

manufacturing or producing an aqueous solution of gum copal by boiling gum copal in soft water and adding thereto sub or caustic soda or other alkaline substance as set forth.

No. 3634. JOHN J. LAPPIN, Toronto, Ont., 16th July, 1874, for 5 years: "Self-acting Car-coupler." (*Attelage de wagon automatique.*)

*Claim.*—1st. The enlargement of the crown of the draw-head A, and hinges inside of the same the mechanism comprising pendulous automatic trip B, as described; 2d. The pendulous automatic trip B, as shown in figures 1, 2, 3, 4, of the drawings; 3rd. The automatic trip B, as shown in figures 7, 8, and 9 of the drawings and comprising the vertical arm a, the journals b, c, the arms or counter-weights D, D, as specified.

No. 3335. SAMUEL VIVIAN, London, Ont (Assignee of C. Luxton,) 16th July, 1874, for 5 years: "Peat Machine." (*Machine à tourbe.*)

*Claim.*—1st. The combination of shaft B, knives D, fingers F, spiral wing P, spiral wing K, and stone roller Q; 2nd. The combination with lifting and compressing tubes T, piston K, discharging nozzle S, and discharging tube V; 3rd. The combination of the perforated iron tubes, as shown in detail figure 4, perforated iron tube C, middle covering b, and outside covering a.

No. 3636. ALEXANDER WALKER, Mornington, Ont., 16th July, 1874, for 5 years: "Broad Cast Seed Sower." (*Semoir à grain à la volée.*)

*Claim.*—1st. The cylinder A, attachable to the arm of the operator or by a strap and provided with a handle U, to be seized by the fingers of the operator when seeding in the manner set forth; 2nd. The cylinder A, having a perforated cap D, and wire gauze c on E; 3rd. The discs e, pivoted to the cap D, and held adjustably by the clamps G, and screws H, as set forth.

No. 3637. ISAAC M. HOUSE, Orillia, Ont., 16th July, 1874, for 5 years: "Shingle Machine." (*Machine à bardeaux.*)

*Claim.*—1st. The vertical frame A, having diagonal race-ways C, for guiding the knife frame D; 2nd. The horizontal race bar H, attached to the obliquely sliding gate B, in combination with the vertical sliding panel G, for actuating the lathe in the manner set forth.

No. 3638. HORACE THORNE, Toronto, Ont., 16th July, 1874, (Assignee of F. Oakley, Extension of Patent No. 8,) for 5 years: "Lock Washer." (*Rondelle de sûreté.*)

*Claim.*—The addition to an ordinary washer of the inside lug or projection A, in Fig. 2, or a similar device as in Fig. 3, for rendering the washer from turning, the said washer being thicker than the thread of the screw, with the projecting points or tails B, B, B, in combination with a grooved or flattened screw shown in Fig. A, and an ordinary vent.

No. 3639. JAMES LOTT, Liverpool, Eng., 16th July, 1874, for 5 years: "Apparatus for Trimming the Edges of Straps." (*Appareil à parer les lisières des courroies.*)

*Claim.*—1st. The novel combination of the pron frame a, and the moveable jaws b, and the pin or bar c, the screw d, cutter f, and the handle g, together forming an apparatus for trimming the edges of straps, bands, traces and other similar articles; 2nd. The particular construction of the jaws b, and their mode of adjustment in both directions; 3rd. The particular construction of the cutters f, when applied to apparatus constructed as set forth and the mode of holding and fixing same.

No. 3640. JAMES G. SCOTT, St. Thomas, Que., 16th July, 1874, for 5 years: "Brake for Railway and other Carriages." (*Train de voiture de railroute et autres.*)

*Claim.*—1st. A brake composed of shaft a, a, provided with screw threads b, b, working into boxes c, c, in combination with arms d, d, and cross-pieces e, e, acting on friction rollers f, f, said shaft being provided with coupling apparatus m, to connect together several lengths thereof, as described; 2nd. The combination with the shaft a, a, the bins-cogged-wheel h, and rod k, provided with hand wheel n, as set forth.

