

No. 3155. SETH W. PAINE, Rochester, N. Y., U. S., 3rd March, 1874, for 5 years: "Improvements on Shot Cartridges." (Perfectionnements aux cartouches de plomb de chasse.)

Claim.—1st. In combination with the shell of a longitudinally divided cartridge case a confining cord wound upon or around the periphery of the same; 2nd. A longitudinally divided cartridge case, the depression or cavity *d*, for receiving the confining cord and so arranged that the cord will not project beyond the periphery of the case when wound; 3rd. The sections *A* and *A*¹, when constructed as shown and provided with the notches *a*, and projections *a*¹; 4th. The apex *B*, constructed as shown provided with the recesses *b*, and combined with the sections *A*, and *A*¹, provided with the lips *a*².

No. 3156. CHARLES N. GOSS, Claremont, N. H., U. S., 3rd March, 1874, for 5 years: "Improvements on Horse Hay-Rakes." (Perfectionnements aux râtaux à cheval.)

Claim.—1st. A horse hay-rake having in combination the following elements, namely, side-beams with stub or short axles affixed to the outsides of the same and a system of teeth independently pivoted forward of a line passing through the axes of the supporting wheels, leaving the space to the rear of the pivotal line occupied only by the teeth, the devices for lifting the same and the clearer bars *ll*, or their equivalents; 2nd. For use in a horse rake the plate *G*, constructed as described, that is, angular in cross section on its inner face and on its outer faces provided with the strengthening ribs and projecting flange and with a journal; 3rd. In combination with the sleeved tooth-head provided with the flaring tooth steady flanges or walls *b*, *b*¹, and a bolt hole or tooth having an eye therein whereby the head and tooth are secured firmly together; 4th. The lifting bar *E*, and treadle *F*, all combined as described.

No. 3157. SAMUEL W. JAMISON, Newark, N. J., U. S., 3rd March, 1874, for 5 years: "Machine for Crimping Leather for Boots and Shoes." (Machine à cambrer les cuirs de chaussures.)

Claim.—1st. The crimping jaws *D*, each formed with a projecting beak or point, and inwardly bevelled on each side thereof so that when the jaw descends, the material when first acted on shall hug the beak or point *a*, only of the jaws without clinging to the bevelled sides *b*; 2nd. A machine or apparatus for crimping leather for boot and shoe fronts, a crimping jaw *D*, the acting face of which is provided between the toe and leg portion and at the point where it crimps the leather over the bend in the tree or form *N*, with upwardly curved corrugations *c*, arranged as described to concentrate or crowd the leather towards the heel or lower rear point of the boot front during the descent of the jaw *D*; 3rd. A crimping jaw *D*, for crimping boot and shoe fronts formed with a projecting beak or point *a*, and inwardly bevelled on each side thereof and provided with central upwardly curved corrugations *c*, with or without toe or leg corrugations; 4th. A crimping jaw *D*, constructed with toe and leg portions *d*, and *e*, and with a central part provided with upwardly curved corrugations *c*, the said central part being of such relative dimensions to the toe and leg portions that during the descent of the jaw, it will have traversed only about one-half the boot or shoe front when the toe and leg portions of the jaw are about to release or quit the same; 5th. A crimping jaw for crimping boot and shoe fronts, the combination of the central upwardly curved corrugations *c*, with toe and leg corrugations formed as described, so as to divert from the heel or lower point of the front, the material on each side of said central corrugations; 6th. A crimping machine the combination with the crimping jaws *D*, of finishing jaws *E*, following said crimping jaws and acting on the crimped front as it leaves the latter set of jaws; 7th. The finishing jaws *E*, having such a contour as to fit or come in contact simultaneously at all points of their lower edges with the tree or the crimped front thereon and arranged immediately above the crimping jaw *D*, to take hold of the crimped front before it is entirely released by the crimping jaws; 8th. The finishing jaws *E*, formed as described with toe and leg portions which may be adjusted or set out more or less to conform to irregularities in the thickness of the crimped front; 9th. In combination with the crimping jaws *D*, and finishing jaws *E*, the hinged independent ways upon which said sets of jaws respectively slide and the independent and separate system of levers connecting rods and weights for drawing together the said ways; 10th. The combination with the finishing jaws *E*, of mechanism for setting them at different distances apart to accommodate different thicknesses of leather and for maintaining their parallelism when thus adjusted; 11th. The combination with the crimping jaws *D*, and their hinged ways of independent hinged ways and finishing jaws *E*, sliding thereon, the said crimping jaws and finishing jaws being so connected that while moving together up and down the jaws of either set may move laterally apart independently of and without interference with the other set; 12th. In combination with the finishing jaws *E*, joined at their lower ends, to their supporting brackets, the devices described for connecting the upper ends of said jaws to their brackets and the levers *v*, whereby said devices may be operated to tilt the said jaws toward or away from each other as described.

