

No. 2143. THOMAS ARMSTRONG, Hamilton, Ont., 10th March, 1873, for 5 years: "A Horse Hoof-Spreader." (Machine pour étendre les sabots des chevaux.)

For the treatment of contracted feet in horses. It consists of jointed levers with variable centres, a screw and other minor appliances for operating the levers.

Claim.—1st. The combination and arrangement of the levers *b*, *b*₁, middle-piece *c*, tightening-screw *d*, spiral-spring *E*, grooved-washer *f*, nut *p*, and thumb-screws *h*, *h*₁; 2nd. The levers *b*, *b*₁, in connection with the screw *d*, of whatever form when used for the purposes set forth.

No. 2144. LINUS A. PADDOCK, Peconica, Ill., U. S., 12th March, 1873, for 5 years: "A Horse Rake." (Un rateau à cheval.)

This invention applies to that class of rakes in which the curved wire tooth is used and known as the "dump rake," and consists more particularly in an improved foot lever and in the manner of securing the teeth to the axle-tree.

Claim.—1st. In combination with axle or rake-head and the tooth of a hay-rake, the axle or clamp *C*, and fastening devices for securing the tooth to the axle or head; 2nd. The combination of the tooth *D*, with its upper part encircling or nearly encircling the head or axle *A*, and the staple or loop *D*₁, with fastening devices; 3rd. The combination of the crooked foot lever *E*, with its foot-pieces *E*₁, *E*₂, elbow attachment *E*₃, socket *f*, and cross-piece *g*; 4th. The combination of foot-lever *E*, connecting-lever *F*, stud *F*₁, and axle or head *A*, with or without the hand-lever *f*₁; 5th. The combination of axle or head *A*, saddle or clamp *C*, staple *D*₁, tooth *D*, foot-lever *E*, stud *F*₁, socket *f*, attached to cross-piece *g*, all those parts constructed, arranged and operated as set forth.

No. 2145. JAMES E. FRAZER, Brantford, Ont., 12th March, 1873, for 5 years: "A Balance Farm Gate." (Une barrière à contrepoids.)

Claim.—1st. The upright *f*, having foot *G*, working in step *D*, and guide-rod *H*, working in cup *B*, also the box *O*, fastened on upright *f*; 2nd. The application of wide mortises in uprights *I*, *F*, *K*, *L*, through which cross-bars *M*, pass, and also the pins *N*, which keep bars in position, and allow the front of the gate to be elevated.

No. 2146. THOMAS HENDERSON & WILLIAM G. WRIGHT, Hamilton, Ont., 12th March, 1873, for 5 years: "A Sewing Machine." (Une machine à coudre.)

Consists in giving the shuttle a continuous rotatory movement and in arranging the thread from the spool to the needle without passing through the top of the needle bar.

Claim.—1st. A continuous rotary movement of the shuttle *H*, in the circular race *G*, in combination with the gears *N*, *O*, cam *L*, thread-shifter *J*, spring *S*, bar *K*; 2nd. The arrangement of the needle-thread passing from the loop *I*, to washers *S*, projection *R*; 3rd. The arrangement for securing the cloth-plate by the screws *c* and *d*, 4th. The construction of the shuttle in the same radius as the circular race, to fit it as shown in sheet *I*; 5th. The combination with the thread-shifter *J*, cam *L*, and gears *N*, *O*, race *G*, threading and taking the shuttle-thread from the bottom of the shuttle.

No. 2147. JOHN V. HOUGH, Sterling, Ont., 12th March, 1873, for 5 years: "A Harrow." (Une Herse.)

Claim.—The combination of the slotted-lugs *D*, anti-friction rollers *F*, pins *E*, and rings *G*, arranged and operating as set forth, for connecting the several sections of the harrow in the manner described.

No. 2148. HENRY PAGIUBLO, Dunham Flats, Que., 12th March, 1873, for 5 years: "Maple Sap Clarifying and Evaporating Apparatus" (Appareil à clarifier et vaporiser la sève d'érable.)

Claim.—Elle consiste dans la combinaison du clarificateur *D*, en toile de cuivre, ou en fer-blanc perforé ou en toile de fil-de-fer, avec la division transversale *C*, du bassin tel que décrit.

No. 2149. CHAUNCEY BUCKLEY & LODOWICK L. SAWYER, Meriden, Ct., U. S., 12th March, 1873, for 15 years: "A Curtain Fixture." (Un rouleau de rideau.)

Designed for rolling the curtain from the top down or from the bottom up as occasion may require.

Claim.—1st. A grooved pulley for curtain fixtures formed from two discs of sheet metal secured together at their centre, one half the groove formed in each part and corrugated in the process of striking up; 2nd. The arrangement of the friction-plate *G*, between the roll and the mechanism of the fixture, made adjustable by the screw *H*, passing through the fixture and friction plate into the roll; 3rd. The combination of the friction plate *G*, the pulley and its ratchet with the square or angular-shaped sleeve *d*; 4th. The ratchet *c*, within the pulley and so as to form the bearing upon which the pulley revolves freely in one direction and engaged in the reverse direction; 5th. The half-yard-plate *F*, combined with the ratchet *c*, within the said half-yard-plate and turning freely therein in one direction and engaging in the other direction.

