

No. 4655. ANDREW G. GRAY, St. John, N. B., 20th April, 1875, for 5 years: "Improvements on Mowing Machines." (Perfectionnements aux faucheuses.)

*Claim.*—1st. The wheels A and A', having teeth B, formed on their inner sides and made fast to the axle to maintain their relative positions, in combination with the bars C and C', top piece E, bottom piece F, lever G, pivot H, and joint I. 2nd. The combination of the bars C and C', with top piece E, bottom-piece F, and shaft b, cam D, lever L, rod g, hand-lever h, link e, and slot a; 3rd. The combination of the guide-bar K with the pin k.

No. 4656. SVEN RYDBECK, Red Wing, Ma., U. S., 20th April, 1875, for 5 years: "Improvements on Mortising Machines." (Perfectionnements aux machines à mortaiser.)

*Claim.*—1st. The combination of the screw-spindle D, sectional pivoted nut GG, and adjustable yoke H, h, h, H; 2nd. The combination of the screw-spindle D, sectional pivoted nut G; G', adjustable yoke I, h, h, H, shaft F, gear-wheel E, D, spur wheel I, and adjustable rack I; 3rd. The combination of the screw-spindle D, auger C, rigidly secured thereto, chisel D, and parts b and b'; 4th. The frame A, and chisel and auger in combination with the gauge-rods K, k, k', the heads k, of which project downward to below the base A, of the machine, 5th. The frame A, and chisel and auger, in combination with the gauge rod M, slot l at m, and carrying an adjustable slide M, m.

No. 4657. ISAAC LEVY, Ellaville, Florida, U. S., 20th April, 1875, for 5 years: "Improvements on Machines for Making Fence Pickets." ((Perfectionnements aux machines à faire les pieux de clôture.)

*Claim.*—1st. The combination with the table or carriage K, of the slotted side bars O, O, the end connecting or cross-bar N, and the clamping screws P, P, said parts forming the end extension; 2nd. The clamping device consisting of the spring N, pivoted lever M, link R, and ratchet-bar S, said parts being combined and arranged with the table R, to hold the picket thereof, by pressure applied laterally.

No. 4658. WILLIAM PEAKER and EDWARD O. RUNIONS, Brampton, Ont., 20th April, 1875, for 5 years: "Hot Air Dumb Stove." (Poêle sourd à air chaud.)

*Claim.*—The pipes F, F, F, door I, and base K.

No. 4659. JOSEPH S. KEMP, Magog, Que., 21st April, 1875, for 5 years: "Manure Spreading Machine." (Machine à distribuer les engrais.)

*Claim.*—1st. The combination of the sides A and A', with the frame work B, axle C, shafts a and a', the six sided pulleys e, chains d, d, lugs e, guard f, rollers 1, and crank H; 2nd. In combination with the shaft a, and wheel D or D', the wheel train g, having wheel A, driving pinion i, and clutch pins k, and lever E, spring F, cut h G, and pin q; 3rd. The roller J, having teeth l, in combination with the gears k, wheel D' or D, belt m, pulleys n and n', bar L, and lever E; 4th. In combination with the guard f, the lever E, spring F, catch G, and pin q; 5th. In combination with the comb M, having transoms r, and teeth s, the lever t, and spring u; 6th. In combination with the pole N, axle C, and frame work B, the bar P, and pin R; 7th. The combination of stationary gears to hub of wheels D, and D', for the same purpose as pinion i, also the use of both gears or belts from axle C, and shafts a and a', to pulleys n or n', or roller J.

No. 4660. BARKER C. YOUNG, Boston, Mass., U. S., 21st April, 1875, for 5 years: "Buckle Attachment." (Ajustage des boucles.)

*Claim.*—The improved buckle attachment B, composed of the plate f, and the perforated projection g, when the latter is arranged at or in close proximity with one edge of and in other respects with the said plate; also the buckle provided with the hook in combination with the plate f, and perforated projection g.

No. 4661. WILLIAM SHEA, Trenton, Ont., 21st April, 1875, for 5 years: "Milk Cooler." (Rafraichissoir à lait.)

*Claim.*—1st. An ice or water containing vessel A, for floating in milk pans or cans, having tubular passages B, 2nd. The vessel A, having an annular tubular buoy C; 3rd. The combination of the removable buoy C, and vessel A, attachable as described.

