No. 835,486. PATENTED NOV. 6, 1906.

H. D. COFFMAN.

SHOE IRONING JACK.

APPLICATION FILED MAY 24, 1905.

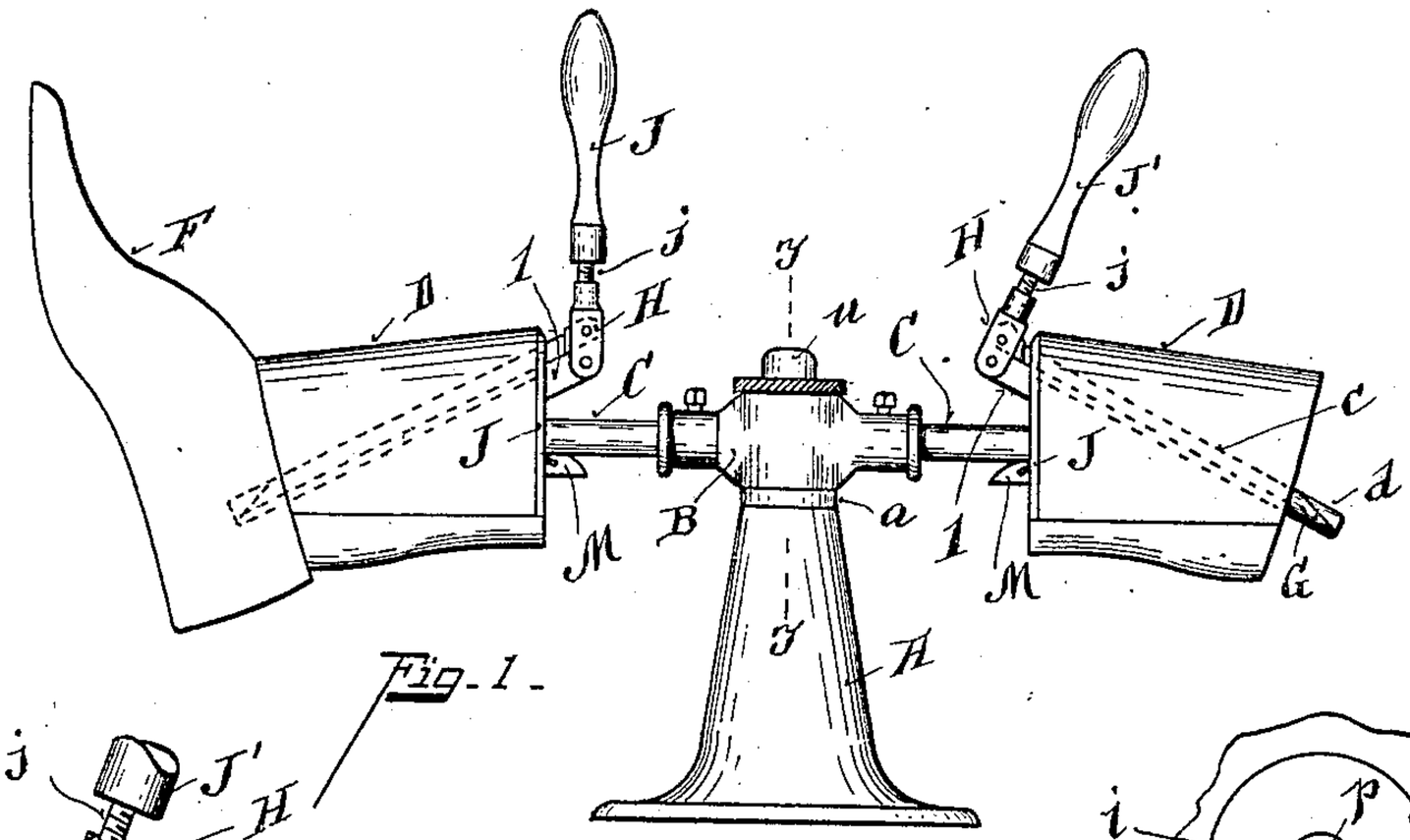

Fig. 1.

