

No. 2568. JOHN LITTLE, Newburgh, N. Y., U. S., 25th July, 1873, for 15 years: "Horse Shoe Sharpener." (*Rémouleur de fers à chevaux.*)

Consists of a tool or machine to sharpen the calks on horse's shoes when they are on the horse's foot instead of taking the shoes off and sharpening them in the usual way.

Claim.—The portable compound machine consisting of the grinding wheel A, and outer L, arranged on the same shaft and capable of being adjusted to any desired position.

No. 2569. JAMES M. DORLAN, Dorlan's Mills, Penn., U. S., 25th July, 1873, (Extension of Patent No. 1872, for a 2nd period, of 5 years): "Paper Sizing." (*Collage du Papier.*)

Claim.—1st. As a sizing ingredient or chloride of lime, or its equivalent; 2nd. Chloride of lime, or its equivalent, in quantities large or small, as a new and essential sizing ingredient or material and as a basis or principle in any composition of other sizing ingredients in and for sizing paper stock materials, or paper pulps to make pulp-sized papers, and for sizing any other article that has required or may require any degree of a poreless gum, size, or of a waterproof character. Imparted thereto or therein; 3rd. The process of sizing paper stock materials and paper pulps to make pulp-sized papers when chloride of lime or its equivalent, shall compose a constituent part of the composition or mass of other sizing ingredients or materials; 4th. Chloride of lime as a sizing ingredient, in combination with resins, soaps, starches, oil, tallow and alums, separately or collectively.

No. 2570. JAMES M. DORLAN, Dorlan's Mills, Penn., U. S., 26th July, 1873, (Extension of Patent No. 1872, for a 3rd period of 5 years): "Paper Sizing." (*Collage du papier.*)

No. 2571. WILLIAM H. CORY & EDWARD CORY, London, Eng., 26th July, 1873, for 10 years: "Artificial Fuel Blocks." (*Blocs de combustible artificiel.*)

Relates to the compounding of small coal, coal dust, &c., in a minutely divided condition with certain ingredients which cause it to cohere when it is compressed into blocks.

Claim.—The mixture of cement or clay and silicate of soda or of potash with carbonaceous matter for the production of fuel blocks as described.

No. 2572. WILLIAM H. CORY & EDWARD CORY, London, Eng., 26th July, 1873, for 10 years: "Fuel Moulding Machine." (*Presse à combustible.*)

Claim.—1st. A pressing and moulding machine the combination of the revolving moulding table A, containing mould cavities B, with the cover G, and feed hopper K, and with the plungers C, working on the helical tramway D; 2nd. The use for the moulds of such apparatus of sliding covers L, L', fitted with rollers L², and L³, which work in cam grooves in the cover G; 3rd. The mode of fitting the plungers C, which form the bottoms of the moulds B, with rims and inner plungers M, worked by rods N, so as to lift the moulded blocks clear of the said rims; 4th. The combination with the pressing and moulding apparatus, of the wipers S, and travelling band T, for removing the moulded blocks from the revolving table; 5th. The method of adjusting the charge of the moulds and regulating the pressure to which the material is subjected in moulding by means of the moveable parts V, and W, of the inclined tramway and the springs W, which support the latter.

No. 2573. FRANCIS H. PERRY, Drummondville, Ont., 26th July, 1873, for 5 years: "Machine for Doubling and Twisting Yarns." (*Machine à doubler et retordre les fils.*)

Claim.—1st. The vibrating arms H, H, and the vibrating fulcrums I¹, I², operated in the manner set forth; 2nd. In twisting the yarns and controlling its draft or delivery by the revolution of the spindle Y; 3rd. The combination and application of the worm A, upon the spindle Y, and its worm gear X; 4th. The combination and use of the spindle Y, cone headed bobbin X¹, and flexible stop holder K¹; 5th. In the inverted V, to control, the centrifugal action of the thread.

No. 2574. WILLIAM NEIL, San Francisco, Cal., U. S., 26th July, 1873, for 5 years: "Refiner for Distilling Apparatus." (*Raffineur d'appareil de distillerie.*)

Consists in an elongated vessel having diaphragms placed across it at intervals. These diaphragms are perforated alternately at the top and bottom for the passage of the vapors.

Claim.—1st. The vessel A, with its perforated partitions E, and F, for directing and condensing the vapors and forming chambers for holding the condensed products, together with its enclosing water-jacket B; 2nd. In combination with the divided vessel A, the discharge pipes G, H, and I, and the vessel J, with its partitions K, gradually increasing in height from first to last; 3rd. In combination with the refiner in peculiar discharge vessel or pipe A¹, having perforated floors.

