## No. 7973 . Improvements on Nut Locks.

(Perfectionnements dans les noix de sûreté.)
Kinzey C. Naylor, New Sbaron, Iowa, U. S., 5th October,. 1877 , for 5 years.
Claim. -1 st. The nut $C$, provided with the slotted sleeve $D$, the wall thereof increased in thickness, at the end farthest from the nut, and screw threaded internally and externally, in oombination with the clamp nut Di; 2nd. The combination with the clamp nut D', of the nut C provided with the slotted and tapering sleeve $D$, having the internal screw-thread running in opposite direction to the external screw-thread; 3rd. The nut $C$, provided with the slotted sleeve $D$, having the exterior screw-threads running in a with the slotted sleeve $D$, having the exterhreads, in combination with the direction oppo
clamp-nut $\mathrm{D}_{\mathrm{I}}$.

## No. 7974. Improvements on Erasers. <br> (Perfectionnements aux grattoirs.)

Samuel Darling. Providence, R. I., U. S., 5th October, 1877, for 5 years
Claim.-1st. An eraser made of pure or prepared rubber and provided w th a bevelled or tapering end; 2nd. The combination with the pointed eraser of the brush C: 3rd. The combination with the rubber eraser $a$, provided with the brush $c$ and ferrule $d$.

## No. 7975 . Improvements on Grain Bags. <br> (Perfectionnements aux sacs à grain.) <br> Joshua Collins, Montreal, Que., 5th October, 1877, for 5 years.

Claim.-1st. In combination with a bag for holding grain, \&c., a funnel secured in, at or near the mouth of the bag and operating to close the same; 2nd. The combination of the bag $X$ and funnel $F$, with rings and hook or bottons, \&c., for securing same as described.

