

### No. 8489. Improvements in Washing Machines. (*Perfectionnements dans les machines à laver.*)

Truman Austin, Virginia, Nev., U.S., 4th March, 1878, for 5 years.

*Claim.*—1st. The rotating cylinder A so mounted as to be supplied with steam or water, and having the fixed buckets D together with an interior series of supporting rollers for clothes; 2nd. The bars or rollers formed in two parts, and having the conical ends E fitting into conical adjusting sockets at each end for the purpose of holding the parts together; 3rd. The conically ended two-part rollers D, having the receiving conical sockets at either end, and the operating screw G for the purpose of allowing the parts to separate or to close and secure them after the clothes are introduced.

### No. 8490. Improvement in Stoves. (*Perfectionnement dans les poêles.*)

Edward Gurney and Charles Gurney, Hamilton, Ont., 4th March, 1878 for 5 years.

*Claim.*—In combination with base burning, self-feeding, cooking, parlour, wood and coal stoves or ranges of a ventilating ring B provided with openings *d*, or ventilating tops and bottoms of stoves constructed in the same manner, for the purpose of preventing the ground, necked or otherwise polished edges of the same from becoming tarnished.

### No. 8491. Improvements on Tools for Metal Working Lathes and Planers. (*Perfectionnements aux outils de tours et raboteuses à métaux.*)

John Du Bois and Edwin F. Beugler, Williamsport, Pa., U.S., 4th March, 1878, for 5 years.

*Claim.*—1st. The combination of a stock or body, and a cutting blade or bit secured in or across the end of the same in an oblique and horizontal position; 2nd. A cutting blade B mounted obliquely and adjustably in the end of the stock or body A; 3rd. In combination with the stock A, the curved blade secured obliquely therein; 4th. A thin steel blade or cutter, and a stock or body adapted to hold the same and give it a firm support to its extreme cutting edge; 5th. The combination of a thin cutting blade, and a stock or holder, the blade being secured horizontally and adjustably to the stock, and sustained at its extreme cutting end thereby; 6th. The combination of a horizontal cutting blade, either curved or straight, with two clamping blocks or plates, one sustaining the blade on the under side to its extreme end, and the other bearing on top of the blade and extending nearly to its end; 7th. The combination of a stock or holder, and a blade or cutter secured obliquely in and across the end of the same, the outer faces of the two standing flush with each other, in order that the tool may be advanced across the end faces of shafting &c.; 8th. The combination of a cutting blade and a stock or holder, constructed with a forward nose or point to sustain the forward end of the same, the nose and blade having parallel vertical sides; 9th. The combination of the stock or holder A having an oblique head or socket, the blade B seated therein and the screw or equivalent fastening device; 10th. The combination of the stock A, the oblique blade B, blocks D b and screw C.

### No. 8492. Improvements on Mining Machines. (*Perfectionnements aux machines à miner.*)

Francis M. Lechner and Joseph A. Jeffrey, Columbus, Ohio, U.S., 4th March, 1878, for 5 years.

*Claim.*—1st. The combination of the straight or chisel edged cutters *c*, with the notched cutters *c*; 2nd. The combination of a stationary screw and a detachable nut mounted in the sliding cutter carrier; 3rd. The combination with the screw K of a divided nut (O), its conical support, and the enclosing shell L; 4th. The shaft *r* and rope *r* in combination with the main frame and sliding cutter frame for withdrawing the cutters; 5th. The combination with the sliding frame which carries the cutter of a screw and nut for advancing the cutter, and a shaft and rope for withdrawing the same, with the mechanism which drives the cutter; 6th. A cutter frame, made hollow to conduct air from the driving engine and deliver it near the cutter; 7th. In scrapers operated in vertical planes to remove the cutting from the kerf or drift; 8th. A worm adjustable upon the driving shaft for actuating the feeding devices; 9th. The shaft F made adjustable for tightening the driving chain *f*; 10th. The overhanging scraper-chain supports; 11th. The combination with the carriers, of the driving shaft E, adjustably supported between said carriers; 12th. The cutter bar provided with the projecting lugs *m* having their engaging faces formed in arcs of circles; 13th. The driving chain provided with friction rollers *m* adapted to engage with the lugs *m*.

### No. 8493. Improvements on Washing Machines. (*Perfectionnements aux machines à laver.*)

Joseph O. Beupperland, Fall River, Mass., U.S., 4th March, 1878, for 5 years.

*Claim.*—1st. The combination with the case B of the rotary cylinder A, having the end brushes, the longitudinal spaced brushes, the prismatic rollers *h* arranged between them and the buckets L; 2nd. In a rotary washing machine, the cylinder A having the spaced strips provided with the tufts *f* and the prismatic rollers *h* between said strips; 3rd. The washing machine cylinder A having the buckets L, the end brushes, the longitudinal spaced brushes and the prismatic rollers between the latter; 4th. The combination with the vessel B having the U-bearings, and the cylinder A having the guide *j* journaled in said bearings, and one of them provided with gear-wheel J of the independently journaled shaft I having a pinion *m* engaging the said gear wheel.

### No. 8494. Improvements on Catches for Bags. (*Perfectionnements aux attache-sacs.*)

Richard Hensley and Dickson Anderson, Montreal, Que. 4th March 1878 for 5 years.