No. 2575. HUGH ROBERTSON, Carillon, Que., 26th July, 1873, for 5 years: "Improvements on Sewing Machines." (*Perfectionnements aux machines à coudre.*)

Consists in the attachment and use of an oscillating hook, on one side of which is fixed a bracket or cell for the reception of the shuttle, the latter being secured therein by any suitable contrivance, and it relates also to the means employed of regulating the tension of the shuttle thread.

Claim.—1st. The hook A, with its bracket B, or cell, oscillating on an axis D, in combination with a shuttle C, of a "sewing machine"; 2nd. The auxiliary hook I, or its equivalent, in combination with the oscillating hook A; 3rd. The spring M, applied to the oscillating hook A; 4th. The moveable loop check N, applied and operating as set forth; 5th. The application to the shuttle C, of an internal or external spring P.

No. 2576. SIMON L. GOULD, Gardiner, Me., U. S., 26th July, 1873, for 5 years: "A Pulp Engine." (*Un engin à pâte à papier.*)

Claim.—1st. The case A, G, in combination with the centrifugal disintegrator B; 2nd. The partitions P, arranged in the case A, G, in combination with a centrifugal disintegrator.

No. 2577. HUGH ROSS, Plattsburg, N. Y., U. S., 26th July, 1873, for 5 years: "Wash Boiler Attachment." (*Disposition de chaudière de buanderie.*)

Claim.—1st. The air chamber I, formed by the out walls G, and lining H; 2nd. The circulating passages Q, formed by the inner walls J, lining H, and double partition walls P; 3rd. In providing the steam and water passages in the inserted bottom A, with perforated coverings D, ball valves F, and cages E; 4th. In providing the inserted bottom A, with a surrounding rim B, and cross partition C; 5th. The chamber of ice L, constructed with perforated sides and bottom and valved tube M, for holding essences or chemically saturated material for removing stains and the application of such device in the manner set forth.

No. 2578. CHARLES S. HALL, Rochester, N. Y., U. S., 26th July, 1873, for 5 years: "Grain Thrashing Separators." (*Séparateurs pour les machines à battre les grains.*)

Claim.—1st. In combination with the thrashing cylinder H, the primary and secondary belts C, and D, arranged to operate conjointly in the manner set forth; 2nd. The beater E, constructed as described, in combination with the thrashing cylinder H, and belt C; 3rd. The adjustable grate G, in combination with the cylinder H; 4th. The adjustable grate G, having its interstices arranged at right angles or nearly so, to the axis of the thrashing cylinder, and extending through, unobstructed, to the rear end of the finger rods C; 5th. In grain thrashing separators, a concave formed of one or more segments, provided with raised diagonal serrations; 6th. In combination with the serrated portions N, N¹, in this class of concaves. The depressed bars V, arranged relatively as described.

No. 2579. JAMES E. CROOKER & WALTER G. CROOKER, Toronto, Ont., 25th July, 1873, for 5 years: "Vegetable and Root Basket." (*Panier à légumes et à racines.*)

Claim.—The wire basket A, and top and bottom frame B, B¹, and handles C, C.

No. 2580. JOSEPH E. HOLMES, New York, U. S., 12th August, 1873, for 5 years: "Atmospheric Motor." (*Moteur atmosphérique.*)

Claim.—The general combination of cylinders A, piston B, and gearing with the use of atmospheric pressure as a motive power for small hand machines.

No. 2581. PRINCE BAKER & JAMES H. BAKER, North Esk, N. B., 12th August, 1873, for 5 years: "Railway Snow Plough." (*Charrue à neige de chemin de fer.*)

This plough is mounted on wheels like an ordinary railway wagon and provided with a fixed engine to operate the shovels independently from the locomotive required to carry it over the track.

Claim.—The combination of the plow share H, attached to the body of the plow by two arms I, operated by a cog-wheel and crank A, gearing on segment B, in shovels F, and G, operated by a fixed engine and working in opposite directions by means of a cog-wheel C, and gear-wheels D, and E, and in the application of a fixed engine to operate the shovels F, and G, as set forth.

No. 2582. FRANCIS H. PERRY, Drummondville, Ont., 12th August, 1873, for 5 years: "Creel and Tension Spooling Machine." (*Cannelier et bobinoir à tension.*)