## No. 7976 . Machine for Making Baskets.

(Machine a faire des paniers.)
James Churohill, Thomas H. Churchill and William Churohill, Uxbridge,
Ont., 5th October, 1877, for 5 years.
Claim.-1st. The rack and pinion A with lever B; 2nd. The tilting axle E ; 3rd. The use of the truss-boop for setting the shape of the splints; 4th. The revolving bottom disk, and weaving apron $H$.
No. 7977 . Improvements on Boots and Shoes.
(Perfectionnements aux chaussures.)
Charles Edwards, Jamaica, N.Y., U.S., 5th October, 1877, for 5 years.
Claim.-1st. The detachable sole B provided with a rim or plate $d$ to fit upon a plate I attached to the inner sole of the shoe; 2nd. The metallic. plate I, in combination with the inner sole $B$ for the parpose of holding the said attachable sole B; 3rd. The heel J consisting of the stationary lifts o; and the detachable outer lift os attached to the metal plate s and secured to the suid stationary lifts o; 4th. The detachable sole B provided with a metal plate $f_{1}$, combined and arranged in relation to the shank $h$, for the purpose of holding the rear end of the said sole in position, and of forming a close and flash joint between the two ; 5th. The detachable sole $\mathbf{B}$ provided with a conntersuak plate e, in combination with the pin $f ; 6$ th. The plate I, consisting of two or more thicknesses or leaves of different lengths, and arranged in relation to the plate $I$ and the instep of the shoe; 7 th. The detachable sole B provided with a raised rim or plate $d$ extending along its edges and the plate $I$ secured to the inner sole $b$, in combination with suitable devices for the purpose of fastening the rear end of the said sole.
No. 7978 . Paper Bag Machine.
(Machine d sacs de papier.)
Thomas R. Rhoder, Westminster, Ont., 5th October, 1877, for 5 years.
Claim. -1st The devices for feeding and folding the paper in the machine consisting of the rollers F H, standards $G$, discs or wheels $K$, arches $L$, guide, $M$, sword $N$ and pressure rollers $O r$ and $s$, operated by crank $B$ and main shaft $D$; 2nd. The entting apparatus consisting of the serrated knife $S$, serrated edge of sword N, striking bar T, rods U , guides V, coil springs W, shaft $\mathbf{Y}$, wheel and finger $a$, projecting plate $b$ and additional coil spring $c$; 3rd. The devices for pasting the sides of paper, consisting of the grooved wheel $d$ and pastebox $e$, in combination with roller $H$; 4th. The apparatus for pasting and closing bottoms. consisting of the paste-rollers $f$, pivoted plate $g$, guides $k$, rods $i j k$, plate $p$ and finger $o$, controlled and operated by bar $l$, shaft $Y$ and eccentric $n$.
No. 7979. Machine for Making Barrels. (Machine d faire des bavils.)
James Tomlinson, Goderich, Ont., 5th October, 1877, for 5 years.
Claim.-lst. In combination with the slotted metal drum $D$ and its heads Dr $\mathrm{D}^{2}$, of the eccentric shaft G and links $f f$, for expanding and contracting the covering $D$ of said drum ; 2nd. The combination of the press-roll with the collapsible drum ; 3rd. The combination of the press-roll and a series of hoop- guides with the collapsible rotary drum; 4th. The combination of the equaiising saws and their swinging-frame with the rotary collapsible drum.
No. 7980 . Mode of Hanging Doors and Blinds.
(Mode de posage des portes et persiennes.)
Edwin Prescott, Hampton Falls, N.H., U.S., 5th October, 1877, for 5 years.
Claim.-lst The combination with a door of cross levers pivoted at one ond, one to the door and the other to the building, and connected at their other ends, one by a stud with a guide, and the other with a radius bar, the pivoted point of the latter with one of the crossed levers, being arranged to pass between the stud on the one lever, and the pivoted point of the two levers; 2nd. The combination with a door, of pivoted crossed door, and post levers, a stud, a guide, and a radius bar, connected with each other and with the door and building, whereby all the levers to sustain and project the door are arranged on the same side of the door, and all the points of connection are made within the space bounded by the bottom and top of the door; 3nd. The combination with the door lever and its atud, of a gaide having aides arranged to co-operate with the stad, to assist in retaining the door in
any desired position ; 4th. The combination with one member of the pair of crossed levers, of a radius bar, bent or shaped to permit the bar to be connected with the lower end of the door midway between the extreme points of movement of the other end of the radius bar, and to pernit the passage of such other end of the radius bar between the stud and the crossing points of the two levers; 5th. The combination of a blind or door and pivoted crossed levers, connected, each at one end positively and at the other end loosely, with the blind or door and casing or building over which the hlind or door moves, and adapted to completely sustain the blind or door during its movement; 6th. The blind or door and its projections at the back, in combination with the holding device, 7 th. A sliding blind or door and levers to sustain and direct it, in combination with a blind bolding or locking device, adapted to hold a blind, and with a crank or handle to operate the locking device from within a room or building ; 8th. The blind or door and its levers $d_{2} d_{2}$, pivoted together and connected with the blind and casing, in combination with guide-strips connected with the top and bottom of the door, and with pins and hooks at the sides of the strips, to prevent movement of the blind or door away, from or toward the casing; 9th. The combination of the two pivoted crossed levers, one adapted at one end to be connected with a post or fixed part of a building and to move at its other end, vertically with relation to a door, and the other adanted to be connected at one end with the door and to move vertically over the post or a fixed part of a building at the oppostie side of the lever, the movable end of one lever being also arranged to pass between the pivotal points of the two levers and the connecting point of the end of the other lever.
No. 7981. Improvements in Sewing Machines. (Perfectionnements dans les machincs à coudre.)
William Mnir, Montreal, Que., (Assignee of David M. Smyth), 5th October, 1877, (Exension of Patent No. 1681), for 5 years.
No. 7982 . Improvements in Sewing Machines. (Perfcetionnements dans les machines a coudre.)
Wiiliam Mnir, Montreal, Que., (Assignee of David M. Symth), 5th October, 1877, (Extension of Patent No. 1681), for 5 years.

