

No. 7320. Brush Handle Attachment.

(*Ajustage des poignées de brosses.*)

John Waddell, Elora, Ont., 9th April, 1877, for 5 years.

Claim—The combination of the two tapering diagonal dovetail tenons *a*, of the brush handle *A*, with the two tapering diagonal dovetail slots *b b*, of the brush back *B*, to produce a tapering diagonal dovetail attachment for brush handles.

No. 7321. Improvements on Safety Valves.

(*Perfectionnements aux soupaps de sûreté.*)

Frank B. Scovell, Waterford, Ont., 9th April, 1877, for 5 years.

Claim—1st. The cylinder *B*, piston *E*, having hollow stem *F*, valve *G*, parts *H I* valve *J*, spiral spring *L*, and steam pipe *R*; 2nd. The screw plug *M* regulating the tension of the spiral spring *L*; 3rd. The screw plug *O* for regulating the lift of the safety valve *G*, and holding it thereon; 4th. The screw shaft *P* for giving access to the plug *M*; 5th. The cylinder *B*, piston *E*, having hollow stem *F* and valve *G*, and connected by steam pipe *R* to a cylinder *S* having valve *J* and spiral spring *L*, and connected to a boiler by pipe *T* provided with three way-cock *C*.

No. 7322. Improvements on Lenses.

(*Perfectionnements aux lentilles.*)

Charles F. Houghton, Corning, N. Y., U. S., 11th April, 1877, for 15 years.

Claim—A semaphore lens of meniscus form having one surface, a portion of sphere or spheroid, and the other composed of zones of a parabolic or hyperbolic form with two surfaces, one adapted to project a portion of the rays to a long distance, and another at the same time by dispersing another portion of the rays to illuminate a field near the lens.

No. 7323. Improvements on Paper Packages.

(*Perfectionnements aux enveloppes en papier.*)

William H. Murphy, Syracuse, N. Y., U. S., 11th April, 1877 for 5 years

Claim—1st. An improved head for paper packages constructed of the pieces *A A* with the shoulder *a* thereon the chime pieces *C C* so arranged as to break joints with the pieces *A A* and the head piece *B*; 2nd. The combination of the pieces *A A*, shoulder *a*, chime pieces *C C*, and head piece *B*.

No. 7324. Improvements on Water Meters.

(*Perfectionnements aux hydromètres.*)

William Smith, San Francisco, Cal., U. S., 11th April, 1877, for 5 years.

Claim—1st. A series of flexible and collapsing pistons arranged in a circle within a partitioned enclosing case having an exhaust and a pressure side, and having cylinders of different diameters within it, after the manner shown, so that the pressure of the fluid in passing through the inlet and outlet passages provided in the case, will at the same time force the pistons through one cylinder and draw them through the other and thus give motion to the ring and its motion wheel; 2nd. A series of expanding and collapsing pistons *c c d d* of different diameters, arranged in pairs and united together by the segments *C C*, when the same are combined with cylinders *D D* of different diameters; 3rd. The segmental cylinders *D D*, one of the larger diameter than the other, when arranged within the case and combined with the piston ring; 4th. The combination with the piston ring *C*, of the motion wheel *B*, when constructed and arranged with it and with the enclosing case *A*; 5th. The circular case *A* with its channel and partition *a*, divided into pressure and exhaust chambers with inlet and outlet passages *E E* and a heating at for the axis of the motion wheel *B*; 6th. The combination with the case *A*, above named, of the two cylinders *D D* of different diameters connecting the exhaust with the pressure side of the case; 7th. The segmental cylinders *D D*, constructed in two parts and having the same length as the distance between any two of the pistons *c c or d d*.

No. 7325. Improvements on Pruning Shears.

(*Perfectionnements aux sécateurs.*)

Jefferson Chase, Orange Mass., U. S., 11th April, 1877, for 5 years.

Claim—1st. Pruning shears composed of the blades *A B* the former being formed with the notch or recess *D*, and the latter terminating in the hooked jaw *E* to operate with said recess; 2nd. Converting the end of the blade *A* into a chisel; 3rd. Pruning shears composed of the blade *A*, terminating in a chisel *a* and provided with the peculiarly formed recess *D*, and the blade *B* terminating in the curved jaw *E*; 4th. The auxiliary sleeve or tubular joint *b*, in combination with the rivet *C* and blades *A B*.

No. 7326. Pocket Match Safe, Tobacco Cutter and Case Combined.

(*Boite à allumettes et boîte coupe-tabac de poche, combinés.*)

Charles F. Harlow, Boston Mass., U. S., 11th April, 1877, for 5 years.

Claim—1st. A portable tobacco cutter and case combined and arranged to cut and retain the tobacco; 2nd. A combined pocket match safe, tobacco cutter and case, constructed, arranged and operated as described; 3rd. The case *A* constructed with an aperture *a* and shearing edge *c*, in combination with slide *B* with its cutting blade *f* and actuating spring *h*, arranged to operate together as specified.

No. 7327. Improvements on Gang-ploughs.

(*Perfectionnements aux charrues à socs multiples.*)

Thomas Hind, Glencoe, and David Darvill, London, Ont., 11th April, 1877, for 5 years.

Claim—1st. The combination of lever *E* with lever *F* and lever *J*; 2nd. The combination with lever *J* of axle *I* and connecting rod *G*, and lock *K*.

No. 7328. Railway Car-coupler.

(*Attelage de wagons de railroads.*)

William H. Fairb, Waterville N. S., 11th April, 1877 for 5 years

Claim—1st. The combination of the slides *B B* with the elevations *H H* guiding the same and supporting the pin *2*; 2nd. The combination of the link *C* with the corresponding opening *1* in draw bar.

