

a brick machine made hollow in whole or in part, and provided with an inlet and outlet orifice, in combination with an aperture through the plunger, by means of which combination the axle may be lubricated.

**No. 5866. Process and Apparatus for Cooling Milk.** (*Procédé et appareil pour rafraîchir le lait.*)

Watson G. Walton, Hamilton, Ont., 21st March, 1876, for 5 years.  
*Claim.*—1st. Placing the milk in cans and standing them in an interior chamber of a vat and surrounding them with water coming from an ice tank, which is placed higher than the necks of the cans; the water entering the interior tank at the bottom, the surface water, as it warms, being carried off by an excite pipe from the interior vat to the exterior of the apparatus placed on a line with the height of the water required in the inside vat, so as to keep the water at a uniform cool temperature; 2nd. The combination of the exterior vat A, interior vat H, ice chamber D, melted ice chamber E, waste pipe J, opening I, at bottom of chamber E, and vat H, braces N, N, and cover X, with ventilator L, thereon.

**No. 5867. Lightning Rod.** (*Paratonnerre.*)

John Hewitt, Hamilton, Ont., 21st March, 1876, for 5 years.  
*Claim.*—1st. The wire a, wrapped around with a corrugated metallic strip b; 2nd. A tube c, wrapped around with a corrugated metallic strip b; 3rd. A lightning conductor composed of a single wire, or a series of wires, or a tube or a series of tubes wrapped around with a corrugated strip of metal; 4th. A continuous lightning conductor formed of a corrugated strip or strips b, wrapped around a central core which on the core being withdrawn leaves a spiral corrugated continuous tube.

**No. 5868. Fuse Lighter.** (*Allumoir de mèche de mines.*)

John W. Platt, Mineral City, Nev., U. S., 21st March, 1876, for 5 years.  
*Claim.*—A fuse lighter a, composed of combustible material and provided with a hole b, through which the fuse to be lighted can pass.

**No. 5869. Improvements on the Attachments of Rudders to Ships.**

(*Perfectionnements dans l'ajustage des gouvernails de navires.*)  
 George H. Couvrette and Pierre Frigon, Montreal, Que., 21st March, 1876, for 5 years.  
*Claim.*—1st. The combination of the stock and rudder l, o, rudder tube f, stationary clasp h, and movable clasp i; 2nd. The combination of the stock and rudder l, o, rudder tube f, and clasp h; 3rd. The combination of the stock and rudder l, o, rudder tube f, clasp h, and i, rudder post d, screwed bolt t, and nut u.

**No. 5870. Washing Machine.** (*Machine à laver.*)

Samuel Williams, Geneva, Ohio, U. S., 24th March, 1876, for 5 years.  
*Claim.*—The combination of the swinging beater F, G, bars or racks H, connecting bars J, levers K, and handle N, with suds box A, B, and with uprights C, and standards M, attached to said suds box.

**No. 5871. Improvements on Wind-mills.**

(*Perfectionnements aux moulins à vent.*)  
 Montgomery Crossman, Marshall, Mich., U. S., 24th March, 1876, for 5 years.  
*Claim.*—1st. In a regulator for a wind-mill, the hinge consisting of the parts S, S, g, and E; 2nd. The swivel P, bearing a bar t, t, upon its yoke; 3rd. The socket J, M, 17, in combination with the timbers H, H, of the tower; 4th. The screw joint K, provided with a second bearing z, in combination with the two parts of the pitman rod; 5th. The combination of the brake shoe, or rub-iron p, with the regulator of a wind-mill to form an automatic take in connection with the circle Q.

**No. 5872. Camp Lounge.** (*Lit de camp.*)

Gardner T. Barker, Pittsfield, Mass., U. S., 24th March, 1876, for 5 years.  
*Claim.*—1st. A camp lounge arranged and constructed to support the body of the occupant in a reclining position above the ground while the feet rest on the ground; 2nd. The combination of couplings D, consisting of ferrule a, and shank b, with the side and cross-pieces of the frame; 3rd. The combination of the lugs T, with the ferrules for driving them on and off the side pieces.

**No. 5873. Manufacture of Bands, Cords or Ropes.** (*Fabrication des courroies et du cordage.*)

Leedham Binns, Oakenshaw, Eng., 24th March, 1876, for 15 years.  
*Claim.*—1st. Wrapping two or more binding threads or cords of any desired material and color, in contrary directions around a core; 2nd. The novel combination of the guide wheels b, d, bobbins or reels e, f, u, guides z, z, z, z, z, wheels j, k, bobbins or reels B, C, guides j, k, tension knobs j, k, and guides j, k, j, k; 3rd. The guide wheel d, in combination with guide e, the band at, pulley u, and bobbins or beam u.

**No. 5874. Pipe Wrench.** (*Clé à dévisser les tuyaux.*)

Edward G. Clinch, St. John, N. B., 24th March, 1876, for 5 years.  
*Claim.*—The combination of the parallel toothed jaws A, B, the handle C, and one or more pivoted connecting links D, with each other.

**No. 5875. Improvements on Windows.**

(*Perfectionnements des châssis de fenêtres.*)  
 William West and John Lord, Toronto, Ont., 24th March, 1876, for 5 years.  
*Claim.*—1st. The combination of a balanced and hinged sash; 2nd. A window constructed with balanced sashes as B, and C, the combination therewith of the hinges b, b, c, c, c, and the spring tongues d, c, with their respective grooves to slide in.

