

ferred to in the preceding claim; 5th. The peculiar needle actuating mechanism, consisting of the combination of the cam or crank pin D connecting rod F, lever C, slide c; 6th. The thread "take up" lever B, in combination with the vertically adjustable stitch regulating slide 3 and stop 9, on the slide y, whereby more or less thread is drawn off the reel, according as the stitch is long or short.

**No. 10,219. Improvements on Seed Sowers.**  
(*Perfectionnements aux semoirs.*)

Andrew Bartholomew, West-Springfield, Mass., U. S. A., 10th July, 1879, for 5 years.

*Claim.*—1st. The combination of the gauge plates *e* et. &c., with a bracket *b* and hopper A; 2nd. The combination, with the hopper A, of the rings or marks *a*, for ascertaining the quantity of seed placed in, or distributed from the hopper A; 3rd. The combination, with the hopper A and bracket *b*, made as described, of the holes *c* *d* and slides *g* *g*; 4th. The combination, with a hopper A and bracket *b*, of an agitator composed of the arms *h* *h*; 5th. The combination, with the hopper A and bracket *b*, of the gauge plates *e* et. &c., and slides *g* *g*; and means whereby they are brought close together so as to prevent the accumulation of seed which would otherwise occur; 6th. The arrangement of the slides *g* *g*, with the distributor *j*, whereby a right, left, or double cast may be thrown.

**No. 10,220. Improvements on Threshing Machines.** (*Perfectionnements aux machines à battre.*)

John A. Crone, Georgetown, Ont., 10th July, 1879, for 5 years.

*Claim.*—1st. A wind chest A, connected to the fan F by the pipe G, and having a longitudinal slit *a*, so arranged that the blast escaping therefrom will strike the grain, as it falls from the canvas belt of the threshler on to the sieve or riddle B; 2nd. A wind chest D, connected to the fan F by the pipe H, in combination with a series of tubes C, arranged beneath the sieve B, and each provided with a slit or porting to direct the blast vertically through the sieves B; 3rd. A wind chest D, connected to the fan F by the pipe H, and having a slit *d*, so formed that the blast escaping from it will pass obliquely through the grain falling from the upper sieve B, to the lower sieve E.

**No. 10,221. Chemical Fire Engine.** (*Extincteur chimique d'incendie.*)

William Morrison, Toronto, Ont., 10th July, 1879, for 5 years.

*Claim.*—1st. The combination of a water supply tank A, with the tilling gas producing cylinder B, by which the said cylinder B will be more speedily charged and recharged, when the engine is at work, than it would be without the tank A; 2nd. The construction of the cylinder B, or the modification of the same.

**No. 10,222. Improvements on Window Blinds.** (*Perfectionnements aux jalousies.*)

Edward Bowslaugh, Grimsby, Ont., 10th July, 1879, for 5 years.

*Claim.*—The combination of the rings E which are attached to the bands C C with the draw cord D.

**No. 10,223. Improvements on Horse Powers.**  
(*Perfectionnements aux manèges.*)

Albion P. Benjamin, Waterville, Me., U. S. A., 11th July, 1879, for 5 years.

*Claim.*—The link C, of the peculiar construction shown and described; 2nd. The combination of link C, with the axle D and truck E; 3rd. The combination of link C, axle D and truck E, with the rag or sprocket wheels H; 4th. The combination of the oil cup I with wick *i*; 5th. The combination of the oil cup I, the curved and flanged rails *f* and bar K; 6th. The combination of the oil cup I, curved rail *f* and bar K, with link C, axle D and truck E; 7th. The combination of link C, axle D and truck E, with the bridge J and rollers L.

**No. 10,224. Improvements on Sewing Machines.** (*Perfectionnements aux machines à coudre.*)

James Authors, Toronto, Ont., 11th July, 1879, for 5 years.

*Claim.*—1st. The hook shaft of a rotary hook lock stitch machine, placed parallel with the driving shaft and driven therefrom by an eccentric and pitman in such manner that the two shafts shall complete a revolution in the same time, but the hook shaft shall be caused to rotate with a continuous rotary differential motion; 2nd. The hook G, provided with the recess G<sub>3</sub>, in the rim enclosing bobbin for the purpose of allowing a bent or badly mounted needle to pass down without striking the hook; 3rd. The recess G<sub>4</sub>, formed in the enclosing rim of hook behind the entering point, for the purpose of allowing one thread of the loop to pass readily behind the bobbin shell and also for the purpose of relieving the other thread of the loop from friction while passing under the bobbin cover and across the face of hook; 4th. The bobbin shell and bobbin enclosed within a recess of the hook, with the edge of the bobbin shell placed outward, in combination with the needle passing across the face of the hook; 5th. The recess or groove *g*<sub>1</sub>, sunk in the back of hook, for the purpose of allowing the thread to enter and pass freely behind the bobbin shell; 6th. The enclosing rim of the hook, provided with a bevelled or enlarged edge on the face adjoining the bobbin shell, for the purpose of permitting the thread to pass freely behind and discharge from under the bobbin shell; 7th. The hook G, having a periphery tapered or diminished in diameter towards its front or needle face; 8th. The bobbin cover mounted on the end of a vertically swinging arm in an adjustable manner and held in place by a spring in order that the connection between cover and bobbin may be elastic; 9th. A thread nipper operated from a cam on the hook, or other suitable operating part and arranged to nip the bobbin thread on the front face of the hook; 10th. The tipping face *g*<sub>3</sub>, formed on the front face of the hook; 11th. The block O, provided with a spiral groove cut in its face, in combination with the disc N, provided with a stud pin *n*; 12th. The spring plate O<sub>2</sub> and screw O<sub>1</sub>, in combination with the adjusting block O, and disc N; 13th. The combination with the axle or stud pin of the rotary thread tension wheel, of the spring P; 14th. The combination with the cam wheel Q attached to the driving shaft of the spring rocking Q<sub>1</sub>, to which the take up lever is connected.

