

No. 7412. Improvements on Life Boats.*(Perfectionnements aux bateaux de sauvetage.)*

George Bates, Cohasset, Mass., U. S., 1st May, 1877, for 5 years.

Claim.—The folding boat body as composed of the central, end, and intermediate sections provided with shoulder ribs; 2nd. The series of fixed and detachable floats, provided with locking hasps or devices, in combination with the boat body composed of the central, end, and intermediate sections, constructed, arranged and furnished with shoulder ribs; 3rd. The combination of the separable longitudinal braces with the boat body composed of sections; 4th. The combination of the series of projections *g h* with the sectional boat body, such projections being for use with the braces and to serve as stops to the sections.

No. 7413. Improvements on Temporary Binders. *(Perfectionnements aux serre-papiers.)*

George F. Alexander, Portland, Me., U.S., (Assignee of Robert C. Pierce.) 1st May, 1877, for 5 years.

Claim.—In combination with the bottom *a*, back *b*, cover *f* and spring *c*, the holder or retainer *d* formed of a single piece of metal clamped around a strip of leather *e* at its lower end, said strip of leather being fastened at its opposite end to the cover, and said spring being attached to the bottom and the back of the file.

No. 7414. Improvements on Grain Separators.*(Perfectionnements aux séparateurs des grains.)*

John D. Van Dusen and Charles S. Gross, Auburn, N. Y., U. S., 1st May, 1877, for 5 years.

Claim.—1st. In combination with the vibrating shoe of a grain separator the strap *b*, thumb screw *a*, roller *d* and rack *h*; 2nd. The adjustable jointed divider composed of a series of slats *L L*, hinged together so as to be folded and unfolded at will and arranged between the upper and lower set of sieves in the shoe of a grain separator.

No. 7415. Improvements on Trace Carriers.*(Perfectionnements aux porte-trails.)*

William H. Main, Boscobel, and Henry S. Woodruff, Janesville, Wis., U. S., 1st May, 1877, for 5 years.

Claim.—1st. The construction of frame *A* with the forward ends extended and curved inwardly in the form of hooks being rigid, and a part of said frame with their points so near the strap lying between them that the trace iron will be held in place by the same; 2nd. The rigid hooks *C C* in combination with the forward bar of frame *A*, back strap *B*, forming a joint for the purpose of hitching and unhitching the trace iron.

No. 7416. Improvements in Gates.*(Perfectionnements aux barrières.)*

Daniel Root, Caradoc, Ont., 1st May, 1877, for 5 years.

Claim.—The combination and arrangement of the wheel *D* above and the flanged wheel *K* below, when both are attached to the centre piece *A*, also *E E*, the cap and groove of the gate above, also the aperture therein at *I*, for the brace or arm to enter, and the links *C*.

No. 7417. Improvements on Folding Umbrellas. *(Perfectionnements aux parapluies brisés.)*

George B. Kirkam, New York, U. S., 1st May, 1877, for 5 years.

Claim.—1st. The runner *G* in combination with the stick *A*, tube *B* and spring *E*; 2nd. The combination of the rods *I J K L*, and pivoted clasp *N*; 3rd. The combination of the rods *I J K L*; 4th. The combination of the rods *I J L K U*; 5th. The combination of spring *P*, wire *Q* and handle *A*; 6th. The spring *R* and thumb piece *S*; 7th. The combination of the slotted tube *B C*, projection *O*, plate *D*, spring *E* and pin *F*.

No. 7418. Improvements on Hoes.*(Perfectionnements aux houes.)*

Charles D. Hyde and Orion N. Elkins, North Troy, Vt., 1877, for 5 years.

Claim.—1st. The seed box *A* having partition and brush *E*; 2nd. The seed box *A* provided with rests *B B*, clasp *c* and spring *a* for its attachment to the hoe handle; 3rd. The seed box *A* having a frame *J*, lever *I*, pivoted therein, for operating the carrier box *O*; 4th. The carrier box *O* having a thumb screw *H* for regulating the slide *G* to increase or diminish the capacity of the seed pocket; 5th. In combination with a hoe, a seeder attachment operating on the under or land side of the hoe handle.

No. 7419. Improvements on Calf Muzzles.*(Perfectionnements aux muselières des veaux.)*

Smilie, Tilton, Atlantic, Iowa, U. S., 1st May, 1877, for 5 years.