## No. 7983. Improvements in Spring Mattresses.

(Perfectionnements dans les nutelas ì ressorts.)
Edwin L. Bushnell, Poughkeepsie, N.Y., U.S., 9th October, 1877, (Extension of Patent No. 1716), for 5 years.

## No. 7984. Tmprovements on Milk Pans. (Perfectionnements aux boites à lait.)

Bruce C. Bort, Chateanguay, N.Y., U.S., 9th October, 1877, for 5 years.
Claim.-The ice chamber B with holes G. combined with a water reservoir $H$ having partitions $C$ of increasing helghts, and with outlets $D$ and perforations $\mathbf{F}$, combined with the milk pan $A$ provided with milk outlet $E$.
No. 7985. Improvements on Rotary Churns. (Perjectionnements aux barattes rotatoires.)
Bruce C. Bort, Chateangaay, N.Y., U.S., 9th October, 1877, for 5 years.
Claim.-list. The peculiarly indented breakers and perforated breakers solidly fitted to the inside of the cylinder; 2ud. The application of a close fitting cap or cover over the gearings, churns and combined therewith.

## No. 7886. Improvements on Dash Churus.

(Perfcctionıcments aux barattcs à piston.)
Allen C. Otiy and Archibald J. Elliott, Rothesay, N.B., 9th October, 1877, for 5 years.
Claim.-The combination of the dashers and their attachment to the handle or shaft A.
No. 7987. Improvements on Waggon Racks.
(Perfectionnements aux râtelie's de wagons.)
Alphens McCallum. Kars, and James F. Cass, L'Orignal, Ont., 9th October, 1877, for 5 yerrs.
Claim.-1st. The dove-tail sockets $B$ an 1 brackets $H$, in combination with a wagon body $A$; 2nd. The dove-tail sockets $B$, fastened to the wagon box by rods $C$ passing transversely therethrough and secured by nuts D; 3rd. The sockets $B r$ and plate $F$ fastened to the sides of the box $A$ by short bolts E, said plate $\mathbf{F}$ baving a screw projection, passing through the bottom of the box, and underlying bar $K$ and secured by a nut $G$.

No. 7988. Harvesting Machine. (Moissonneuse.) Robert Thomson and Alfred R. Williams. Stratford. Ont., (Assignees of

Orville Cooley), 9th October, 1877, for 5 years.
Claim. -lst. The main frame D H; 2nd. The combination of standards forming a part of the main frame, and having concave upper ends with tubalar bearings for the shafting, and with staples $p$ extending down to, or throngh the frame, by which the tubular bearings are strapped in place upon the standards; 3rd. The combtnation of continuonsly rotating main pinion shaft, driven from the traction wheel with the cutter shaft and rake shaft, and with the backing ratchet $r^{2}$, by which both the catter and rake are simnitaneously stopped or driven; 4th. The yoke Y combined with the traction wheel, the main frame and the pinion shaft; 5th. The combination of the lifting bar $U$, the tongue, the bracket $T$ and the rack bar $V$ or its of the lifting bar $U$, the tongue, the bracket
equivalent; 6 th. The combination of the lifting bar $U$, the tongue, the equivalent; 6th. The combination of the lifting bar $U$, the tongue, ad-
bracket $T$, and the supporting bar $L$; 7 th. The combination of the two ad justable supporting bars, with the lifting bars, bracket and tongue; 8th. The combination of the yoke, the bracket, the lifting bar, and the front supporting bar; 9 hh . The combination of the yoke, the bracket, the lifting bar, and the rear supporting bar ; 10th. The combination of the two adjustable supporting bars, with the yoke, bracket, and lifting bar; 1lth. The combin ation of the driver's seat having its leverage back of the centre of oscillation of the main frame, and the andjusting and supporting bracket $T$ having its leverage forward of said centre, for the purpose of balancing the frame;

