

No. 7346. Platform Scale Protector.*(Protecteur de bascule.)*

David A. Gilbert, Morrisville, Vt., U. S., 10th May, 1877, for 5 years.

Claim.—1st. In a platform scale, an elevated curb surrounding the platform or opening for the ordinary platform, in combination with a cover resting on the platform or lower beams. 2nd. A removable curb surrounding the ordinary platform and a cover fixed to beams or legs that rest on said platform. 3rd. The cover (in sections or whole) made with a flange fitting over the curb and adapted to rest on the lower platform or beams, and to receive and bear the load to be weighed.

No. 7438. Improvements on Fringing Machines.*(Perfectionnements aux machines à franger.)*

Jesse B. Lincoln, Providence, R.I., U.S., 10th May, 1877, for 5 years.

Claim.—1st. The series of metallic hooks or points *b b* set into a fringing surface at intervals; 2nd. The rotating wheel *F* having on its periphery a series of fringing points *b b*, in combination with a feeding mechanism *E*; 3rd. The combination of the table *A* and revolving finger *F*; 4th. The table *A*, bearings *B C*, spindles *D G*, crank *H*, gearing *d I*, wheel *F*, fringing points *b b* and guard *J*.

No. 7439. Machine for Grinding Wheat.*(Machine à moudre le blé.)*

John S. Detwiler, Philadelphia, Pa., U.S., 10 May, 1877, for 5 years.

Claim.—1st. The combination of a pair of stones set to grind coarse with a second pair of stones, of larger diameter, set to grind fine and run at a slower speed than the upper and smaller pair of stones, the partially ground grain falling from the upper to the lower stones and passing from the latter in the form of flour; 2nd. The millstone dress consisting of straight, broad and shallow furrows, only leading direct from the eye to the skirt of the stone.

No. 7440. Improvements on Steam Engines.*(Perfectionnements aux machines à vapeur.)*

George G. Lafayette and Pitt W. Stroug, Brockville, Ont., 10th May, 1877, for 5 years.

Claim.—1st. The trunk *B* sliding obliquely on the shaft *A* passing through its centre and having a slot *H* eccentric thereto, and a sleeve *C* with slot *K* transversely thereto and held by a stud *D* to the shaft *A* by a set screw *L* whereby, by changing motion of the said trunk, the centre of the sleeve is thrown across the centre of the shaft and the sleeve partially rotated. 2nd. The collar or ring *F* integrally combined with the trunk *B* for the attachment of a lever for its operation. 3rd. The trunk *B* having slot *L*, in combination with the sleeve *C* held to the shaft *A* and provided with guide block *J*, for keeping the sleeve from turning on the trunk.

No. 7441. Improvements on Seeding Machines.*(Perfectionnements aux machines à semer.)*

John M. Westcott, Milton, Ind., U.S., 10th May, 1877, for 5 years.

Claim.—1st. The combination of scalloped feed wheel *C* and sleeve *E*, the sleeve *E* being of smaller diameter than the wheel *C* to provide for the free access of grain to both the periphery and ends of the scallops; 2nd. The combination of the peripheral seed wheel and the sliding sleeve *E*, provided with cut off wings *e e* at top and bottom of the seed cup; 3rd. The combination of revolving peripheral feed wheel *C* and sleeve *E* the wheel having a bearing at its outer end and at its other end a projecting hub *C* resting and revolving within the sleeve *E*; 4th. The combination of sliding shaft *D*, collar *G*, jaw arm *K*, pointer slide *L* and scale *M*; 5th. The combination of sliding shaft *D*, collar *G*, swivelling jaw arm *I* and lever *H*; 6th. The combination of sliding shaft *D*, collar *G*, indicator *K L M*, swivelling jaw *I* and lever *H* connected and operating, as specified.

No. 7442. Machine for Threshing and Separating Grain.*(Machine à battre et separer les grains.)*

John H. Edward, St. Paul, Minn., U.S., 10th May, 1877, for 5 years.

Claim.—1st. A mounted thrasher and adjusting mechanism whereby the front end of the machine can be adjusted or levelled relatively to the front axle; 2nd. The combination with the wheel *A*, of hooked rod *a* and cross tie *a*; 3rd. The combination with the concave of toggle levers, a crank shaft or rock shaft and links connecting the crank shaft with the toggle levers for adjusting the position of the concave; 4th. The combination with a crank wheel *F*, the pitman *F* and connecting bar *F* for the adjusting plate *f*; 5th. In a separating machine, the separating table *E* provided with blind slats and shouldered wires *e e*; 6th. The combination with crank arms *E* *E* of an adjustable connecting bar *F*; 7th. The combination in a thrasher and separator, of the slatted separating table *E*, shouldered fingers *e*, grain table *G* and the grain rack or radicle belt *G*; 8th. In a thrasher and separator, a grain table *G* provided with the trap or hinged portions *g* to afford access to the interior of the machine; 9th. In a grain separator, the combination with the fan of a winnower shoe having an adjustable false bottom; 10th. In a separator, the combination of a blast fan, a screen and an adjustable false bottom made in two parts hinged to each other; 11th. In combination with the winnower shoe the supplemental returning board *J* and adjustable segments *Y*; 12th. The belt crank *L* and link in combination with link *I*, hinged to the shoe, and adjustable link *L*; 13th. Link *L* in combination with spout *L* and adjusting plate *L*; 14th. Spout *L*

having bottom openings *h h* and slides *h h*, in combination with the centrally pivoted grass seed screen *g*; 15th. In a grain separator, the combination of an overblast fan and a central blast deflector *N*, with the screen or sieve *I* and the bottom board of the winnower shoe; 16th. The combination with the overblast fan, the central blast deflector and the screen of an adjustable bottom board in the winnower shoe; 17th. The combination of the adjustable tallings board *J* and returning spout *g* with the nest of sieves consisting of the long coarse meshed upper sieve and the short finer meshed lower sieves; 18th. In combination with the swinging plate *T* and shaft *R S*, the pulley *R S* belt *P* loose pulley *u* and supporting mechanism for driving the swinging stacker.