Claim.—1st. A calf muzzle composed of bow *A* with its ends *a a* nearly meeting and provided with pointed pins *B B* projecting in various directions, and with longer laterally projecting pins *Ba Ba*; 2nd. A calf muzzle having a rigid bow *A* provided with a swinging portion *C* jointed to it, and held in a clamping position by a spring *d*.

No. 7420. Improvements in Air Heating Attachments.*(Perfectionnements aux appareils à chauffer l'air.)*

David McAllister, Walton, N. Y., U. S., 1st May, 1877, for 5 years.

Claim.—The improved air heating attachment for furnaces and stoves consisting of the inner drum or cylinder *B* having closed ends, and provided with the diaphragms *H* and *I* cut away to form the respective crescent shaped openings *d d* and *e*, the vertical pipe *F* and regulator *G* and the outer drum or cylinder *A* open at each end, and the circular flanges *C D* of the furnace and exit flues.

No. 7421. Window Curtain Fixture.*(Ajustage de rideaux de fenêtres.)*

Edwin F. McComas and John H. Silveira, Erie, Pa., U. S., 1st May, 1877, for 5 years.

Claim.—1st. The combination of the carriers *D D* and cord *E E*; 2nd. In combination with the roller *B* or *B'* of a window shade, a carrier or hanger *D* provided with a hole *b* of the proper form for receiving the end or journal of the fixture attached to the roller; 3rd. In combination with the journal and hanger a bush washer *g*; 4th. In combination with pulley *G*, journal *h* and bush washer *g*, a weighted tassel *F* and actuating cord *F*; 5th. In combination with pulley *G* and carrier or hanger *D D*, the sustaining cord *E E* and the actuating cord *F*, said cord being endless and passing around the roller and through loops, knobs or pulleys; 6th. In combination with journal *h*, bush washer *g*, weighted tassel *F* and cord *F*, the carriers *D D* and suspending cord *E*; 7th. A window curtain roller carrier *D* provided with projections *d*; 8th. A window curtain roller constructed as follows: Of a cylinder *B*, shaft *S* and spring *K*, said spring being so arranged as to turn said cylinder and also impell it against one of the hanger fixtures; 9th. The cylindrical roller *B* in combination with the strip *O*.

No. 7422. Method of Keeping Milk, Cream and Butter.*(Méthode de conservation du lait, de la crème et du beurre.)*

James F. Ferguson, Essex, Vt., U. S., 1st May, 1877, for 5 years.

Claim.—1st. A milk bureau *A* provided with an upper cooling reservoir *B*, a lower reservoir *D* and suitable ventilators *i* in its sides and near the top of each division or shelf: the intermediate milk pans *D* resting upon metallic rollers *K* which revolve in a malleable iron frame, tinned and sustained in the milk bureau by cleats *c c*, the metallic ice pan *E* with its exterior wooden bottom *G*; 2nd. The portable milk bureau *A* provided with upper cooling and lower heating reservoirs, the milk pans *D* arranged above each other and adapted to be drawn out on rollers *K* on to moveable supports *d d* which are temporarily braced against the cleats *c c* by means of the metallic braces *f f*.

No. 7423. Improvements in Hinges.*(Perfectionnements dans les pentures.)*

Pierre Houle, Montreal, Que., 1st May, 1877, for 5 years.

Claim.—In combination with a French or casement window sash *A*, the projections *b b'* formed or fixed upon the back of each leaf of the hinge *C C'* arranged concentrically with the pintle *a* and terminating in inclined or bevelled surfaces *c c'* in combination with catches *d d*, upper movable leaf *c* and stop *e*, all arranged and constructed in such a manner that the weight of the sash will act with the hinge to keep it securely in its place when opened, and allow of its being closed by raising it slightly.

No. 7424. Apparatus for Rolling and Unrolling Window Blinds.*(Appareil à rouler et dérouler les rideaux de fenêtres.)*

Damase Prérôt, South Elby, Que., 1st May, 1877, for 5 years.

Claim. 1st. The combination of the rail *d* having pulleys *K K*, *K₂ K₂* blind *e*, roller *f* having small rollers *g* at each end, cords *m n* and tassel *o*; 2nd. The combination of the rail *d* with pulleys *K₁ K₂*, either or both, and staples *l*, whereby the staple or staples are caused to simultaneously act as an axle to the pulley and guide to the cords; 3rd. The combination of the staple and ring *c* constructed in one with the pulleys and cord; 4th. The combination of the blind *e* with rail *d* made in two parts *d₁ d₂*.