No. 16,137. Improvements in Whip-Holders.

(*Perfectionnements aux porte-fouets.*)

Rudolph Peters and Walter J. Swartzenburg, Hamilton, Ont., 17th January, 1883; for 5 years.

Claim.—1st. A whip-holder composed of the two shear blades A A. 2nd. The blade A A pivoted by a screw B to a block ring or other equivalent device to hold it and provided with projections *a*, operating spring D, pins F F for the purpose of holding and hanging a whip in a vertical position.

No. 16,138. Improvement on Bottle Stoppers.

(*Perfectionnements aux bouchons des bouteilles.*)

Nathan Thompson, Brooklyn, N. Y., U. S., 17th January, 1883; for 5 years.

Claim.—1st. The combination, with a stopper, of a bale or handle *c* by which the stopper can be removed and held, and the pivot ends *c1*, which are used to lock the said stopper when the bale or handle is turned down, and to unlock the said stopper when the bale or handle is turned up. 2nd. The combination, with a stopper, of a bale or handle *c*, whose pivots ends *c1* are caused to lock the said stopper when the bale or handle is turned down, and to unlock the said stopper when the bale or handle is turned up, by being moved to and from each other within sockets formed in capsule *a* and under a flange or into a groove *b1* round the bottle neck. 3rd. The combination, with a stopper, of a bale or handle *c* whose pivot ends *c1* are caused automatically to lock the stopper in position on the bottle or other article by simply pressing the same into the bottle neck, the pivot ends being first forced outward by the conical end of the bottle neck and afterwards springing by the elasticity of the bale or handle into a groove or under a flange on the bottle neck. 4th. The use, in combination with stoppers, of projections *a* acting against the sides of the bale or handle *c*, when the latter is being raised, and thereby forcing the pivot ends *c1* thereof outwards, so as to disconnect the stopper from the bottle or other article.

No. 16,139. Improvements on Halters.

(*Perfectionnements aux licous.*)

Edward Barnard, Rome, N. Y., U. S., 17th January, 1883; for 5 years.

Claim.—1st. A corner piece provided with the vertical slots at each end, the horizontal slot and the inclined slot, both being located between the vertical slots. 2nd. A corner piece provided with vertical slots at each end, a horizontal and an inclined slot located between the vertical slots and having pins projecting from one side thereof. 3rd. The combination, with a single strap, of corner pieces located at the angle formed at the junction of the head and nose portions of the halter, said corner pieces being provided with vertical slots at each end, and horizontal and inclined slots located beneath the vertical slots.

No. 16,140. Improvements in Shoemakers' Jacks.

(*Perfectionnements aux chevalets des cordonniers.*)

Henry P. Roberts, Jamestown, N. Y., U. S., 18th January, 1883; for 5 years.

Claim.—1st. The combination of the swivel plate A, swivel B having perforated ears *a* and the loose bearing plate *h* for such swivel, with the arms C, set screws L M and last holding devices, the whole adapted to allow oscillatory adjustment in two directions. 2nd. The adjustable arm C and plate D having flange and ratchet *b*, the curved arms G carrying adjustable toe pad I, and central pivot *k*, combined with the arm F carrying the heel pin *d* and with the double pawl H. 3rd. The heel arm J pivoted to the arm F and having a perforated ear *e*, and heel pin *d* combined with the spring K, arm F, toe pad I and the swivel arm C.

No. 16,141. Improvements in Water Meters.

(*Perfectionnements aux hydromètres.*)

Parker Wells, Lynn, Mass., U. S., 18th January, 1883; for 5 years.

Claim.—1st. A water meter having cross cylinders and external chutes to lead the water under force to reciprocating cross pistons, and from said pistons to the service pipes after measurement, the pistons acting alternately and automatically without the aid of internal valves or other moving mechanism. 2nd. A water meter case having internally projecting rings covering the area of the stroke of the piston heads, said case being formed of cross cylinders adapted to receive alternately acting pistons and to be formed into a true cylinder by turning, boxing, or otherwise. 3rd. The main piston and auxiliary piston, both being buoyed up against friction by confined air and operating at approximately right angles with each other. 4th. A main piston and auxiliary piston operating approximately at right angles with each other, the one being locked while the other is moving. 5th. A lift-valve adapted to allow the water in the house pipes to gravitate into the sewer as the water pressure is cut off. 6th. The main piston G having lugs *g2* upon the plate *g*, combined with the auxiliary piston H having the recesses *h1* adapted to serve with the cross cylinders A B. 7th. The receiving chamber C having ports W W1 W2 W3, combined with the pistons G H having connecting and shifting recesses and with the cross cylinders A B. 8th. The removable cap D having exit D1, aperture *d* and inlet E, combined with the case A B having central aperture, and with pistons and ports. 9th. The cap D having pipes D1 and E, combined with the valve *f* and case A B C *d*. 10th. The cross cylinders A B having chamber C, ports W W1 etc., and chutes *x x1*, etc., combined with the pistons and chamber cap D. 11th. The piston G having groove K, recess K1 and connected barrels, and the auxiliary piston H, with the heads *h2* having annular recesses *h3* combined with the ports in the cross cylinders A B. 12th. The recesses J1 in the cylinder heads, and the cross bars J adapted to limit and control the stroke of the pistons G H.