*Claim.*—1st. The pawl D in combination with and pivoted to the projections B of the plate A, plate A and string or band, &c., F, the pawl D having a cam form from the point 1 to point 2 and form of equal radius from

the point 2 to the point 3, in combination with the plate A having projections B and with string, &c., F; 3rd. The combination of the plate A having projections G with pawl F having surfaces from the points 1 to 2 and from the points 2 to 3 constructed as shown; 4th. The plate A having hole L in combination with the pawl D having surface constructed as shown and with string, &c., F; 5th. The plate A having projections B, said projections having holes L, in combination with pawl D having surfaces as described; 6th. The plate A in combination with pawl D having surface constructed as shown, and with the string, &c., F.

### No. 8495. Improvements on Car Wheels. (*Perfectionnements aux roues des wagons.*)

William Wilmington, Toledo, Ohio, U.S., 4th March, 1878 (Extension of Patent No. 2312), for 5 years.

### No. 8496. Improvements on Coal Oil Stoves. (*Perfectionnements aux poêles à pétrole.*)

James Baulff, Ottawa, Ont. (Assignee of John A. Frey, Jersey, N.J. U.S., 6th March, 1878 (Extension of Patent No. 2308), for 5 years.

### No. 8497. Improvements on Coal Oil Stoves. (*Perfectionnements aux poêles à pétrole.*)

James Baulff, Ottawa, Ont. (Assignee of John A. Frey, Jersey, N.J. U.S., 7th March, 1878 (Extension of Patent No. 2306), for 5 years.

### No. 8498. Improvements on Potato-Diggers. (*Perfectionnements aux aratoires à patates.*)

Peter M. Bawtinhauer, Woodstock, Ont., 8th March, 1878 (extension of Patent No. 2152), for 5 years.

### No. 8499. Improvement in Fog Alarms. (*Perfectionnements dans les signaux de brouillard.*)

Noah Woodward, (Assignee of Robert Booth and Lewis Smith) Sherbrooke, Que., 8th March, 1878, for 5 years.

*Claim.*—1st. The controlling mechanism G consisting of the spring lever *c*, disc *f*, with stop piece *g* *h* and weighted lever K; 2nd. The combination of the steam cylinder A and its piston B, with the air cylinder E and its piston D; 3rd. In combination with the controlling mechanism G, a valve F, stop cock, slide valve, or equivalent devices, and cylinder A; 4th. In combination with the cylinders A and E, valve F and controlling mechanism G, the pivoted *p* and pins *m* and *n*; 5th. In combination with the cylinder A, valve F and controlling mechanism G, the stop cock lever *p*, pin *n* and disc *y*; 6th. In combination with the valve F, controlling mechanism G and cylinder A or E, the stop cock M; 7th. In combination with the stop cock M, the stop cock or valve N, 8th. In combination with the valve F, the stop cock or valve P; 9th. The combination of the cylinder A, or cylinder A and E, with their pistons, &c., the controlling mechanism G, valves F and P, stop cocks M and N, pivoted lever *p*, pin *n* and pin *m* or disc *y*, with a horn and reed or with a whistle.

### No. 8500. Compound for Preserving and Renovating Cut Stone. (*Composé pour préserver et rafraîchir la pierre à taille.*)

Alexander McLean, Benjamin Morton and John W. G. Whitney, Toronto, Ont., 8th March, 1878, for 5 years.

*Claim.*—A preservative and renovative compound wash or paint, composed of Portland Cement, native cement, grey lime and plaster of Paris mixed, or other equivalent materials in a liquid composition of water sulphuric acid or spirits of salts and hydrochloric acid, or their equivalents.

### No. 8501. Machine for Washing Clothes. (*Machine à laver le linge.*)

Edward S. Redfern and Charles Burns, Meaford, Ont., 8th March 1878 for 5 years.

*Claim.*—1st. A tube C having a flaring flange C<sub>1</sub> and a plunger D, worked by a rod E in the usual way in combination with a closed cylinder, 2nd. The perforated detachable mouthpiece, having a hinged valve H and connected into the end of the tube C provided with a plunger D, in combination with the closed cylinder A having spout B.

### No. 8502. Improvement on Shutters. (*Perfectionnement des persiennes.*)

Asher Bijur, New York, U.S., 8th March, 1878, for 5 years.

*Claim.*—1st. The combination of the slats with a slat rod and adjusting mechanism arranged at one end of the slats, at the inside of the shutter frame, so as to be entirely out of sight; 2nd. The combination of a shutter frame having a recessed stile, with slats turning in a perforated supporting frame and with adjusting mechanism applied to the pivots at one end of the slats and fitted into the recess of the stile, so as to be enclosed thereby; 3rd. The combination of a shutter frame having recessed stile, with slats a slat carrying frame and a balanced adjusting mechanism, applied to the pivots at one side of the slats, the adjusting and balancing mechanism being fitted into the recessed stile and enclosed by the same and the slat carrying frame; 4th. The combination of slats B, mortised frame C and balanced slat rod D, pivoted to fixed and recessed crank arms of the slat pins outside of perforated detachable frame C.

### No. 8503. Improvements on a Folding Chair. (*Perfectionnements a un pliant.*)

Edwin S. Pratt, Buffalo, N.Y., U.S., 8th March, 1878, for 5 years.

*Claim.*—1st. The double slotted arm D; 2nd. In folding chair, a seat composed of a series of slats secured transversely, said seat being pivoted to the chair frame and adapted to move rearward and downward by a guide, when the chair is folded together; 3rd. The combination with the standards A and legs B, pivoted together by the bolts *b*, of the bolt *b* hollow cylinder C, slats F, transverse piece *f* and the round *a*; 4th. The folding chair consisting essentially of the connected standards A, legs B, double slotted arm D, secured to the legs B by the bolt *b*, and to the standard A by the rosette bolts *d*, hollow round C with the slats F, arranged between the round *a* and the chair back E.