**No. 10,225. Means for augmenting the volume of sound in Musical Instruments.** (*Moyens d'augmenter le volume du son dans les instruments de musique.*)

Daniel S. Conner, Montreal, Que., (Assignee of Stephen F. Wasley, London, England), 11th July, 1879, for 5 years.

*Claim.*—A stand or support for Piano-fortes, Organs and Harmoniums to rest on, provided with pointed feet or spikes, which penetrate through the carpet to the wooden floor.

**No. 10,226. Apparatus for Cleaning Silk.**  
(*Appareil pour nettoyer la soie.*)

William B. Swift, Montreal, Que., 11th July, 1879, for 5 years.

*Claim.*—1st. The combination of a series of separate fixed cleaning plates, a corresponding series of separate movable cleaning plates, arranged in the same plane, slide bars for supporting said movable plates and the means for simultaneously adjusting all the movable plates; 2nd. The combination of a series of separate fixed cleaning plates, a corresponding series of separate movable cleaning plates, arranged in the same plane, slide bars for supporting said movable plates, the means for simultaneously adjusting all the movable plates and set screws for separately adjusting the several movable plates.

**No. 10,227. Machine for Hulling Buckwheat.**  
(*Machine à écaler le sarrasin.*)

Giles S. Cranson, Syracuse, N. Y., U. S., 11th July, 1879, for 5 years.

*Claim.*—1st. The combination of a revolving horizontal cylinder, provided in its convex surface with grooves formed of an abrupt side *a*, and a bevelled side *b* and with narrow plain faces *c*, between said grooves, all arranged parallel to the axis of the cylinder and with the back or deepest part of the grooves, toward the feed of the machine, and a convex opposing surface arranged near, but not in contact with, the aforesaid cylinder, and presenting to the same grooves or notches with intervening plain surfaces, the former of which are bevelled in the direction of the feed; 2nd. A set or pair of cylinders having their respective convex surfaces provided with grooves formed of an abrupt side *a* and a bevelled side *b*, and with plain faces *c* between said grooves, all arranged parallel to the axis of the cylinders and disposed alike in both cylinders, geared to revolve in opposite directions toward each other and with an accelerated speed of that cylinder, which has the back or deepest part of the grooves of the upper half of the periphery nearest the opposing cylinder.

**No. 10,228. Feather Renovator.** (*Machine à rafraîchir la plume.*)

Eugène S. Manny et Paul Cartier, Beauharnois, Que., 11th July, 1879, for 5 years.

*Résumé.*—1er. La combinaison de l'engin G et du tuyau distributeur F; 2e. La combinaison de l'appareil de chauffage P R R et du calorifère D, avec la chambre ou cylindre troné C.

**No. 10,229. Improvements on Snow Ploughs.**  
(*Perfectionnements aux charrues à neige.*)

Thomas S. Chapman, Marbleton, Que., 14th July, 1879, for 5 years.

*Claim.*—The sides A and mould boards B, in combination with the wings F F and lever D, also the combination of the guide board C C, cutters H and the oval bolt holes L L.

**No. 10,230. Improvements in Fences.** (*Perfectionnements aux clôtures.*)

James Grist, Blenheim, Ont., 14th July, 1879, for 5 years.

*Claim.*—The combination of pickets A, rivets or bolts B, arranged as described, forming a fence which may be extended or contracted at pleasure, and which may also be folded in compact form for transportation.

**No. 10,231. Improvements in Waggon Racks.**  
(*Perfectionnements aux râteliers des wagons.*)

Levi Talcott, Minetto, N. Y., U. S., 14th July, 1879, for 5 years.

*Claim.*—1st. The abutment D, to which the boards A B C of the wings are attached, having their hinged ends faced with rubber, in combination with the cross bars E F G and hinges H, to clasp the sides of the waggon body and hold the rack on the same; 2nd. The hinged wings, held to the body by the cross bars E G, in combination with the body sides J J and half hinges K; 3rd. The combination of the hinged wings of the rack and cross bars E F G, with the movable ends L, having the lock bolts *a*, buttons *b*, handles *c*, eye bolts *d* and cleats *e*; 4th. The boards A C, of the rack wings, having their inner edges matched or dovetailed, in combination with the removable board B, having its edges matched or dovetailed to match the inner edges of the boards A C.

**No. 10,232. Improvements in Torpedo Boats.**  
(*Perfectionnements aux bateaux à torpilles.*)

John L. Lay, Paris, France, 14th July, 1879, for 5 years.

*Claim.*—1st. The employment of a double screw or two screws revolving around the same axial line and driven in opposite directions, by means of either of the peculiar arrangements of gearing consisting of the bevel wheels 1 2 3 4 5 6, or the modification wherein the bevel wheel E<sub>1</sub> is geared with the bosses of the propellers; 2nd. The arrangements or contrivances for carrying an electric cable, and for paying out the same through a tube S extending art beyond the screw propeller or through a central tube S<sub>1</sub> passing through the propeller, and which cable may or may not have a brake applied to the same; 3rd. The reel or drum so constructed that when the cable is coiled thereon, the said cable will be retained by a sheath or cover