No. 3641. HOSEA HENIKA, MEYRON F. CARDER and OSCAR M. ALLEN, Kalamazoo, Mich., U. S., 16th July, 1874, for 5 years: "Burial Casket." (*Cercueil.*)

*Claim.*—A casket provided with a top or cover made in two sections C, D, pivoted to the ends and upper portion of the case and adapted to be independently raised and lowered with or without supporting catches a, a, as described.

No. 3642. GEORGE F. SIMONDS and JAMES A. FERSON, Fitchburg, Mass., U. S., 16th July, 1874, for 5 years: "Process for Tempering and Forming Articles of Steel." (*Procédé pour adoucir l'acier et en fabriquer différents objets.*)

*Claim.*—1st. The process described for tempering and bringing hardened articles of steel, or steel combined with iron, to any required form by clamping them between plates or forms, and treating to that uniform temperature which is consistent with the requisite temper and keeping them at that heat for the length of time required for the article to take permanently the form of the clamping surface; 2nd. A tempering, or tempering and forming oven A, an intervening plate or perforated plate C, between the fire and the clamps or dies D, for the purpose of securing an evenness of heat in the clamps; 3rd. A tempering, or a tempering and turning oven A, constructed with a perforated bottom a, c, for the admission and even distribution of heat around the articles to be treated; 4th. A tempering, or a tempering and forming oven A, constructed as described, in combination with passages e, for air chamber E, and the E, when arranged to operate as set forth.

No. 3643. JOSEPH E. LANDERS, New-Bedford, Mass., U. S., 16th July, 1874, for 5 years: "Flower Pot." (*Pot à fleurs.*)

*Claim.*—The pot F, with a curved top J, and projections g, and flanges h, h, in combination with pot A, with circular hole C, and opening d, d, as set forth.

No. 3644. WILLIAM DUCHEMIN, Boston, Mass., U. S., 16th July, 1874, for 5 years: "Improvement on Turned Shoes." (*Perfectionnement des souliers retournés.*)

*Claim.*—1st. A turned shoe, having its sole channelled on the lower or grained side, the over lapping surface of its lip being directed towards the centre of the sole; 2nd. The mode of sewing turned shoes consisting in uniting the sole, upper, and welt, together, by stitches passing through angularly to the surface of the sole; 3rd. A new article of manufacture, in a turned shoe having its sole channelled on the lower or grained side and sewed angularly and composed of the sole A, upper B, and welt C, as specified.

No. 3645. AUSTIN D. CABLE, Montreal, Que., 16th July, 1874, for 5 years: "Improvements on Faucets." (*Perfectionnements aux robinets.*)

*Claim.*—1st. The shell a, having double valve-seat d, and valves m, and i, in combination with spindle e, and "bit" h, all working together as set forth; 2nd. The shell a, with pipe at, opening b, double valve seat d, valves i, and m, all working together as set forth.

No. 3646. JOHN PRINCE, and NORRIS D. MARTIN, North Troy, Vt., U. S., 16th July, 1874, for 5 years: "Milk Pan." (*Boite à lait.*)

*Claim.*—Subdividing the water chamber, formed by the double bottom, by transverse partitions L, having connecting apertures diagonally opposite, to cause a serpentine direction of flow and to admit of hydraulic pressure to be exerted within the chambers, as set forth.

No. 3647. CHARLES ROBINSON, Cambridge, Mass., U. S., 16th July, 1874, for 5 years: "Combined Washer and Wringer." (*Laveuse-tordeuse combinées.*)

*Claim.*—1st. The novel combination of the large fluted inelastic roller A, the small inelastic roller C, and the large elastic roller D, arranged in the standards e, e, of the frame of the machine, thereby producing a convertible washing and wringing machine; 2nd. The combination of a small inelastic roller C, with a large inelastic fluted roller A, for washing clothes; 3rd. The combination of a small inelastic roller C with a large elastic roller D; 4th. The combination of the elastic loops or cords b, b, with the small roller C; 5th. The combination of the pressure levers G, G, with the small roller C, and large roller D; 6th. The combination of the adjusting notches or rat-bet teeth g, g, with the pressure levers G, G.

No. 3648. RICHARD M. WANZER, (Assignee of J. H. McCune, Hamilton, Ont.,) 16th July, 1874, for 5 years: "Improvement in Sewing Machines." (*Perfectionnement des machines à coudre.*)