

screwing reversely for clamping the spokes; 2nd. The tubular cap H, sleeved over the end of the pipe box A, and secured thereto by radial screws c, for receiving internally the shoulder d of the axle, when the arm is inserted in the pipe box.

### No. 9956. Improvements in Waggon.

(*Perfectionnements aux voitures de roulage.*)

Thomas Seaman, Listowel, Ont., 12th May, 1879, for 5 years

*Claim.*—1st. The combination, with the rear axle and reach pole of a wagon, of the metal socket bracket E and bolt E<sub>2</sub>. 2nd. The adjustable reach D, provided with the coupling bars E<sub>1</sub> E<sub>3</sub>, in combination with the front axle and king bolt F. 3rd. The combination, with the front axle and tongue of a wagon, of the metal socket bracket G. 4th. The counter balance spring H fastened to the axle, in combination with the socket bracket G, provided with the bearing piece G<sub>1</sub>. 5th. The hollow tapering metal cap stake H, provided with the cap base H<sub>1</sub> and ring H<sub>2</sub>, in combination with and fastened to the reduced ends of the bolsters by a joint bolt.

### No. 9957. Improvements on Hoisting Buckets.

(*Perfectionnements aux godets elevateurs.*)

William T. Warner, Plattsburgh, N. Y., U. S., 12th May, 1879, for 5 years.

*Claim.*—1st. In combination with an elevator bucket and its belt, the hooks H projecting from the bucket, and formed with the sharp edges a on the inner side, and the corresponding edges b on the back of the bucket and clasping the belt; 2nd. The combination of the elevator bucket A B C, the solid metallic band D with sharp edge b, and the hooks H H<sub>1</sub> having sharp edges a on the under sides.

### No. 9958. Improvements on Washboards.

(*Perfectionnements aux planches à savonner.*)

Ezra B Eddy (Assignee of George H. Millen), Hull, Que., 12th May, 1879, for 5 years.

*Claim.*—A washboard, plate B, of sheet metal, having angular corrugations b c in parallel waved lines transversely.

### No. 9959. Improvement in Sewing Machines.

(*Perfectionnement aux machines à coudre.*)

Oliver H. Taylor, Brooklyn, N. Y., U. S., 12th May, 1879, for 5 years.

*Claim.*—1st. The belt driving wheel D with slotted spoke d, in combination with the side frame B, the pitman E and wrist pin d<sub>2</sub>; 2nd. The wrist pin d<sub>2</sub>, in combination with the slotted spoke d and pitman E. 3rd. The pitman E, in combination with the wrist pin d<sub>2</sub>, the sleeve e, with slot e<sub>2</sub> and the bolt e<sub>3</sub>; 4th. The rubber rim f and m, in combination with the sections E E<sub>1</sub> of the pitman, and the pins f and d<sub>2</sub>. 5th. The two pieces f<sub>1</sub> and f<sub>2</sub> and slots f<sub>3</sub>, in combination with the pitman E, and treadle F with slot f<sub>6</sub> and the bolt f<sub>4</sub>. 6th. The adjustable treadle F; 7th. The treadle F with slot f<sub>5</sub>, in combination with the slotted toe piece f<sub>2</sub>, bolt f<sub>5</sub>, slotted supporting piece g, bolts h h and rod G; 8th. The slotted supporting piece, in combination with the treadle F, rod G and bolts h h. 9th. The rod G with treadle F, in combination with the supporting bars H, slots h h<sub>2</sub>; 10th. The supporting bars H H with slots h h<sub>2</sub>, in combination with the side frames B H<sub>1</sub>, slots h<sub>3</sub>, bolts h h<sub>3</sub> and rod G.

### No. 9960. Improvements on Conveyors.

(*Perfectionnements aux vis sans fin.*)

Charles E. Hovey and Edward D. Macpherson, Clinton, Ont., 12th May, 1879, for 5 years.

*Claim.*—1st. A screw conveyor, for threshers, elevators or mills, composed of spiral sections, each having a hub a cored to sleeve on a polygonal shaft c, by which the conveyor is operated; 2nd. The spiral sections B, constructed with a hub a, cored to sleeve on a shaft.

### No. 9961. Knitting Machine.

(*Machine à tricoter.*)

Dona Bickford, New York, U. S., 13th May, 1879, (Extension of Patent No. 3454), for 5 years.

### No. 9962. Compound and Process for the Cure of Cancers, &c.

(*Composé et procédé pour guérir les cancers, &c.*)

Levi J. Dart, Albion, Cal., U. S., 13th May, 1879, for 5 years.

*Claim.*—1st. A compound composed of the constituents of the bark of the Fraxinus reduced to ashes, and then leached and concentrated to a syrup; 2nd. The process of applying the compound of the fraximus, and afterwards a poultice for the removal of excrescences.

### No. 9963. Improvements on Reaping Machines.

(*Perfectionnements aux moissonneuses.*)

Thomas S. Marshall, Millbrook, Ont., 13th May, 1879, for 5 years.

*Claim.*—1st. The combination of the lock ratchet lever D, with the chain end or flexible cable E running over shears F and connected by rod G. 2nd. The combination of the universally coupled shaft C between main driving shaft and wheel B, driving rake and knife gear M and N.

### No. 9964. Improvements on Egg Carriers and Testers.

(*Perfectionnements aux machines à transporter et mirer les œufs.*)

Charles H. Wyman, St. Louis, Miss., U. S., 13th May, 1879, for 5 years.

