

one end to finger pieces and at the other end to sets of springs or weights; 2nd. The combination of the tension compensating levers *b*, *b*, the straps *b*, *b* and the springs *b*, *b*; 3rd. The jointed fingers *C*, *C*, in combination with the sliding pieces *C*, *C* and the latching girth; 4th. In a latching machine for girth latching, the combination of the rigid adjustable fingers *C*, *C* having a rising and closing motion and the girth; 5th. In combination with an elastic heel pad *R*, the reciprocating folding plates, the spring rods *R*, *R*, and *R*, *R* and the arm *R*, *R*; 6th. A spring toe stretching and smoothing pad *N* having a vertical motion, and also adapted to move against the upper at the toe, in combination with suitable devices for folding the upper over upon the sole; 7th. For toe latching devices the combination of winkle sweeping fingers *P*, *P* with oscillating, turning and smoothing finger plates *J* moving in unison therewith; 8th. The right and left screw; 9th. In combination with blocks *K*, *K* and *K*, *K* to bring the shoe, without regard to its size, into the proper position with reference to the girth; 9th. The automatically acting toe support *M*, consisting of a post *M* resting upon a cam or wedge, the cam or wedge being actuated at the commencement of the upward rise of the girth carrying cross-head; 10th. The combination of the cam *C*, adjusting screw *C*, lever *C*, and *C* actuating the girth carrying cross-head; 11th. In combination with the oscillating toe rest *M*, post and wedge *M*, *M*; 12th. The combination with reciprocating toe latching plates, of a reciprocating toe clamp *H* arranged to operate between such plates acting alternately; 13th. The automatically removable toe clamp forming an abutment for the toe of the boot or shoe, to rest against when adjusted in place, and also serving as a clamp to prevent the boot or shoe from rising when acted upon by the girth; 14th. In combination with the cam *J* or other actuating mechanism, the folding plates provided with an oscillating or rocking motion; 15th. Oscillating plates *J* for latching the heel or toe, provided with fingers controlling the position of the wrinkles or folds; 16th. Oscillating finger plates *J*, provided with fingers for sweeping the wrinkles or folds into the desired position; 17th. The combination of the finger plates *J*, oscillating plates *J*, housings *J*, levers *J* and cam *J*; 18th. The upturning square spindle *E*, in combination with the last mortised or bored for the reception of the spindle at right angles, with a line across the tread of the toe portion of the last; 19th. The combination of the heel latching mechanism, the cam *K* and cam spindle *K*, with the oscillating yoke *K*; 20th. The combination of the housing *J* with the swinging plate *J* and adjusting thumb screw *J*.

No. 7892. Improvement on Hinges.

(*Perfectionnement des pentures.*)

John Beaudet, Cambriège, Mass., U. S., 12th September, 1877, for 5 years.

Claim.—1st. The combination of the two hinge screws *A* with the pivotal screw or pin *B*, inserted into the head of one and screwed into that of the other of such hinge screws; 2nd. In combination with the door *D* and its frame *E* and the two lower hinge screws *A* inserted therein and arranged and provided with the pivot or pin *B* and flange *B*, the two upper hinge screws *A*, and their headed pivotal screw or pin *B* inserted through the upper of such hinge screws, and screwed into that next below it, such upper pair of hinge screws being screwed into the door and frame.

No. 7893. Machine for Gathering Potato Bugs.

(*Machine à recueillir les chrysomèles à patates.*)

Joseph Labelle, Sault-aux-Récollets, Que., 12th September, 1877, for 5 years.

Resumé.—1o. La combinaison de l'essieu *h* supporté par les poteaux *p*, afin de mettre en mouvement, par l'emploi des courroies *g*, la moissonneuse à chrysomèle; 2o. La combinaison d'un brancard mobile *b* supportant les deux rans *f*, au moyen desquels on bat les tiges des patates pour en dégager les chrysomèles; 3o. L'emploi d'un auge *c* suspendu au brancard inférieur *b* au moyen des chaînes *d* pour recueillir les chrysomèles.

No. 7894. Improvements on Taps and Dies.

(*Perfectionnements aux tarauds et aux filières.*)

James Flower, Detroit, Mich., U. S., 12th September, 1877, for 5 years.

Claim.—The combination of removable chaser-cutters *C* the radially slotted chuck head *A* to receive said cutters, and the flanged collar *B* and set screws *a* to secure them in their relative positions.

No. 7895. Rock Drilling Machine.

(*Machine à forer le roc.*)

Franklin Keenan, Brownville, N. Y., U. S., 12th September, 1877, for 5 years.

Claim.—1st. The arrangement of the cable *C* and drop rope *E* running at the former winding on reel *D* and the latter passing over pulley *d* and tripping frame *F*, and winding on reel *G*; 2nd. The combination with the tripping frame *F*, of reels *D* and *G* for operating the cable *C* and drop *E*; 3rd. The combination of the clutch and lever *V*, chain *T* and wheel *S*, with the reel *D* for winding the cable *C*; 4th. The arm *W* having a reversible rubber bumper *X*, in combination with a shoe or saucer *Y* on the tripping frame *E*; 5th. The mast *B*, trunnioned to the frame *A* and held in a step *b*.

No. 7896. Mode of Putting up Baked Beans.

(*Mode d'apprêter les fèves crütes.*)

Edwin W. Brown (Assignee of W. K. Lewis), Boston, Mass., U. S., 12th September, 1877, for 5 years.

Claim.—1st. The process of putting up beans for the market, by par-boiling the same, hermetically sealing them in cans, and baking by steam heat, without thus hermetically sealed; 2nd. Baked beans and pork put up in hermetically sealed cans.

