

**No. 23,106. Washing Machine.***(Machine à Laver.)*

Alexander Stuart, Jr., Hamilton, Ont., 7th January, 1886, 5 years.

*Claim.*—1st. In a washing machine, the combination of a tub A, a vertical stationary shaft C, with its bearings, a revolving dasher F operated by gear wheels and a lever handle substantially as specified. 2nd. In a washing machine the combination of the shafts C, I, bevel gear G attached to dasher F and gear wheel H attached to shaft I, and the collar D on shaft C, substantially as and for the purpose specified. 3rd. In a washing machine, the combination of the collar D, shaft C, brace B and nut E, shaft I, nut J, substantially as and for the purpose specified.

**No. 23,107. Combined Last and Jack.***(Forme et Tire-Forme Combinés.)*

Henry Stockman, Philadelphia, Pa., U. S., 7th January, 1886, 5 years.

*Claim.*—1st. A last holding jack having a base secured to a suitable support, a sub-base hinged directly or indirectly to said base, and means, substantially as described, for holding said sub-base at different angles with relation to its base, as and for the purpose set forth. 2nd. In a last holding jack, and in combination, a base secured to a suitable support, a sub-base hinged directly or indirectly to said base, a holding bar connected to the sub-base and extending through the base, and a locking bar, substantially as described. 3rd. In a last holding jack, a base secured to a suitable support, a sub-base hinged directly or indirectly thereto, and a holding bar, in combination with a jack body having a plane of motion at right angles to the plane of motion of the sub-base, substantially as described. 4th. In a last holding jack, and in combination, a base secured to a suitable support, a sub-base hinged thereto, a holding bar, a securing bar and a jack body having last receiving standards, and means, substantially as described, for securing it to the sub-base, as and for the purpose set forth. 5th. In a last holding jack, a base, a sub-base, a hinge connecting said base and sub-base, a holding bar connected to the sub-base and a locking rod journaled in the base, in combination with the jack having last receiving standards and securing lever, substantially as described. 6th. A last holding jack having standards for receiving and holding the last, combined with a base, having a pivot pin, which is received centrally in the base of the jack upon which said base may be revolved at will, substantially as described. 7th. The combination, with an adjustable base, as B, and means for locking it in any desired position, of a jack pivoted to such base and having standards to receive and hold the last, as set forth. 8th. The combination, with an adjustable base, as B, and with a jack, as D, pivoted to said base, whereby independent adjustments on planes at right angles to each other is obtained, of means, substantially as described, for locking the base at any desired point of adjustment, and means for locking the jack to the base, as set forth. 9th. The combination, with the base A having guides *a* and a slot *a*, of the hinged sub-base B having central aperture *b* and guide *b*, the segmental bar C, pin C<sub>1</sub> and last supporting jack, as set forth. 10th. The combination, with the hinged sub-base B and jack D having rotary movement thereon, and a cam face, as *d*, of an adjustable bar, as C, lever nut, as F, having corresponding cams *f*, as set forth. 11th. In a last jack, as described, the combination, with the lever, as H, and a last holding device having last pin, as *i*, a threaded bolt and thumb nut for moving and holding the lever, as set forth. 12th. The combination, with the jack D having independent adjustment on planes at right angles to each other, of removable interchangeable devices, as L, M, H, L, and locking screws, as *k*, *m*, as set forth. 13th. The combination, with the jack D having standards D<sub>1</sub>, D<sub>2</sub> and ribs N<sub>1</sub>, of the frame, the rest H, holder I, holder I and set screws, as and for the purpose set forth. 14th. In a boot and shoe last, the combination, with the last proper, of its supporting jack comprising the toe and heel supports having a holding dog or tennon, and pin which respectively engage the lower end of the last, and a groove or mortice in the body or said last, substantially as and for the purpose set forth. 15th. In a boot and shoe last, the combination, with the last proper, of the pivotally secured supporting jack comprising the standards D<sub>1</sub>, D<sub>2</sub>, having mortice and tennon connection with the last, the toe holding dog with its screws, and means for holding said last at different angles, substantially as and for the purpose set forth. 16th. In combination with a supporting jack, the boot and shoe last having the sliding partial sole and heel extension of dovetail form in cross section, a portion of its length fitted in a corresponding groove in the sole of the last, and having pendant arm or post fitting in a groove of the last body, substantially as and for the purpose set forth. 17th. In combination with a supporting jack, the boot and shoe last having in its sole a dovetailed groove and having the extensible partial sole and heel part of a dovetailed form in cross section a portion of its length, and having a binding screw in said dovetailed portion, and at its heel end a post or pendant arm entering a groove in the last body, substantially as and for the purpose set forth. 18th. The boot and shoe last having the extensible partial sole and heel part, substantially as and for the purpose set forth.