No. 16,142. Improvement on Rotary Engines.

(*Perfectionnements aux machines rotatoires.*)

George W. Wade and Joshua M. Wardell, Cadillac, Mich., U.S., 18th January, 1883; for 5 years.

Claim.—1st. The combination of the cut off valves K or K1 with the revolving cylinder B having a central steam chamber B1, radially sliding pistons J and ports or inlets *b1*, for passage of the steam through the cylinder to act upon the sides or faces of the pistons and the ellipsoidal case A. 2nd. The combination, with the revolving cylinder B having a central steam chamber B1 and ports or inlets *b1*, of the cut-off valves K or K1 and their attached shaft *e* having its axis coincident with that of the cylinder. 3rd. In a rotary engine having a hollow revolving cylinder fitted with radially sliding pistons for operation within a fixed case of varying diameters and having duplicate exhaust ports *m n* on opposite sides of it, the combination of the reversing valves *m m* with the revolving cylinder B having a central steam chamber B1, ports or inlets *b1*, radial slots *b* for the pistons, recesses, or chambers *g g* for the valves M M on opposite sides of the slots, and outwardly diverging passages *h h* from said chambers. 4th. The combination, with the revolving ring *k*, clutch rod *m*, lever *l* and rods *i*, with the reversing valves M M, the revolving heads F G and their attached revolving cylinder B having radial piston slots *b*, inlets *b1*, reversing valve chamber *g g* on opposite sides of said slots, and outwardly diverging ports or passages from said chambers *g g*.

No. 16,143. Improvements on Sash Fasteners.

(*Perfectionnements aux arrête-croisées.*)

Richard N. Sibley, Stephen Sibley, Benjamin Sibley and Aaron Sibley, Stewiacke, N. S., 18th January, 1883; for 5 years.

Claim.—1st. The sash fastening C having a flat pear-shaped cam notched diagonally at the small end and provided with a hole eccentrical to the curvature of the larger end, and on that side terminating in the point formed by the diagonal notch. 2nd. In combination with a window and sash, a cam fastener rounded at one end and notched at the other end, and provided with a screw-pivot D eccentric to the rounded end nearest to the longest side.

No. 16,144. Improvements on Mechanical Musical Instruments.

(*Perfectionnements aux instruments de musique mécaniques.*)

Alonzo Durkee, New York, N. Y., U. S., 18th January, 1883; for 5 years.

Claim.—1st. In a wind musical instrument, the combination, with a perforated music sheet and jacks, levers, or key moving fingers arranged on one side of it, and push pins arranged on the other side thereof, of a perforated block embracing said sheet and movable laterally, whereby a lateral movement of said music sheet is imparted to the said push pins. 2nd. The combination, with a perforated music sheet or strip arranged between jacks, levers, or key moving rods on one side, and push pins on the other side, of a laterally movable box, a frame holding said levers, jacks or rods and embracing the edge of said sheet, or strip, whereby the relative lateral position of said jacks or rods and music sheet are preserved. 3rd. In a musical instrument adapted to be played by means of a moving perforated music sheet which controls the operation of valves to its reeds, pipes, or other sounding devices, the combination, with the jacks or levers E pivoted in pivoted frame E1, of the movable perforated block C, push pins B and connected levers and wind regulating valve F G H and I respectively. 4th. The combination, with air pressure chamber K, escape tube J, air passages L1 and pipe connecting tubes N, of the bellows valve or pallet L having a spring *m* and arranged within said pressure chamber against the mouth of the tubes N. 5th. In a wind musical instrument constructed and adapted to be operated mechanically or manually, the combination, with the air pressure chamber K and escape tube J, of the bellows valve or pallet L provided with communicating supply and exhaust passages L1.

No. 16,145. Improvements on Pillow Sham Holders.

(*Perfectionnements aux porte faux oreillers.*)

John A. Wanless, Toledo, Ohio, U.S., 18th January, 1883; for 5 years.

Claim.—1st. A pillow sham holder consisting of a frame D, a rod C and means for locking the rod and frame in position, when partially rotated. 2nd. The combination of the brackets A B, the rod C and the frame D, said rod being provided with journals, and said brackets being constructed and parts arranged and operating as described. 3rd. The rod C with the frame D having a removable and a locking connection with the brackets A B.

No. 16,146. Improvements on Fare Boxes.

(*Perfectionnements aux troncs des wagons.*)

Walter S. Wales, Henry R. Phelphs and Helen R. Rockwell, (assignees of George Beadle,) Syracuse N.Y., U.S., 18th January, 1883; (Extension of Patent No. 8327.)

No. 16,147. Improvement on Paint.

(*Perfectionnement de la peinture.*)

Lemira H. Brocket, (assignee of Atwater E. Brocket,) Branford, Conn., U.S., 19th January, 1883; for 15 years.

Claim.—The base for a paint made of pine tar or stockholm tar, caoutchouc gum, gutta percha, gum shellac, gum copal or copal (oil) varnish and linseed oil or their equivalents.

No. 16,148. Sap Pan Elevator and Car.

(*Elévateur-chariot pour les casseroles à sucre.*)

Lorenzo Magoon, (executor of Ede W. Lee,) Stanstead, Que., 19th January, 1883; (Extension of Patent No. 2332.)