No. 7897. Improvements on Bed Bottoms.

(*Perfectionnements aux fonds de lits.*)

Jason Bostwick, Buffalo, N. Y., U. S., 12th September, 1877, for 5 years.

Claim.—1st. The combination with groove *d*, the frame *C* basket work *b* strap *c* and springs *a*; 2nd. Forming in the wooden frame *C*, the groove *d*.

No. 7898. Portable Water Power Apparatus.

(*Appareil hydraulique portable.*)

Marcus L. King, Oblong, Ill., U. S., 12th September, 1877, for 5 years.

Claim.—The channel *B*, inclined plane *A* and top cover *C*, in combination with the water wheels *E*, *E*, with axles *g* and *g*, chain *M*, and cog wheels *L*, and *n*.

No. 7899. Chuck for Holding Pipe Fittings.

(*Mandrin pour saisir les manœuvres de tuyaux.*)

James Flower, Detroit, Mich., U. S., 12th September, 1877, for 5 years.

Claim.—1st. The combination with the chuck frame *A*, chuck heads *B* and right and left hand screw *D*, of the revolving heads *E* and the spring bolt *b*; 2nd. In combination with the heads of a chuck, the revolving heads *E* and spring bolt *b*.

No. 7900. Railway Journal Box.

(*Boîte d'essieu de railroads.*)

William E. Wiley and Lorenzo A. Kelsey, Cleveland, Ohio, U. S., 12th September, 1877, for 5 years.

Claim.—1st. The collar rollers *1*, *2*, *3* and arranged in relation to and in combination with the grooved rollers *5*, *6*, *7* and *8*; 2nd. In combination with grooved and collared rollers, the grooved axle *H* and grooved journal box consisting of sections *B* and *C*; 3rd. The combination of the grooved and collared rollers, radially slotted rings *g* covered axle journal *H* and grooved journal box; 4th. Journal boxes slotted segmental sections, more or less in number, having pivoted therein anti-friction rollers arranged in relation to each other; 5th. In combination with the axle box and car sill *A*, the bar *M*, bolts *k*, braces *l* and springs.

No. 7901. Manufacture of Paper Bags.

(*Fabrication des sacs en papier.*)

James C. Wilson, Montreal, Que., (Assignee of L. D. Benner), 12th September, 1877, (Extension of Patent No. 1914), for 5 years.

No. 7902. Process of Seasoning and Preserving Wood.

(*Procédé de séchage et de conservation du bois.*)

Louis S. Robbins, N. Y., U. S., 13th September, 1877, for 5 years.

Claim.—1st. The air pump *C* in combination with the air heating pipe or tube *B* surrounded by a suitable furnace *D* and the wood-chamber *A* with or without a steam heating arrangement; 2nd. In combination with the apparatus the process of curing wood by heating the same, increasing under an atmosphere or gaseous pressure.

No. 7903. Improvement on a Waggon Box.

(*Perfectionnement d'une caisse de voiture.*)

Edwin R. Laugs, Langford, Ont., 13th September, 1877, (Extension of Patent No. 7719), for 5 years.

No. 7904. Improvements in Moccassins.

(*Perfectionnements dans les moccassins.*)

George Boulter, Montreal, Que., 13th September, 1877, for 5 years.

Claim.—The combination with a moccassin, the rings or loops *D*, rings *E* and rings *F*, through which the lace passes.

No. 7905. Improvements in Reaping Machines.

(*Perfectionnements aux moissonneuses.*)

John Abell, Woodbridge, Ont., 13th September, 1877, for 5 years.

Claim.—1st. The segmental guide block *A* arranged in connection with a rake head of a reaping machine, for the purpose of guiding and supporting the rakes during a portion of their revolution; 2nd. The pivoted switch *B* in combination with the guide block *A* and pivoted tilting and locking lever *H*; 3rd. The guide block *A* with upwardly projecting tilting shoulder *A*, in combination with tilting and locking lever *H* and connections; 4th. The rake bracket *E* with pivoted tilting and locking lever *H*, in combination with the pin *F* of the rake arm *D*, with lug *D*; 5th. The rake bracket *E* mounted on the pin *F* of the rake arm *D*, in such manner that by means of the lugs *c* and *D*, or their equivalent, a limited turning only of the rakes on the pin *F* as an axis is permitted, ensuring a positive degree of revolution (say one quarter); 6th. The rakes of a reaping machine.

No. 7906. Improvement in Pessaries.

(*Perfectionnement dans les pessaires.*)

Charles N. Fowler, Youngstown, Ohio, U. S., 13th September, 1877, for 15 years.

Claim.—The modification of the fodge pessary, the pessary being filled out and rounded to conform to the parts broader at the posterior portion than at the interior portion, and having a swell at the posterior part.

No. 7907. Improvements in Sofas.

(*Perfectionnements dans les sofas.*)

James H. Corrin, Bruce Mines, Ont., 13th September, 1877, for 5 years.

Claim.—A combined sofa and bed consisting of the hinged seat *A* with box enclosure underneath, hinged back *D*, false sliding back *C*, with raised ends *C* and heads *A*, provided with the detachable slides *E* and *E*.

No. 7908. Machine for Making Match Splints.

(*Machine à fendre le bois d'allumettes.*)

Henry Wright, Danversville, Me., U. S., 13th September, 1877, for 5 years.

Claim.—1st. The frame *A* a forming ways for the sliding head *B* the sliding head *B* with its cutters *F* and *F*, the feeding bar *D* and the cutter head *C* with its slitting knives *g*; 2nd. The feeding bar *D* arranged to slide laterally in its