**No. 23,108. Paper Folding Machine.***(Machine à Plier le Papier.)*

Wellington Dowling, Erie, Pa., U. S., 7th January, 1886, 5 years.

*Claim.*—1st. In a paper-folding machine, the combination, substantially as set forth, of a stop for limiting the forward movement of an incoming sheet, and a stop for preventing the said sheet from rebounding from the said front stop. 2nd. In a paper-folding machine, the combination, substantially as set forth, of an adjustable stop for limiting the forward movement of an incoming sheet, an adjustable stop for preventing the said sheet from rebounding from the said front stop, and adjustable side guides which control the position of the sheet relative to the folding rollers. 3rd. In a paper-folding machine, the combination, substantially as set forth, of an adjustable front stop, an adjustable back stop, and means, substantially as shown, for actuating both of said stops simultaneously. 4th.

In a paper-folding machine, the combination, substantially as set forth, of an adjustable front stop, an adjustable back stop, adjustable side guides, and means, substantially as shown, for actuating all of said stops and guides simultaneously. 5th. In a paper-folding machine the combination, substantially as set forth, of a justable front stop, adjustable side guides, and means, substantially as shown, for actuating said guides and stops simultaneously. 6th. In a paper-folding machine, the combination, substantially as set forth, of the adjustable stops F and G, the rack toothed arms F<sub>1</sub> and G<sub>1</sub>, the pinion H<sub>1</sub>, the crank arm I and the dial I. 7th. In a paper-folding machine, the combination, substantially as set forth, of the adjustable front stops F and G, the adjustable side guides E and E, the rack toothed arms F<sub>1</sub>, E<sub>1</sub>, and E<sub>2</sub>, and the pinions H and H<sub>1</sub>. 8th. In a paper-folding machine, the combination, substantially as set forth, of the adjustable front stops F and N, the adjustable side guides E, E, the rack toothed arms F<sub>1</sub>, F<sub>1</sub>, I, E<sub>1</sub>, the pinions H and H<sub>1</sub>, and H<sub>1</sub> and H<sub>1</sub>, the crank arms I and I, the dials I and I with the equally spaced and numbered stops *i*. 9th. In a paper-folding machine, the combination, substantially as set forth, of the adjustable front stops F and F, the adjustable side guides E and E, the rack toothed arms F<sub>1</sub>, F<sub>1</sub>, E<sub>1</sub>, the pinions H and H<sub>1</sub>, the crank arm I and the indicating scales J and J, J<sub>1</sub> and J<sub>1</sub>.

**No. 23,109. Convertible Skate.***(Patin Convertible.)*

John Lapp, Honeoye Falls, N.Y., U. S., 7th January, 1886, 5 years.