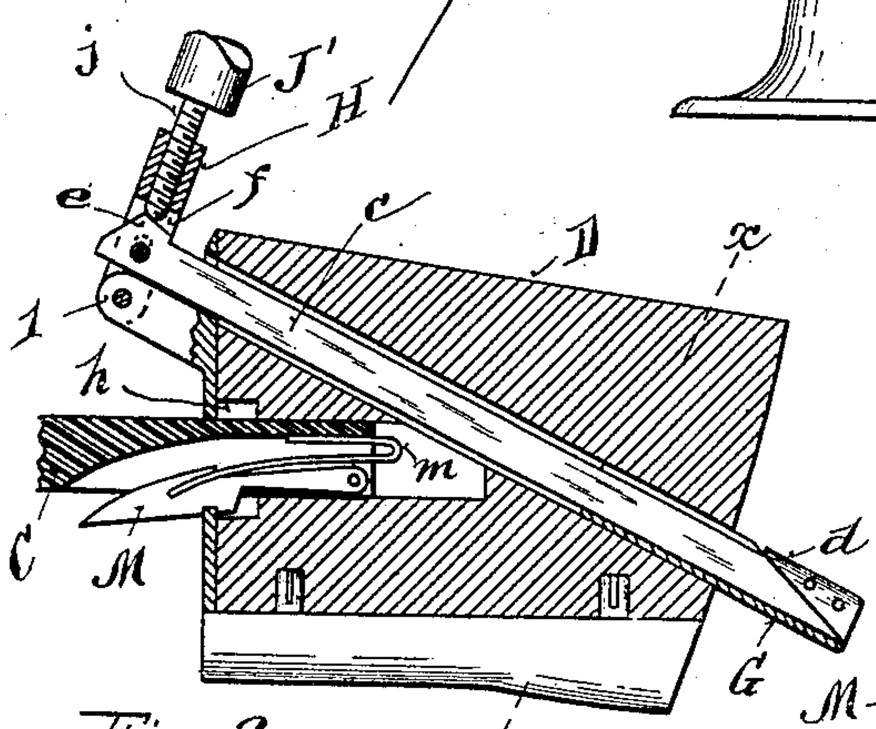

Fig. 2.

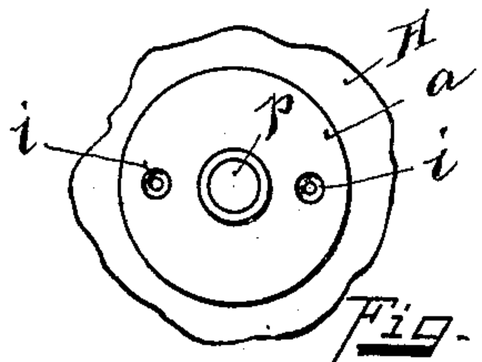

Fig. 7.

