

the inner portion of the stems and passing them between heated fluted rollers; 4th. Splitting the stem and removing the inner portion, and then subjecting the stem to a rasping or grinding process to remove all or nearly all of the pith; 5th. Splitting the stem, removing the inner portion, rasping or grinding the stem to remove the pith, and then subjecting the stem to the action of crushing rollers or surfaces either fluted or otherwise, either with or without the action of heat.

No. 8939. Mangle and Wringing Machine. (*Machine à calandrer et essorer.*)

James C. Harrison, Brockville, Ont., 10th July, 1878, for 5 years.

Claim.—The arrangement of the rollers H I, and the pressure roller H, having an equalising spring A imposed on its movable bearings regulated by screw B, and geared together to operate in unison within the frame D.

No. 8990. Sliding Door. (*Porte en coulisse.*)

George R. Kildner, Amuda, Mich., U. S., 10th July, 1878, for 5 years.

Claim.—1st. In a sliding door or gate, the combination of the hangers B B with the door or gate A, pulleys C C and elevated platform A; 2nd. The combination of the door or gate A, platform A, hangers B B, pulleys C C and bent or angular bar D, provided with a friction roller d.

No. 8991. Camp Bedstead. (*Lit de camp.*)

William Shoobred, (Assignee of Thomas Steers, Jr.) Ottawa, Ont., 10th July, 1878, for 5 years.

Claim.—A camp bedstead constructed of rails A A and C C, telescoping together and hinged to cross legs E E F F D D, said legs formed with a zig-zag pivot joint at their intersection to fold compactly as set forth.

No. 8992. Machine for Crushing Withe. (*Machine pour écraser l'osier.*)

William Lesslie, Jr., Kingston, Ont., 10th July, 1878, for 5 years.

Claim.—The rollers A B having the tapered surface and the spiral groove d e f, and the parallel grooves g h k, for crushing withes.

No. 8993. Washing Machine. (*Machine à laver.*)

Leonard C. Snyder and Hiram E. Bates, Essex Junction, Vt., U. S., 10th July, 1878, for 5 years.

Claim.—1st. In combination with a plain rubber roller B, journaled in the standards A A of a washing machine, in any ordinary manner, a roller C having longitudinal grooves F. 2nd. The combination with the wringer standard A A, of the locking block G and segmental bar H.

No. 8994. Improvement in Scrubbing Machines. (*Perfectionnement dans les machines à frotter les parquets.*)

August F. Stockley, Bishop Creek, Cal., U. S., 10th July, 1878, for 5 years.

Claim.—1st. The arrangement of devices for giving a reciprocating movement to the brush, composed of the wheel M, with a sunken gear in its outer periphery pinion, cranks and shaft K, horizontal arms L and fixed upright standards H; 2nd. The combination with the tank A, of the sprinkler R, valve S, and its operating mechanism composed of the vertical rod T and arm and adjustable nuts V.

No. 8995. Improvements in Ironing Boards. (*Perfectionnements dans les tables à repasser.*)

Louis Duval, Longueuil, Que., 10th July, 1878, for 5 years.

Claim.—The combination with the board A of supports B and C, pivoted respectively to lugs d and e (the former having slots B formed therein,) and the connecting rod D, with heads or nuts D.

No. 8996. Improvements on Carriage Springs. (*Perfectionnements aux ressorts des voitures.*)

William Bambridge, Oshawa, Ont., 10th July, 1878, for 5 years.

Claim.—The combination of an elastic cushion or separator A, with springs B B, ellipse C, follower C¹ and rivets D.

No. 8997. Art of Draughting and Cutting Garments. (*Art de tracer et tailler les hardes.*)

Neil McMillan, Mount Forest, Ont., 10th July, 1878, for 5 years.

Claim.—1st. The combination of scales G F P T B and W B. 2nd. The combination of scales S P H and F.

No. 8998. Improvements in Gates. (*Perfectionnements dans les barrières.*)

Jacob S. Lounsbury, Sandwich East, Ont., 10th July, 1878, for 5 years.

Claim.—1st. The curved double lever F F F, with the hinged double pulley H; 2nd. The wheels L L with their attachments, acting in combination with curved double lever F F F; 3rd. The spring lever M M with their attachments, acting in combination with latch guards D D; 4th. The swinging leaf A, at the lower side of the gate with its bolt. 5th. The combination of the curved double lever F F F and its adjuncts H and G, with wheels L L, and their attachments I I I, and with spring levers M M and their attachments, with swinging leaf A.

No. 8999. Improvements on Gas Governors. (*Perfectionnements aux régulateurs à gaz.*)

Frank B. Scovell, Waterford, Ont., 10th July, 1878, for 5 years.

Claim.—1st. The outer vessel or can A, vertical pipe B, float E and rod F, having universal joint G, collar K, set screw L and weights M, in combination with valve chamber C, check valve H, outlet I, and connection J. 2nd. As a means of regulating the flow of gas from the main pipe to the burners, in a vessel A, partially filled with water D and having a space N between said fluid and a float E, operating the valve H or equivalent devices.

No. 9000. Improvement in Rein-holders. (*Perfectionnements aux accroche guides.*)

John M. Taylor and John MacKay, Fredericton, N.B., 10th July, 1878, for 5 years.