*Claim.*—1st. The combination, in a convertible roller and ice skate, and with the front and rear roller frames C and elastic cushions E, arranged substantially as described, of the runners F, G, constructed with connected opposite pairs of runner blades *f*, *f*, *g*, *g*, and pivot rods *f*, *g*, adapted to the lugs *c* of the roller frame C, and connected by a spring J, substantially as herein set forth. 2nd. The skate runners, constructed with front and rear runners F, G, consisting of blades *f*, *f*, *g*, *g*, tied together by rods *f*, *g*, and having pivot pins *f*, *g*, and said runners F, G being connected by a spring J, substantially as herein set forth. 3rd. The skate runners, constructed with front and rear runners F, G, consisting of blades *f*, *f*, *g*, *g*, tied together by rods *f*, *g*, and having angular lower edges *l*, and the pivot pins *f*, *g*, and said runners F, G being connected by a spring J, substantially as herein set forth. 4th. The combination, with the pivoted rear runner G, of a tie connected to the forward end of the runner, and passing over a rod or bar held to the skate foot-piece, substantially as herein set forth. 5th. The combination, with a bar, or rod, on the skate foot-piece, and the rear runner G, of a tie K in the ball form extending over the foot-piece bar, and connecting with the forward end of the runner, substantially as set forth.

**No. 23,110. Device for Feeding Clover Hul-  
lers and Thrashing Machines.***(Appareil pour Alimenter les Machines à  
Egrener le Trèfle et à Battre.)*

Merriek E. Perring, Berrien Springs, Mich., U. S., 7th January, 1886, 5 years.

*Claim.*—1st. The combination, with the revolving feed cylinder, of a series of rake teeth mounted eccentrically on a shaft, journaled in the ends of the cylinder, substantially as set forth. 2nd. The combination, with the revolving feed cylinder, of a set of feed teeth mounted eccentrically, a shaft journaled within the bearings of the feed cylinder and adapted to advance and recede through perforations of bars, a slot or slots in the cylinder casing as the cylinder revolves, substantially as set forth. 3rd. The combination, with the revolving feed cylinder journaled on hollow trunnions, and a set of feed teeth mounted eccentrically on a shaft journaled within the hollow trunnions, of a regulator secured on one end of the shaft and adapted to lock the shaft in different rotary adjustments, substantially as set forth. 4th. The combination, with the revolving feed cylinder and the set of rake teeth, eccentrically mounted on a shaft journaled at the centers of the ends of the cylinder of a sector secured on the end of the shaft and means for securing the sector in different rotary adjustments, substantially as set forth. 5th. The combination, with the revolving feed cylinder journaled on hollow trunnions, of a set of feed teeth loosely mounted on a crank shaft journaled within the hollow trunnions, and means for locking the crank shaft in different rotary adjustments, substantially as set forth. 6th. The combination, with a set of feed teeth adapted to advance through the feed cylinder casing at the feed side of the hopper, and to withdraw within the cylinder casing as they approach the threshing cylinder, of a regulator secured to the feed teeth shaft and adapted to determine the outward thrust of the feed teeth at their point of contact with the hay or grain, substantially as set forth.

**No. 23,111. Skate Roller. (Roulette de Patin.)**

Charles Dalton and Edward J. Dalton, Oshkosh, Wis., U. S., 7th January, 1886, 5 years.

*Claim.*—1st. In a wheel for roller skates, the combination, of a wearing-disk plates located on opposite sides of said disk, and an exteriorly threaded bushing having an annular flange, or rim, at one end, adapted to engage one of the plates and having its threaded portion engaging the wearing-disk and opposite plate, as set forth. 2nd. In a wheel for roller skates, the combination of the wearing-disk comprising one or more discs of leather cemented together and having a turned or rounded bearing edge and a threaded bearing, a clamp plate D fitted against one face of the disk, a metallic bushing C having a flange or rim at one end adapted to clamp the plate D, and an exteriorly-threaded portion engaging the disk aperture, and a clamp-plate E having a threaded collar adapted to engage the threaded bushing all arranged and adapted to serve, as set forth.

**No. 23,112. Stone-Cutter's Chisel.***(Ciseau de Tailleur de Pierre.)*

Thomas Woods, Nicholasville, Ky., U. S., 7th January, 1886, 5 years.