the revolving chuck; 7th. The combination of the dies with the revolving and sliding head, the square collars on the dies and the locking guard for controlling them, 8th. The combination of the revolving head, the dies and the pull off or shipper for the dies, 9th The combination of the revolving head carrying the dies revolving in opposite directions with a screw driver for removing the screws for the dies. 10th The combination of the guide for the blanks to the blank holders with a tripping device for letting a blank down automatically; 11th. The combination with a revolving head of four die holders and intermediate gearing enclosed in the head, 12th. The combination of the sliding plate *b2*, the head *b*, the notched collar *f*, the ratchet and pawl *f7 f8*, the dog *f5* and the stationary cam *i*; 13th. The combination of the sliding plate *b2*, the pull off *e4*, the toe *e8*, lever arm *e6* provided with the stop T and the head *b* or equipped with the pins *e9*.

No. 7370. Boot and Shoe Plate.

(Plaque de chaussures)

Elkanah S. Perry, Clay Lick, Ohio, U.S., 19th April, 1877, for 5 years.

Claim.—The metallic wear plates B having the circular bevelled edge *j* and the straight edges *c k*, and adapted to be applied to either the sole or heel of a shoe or boot.

No. 7371. Improvements in Turbine Water Wheels.

(Perfectionnements aux roues-turbines hydrauliques.)

Timothy Rose, Cortland, N.Y., U.S., 19th April, 1877, for five years.

Claim—In combination with a water wheel the deck plate B with parts *a a* and flanges *b b*, and the circular gate D with chutes *d d*, 2nd. The step block E, step *f* and wedge *g*, all combined and arranged as described.

No. 7372. Improvements on Motive Powers.

(Perfectionnements aux moteurs mecaniques.)

Angus R. McLennan, Charlottenberg Ont (Assignee of James Rae), 21st April, 1877, for 5 years.

Claim.—1st. The combinat on with the frame posts B B and mounted on a base A of the shaft C F and pulleys E G endless belt H and crank wheel I, 2nd. The combination with the frame posts B B and post L mounted on a base A of the working beam K, pitman J and crank wheel I, 3rd The con cave clamp P hinged to the base A and stop Q, for holding a churn securely.

No. 7373. Paint for Ships' Bottoms.

(Peinture pour les fonds des navires.)

Ebenezer Moseley, Dartmouth N.S., 23rd April, 1877. (Extension of Patent No. 1437), for 5 years.

Claim.—A matter composed of copper ore, fine copper or its sulphurets reduced to a powder through the agency of sulphuric acid, the whole being precipitated with iron, caustic potash or caustic soda or zinc, in combination with rectified tar, naptha and coal tar.

No. 7374. Improvement on Venetian Blinds.

(Perfectionnements aux jalousies.)

Richard Jane, Thomas McKenny and William H. Smith, Thornbury, Ont., 24th April, 1877, for 5 years.

Claim.—1st. The rabetted frame A adapted to be hinged to a window casing, and the removable rabetted blind frame B fitting therein, capable of being replaced by a corresponding rabetted glazed frame D, 2nd. The rabetted frame A adapted to be hinged to a window casing, and the rabetted removable glazed frame D fitting therein, the latter capable of being replaced by a corresponding rabetted blind frame B.

No. 7375. Shingle Machine. *(Machine à bardeau.)*

Richard Smith, Sherbrooke, Que., 24th April, 1877. (Extension of Patent No. 1136), for 5 years.

Claim.—1st. The application of screw or screws *c d* to shingle and clapboard machines, for imparting the traverse motion to the carriage *r r*; 2nd. The gain or graduated screw *c* for the back motion; 3rd The working a nut *e*, alternately from screws *c* and *d*, 4th. The two methods of tilting the nut *e*; 5th. The construction of standard *p* for the saw arbor, 6th. The drop in top rail G.

No. 7376. Mechanism for Propelling Street Cars. *(Mécanisme de propulsion des voitures de tramway.)*

James Walton and William Hortop, Toronto, Ont., 26th April, 1877, for 5 years.

Claim—1st. The spindle B with springs C, spur wheels D, ratchet wheels E, in combination with the spur pinions F, adjustable spindles G, clutches H and I, crank axle J and K connected together by the rod J1, 2nd. The lever M pivoted to the frame A in combination with the spur pinion F, for the purpose of shifting the adjustable spindles G; 3rd The adjustable hold fast bar N provided with pawls O in combination with the ratchet wheels O, 4th. The guide wheels Q, in combination with the frame of a street car.

No. 7377. Plaiting and Flouncing Machine.

(Machine à plisser et faire des volants.)

Robert Duffy, St. John, N.B., 26th April, 1877, for 5 years.

Claim.—1st The arrangement of gauge C attached to the table A, 2nd. The combination of the wires G G G, front of the table gauge C and back side of the table D.

No. 7378. Improvements in Dust Pans.

(Perfectionnements dans les porte-ordures.)

Cornelius J. T. Fox, Yarmouth, N. S., 26th April, 1877, for 5 years.

Claim.—A dust pan, of the form described, having the top covered with holes G in the back the back legs F the bridge D and the apron C.