Claim.—The device C, made with two recesses C¹ C², to adapt it to be attached to the hip straps of a harness for holding the reins.

No. 9001. Improvement on Cooking Stoves. (*Perfectionnement aux poêles de cuisine.*)

John M. Taylor and John Mackey, Fredericton, N.B., 10th July, 1878, for 5 years.

Claim.—The device E, so made as to adapt it to be secured to the fuel chamber of cooking stoves.

No. 9002. Apparatus for Utilizing Steam in Heating. (*Appareil pour utiliser la vapeur dans le chauffage.*)

Birdsall Holly, Lockport, N. Y., U. S., 10th July, 1878, for 5 years.

Claim.—1st. An underground steam street main in combination with steam-supplying apparatus, and with a meter constructed to control the pressure of steam in a building, and also record the consumption of steam from such main; 2nd. Underground street mains, connected with steam supplying apparatus and with junction boxes which permit expansion and contraction of the mains longitudinally, and with heat radiators in building contiguous to streets where the mains are laid; 3rd. In combination with steam conveying pipes of a building, for conveying steam to heat the building and for other purposes, a steam meter constructed to control the pressure of steam in such pipes and also to record the consumption of steam in the building; 4th. An underground steam street main in combination with steam supplying apparatus, and with a heat radiator of a building and with a meter; 5th. Underground street mains connected with steam supplying apparatus and with a heat radiator, and with a steam trap; 6th. Underground street mains connected with steam supplying apparatus and with a heat radiator, and with a steam trap which answers the double purpose of a reheater and a steam-trap; 7th. An underground steam street main in connection with steam supplying apparatus, and with a heater of building and with a water hydrant; 8th. An underground steam street main connected with steam supplying apparatus, and with a heater of a building and with a street steam hydrant; 9th. In underground street mains connected with steam supplying apparatus and with a heat radiator, and with an automatic steam regulator or governor; 10th. Underground steam street mains connected with a steam supplying apparatus and with a heat radiator of a building and with underground snow and ice reservoirs, having open ended or perforated steam pipes in said reservoirs for the escape of steam therein; 11th. A steam street main expansion-chamber F⁸; 12th. An adjustable hood g, in combination with steam main F¹, service pipe a, and expansion chamber in which serves as a steam chamber; 13th. The combination of the expansion chamber F⁸, the street main F¹, screw threaded as at f³, the adjustable ring G², and the follower e; 14th. The wall of the expansion chamber F⁸ of the junction box F¹, made to support the inner end of a section of the steam main, and the outer covering m² of the steam main; 15th. The section f² of the steam main, made of nickel plated metal; 16th. The combination of the convex ring g¹ of the steam main F¹, the wall of the expansion chamber tube G and eyebolts g³; 17th. Steam street mains, insulated as described, drained by tiles as at z; 18th. The meter cylinder c, having inlet n³ and outlet n⁴ and an annular diaphragm e⁷, in combination with a longitudinally adjustable valve e⁴, a laterally travelling pencil finger i; clock movement M and ribbon M¹; 19th. One or more than one radiator heated by steam supplied through the passage of the cone valve e⁴, in combination with the regulator K, whereby the same determined the pressure of the steam is practically maintained either in one radiator or in more than one radiator, whether only one radiator or more than one radiator is in use at the same time; 20th. The spring i⁶, in combination with the bar i³, the pencil finger i², clutch i⁴, and valve stem e⁵; 21st. The combination of the conducting pipe n¹ and steam pipe n² having a coil h¹ and the trap i¹, having connected chambers e² e³ and pipe m¹; 22nd. The suspended trap float f³ provided with a tube f² of less height than the depth of the chamber of the float, in combination with the pipe m¹, pipe n², cock i² and pipe w³; 23rd. A reheater interposed between radiators which are heated by steam from the source of supply, and radiators which are heated by water of condensation from the same steam; 24th. The reheater pipe n¹, in combination with the trap i¹; 25th. A street steam hydrant connected with the street main F¹ and located in close contiguity to a water hydrant, which is warmed by a pipe n connected to said main F¹, whereby steam and water may at all times be simultaneously supplied from the same locality to an engine for extinguishing fires; 26th. The casing m¹ m² for these service pipes, said casing serving for preventing the major portion of the service pipes from becoming impacted by earth, and for permitting them to expand and contract freely; 27th. A contrivance or contrivances for supplying steam for warming districts of dwellings in cities and towns, and for driving machinery and for other purposes in said districts, consisting of steam supplying apparatus, street mains having expansion junction service boxes, service pipes having connecting pipes and meters.

No. 9003. Apparatus for the Extraction of Gold from Auriferous Gravel. (*Appareil pour l'extraction de l'or du gravier aurifère.*)

Phillip Cadell, Victoria, B.C., 11th July, 1878, (Extension of Patent No 3469) for 5 years.

No. 9004. Improved Tape Measure. (*Ruban-mesure perfectionné.*)

Asahel F. Ward, Philadelphia, Pa., U. S., 11th July, 1878, for 5 years

Claim.—A non-elastic tape measure, composed of a fabric impregnated and coated with rubber, and having figures and graduation marks printed on its rubber surface.