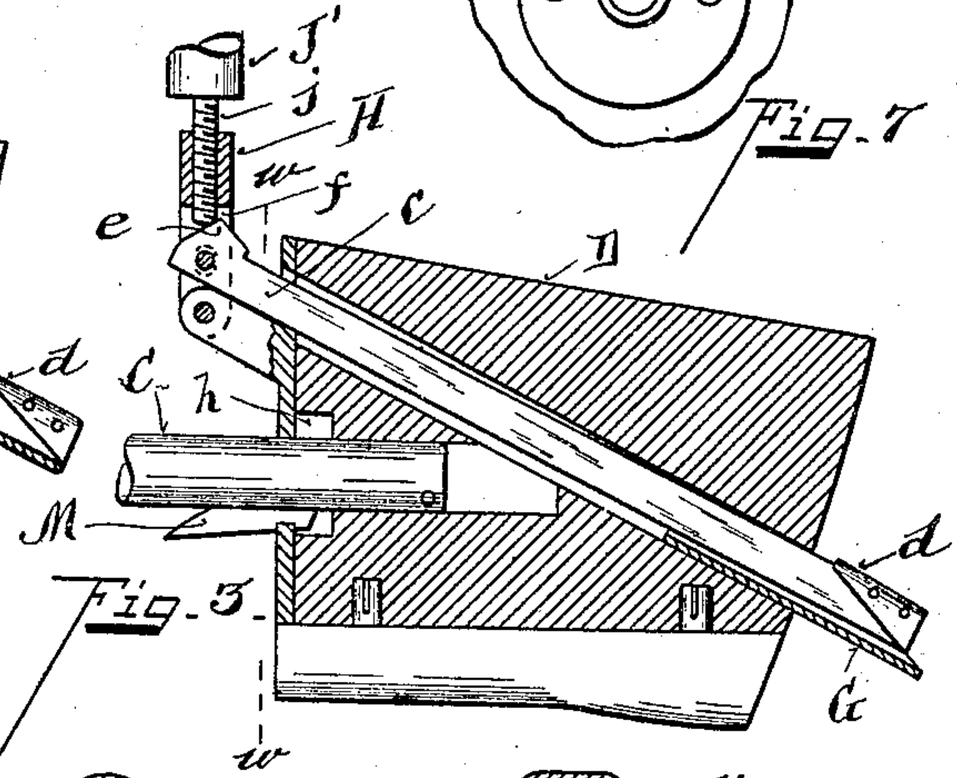

Fig. 3.

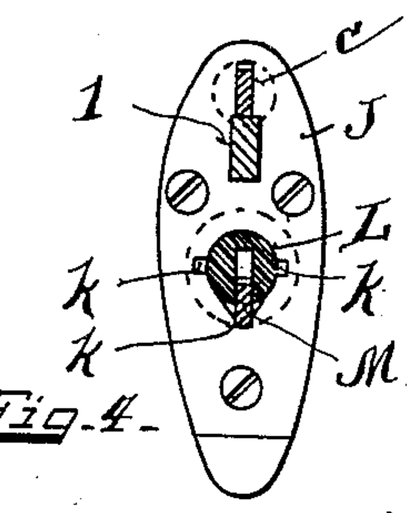

Fig. 4.

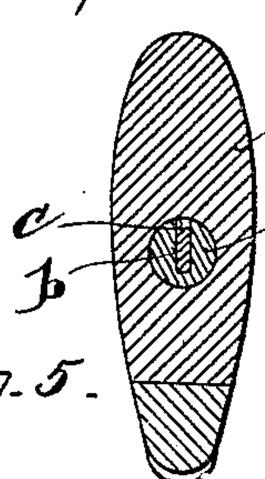

Fig. 5.

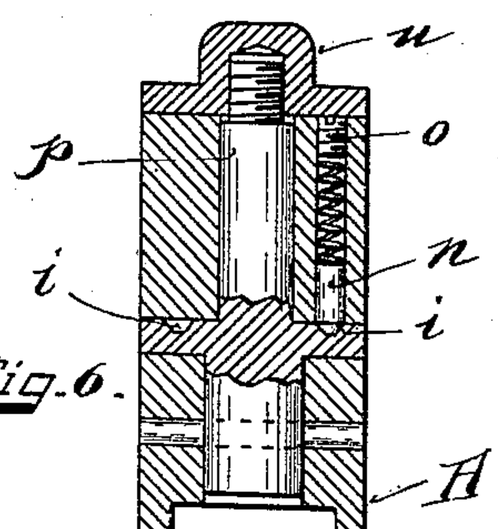

Fig. 6.

Fig. 8.

Witnesses

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UNITED STATES PATENT OFFICE.