No. 4662. WILLIAM J. MANSELL, Toronto, Ont., 21st April, 1875, for 5 years: "Self-Acting Car-Coupling." (Attelage automatique de wagons.)

*Claim.*—1st. The tongue A, pivoted on the pin d, to the draw-head B, and at such an angle to the said draw-head B, that the strain of the link comes against the end of the tongue A; 2nd. The tongue A, having the wings b', in combination with draw-head B.

No. 4663. WILLIAM H. LANDON, Princeton, Ont., 21st April, 1875, for 5 years: "Improvements on Stoves." (Perfectionnements aux poeles.)

*Claim.*—1st. The combination of oven A, below the fire-box B, b, Fig. 1; 2nd. The combination of saddle shaped top plate S, and fire-box B, fig. 1.

No. 4664. WILLIAM J. WAUCHOPE, Executor of the will of ANDREW WAUCHOPE, Niddrie, Scot., and JOHN COWAN, Pengo, Eng., 21st April, 1875, for 5 years: "Gas Manufacture." (Fabrication du gaz.)

*Claim.*—The construction and arrangement of the gas retort D, in combination with and capable of being worked, concurrently with the kiln A, B, C.

No. 4665. CHARLES GAOUETTE, and LOUIS GAOUETTE, Ste. Anne de Stukeley, Que., 22nd April, 1875, for 5 years: "A Varnish." (Un vernis.)

*Claim.*—A compound composed of turpentine, paint, oil (boiled) japan oil, benzine, rosin and balsam gum mixed and boiled together in the proportion set forth.

No. 4666. JULIUS S. SHAILER, Boston, Mass., and WILLIAM COREY, Manchester, N. H., U. S., 22nd April, 1875, (Assignees of B. C. Stevens), for 5 years: "Improvements on Knitting Machines." (Perfectionnements aux machines à tricoter.)

*Claim.*—1st. In combination with the cylinder N, and dial A, the mechanism for giving a continuous circular and reciprocating semi-circular motion to the plate M, consisting of the pinion K, ring L, rack G, pinions I, and D, ring J, and stop J; 2nd. The mechanism for operating the dual-needles, consisting of the latch b', arch d', cam A, and plate M; 3rd. The dial A, and its operative mechanism, applied upon a hinged arm V, so that it can be readily removed out of the way, to facilitate the operation of the machine on different work; 4th. The combination with the circular plate M, of the shifter T, hooks U, U, and ring S, for operating the cams R, R; 5th. In combination with the revolving plate M, and toothed rings J, L, the locking pin J, for changing the movement of the machine; 6th. The reversing hooks U, U, in combination with the shifter T; 7th. A needle-cylinder containing two separate independent sets of needles operated by two separate independent cams.

No. 4667. GEORGE W. DUBUISSON, Toms River, N. J., U. S., 22nd April, 1875, for 5 years: "Method of Treating Jute, Gunny and Manila for the Manufacture of White Paper." (Mode de traitement du chauvre du Bengale, de la natte de jonc et de la manille pour la fabrication du papier blanc.)

*Claim.*—1st. The method or process of disintegrating the fibre of jute, gunny and manilla, and other fibrous plants and preparing them for bleaching by the use of potash; 2nd. The method of repeatedly using the potash solution in the treatment of jute, gunny and manilla, after such solution is restored by leaching through leached ashes.

No. 4668. WILLIAM PATESON, Bramley, Ont., 23rd April, 1875, for 5 years: "Improvements on Milking Machines." (Perfectionnements aux machines à traire le lait.)

*Claim.*—1st. The collars b', in combination with the tubes B; 2nd. The double spring clips D, in combination with the tubes B and A.

No. 4669. SAMUEL BRILLINGER, St. Catharines, Ont., 23rd April, 1875, for 5 years: "Improvement in Paint Brushes." (Perfectionnement des pinceaux.)

*Claim.*—1st. The combination and arrangement of the conical screw B, and expanding nut a, a, the said screw screwing directly in the sectional or non sectional nut, without the interposition or agency of other parts; 2nd. In combination with the sectional nut a, a, the defenders c, c.