No. 2150. LEVI K. FULLER, Brattleborough, Vt., U. S., 12th March, 1873, for 10 years: "Improvement on Reed Organs." (Perfectionnement des orgues à jeux d'anches.)

Consists in the stop mechanism whereby the motion of the fan can be instantly arrested by the interposition of a resisting medium to overcome the rotation.

Claim.—The combination of the stop-lever *J*, connecting rod *h*, and slide *E*, with the spur *b*, or its equivalent, for controlling the motion of the fan-shaft *D*, in parlor organs.

No. 2151. GEORGE A. KENNEDY, Compton, Que., 12th March, 1873, for 5 years: "A Clothes Rack." (Un séchoir à linge.)

Consists of an open elastic band or hoop of sheet iron with sockets formed on the outside to receive double wire arms of various shapes on which the clothes may be suspended.

Claim.—The band *A*, set screws *B*, lugs *C*, *C*₁, sockets *D*, *D*₁, arms *E*, *E*₁, with bond *F*, *F*₁, and hook *G*; 2nd. The plate warmer *H*, fig. 2; 3rd. The coiled arms *K*, fig. 3.

No. 2152. THOMAS MACBETH, Blenheim, Ont., 12th March, 1873, for 5 years: "Carriage Pole and Thill Shifter." (Ajustage des limons et limonnières de voitures.)

Consists in substituting spring-bolts in lieu of the ordinary nuts and bolts now in use.

Claim.—The combination of the spiral spring *F*, casing *E*, heads or washers *D*, and rods *C*, working in conjunction with the clips *B*.

No. 2153. ROBERT HITCHCOCK, Watertown, N. Y., U. S., 12th March, 1873, for 5 years: "Improvements on Lamps." (Perfectionnements aux lampes.)

Relates to the burning of heavy oils in lamps in such manner that a brilliant flame without smoke may be produced without the use of a chimney.

Claim.—1st. A lamp for burning heavy oils, in which the wick-tube *a*, or holder and oil-reservoir *A*, are combined with conduits or passages *b*, for conducting air both to the exterior and to the interior of the flame, mechanism for forcibly impelling air through said passages, and a deflector or cone *g*; 2nd. The combination of the auxiliary reservoir *C*, and the main reservoir *A*; 3rd. A lamp of the kind specified, the employment of heat-conducting rods or wires *f*, to conduct heat to the oil both from the external casing *D*, and other shell *E*, of the oil reservoir; 4th. The employment of ash shields *h*, and *f*, or boxes; 5th. The construction and arrangement of the wick-raising mechanism consisting mainly of screw rod *n*, coupling sleeve *o*, thimble *p*, button *q*, pinio *r* and *s*, rod *t*, and sleeve, or their equivalents as described.

No. 2154. JOHN MILLER, Perth, Ont., 12th March, 1873, for 5 years: "Sewing Machine Hemmer." (Lames à ourler, des machines à coudre.)

Claim.—A hemmer composed of the base plate *A*, formed with a guide-edge *C*, and sheath *D*, and of an adjustable bar *E*, sliding thereon, carrying on its end within the sheath, the hem-folder *G*, the several parts arranged to operate in the manner set forth.

No. 2155. THOMAS H. HICKS, Chatham, Ont., 17th March, 1873, for 5 years: "Process and Machine for Making Gas." (Procédé et appareil pour faire le gaz.)

Claim.—The process of forcing the gas generated in the tank *A*, through the oil, in the tank *B*, and the combination of the tanks *A*, *B*, *C*, with the pipes *1*, *2*, *3* and *4*.

No. 2156. JOHN H. STONE, Hamilton, Ont., 17th March, 1873, for 5 years: "A Kerosene Lantern." (Une lanterne à kérosène.)

Claim.—1st. The flat circular air-chamber *d*, and opening *d*₁, in combination with the tubes *c*, *c*₁; 2nd. Combining the oil-cup and bottom *a*, of the lantern; 3rd. The arrangement of the holes *l*, in the collar *b*.

No. 2157. LEVI K. FULLER, Brattleborough, Vt., U. S., 17th March, 1873, for 10 years: "A Parlor Organ." (Un orgue de salon.)

Claim.—1st. The combination with the frontal columns *D*, *D*₁, consoles *C*, *C*₁, and body front *B*, of the concave columnar members *f*, *f*₁; 2nd. The pilasters *G*, *G*₁, in combination with the ends of the case; 3rd. The pilasters *G*, *G*₁, of the ends, in combination with the frontal columnar projections *D*, *D*₁, consoles *C*, *C*₁, and concave columnar members *f*, *f*₁, forming the front and ends of an organ case.