*Claim.*—1st. The carrier and tester A, having the pockets b b b perforated only at the sides of said pockets. 2nd. The carrier and tester A consisting of the parts B and C, and having the pockets b b b which are inclosed, saving the perforations g e in the sides thereof.

### No. 9965. Improvements in Railway Switches.

(*Perfectionnements aux aiguilles des railroads.*)

Edwin Gordon, Hyde-Park, and John A. Duggan, Quincy, Mass., U. S. 13th May, 1879, for 5 years.

*Claim.*—A combined rotating switch and guard rail a, hung and rotating upon journals c c.

### No. 9966. Portable Sawing Machine and Tree Feller.

(*Scierie et abateur portatifs.*)

William H. Smith, San Francisco, Cal., U. S., 13th May, 1879, for 5 years.

*Claim.*—1st. The guides G, having the cross-head H moving upon them and connected with the saw D by the rod E, which passes through the cross bar F, said guides having their rear ends journalled upon the driving shaft which forms a centre, about which the saw moves while making its cut. 2nd. The guides G with their cross-head H, saw D, connecting rod and crank shaft V, in combination with the frame A having the steadying forks B and the holding dogs C; 3rd. The saw D, with the guides and cross-head journalled to move about the operating crank shaft, in combination with the feeding device consisting of the racks O, gears N N<sub>1</sub>, shaft P, the pawl and ratchet Q and the operating lever S, so fitted as to be moved at each revolution of the crank. 4th. An adjustable sawing device, consisting of the saw, supporting and directing guides and cross-head journalled to move about the driving crank axle V, which turns in boxes at one end of a frame A said frame being provided with the steadying forks B and holding dogs C, whereby the machine may be set at any angle, and an automatic feeding device by which to feed the saw forward.

### No. 9967. Method of Manufacturing Gas.

(*Mode de production du gaz.*)

Pavel P. Timofeeff, St. Petersburg, Russia, 13th May, 1879, for 5 years.

*Claim.*—1st. The production of illuminating gas, by the carbonization of hydrogen, or of a gas capable of burning as for instance, in oxide of nitrogen in the same apparatus in which the formation of the aforesaid gas takes place this gas during the process of carbonization, passing either (1st) immediately and instantly after its formation, through a layer of carbonizing liquid; or (2nd) through a material moistened by a carbonizing liquid. 2nd. The construction of apparatus serving for the production and immediate consumption of illuminating gas, intended to replace candles, lamps and ordinary gas light, or, if desired, to serve merely as gas generators, from which the gas can be conducted by a system of pipes to the places where it is employed; 3rd. The combination of the described portable illuminating gas generators with a galvanic element for self-ignition.

### No. 9968. Suspender Clamp.

(*Crochet de bretelle.*)

Charles E. Ramage, Toronto, Ont., 13th May, 1879, for 5 years.

*Claim.*—A piece of sheet metal B, having teeth or their equivalent at each end and folded so that the ends shall come opposite to each other, and provided with a metallic band C, or its equivalent, in combination with the metal hook D attached to the suspender E, and fitting over a hook or into the hole made in B.

### No. 9969. Improvements on Tellurions.

(*Perfectionnements aux globes terrestres.*)

Gideon McBride, Dover-Hill, Ind., J. S., 13th May, 1879, for 5 years.

*Claim.*—1st. In a tellurion, the combination with the stand A, provided with the elliptic recess C and elliptic gear i, and fitted with a revolving arbor b, of the slotted disk e, arm F and gear wheel I upon arm F, whereby the arm F, and its attached mechanism, is caused to move in an eccentric path. 2nd. In a tellurion, the combination with the arm F, fitted to revolve in an elliptic path around centre-post E, of the earth supporting post G gear wheels P and I and gear i, whereby the earth K is maintained at the proper inclination to the sun S throughout its revolution; 3rd. The combination with the arm F, fitted to move in an elliptic path and carrying the earth supporting post G, that is formed at its upper end with an inclined plane a, of the sleeve l, jointed arm m, pinion H, gear wheels J and L and gears r, whereby the rotation of moon M and its ascension and descent is obtained; 4th. The combination and arrangement, with the earth supporting post G and earth K, of the rotating sleeve l formed with an enlarged upper rim b, on which earth K rests and its diurnal rotation obtained. 5th. In a tellurion, the wires s supported by arms o. 6th. The combination, with the wheel P fitted upon the arm F so as to move with the arm round the centre-post E, and having the backward motion, of the fixed index r projecting from arm F.

### No. 9970. Improvements on Curd Agitators.

(*Perfectionnements aux menoles.*)

Edward Tyhurst, Chatham, Ont., 16th May, 1879, (Extension of Patent No. 9868), for 5 years.

### No. 9971. Improvements on Curd Agitators.

(*Perfectionnements aux menoles.*)

Edward Tyhurst, Chatham, Ont., 17th May, 1879, (Extension of Patent No. 9868), for 5 years.

### No. 9972. Improvements on Matching Machines.

(*Perfectionnements aux machines à allumettes.*)

Patrick Cardiff and Jonathan M. Adams, Marshfield, Oregon, U. S. 17th May, 1879, for 5 years.

*Claim.*—1st. The guide C composed of parts b b<sub>1</sub>, which, when placed together and secured by bolt E to bed plate A, form a groove, adjacent to the matcher head, to receive the grooving knives a a<sub>1</sub>, in their movement. 2nd. The guide C provided with a groove in the end, adjacent to the matcher head, that enables it to be moved up to the edging knives a a<sub>1</sub> so as to just clear the same when the machine is in operation, whereby support is afforded to the board, so that there is no liability of the edges being split or broken by the knives.