No. 7329. Washing Machine.(*Machine à laver.*)

Philibert Anger, Roxton Falls, Que., 11th April, 1877, for 5 years.

Résumé—1o. L'action combinée des rouleaux frotteurs montés et bossés *H* sur les demi-rouleaux fixes frotteurs *R*. 2o. La rainure *C* qui sert à élever verticalement les rouleaux *H* au dessus des demi-rouleaux *R*, de manière à favoriser l'introduction du linge dans la lavante.

No. 7330. Milk Pan and Cooler.

(*Boîte-réfrigérant à lait.*)

William Cooley, Waterbury, Vt., U. S., 11th April, 1877, for 5 years.

Claim—1st. The process of treating milk for raising cream by sealing with water and air the cover applied directly to the vessel containing the milk; 2nd. The process of treating milk for the raising of cream by totally submerging in water the closed vessel containing it; 3rd. The process of separating the cream after it has been raised from the milk from which it was caused, by gradually and automatically withdrawing such milk from the bottom of the vessel leaving the body of the cream therein; 4th. The combination, in an apparatus for setting milk for cream of a vessel holding the milk, a cover adapted for water sealing the same and a fastening device serving to hold the cover to the vessel; 5th. In combination with the vessel for milk and with the water sealing cover and fastening device, a water vessel adapted to contain the milk vessel and to permit it to be water sealed or submerged therein; 6th. In combination with a can or vessel for raising cream a flexible tube applied at the bottom of the can and adjustable at its extent to the desired height and adapted for discharging the milk from the vessel leaving the cream remaining therein.

No. 7331. Improvements on Baling Presses.

(*Perfectionnements aux presses d'emballage.*)

Gilbert Brewster, Harvey, N. B., 11th April, 1877, for 5 years.

Claim—1st. The combination of the ratchet bar *P*, lever *M* having pawl *N* post *R* having pawl *S*, and levers *Q* connected to lever *M* by rods *O* with a baling press for operating the follower *J*; 2nd. The rods *T* attached to the lever *M* and connecting with the ratchet bar *P* to swing the latter on withdrawal from the packing box *A*; 3rd. The arrangement and combination of the windlass *Z*, lever *W* and ropes *V* and *X*, for operating the lever *M*.

No. 7332. Improvements on Atmospheric Motors.

(*Perfectionnements aux moteurs atmosphériques.*)

Regis Mayer, Joseph Mayer and Jean Mayer, Seeley's Bay, Ont., 11th April, 1877, for 3 years.

Claim—1st. The combination of the cone *F* and the ring *G*, for the purpose of dividing the current of air and of causing it to impinge on the sails and paddles of the vane *D* with the vane *D* and the draft pipe *A*; 2nd. The combination of the cone *F*, ring *G*, vane *D* and its shaft *E*, the pulley *H* with the draft pipe *A*, air pipe *B*, and the damper or valve *C*, to produce an atmospheric motor.

No. 7333. Improvements in Gates.

(*Perfectionnements dans les barrières.*)

Theodore F. Timby, Alma, Mich., U. S., 11th April, 1877, for 5 years.

Claim—1st. A pivotal bolt or stud *C*, at or near the center of the gate in combination with an elevated suspending pivot *E*, in line with the hinges or nearly so, and connecting media *B L* for balancing the weight of the gate on its vertical support; 2nd. The combination of a suspending pivot *E* in line with the hinges or nearly so, a connecting bar or link *B*, a lever *L*, fulcrumed at or near the center of the gate, and a rack *R* at the free end of the gate for raising and lowering said gate; 3rd. The combination of a ribbing strip or flange *R*, at the hinge end of the gate, with a lever *L*, fulcrumed at or near the center of the gate, and a vertical rack *R* at the free end of the gate; 4th. A notched sill or sills *S S'* and a rack *R*, having a reversed notch or shoulder *n* at its lower end in combination with the adjustable gate and its elevating lever for supporting and locking the gate in a lowered position; 5th. A false post *P*, having the gate proper attached thereto by sliding hinges, and provided with an elevated suspending pivot in combination with said gate and its adjusting device.

No. 7334. Improvements on Freezers.

(*Perfectionnements aux congélateurs.*)

Charles Boss, Bathurst, N. B., 11th April, 1877, for 5 years.

Claim—1st. The oval division *E* having hollow walls and surmounted by an ice trough *D* within the walls *A*; 2nd. The hollow partitions *B* surmounted by ice troughs *D* and arranged vertically; 3rd. The arrangement of the oval division *E*, partitions *B* and connected ice troughs *D* bearing on sleepers within the walls *A* provided with suitable doors.

No. 7335. Improvements in Buggies.

(*Perfectionnements dans les voitures.*)

John McBride, Strathroy, Ont., 11th April, 1877, for 5 years.

Claim—The arrangement of the iron bar *B B* placed over the spring bar of the elliptic spring in one continued piece or in two separate pieces, and passing through sockets at *C* in which the bar turns, the bar having eyes at each extremity for attachment to body loop *A*, and the combination thereof.

No. 7336. Improvements in Driving Reins.

(*Perfectionnements dans les guides de harnais.*)

Joseph Staples, Bexley, John M. Might and Charles W. H. Taylor, Toronto, Ont., 11th April, 1877, for 5 years.

Claim—1st. In combination with a lever driving bit an elastic strap and a non-elastic strap arranged in connection with the driving rein in such manner that either a nip may be used for controlling the horse as circumstances may require; 2nd. In combination with the lever bit *A* provided with the staples *A A'* and rings *G H* the spring strap *E*, lever strap *F*, ring *D* and driving rein *C*.