

**No. 7071. Improvements on Re-sawing Machines.** (*Perfectionnements aux machines à refendre.*)

John Lamb, Ottawa, Ont., 9th February, 1877, for 5 years

*Claim.*—The arrangement and combination of a lever for operating the sliding frame which carries the binding rollers, and which has its fulcrum in the bed frame which carries the back or stationary rollers

**No. 7072. Apparatus for Cleaning and Polishing Boots and Shoes.**

(*Appareil à nettoyer et cirer les chaussures.*)

David H Laurie and John Laurie Montreal Que 13th February 1877 for 5 years.

*Claim.*—1st. A rotary brush or brushes mounted on a spindle driven by any motive power for the purpose of cleaning blackening, brushing and polishing boots, shoes &c. 2nd The rotary brush D made concave so as to accommodate itself to the shape of the boot 3rd The combination of one or more rotary brushes mounted on a spindle carried in proper bearings, with a shelf formed on the frame to receive the boots to be polished. 4th. In combination with a rotary brush a stand or fast carrying the boot or shoe and presenting it to the action of the brush.

**No. 7073. Improvements on Pumps.**

(*Perfectionnements aux pompes.*)

George Lander, (Assignee of Francis T Forbest) Chicago, Ill. U. S. 13th February, 1877, for 5 years.

*Claim.*—1st. The combination of the cylinder A and valve F removably lugged and held in position by means of a removable lug b 2nd The valve F provided with the forked or slotted arm C in combination with the rod G, 3rd The scraper H and its operating rods I in combination with the cylinder A and valve F 4th. The valve K provided with a slotted curved bar e in combination with the operating rod l and cylinder A 5th The piston J formed of two parts with a curved interior in combination with the cylinder A 6th The cylinder A having its outlet E straight or nearly straight in the bottom and curved upon the sides and top.

**No. 7074. Tobacco Cutter.** (*Hache-tobac.*)

John Farrar, and Henry Earle, jr Montreal, Que., 13th February, 1877, for 5 years.

*Claim.*—1st. The combination, in a tobacco cutter, of a cylinder containing chambers the tobacco to be cut and placed in a loose ring carrying knives and secured to a screwed shaft upon which work arms for pushing the tobacco forward; 2nd. In combination with a cylindrical tobacco cutter the match boxes H and compartment I or either of them.

**No. 7075. Improvements in Can Making Machines.**

(*Perfectionnements aux machines à faire les boîtes métalliques.*)

Peter Dillon and George H. Bradford, Sherbrooke, Que and John Cleary, Great Falls, N. H. U. S. 13th February, 1877, for 5 years.

*Claim.*—1st. In combination with the bath B for the purpose of holding molten solder, a soldering bolt I consisting of a copper point E in communication with the bath B by means of a tube I, said communication being regulated by the valve to constitute a soldering apparatus 2nd. In combination with the soldering apparatus B I described above, the sliding mould M, dog ee and clips K K with their operating mechanism 3rd. In combination with the soldering apparatus B, I, the rotary holder h with its springs pp and operating mechanism; 4th. In combination with the furnace F, F a perforated guard f for the purpose of allowing the point of the soldering bolt to be heated without being clogged with ashes or dust.

**No. 7076. Improvements in Saddle-trees.**

(*Perfectionnements aux bâtis des sellettes.*)

William H Taylor Baldwinville N. Y. U. S. and Samuel Taylor Hamt ton, Ont., 13th February, 1877, for 5 years.

*Claim.*—1st. The cantle B and centre yoke L formed all in one piece the copper loop C formed in a separate piece from either and grooved to receive the cheek hook D in connection with the projections f on the cantle B. 2nd. The stops G on the hinge K, the pad screw sockets I.

**No. 7077. Spring Bed Bottom.**

(*Fond de lit à ressorts.*)

Thomas DeWitt Chatham, Ont., 13th February, 1877, (extension of Patent No. 6760), for 5 years.

**No. 7078. Process and Apparatus for Treating the Ores of Gold and Silver.**

(*Process et appareil pour le traitement des minerais d'or et d'argent.*)

Augustine B Crosby, Greene M Francis Amory Beverly Mass Edward W Hamon Haverhill, John Wetherbee, Boston, Mass. Joseph G. Mitchell Germantown, Pa. Charles H Crosby Lisbon N H John W. Beals Boston, Mass., U. S., 13th February 1877 for 15 years

*Claim.*—1st. The successive and continuous subjection of the ore to the drying, roasting, grinding, washing and amalgamating processes by feeding the ore continuously and at a uniform rate through the apparatus used in said processes so that every portion of the ore is subjected to practically the same conditions, and the novel mechanical devices and arrangement of apparatus necessary for accomplishing this result 2nd. Drying the ore after it is taken from the concentrating apparatus by feeding the same on and over a series of pipes heated by being used to convey the product of combustion from the furnace used for heating the roasting cylinders, and also to convey the heated vapors escaping from these said cylinders. 3rd. In combination with the said drying apparatus the settling chambers and wash down apparatus used for collecting the arsenical or other similar products from the ores. 4th. The method of collecting the arsenical or other similar products

