Improvement on carriage hubs." (Perfectionnement des moyeux des roues.)

*Claim.*—1st. The combination of the grooved hub A, and dovetailed spokes B, of the keys *f, f'*, and flanges *c, c'*; 2nd. The combination of the flanges *c, c'*, grooved hub A, keys *f, f'*, wedge *d*, and spoke B.

No. 3046. CALMAN WOLF, Rochester, N. Y., U. S., 20th January, 1874, for 5 years: "Improvement on bedstead fastenings." (Perfectionnements dans l'ajustage des couchettes.)

*Claim.*—1st. In combination with the hook C, of a bedstead fastenings, the wedge D, when constructed with the flanges *c, d* or