No. 3158. ALFRED B. COSTELLO, Jersey City, N. J., U. S., 3rd March, 1874, for 5 years: "Improvements in Photographic Back-grounds." (Perfectionnements aux fonds des photographies.)

Claim.—The pliable conical back-ground *A*, with the frames *B*, *D*, and *F*.

No. 3159. THOMAS G. GLOVER, Bedford, Ind., U. S., 3rd March, 1874, for 5 years: "Improvements in Reapers." (Perfectionnements dans les moissonneuses.)

Claim.—The moveable rake *Q*, moveable frame *R*, cog-wheels *d*, and *E*, wheel *G*, adjustable pins *i*, *l*, rods *L*, *L*¹, vertical arm *O*, connecting rods *P*, and *W*, and cam *V*, in combination with the slotted table *T*, frame *A*, axle *C*, and wheels *B*, *B*¹.

No. 3160. JOHN H. WESTCOTT, Oneida, N. Y., U. S., 3rd March, 1874, for 5 years: "Improvement on Chucks." (Perfectionnement des mandrins.)

Claim.—The combination of the screws *F*, the radial sliding boxes *E*, and dogs *B*, with the face plate *A*, and scroll-ring *C*, or its equivalent.

No. 3161. WILLIAM T. FRY, Brooklyn, N. Y., U. S., 3rd March, 1874, for 5 years: "Improvements in Combined Shutter and Window Fastener." (Perfectionnements aux arrêtees et arrête-persiennes combinés.)

Claim.—1st. Shutter having the stud catch *C*, in front and sub-jacent spring *J*, in the rear combined with a sash *K*, having the spring lever *F*, *D*, and a rill having stud-catch *L*; 2nd. Shutter fastener consisting of the rod *J*, placed in the tube *H*, thrown forward against the hook *B*, by aid of the spiral spring *L*, and drawn backwards by aid of the cam-lever *F*, placed in the recess *r*, of the plate *S*; 3rd. Ratchet bar *w*, and spring catch *X*, in combination with the sash *V*, and frame *Y*.

No. 3162. JOSEPH POZNAUSKI, New York, and JOHN G. BETHUNE, Warrinton, Va., U. S., 3rd March, 1874, for 5 years: "Safety Pin." (Épingle de sûreté.)

Claim.—The revolving cap or thimble *A*, with the recess *h*, guard *g*, and slot *c*, in combination with the arms *B*, and *E*, spring *A*.

No. 3163. THOMAS DEWITT, Grand Lodge, Mich., U. S., 3rd March, 1874, for 5 years: "Machine for Washing Clothes." (Une machine à laver le linge.)

Claim.—The combination of the ribs or bar *f*, *f*¹, *h*, *h*¹, and the cylinder and cylinder head.

No. 3164. JOB JOHNSON, Brooklyn, N. Y., U. S., 3rd March, 1874, for 5 years: "Improvements on Ball Castors." (Perfectionnements aux roulettes de meubles sphériques.)

Claim.—1st. The cap *l*, secured to the socket containing the castor ball by a pin entering the groove *o*, and a screw or pin *4*, to prevent the cap turning; 2nd. The bearing disc *e*, secured within the socket *b*, by the projections *2*, *2*¹, in combination with the balls *m*, and castor ball *d*; 3rd. The disc *c*, with an opening or openings receiving the balls *m*, in combination with the plate or disc *e*, ball *d*, and retaining sleeve *l*; 4th. The sleeve *l*, retaining the castor ball *d*, and screwed upon the socket *a*, and indented at opposite sides of the joint to prevent the sleeve unscrewing; 5th. The ball castor provided with a steady pin *r*, at the centre of the circular attaching flange *b*, as set forth.

No. 3165. THOMAS H. BROMLEY, Stoneboro, Penn., U. S., 3rd March, 1874, for 5 years: "Improvements on Sled Brakes." (Perfectionnements aux freins de traîneaux.)

Claim.—1st. In combination with a sled, the brake bar *F*, provided with bifurcated end branches or arms *E*, *E*, pivoted to pendant arms *D*, *D*, of a transverse rock shaft *B*; 2nd. The pivoted claw or prong *I*, in combination with the brake bar *F*, and its operative mechanism.