obtained from the ores heated by this process by subjecting the condensed vapors which pass off from the roasting cylinders to the action of a current of hot water and causing the deposition of the arsenical or other similar products obtained by reducing the temperature of the resulting solutions. 5th. The combination of the drying receptacle and drying tubes. 6th. The wash down or condensing apparatus composed of a series of shelves. 7th. The combination with the wash down or condensing apparatus of the tanks and pump or its equivalent. 8th. The combination with the drying apparatus of elevator roasting cylinders and feeding apparatus connected therewith; 9th. The combination with the roasting cylinders, the heating furnace connecting the said drying apparatus and its adjuncts of the suction blower. 10th. The combination with the roasting cylinders of the self regulating feed apparatus. 11th. The combination with the supply pipe G of the valve. 12th. The combination with the roasting cylinders of the bands and rollers supporting and rotating the cylinders. 13th. The combination with the roasting cylinder of the flange and flange cover. 14th. The combination with the rollers the wells containing the same. 15th. In combination with the rollers the well and plate. 16th. Heating the water used in the washing apparatus by first using the same to cool the ore in the cooling apparatus. 17th. The combination with the cooling apparatus of the elevator or its equivalent grinding mills and washing apparatus. 18th. Excavating or washing the ore pulp by subjecting it to the action of a suitable stirring apparatus and the action of a current of water introduced into the bottom of the washing tub. 19th. The combination with the washing tub having a conical bottom and provided with suitable discharge pipes of the partition rotating stirrer, hollow shaft gearing and hollow wooden cylinder. 20th. The combination of the washing tub settling tank and amalgamator. 21st. The combination of the collecting tank, strainer and sleeve tubes Et Et; 22nd. The combination with the collecting tanks and amalgamators of the clearer H; 23rd. The dolly tub in combination with the hollow stirrer connected with the amalgamator; 24th. The collecting plate in combination with the reciprocating stirrer; 25th. The combination with the amalgamator of the dolly tub and stirrer; 26th. The combination of the drying apparatus settling chamber, wash down or condensing apparatus roasting cylinder self-regulating feed attached to the same cooling chamber grinding apparatus elevator washing vat, settling tank, amalgamator, circulating apparatus and its attachments for treating the quick silver dolly tub and cooling plate and their respective stirrers.

**No. 7079. Composition of Matter for Deodorizing Night Soil.**

(*Composé pour désinfecter les matières excrémentielles.*)

Walter H Barren, Toronto, Ont., 16th February, 1877 for 5 years.

*Claim.*—A composition of matter composed of nitrate of lead, chloride of ammonium and water, and mixed.

**No. 7080. Apparatus for Discugaging Ship's Boats from their Lowering Tackles.**

(*Appareil à dégager les canots de navires de leurs aynes de descente.*)

Arthur B. Cruickshank Dundee, Scotland 16th February 1877 for 5 years

*Claim.*—Constructing and operating the hook C C and shackles B B in combination with the ordinary tackle employed to lower boats into the water.

**No. 7081. Railway Alarm.** (*Alarme de chemin de fer.*)

John M Livingston, Merriton, Ont., 16th February, 1877 for 5 years

*Claim.*—1st. The spring d, rod e and h and curved rod f 2nd The shaft g, arm j, joint k and springs l and m.

**No. 7082. Improvement on Axle Trees.**

(*Perfectionnement des essieux.*)

William Herlihey and Henry Dennis, Lindsay, Ont., 16th February, 1877, for 5 years.

*Claim.*—The raised projections C C upon which the bolster or sand board rests and the lower raised part of the collar D D and the braces F F G.

**No. 7083. Composition for Kindling Fires.**

(*Composé pour allumer le feu.*)

Charles D. Bradley, Quebec, Que., 16th February, 1877, for 5 years.

*Claim.*—Wood, paper or bags soaked in an inflammable fluid or fluids, as coal, oil tar and turpentine and covered with a wrapper capable of preventing evaporation, wholly or in great part, and at the same time not interfering with the ignition of the inflammable fluids within, as resin and gum arabic, or their equivalent.

**No. 7084. Machine for Making Bobbins.**

(*Machine à faire des bobines.*)

George W. Glazier, Salem, Mass., U. S. and Oscar E. Wait, Lynn, Mass., U. S., 16th February, 1877, for 5 years.

*Claim.*—1st. The intermittently revolving head E provided with sockets, in combination with an automatic clamping mechanism i l. 2nd. The combination of the head E clamping devices i l and the evener F. 3rd. The combination of the hollow auger D, slide g and its operating mechanism with the roller h. 4th. The combination of the head E, automatic clamping mechanism i l and the hollow auger D. 5th. The combination of the head E, clamping mechanism i l hollow auger D and the two series of revolving spindles. 6th. The combination of the head L clamping device i l hollow auger D series of tool carrying spindles the saw H and their operating mechanism. 7th. The combination with the head E carrying socket, and clamping devices of the head I carrying spindles n and their operating mechanism; 8th. The combination of the head I provided with spindles n the lathe head N T. 9th. The head I and its hollow spindles n provided with wicking leading to a central cup or reservoir within the head. 10th. The combination of the lathe head N, carriage Q, adjustable way u. 11th. The combination of the lathe head N, tool carriage Q, adjustable way u, lever v, and cam M. 12th. The combination of the head I, provided with spindles n, carriage R and take off U; 13th. The combination of the rotating head L, carrying spindles n, tool carriage Q, carriage bed Qz, lever 11 and cam M having the deeper depression for dropping the bed. 14th. The ad-