**No. 5876. Improvements in Dressing Mill-stones.** (*Perfectionnements dans le rhabillage des meules.*)

George T. Smith, St. Louis, Mo., U. S., 24th March, 1876, for 5 years.  
*Claim.*—1st. The method of proving or determining the face of a mill-stone by the use, first, of a circular staff, which is employed to level the skirt, and second, of a long staff to establish the height or plane of the eye or central part of the stone relative to the skirt, said skirt serving as a guide for the ends of the long staff; 2nd. A proof plate made of stone or artificial stone; 3rd. The combination of the casing, the proof plate A, A, and the rubber cushions C; 4th. In combination with the main furrows A, or B, B, B, the middlings furrows a; 5th. A mill-stone having its grinding surface reduced to a plane, and the edges of the cells dulled.

**No. 5877. Improvements in the Art and Apparatus for Melting Glass.**

(*Perfectionnements dans l'art et les appareils de coulage du verre.*)  
 John N. Tarbox, Hamilton, Ont., 24th March, 1876, for 5 years.  
*Claim.*—1st. Placing the materials in a flint glass crucible with an opening at the top, and keeping the said opening uncovered until the glass has sufficiently melted to be blown, then covering the said opening with a cover to prevent the glass from boiling; 2nd. The combination of the vertical flues D, or the horizontal flues D, of a glass furnace with the openings J, of the pots I, for drawing heat to the bottom of the furnace for more quickly melting flint, white or colored glass.

**No. 5878. Improvements on Pistols.**

(*Perfectionnements aux pistolets.*)  
 Edward P. Boardman, Lawrence, Mass., U. S., 24th March, 1876, for 5 years.  
*Claim.*—1st. The sliding rod D, and hammer m; 2nd. The hammer m, provided with the spring pin k; 3rd. The spring F, in combination with the rod D; 4th. The pull G; 5th. The cylinder Q, barrel B, hammer m, pawl P, and rod D; 6th. The boss h, in combination with the spring catch Y.

**No. 5879. Sewing Machine.** (*Machine à coudre.*)

George L. DuLaney, New York, U. S., 24th March, 1876, for 5 years.  
*Claim.*—1st. The combination with the main shaft E, and with the needle operating mechanism and a looper of the discs 1, and 2, provided with radial slots, the cranks and crank pins 3, 3, the shaft H, above the shaft E, and the shaft H, below it or on the opposite side; 2nd. The spool case holder G, provided with the jaw d, having a thread projection 7, located on its upper edge at a point slightly in advance of the path of the needle; 3rd. The shield or guard j, in combination with the jaw d; 4th. In combination with the hard rubber spool case M, the spool guard 12, constructed with the rearward extension and applied to the spool case; 5th. A sewing machine needle provided with a shoulder groove 21, 22; 6th. The combination for joint operation of the following devices, viz., the incision wheel o, ring o, lever m, m, spring m, lifter Z, spur X, adjusting lever 3, graduating lever 4, and yoke Et, 7th. The combination with a thread tension device adapted to feed out automatically the quantity of thread for a stitch and with the needle the discs 5, when used for controlling the slack thread above the eye of the needle; 8th. The adjustable slotted thread guard g, in combination with the jaw d, provided with the point 6, 9th. The combination of the wheel o, lever m, m, spring m, lifter Z, spur X, adjusting lever 3, graduating lever 4, yoke Et, and h... N; 10th. The combination with the feed dog L, of the eccentric 10, the pendent lever e, adjustable filerum slide r, and bracket u.

**No. 5880. Art of Decolorizing and Preserving Tanning Extracts.**

(*Art de décolorer et conserver les extraits de tannage.*)  
 James Foley, Montreal, Que., 24th March, 1876, for 5 years.  
*Claim.*—1st. The incorporation with tannin juices, aqueous solutions of tannin, and concentrated tanning extracts, obtained from hemlock or other bark and astringent vegetable substances, containing tannin of the chemically combined form of sulphites, bisulphites and double sulphites of the bases, sodium, calcium, potassium, aluminium, and ammonium, separately or combined, either in the form of solid salt, or solution during the leaching of the bark or astringent substances containing tannin or in the tanning ooze or liquor after being leached or in the extract thereof after concentration, for the purpose of decoloration, preservation from oxidation, loss by fermentation or souring and precipitation; 2nd. The tanning liquids or extracts treated with sulphites, bisulphites and double sulphites of the bases, sodium, calcium, potassium, aluminium and ammonium, separately or in one or more combinations.

**No. 5881. Turbine Water-wheel.**

(*Roue hydraulique turbine.*)  
 Willis S. Phelps, Komoka, Ont., 24th March, 1876, for 5 years.

*Claim.*—1st. The combination of double scroll B, B, cone-shaped centre and bucket G; 2nd. The arrangement of gates I, I, and ventilating pipes E, E.

**No. 5882. Stove Base Plate.**

(*Plaque inférieure de poêle.*)  
 John W. Elliott, Toronto, Ont., 24th March, 1876, for 5 years.  
*Claim.*—The centrally perforated base plate C, with or without the foot pockets G, crowning piece E, and rim F elevated in the centre to form an air chamber underneath and raised above the level of the floor for the purpose of inducing, in combination with the stove, a circulation of air in the lower part of an apartment.