No. 7443. Improvements on Mowers and Reapers.*(Perfectionnements aux faucheuses-maisonnières.)*

William N. Whitely, Springfield, Ohio, U.S., 10th May, 1877, for 5 years.

Claim.—1st. The combination of two independent driving and supporting wheels an adjustable gear frame and a universal jointed crank shaft to drive the cutters, the said shaft being mounted in the said frame; 2nd. The combination of two independent driving and supporting wheels, an adjustable gear frame, a universal jointed crank shaft mounted in said gear frame, a hinged pole for guiding the machine and a draft rod connection from the front end of the adjustable gear frame to an independently acting wheel on the guiding pole; 3rd. In combination with the adjustable frame *A*, the universal jointed crank shaft *G H*, the hinged or jointed cutting apparatus *C I* hinged or jointed around the said crank shaft, hinged pole *L*, the foot lever *M* mounted upon said pole and connected to the adjustable frame, in such manner that the operator can lift the front end of said adjustable frame and carry the weight upon the pole; 4th. The combination of an adjustable gear frame or universal jointed crank shaft, hinged cutting apparatus with the lifting lever *J* mounted upon said adjustable frame, in such a manner that the operator may turn the cutting apparatus into an elevated position and, by means of the foot lever, place the weight upon the pole of the machine; 5th. The combination of the universal jointed crank shaft *G H* with the cutting apparatus, hinged around the same, the cross joint of the cutting pivot *D* placed on a line with the centre of the universal joint of the crank shaft and so arranged that the points of the guard fingers may be turned up and down and the cutting apparatus rise and fall to meet the undulations of the ground and be turned to a vertical position while the machine is in gear and the knives in full play; 6th. The combination of the universal crank shaft, the foot lever to lift the heel of the cutting apparatus, the hand lever to control the outer end of the cutting apparatus and the tilting lever for lifting and depressing the points of the guard fingers upon a joint coincident with the universal jointed crank shaft; 7th. The combination of the universal jointed crank shaft mounted in the adjustable gear frame with jointed cutting apparatus, around the centre of the crank shaft the hinged connection between the cutting apparatus and the adjustable frame placed upon a line crossing the centre of the universal crank shaft, and the tilting lever connecting the cutting apparatus and vibrating gear frame, in such a manner that the up and down movement of the cutting apparatus and gear frame does not alter or affect their relative position; 8th. The combination of two independent driving and supporting wheels, the vibrating gear frame carrying the universal jointed crank shaft, the hinged pole to guide the machine, the hinged cutting apparatus moving around the centre of the crank shaft, the foot lever to raise the heel of the cutting apparatus, the hand lever to raise the outer end of the cutting apparatus, and the tilting lever to raise and lower the points of the guard fingers all arranged for joint operation.

No. 7444. Improvements on Churns.*(Perfectionnements aux barattes.)*

Oliver W. Davis, Waterbury, Vt., U.S., and Walter H. Nelson, Sherbrooke, Que., 10th May, 1877, for 5 years.

Claim.—The combination of the body *A* with the oscillating supports *B B* and bearings *C*, frame *D* with handles *G G*, and springs *E E* with metallic box *H* and brace *K*.

No. 7445. Improvements in Rock Drills.*(Perfectionnements aux forêts de mines.)*

Simon Ingersoll, Stamford, Conn., U.S., 10th May, 1877, for 5 years.

Claim.—1st. The swell *H* of larger diameter than the central part of the piston *H* and extending around the same, in combination with the partial bushings *g g* arranged at a distance apart and with the cylinder *G*; 2d. The pins *K K* having the head *K* fitted steam tight, in combination with the pistons *H H*, and with the part *N*, spring *n*, spring *m* and levers *L L Z z*; 3d. The chuck *h* with its dove-tailed base and arranged to fit the annular dovetailed hole *h*, on the end of the piston rod, and the mortised retaining bar *h*, in combination with the drill *M* and piston rod *h*; 4th. The tripod legs *V* attached to the machine by the ball and socket joints *e* and the securing bolts *e*; 5th. The tripod leg *W* attached to the machine by means of the laterally pendulous joint *u* and the fixing screw *u*.

No. 7446. Process for the Preparation of Animal Food.*(Procédé de préparation de la viande.)*

John L. Johnston, Sherbrooke, Que., 10th May, 1877, for 5 years.

Claim.—1st. The abstraction of a portion of the juices of animal food previous to its being subjected to a process of salting. 2nd. The separation of the bones from animal food previous to its being salted for the preparation of compressed corn beef. 3rd. The addition to animal food, at any stage or stages, during the process of its being prepared or packed for future use, of a portion or portions of the expressed salts of flesh or soluble constituents of animal food.