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**INVENTIONS PATENTED.**

**No. 6340. Improvements in Journals and Journal Boxes.**

(*Perfectionnements aux tourillons et aux boîtes de tourillons.*)

William S. Mead, San-Francisco, Cal., U. S., 20th July, 1876, for 5 years  
*Claim.*—1st. Securing the chilled or gray iron sleeve on the journal to prevent it from turning; 2nd. The chilled or gray iron balls *k*, between the end of the rollers *G* and the plate; 3rd. Relieving the friction due to end play and pressure by means of the chilled segments of a sphere *M* and *C*, and chilled or gray cast iron surfaces; 4th. The chilled cast iron pieces *P* in the end of the journal; 5th. The cover on the inside end of the journal box so as to run it with or without oil.

**No. 6341. Machine for Lifting Stone and other heavy weights.**

(*Machine à lever la pierre et autres fardeaux.*)

William H. Solomon, Stukely, Que., 21st July, 1876, for 5 years.  
*Claim.*—1st. The combination of the spring *L*, hoist gage *N* and elongation *T* of said lever *E*; 2nd. The formation of the lower extremity of said sliding bar *C* into the claw hook *Z*.

**No. 6342. Improvements on Window Shades.**

(*Perfectionnements aux jalousies.*)

Elliott Metcalf, Port Huron, Mich., U. S., 21st July, 1876, for 5 years.  
*Claim.*—1st. The two laces *C*, hanging down on each side of the slats *B* and fastened thereto by the staples *D*, one staple near each edge of each slat *B*; 2nd. The combination of the small rollers *E*, screwed to the top board *A*, with the laces *C* to open the slats *B* at any required degree; 3rd. The arrangement of the two cords *F* and *G* passing either in the forked pulleys *H*, or in the screw eyes *s* screwed to the top board *A*, for the purpose of opening or shutting the shade.

**No. 6343. Improvement on Office Desks.**

(*Perfectionnements des pupitres de bureaux.*)

William S. Wooton, Indianapolis, Ind., U. S., 21st July, 1876, for 5 years.  
*Claim.*—The hinged, or pivoted, or rotating chests or cases *A* and *A'*, located in the hinges or ends of the desk.

**No. 6344. Machine for Polishing Boot and Shoe Heels.**

(*Machine à polir les talons des chaussures.*)

Leopold Graf, Newark, N. J., U. S., 21st July, 1876, for 5 years.  
*Claim.*—The first part: 1st. The lever cam *M*, pivoted on the bearing *G*, in combination with the yoke *A*, dog *L*, pawl *K* and the clamp *C F*; 2nd. The combination of the eccentrically rotating plate *K*, with the yoke holder; 3rd. The ratchet wheel *D* and holding pawl *E*, combined with the lifting spring *C* of the yoke holder; the second part: 1st. A polisher pivoted at lower end of its carrier and connected with a stationary object at *L*, by the

arm *J* and bar *K*, in combination with a carrier that swings on a pivot *F* in the top of a standard *B*; 2nd. The combination of the vibrating and adjusting gage *M*, with the polisher; 3rd. The gage *M* fitted on the pivot of the polisher and connected with stationary stud *T*; 4th. The combination of sliding gage *M*, spring *O* and the cam block *P*; 5th. The combination with the sole plate of clamp frame *S*, connected by the ball and socket joint *U* to holder *V* having a sliding motion in the swinging holder *W*.

**No. 6345. Lifting Jack. (Cric.)**

George W. Hunter, Joseph P. Norris, Theodore L. Chase, Philadelphia, Pa., and Henry M. Baker, Washington, D. C., U. S., 21st July, 1876, for 5 years.

*Claim.*—1st. The combination of a standard, sliding-bar, dog operated by a lever or other device and gripping the bar when tilted; 2nd. The combination with the bar and tilting and gripping dog of stops to tilt the dog; 3rd. The standard consisting of metal pieces *b b*, bolted together and to the base *A*; 4th. A lifting jack provided with a sliding-bar carrying an adjustable arm *D*; 5th. The combination of the sliding-bar, of a lifting jack and a chain secured permanently to the bar; 6th. The combination of the standard sliding-bar and base plate *A*, having a recess *a*, through which the bar may be projected below the base; 7th. The double ended pawl combined with the sliding-bar having teeth inclined at both sides to arrest the movement of the bar in either direction; 8th. The combination of the sliding bar, pawl, operating lever *I* and arm *L*, whereby the pawl is thrown outward on elevating the lever; 9th. The standard provided with an arm *J*, extending at right angles or thereabout to the standard below the lever; 10th. The standard consisting of the side pieces *b, b*, each having flanges *c, d*, and parallel guides.

**No. 6346. Improvements on Fruit Dryers and Evaporators.**

(*Perfectionnements aux séchoirs et évaporateurs à fruits.*)

Andrew J. Reynolds, Chicago, Ill., U. S., 21st July, 1876, for 5 years.  
*Claim.*—1st. A condenser arranged within the drying chamber, said condenser filling or partly filling the upper portion of the drier whereby the air within the chamber is rendered and kept dry; 2nd. A drum revolving within a drying chamber and carrying with it, in its rotation, a series of fruit shelves or trays capable of being raised and lowered; 3rd. The drum *E*, extending centrally through the dry house and supporting the fruit trays, together with the windlass and ratchets; 4th. The combination with a hot air pipe, a hollow shaft, a furnace, a fan or blower, a smoke pipe and a drum *E*, whereby a current of heated air is created, maintained and caused to circulate through and among the revolving trays of fruit or other substance to be dried; 5th. The hot air drum *Q*, heated air pipe *O*, warm air chamber *T*, ports *u u*, in combination with the revolving drum *E* and fruit trays *F F*; 6th. The fruit trays to be attached; 7th. The revolving shelf frames *F F*, in combination with the fans *S S*, operated by the hollow shaft *C*; 8th. The combination of the shelf frames *F F*, the fans *S S* and furnace and condenser; 9th. The combination of a drip pan with a condenser and hollow shaft.

**No. 6347. Improvements in the Construction of Sewers.**

(*Perfectionnements dans la construction des égouts.*)

Alfred Brittain, Montreal, Que., 21st July, 1876, for 5 years.  
*Claim.*—1st. The novel art of constructing drains and sewers in a continuous brick work by means of an outer rib *c*; 2nd. The rib *c* constructed to be arranged in combination with the brace *d*.

**No. 6348. Improvements on Car-Couplings.**

(*Perfectionnements aux attelages de wagons.*)

James C. Mitchell and Charles W. Roby, Lancaster, N. H., U. S., 21st July, 1876, for 5 years.  
*Claim.*—1st. In combination with any freight or other car, the draw bar *A* provided with back plate *A2* and secured both to the cross head of the car and to any point near the centre of the car to equalize the draught strain; 2nd. The draw bar *A* provided with back plate *A2* and divided up