HARRY D. COFFMAN, OF WASHINGTON COURT-HOUSE, OHIO, ASSIGNOR OF ONE-HALF TO JOHN MORGAN BAKER, OF WASHINGTON COURT-HOUSE, OHIO.

SHOE-IRONING JACK.

No. 835,486. Specification of Letters Patent. Patented Nov. 6, 1906.

Application filed May 24, 1905. Serial No. 261,995.

To all whom it may concern:

Be it known that I, HARRY D. COFFMAN, a citizen of the United States, residing at Washington Court-House, in the county of Fayette and State of Ohio, have invented certain new and useful Improvements in Shoe-Ironing Jacks, of which the following is a specification.

My invention relates to a shoe-jack.

The object of my invention is to provide a convenient means for an operator to iron a shoe on the second last, having a proper-shaped ankle-stock to support the ankle of the shoe for ironing.

Another object of my invention is to provide duplicate ironing and dressing supports mounted upon horizontal rods and swiveling the supports upon a suitable base, so that as soon as a shoe is ironed the operator revolves the supporting-rods half-way around in position for a second operator to apply the finishing-dressing while it is still in position on the supports, thereby saving an additional handling of the shoe and providing a better means for applying the finishing-dressing.

Other features of my invention are more fully set forth in the description of the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation of my improvement in position for use. Fig. 2 is a central vertical section, partly in elevation, of the ankle-stock, showing the spindle and locking attachments in normal position. Fig. 3 is a similar view, showing the locks in position for rigidly securing the lasts to the ankle-stock. Fig. 4 is a section on line *w w*, Fig. 3. Fig. 5 is a section on line *x x*, Fig. 2. Fig. 6 is a section on line *y y*, Fig. 1. Fig. 7 is a plan view of the locking-plate on the swiveled stock-support. Fig. 8 is a perspective view of the fixed keeper-pin.

A represents the base-support of the jack, which is adapted to be securely attached to a bench.

a represents a lock-plate forming a base in which the tool swivels.

B represents the swiveled head.

C C represent rods rigidly attached to the swiveled head B, the free ends of which serve as spindles for the ankle-stocks.

D D represent ankle-stocks, each detachably secured to its spindles C.

F represents a last rigidly attached to one of the ankle-stocks, upon which a shoe is placed for ironing and finishing.

In order to readily lock the last to the ankle-stocks, I have provided the following instrumentalities: G represents a keeper-pin of the size and shape to fit the dowel-hole in the last. The upper face is provided with an incline *g*. This pin is rigidly secured to the front of the ankle-stock and at appropriate angles to enter the dowel-hole in the last. This keeper-pin is provided with a slot *b*. *c* represents a rod extending through the bore in the stock D, the front end of which slides in said slot *b*. *d* represents a cylindrical wedge pinned to said rod. The rear end of rod *c* is pivoted between the fork of the hinged lever H. Said lever is pivoted to a bracket *l*, rigidly attached to the stock-plate J, which plate is rigidly secured to the rear end of the last-stock. J′ represents an operating-handle which carries a screw threaded into the upper end of the lever H. Rod *c* is provided with a cam *e* within the slot *f* of the bifurcated lever H. In Fig. 2 this keeper-pin and its locking-rod are in such relation that the keeper-pin is cylindrical and the last can be freely taken off and on of the same. In Fig. 3 the lever H is shown thrown backward, the lock-rod *c* carrying the wedge *d*, which has been moved backward and the wedge moved up on the incline *g*, thus increasing the diameter of the keeper-pin, of which the wedge forms a part, and by its frictional contact with the bore in the last rigidly locks the last firmly to the ankle-stock. In order to hold the parts in this locked position, the lever H, carrying the screw-rod *j*, is turned down till its point engages the head of the cam *e*, forcing rod *c* against bracket 1, locking the rod *c* against forward movement, as shown in Fig. 3. It may also be locked against backward movement, as shown in Fig. 2.