No. 7379. Process of Making Cigars and Cigarettes.

(Procédé de fabrication des cigares et des cigarettes.

Alexandre Marengo and Joseph Marengo, Montreal, Que., 26th April 1877 for 5 years.

Claim.—1st The combination with endless belt C and roller K with sad ing frame to regulate the size of cigars that are being made; 2nd. The rollers A B arranged in supports E, one of which is rigid and the other movable provided with adjustable screws and lugs or stops to regulate the closeness of approach of said rolls, but more particularly to regulate the hardness or the softness of the cigars that are being made; 3rd. Shaped rollers A B K and endless belt C or equivalent, for making cigars usually called chemots and dove tails; 4th. The flattening of the ribs and straightening of tobacco leaves; 5th. The combination, in press compressing the sliding belt and plate P Q, the wrapper pattern plate R, the press plate S in connection with its spiral and studs U U.

No. 7380. Mode of Ventilation.

(Mode de ventilation.)

George P. Godley, Philadelphia, Pa., U.S., 26th April, 1877, for 5 years.

Claim.—1st. The method of ventilating apartments of buildings, &c., by means of perforated pipes placed in, on or near the floor of the same and pipes laying in a plane parallel with said floor and communicating with the external air; 2nd. The method of drawing out the vitiated air from the bottom of an apartment of buildings, &c., by means of perforated pipes placed in, on or near the floor which lay in a plane parallel with said floor and having communication with the external air; 3rd. Perforated pipes placed in, on or near the floor of an apartment and laying in a plane parallel with said floor, and having communication with the external air for withdrawing and expelling impure air out from the bottom of apartments 4th Perforated pipes placed in, on or near the floor of an apartment and laying in a plane parallel with that of the floor, for the purpose set forth said pipes being furnished with valves for regulating the degree of ventilation; 5th. In combination with a perforated pipe placed in, on or near the floor of an apartment and laying in a plane parallel with that of the floor, a swivelled vane or hood, 6th. In combination with a perforated pipe placed in, on or near the floor, a swivelled vane or hood furnished with automatic valves, 7th. In combination with perforated pipes C C, a swivelled vane or hood F having the mouth F^1 and pipe f_3, 8th. The swivel hood or vane F constructed with the funnel-shape pipe F^2 in the extremity of which is secured the pipe f_3; 9th. In combination with the floor of a railway car and depending therefrom, the swivelled vane or hood F having mouth F^1 and pipe f_3 whereby, through the suction produced by the moving train said vane or hood will receive and expel the vitiated air from the interior of the car

No. 7381. Improvements on Machines for the Preservation of Animal and Vegetable Substances.

(Perfectionnements aux appareils de conservation des substances animales et végétales.)

John Hopkins, St. John, N. B., 26th April, 1877, for 5 years.

Claim.—1st The combination of the outer chamber A, the tanks C C and the freezing mixture *h*, 2nd. The combination in the outer case A of the tanks C C D D and the faucets *e e*, 3rd. The combination of the outer and inner chambers A B, the tanks C C D D, the faucets *e e*, the packing *j* the freezing mixture *h*, brine *i*, the door *g* and the covers K K.

No. 7382. Process for Treating the Woodwork of Carriages, &c.

(Procédé de traitement des bois des voitures, &c.)

Patrick O Brien, South Bend, Ind., U. S., 26th April, 1877, for 5 years

Claim.—The process of preparing the surface of the wood work of carriages and cabinet work for the reception of the final coats of paint and varnish, that is to say coating the surface with a solution of oil, gums and driers in a heated condition.

No. 7383. Improvements on Portable Fences.

(Perfectionnements aux clôtures portatives.)

Elias H. Overholt, Rainham, Ont., 26th April, 1877, for 5 years.

Claim.—The mode of supporting panel fences having posts B, to be driven into the ground by cross braces C pivoted together, at their inter section, to maintain the overlapping ends of the upper rail A of the adjoining panels fixedly.

No. 7384. Improvements on Hydraulic Elevators. *(Perfectionnements aux élevateurs hydrauliques.)*

Elias Brewer, Boston, Mass., U. S., 26th April, 1877, for 5 years.

Claim. The cross head, its two sets of sheaves and two pistons positively attached at the ends of the cross-head, in combination with two stationary cylinders *p q* adapted to be connected with the main or service and waste pipes, to lift the cross head at its ends and with a central counterbalancing cylinder and piston.

No. 7385. Improvements on Carburetters.

(Perfectionnements aux carburateurs.)

Andrew Wiggin, Boston, Mass., U.S. 26th April, 1877, for 5 years

Claim—1st The method of accelerating and increasing the vaporization of the fluid by showering the same in lateral sprays towards the circumference from a central vessel or sprinkler upon a body of absorbent material ying upon a distributer, at the bottom of the carburetting chamber but casing to a height above that at which it could become saturated from capillary attraction of the liquid from the bottom of this chamber, 2nd. The float H provided with a guide rod I combined with a sprinkler having perforated sides, the rod passing through such sprinkler and terminating in an enlarged end having a fine elongated point and serving as a valve to check or to prevent the downward flow of the liquid into the said sprinkler 3rd