As the ironing movement is better accomplished when the stock and last are turned so as to have the broad faces lie horizontally and to lock the same against further movement, I have provided the following instrumentalities: J represents the stock-plate, which is provided with a central orifice L to form a bearing for the spindle. Said spindle is slotted to receive a spring-catch M, which is pivoted to the spindle within the slot, as shown in Figs. 2 and 3. This catch is con-

structed so as to lock the stock to the spindle. *h* represents an annular recess in the stock, in which the heel of the catch M turns. Said catch is provided with a slot-engaging plate J and holding the stock rotatively on the spindle and against longitudinal movement until the catch is released by depressing the same. Thus this catch serves as a lock against longitudinal movement and with the notches in the stock-plate locks against rotation. *m* represents the preferred form of spring, throwing the catch outward in its normal position. *k* represents notches formed in the stock-plate into which the catch M engages when the stock is turned to bring the catch opposite the said notches, the spring pushing the catches into engagement therewith and locking the ankle-stock against revoluble movement until the catch is released. The stock, last, and shoe may be locked in position, ironing the ankle, and it may be turned so as to iron on both sides, and this movement of the stock is convenient for the operator, who applies the finishing-dressing after the parts been turned from ironing around to a position of the operator who applies the dressing.

In order that the stock and last may be locked against horizontal movement of the revolving head during the operation of ironing or finishing the shoe, I have provided the following instrumentalities: The swiveling or revolving head bears upon the plate *a*, as shown in Fig. 6. Said plate is provided with countersunk orifices *i i*. Said head is provided with a vertical bore in which is inserted a spring keeper-pin *n*, which is inserted therein and normally held in engagement by the spring keeper-pin *n*, which is secured in position by the nut *o*. The head B and contained parts are mounted upon a shaft *p* and held in position by nut *u*. The end of the keeper-pin *n* is pointed so that strain applied upon the stock-spindle will force the pin out of engagement and allow the same to turn half around, when it automatically reëngages the opposite orifice *i*, thus automatically locking the ankle-stocks and last in proper position for the operator to turn it half around, so that the shoe can be ironed by one operator and turned in position for the finishing operator, who applies the same without removing the shoe from the ankle-stock and last.

By means of this arrangement two operators—the ironer and finisher—can work at the same time, the finishing following the ironing. It has been found that the finishing immediately following the ironing when the upper of the shoe is still warm assists the dressing in drying and leaving it in better condition at the same time avoiding one handling of the shoe. Again by this method the ironer puts the shoe in position for the operation but he does not have to take it off of the jack. The finisher does this, and the finisher is saved the labor of putting the shoe and its last into position for dressing. Thus not only is this a saving of labor, but insures a neater and better finish in the application of the dressing.

Having described my invention, I claim—

1. In a shoe-ironing jack, a solid stock having a substantially central bore at one end to form a spindle-journal, an inclined bore extending longitudinally through the stock and terminating substantially centrally on the last end of the stock, a wedging-pin on the last end of the stock, an actuating device on the front end of the stock, and a rod extended through said inclined bore and connecting with said wedge, substantially as described.

2. In a shoe-ironing jack, a stock, a last provided with a keeper-pin hole, a keeper-pin on the last end of the stock consisting of a stationary slotted member with an inclined end, a movable coacting wedge engaging said inclined end, a lever on the front end of the stock, and a rod extended through said stock and slot and connecting the lever to the wedge member, substantially as described.

3. In a shoe-ironing jack, a stock, a last having a pin-receiving orifice, a clamp formed of a pin split longitudinally on an incline, one of the split sections being secured to the last end of the stock, a rod connected to the other split section and extended through the stock, and means on the other end of the stock connected to said rod for actuating said clamp, substantially as described.

In testimony whereof I have hereunto set my hand.

HARRY D. COFFMAN.

Witnesses:

J. A. EDGE,

C. U. ARMSTRONG.