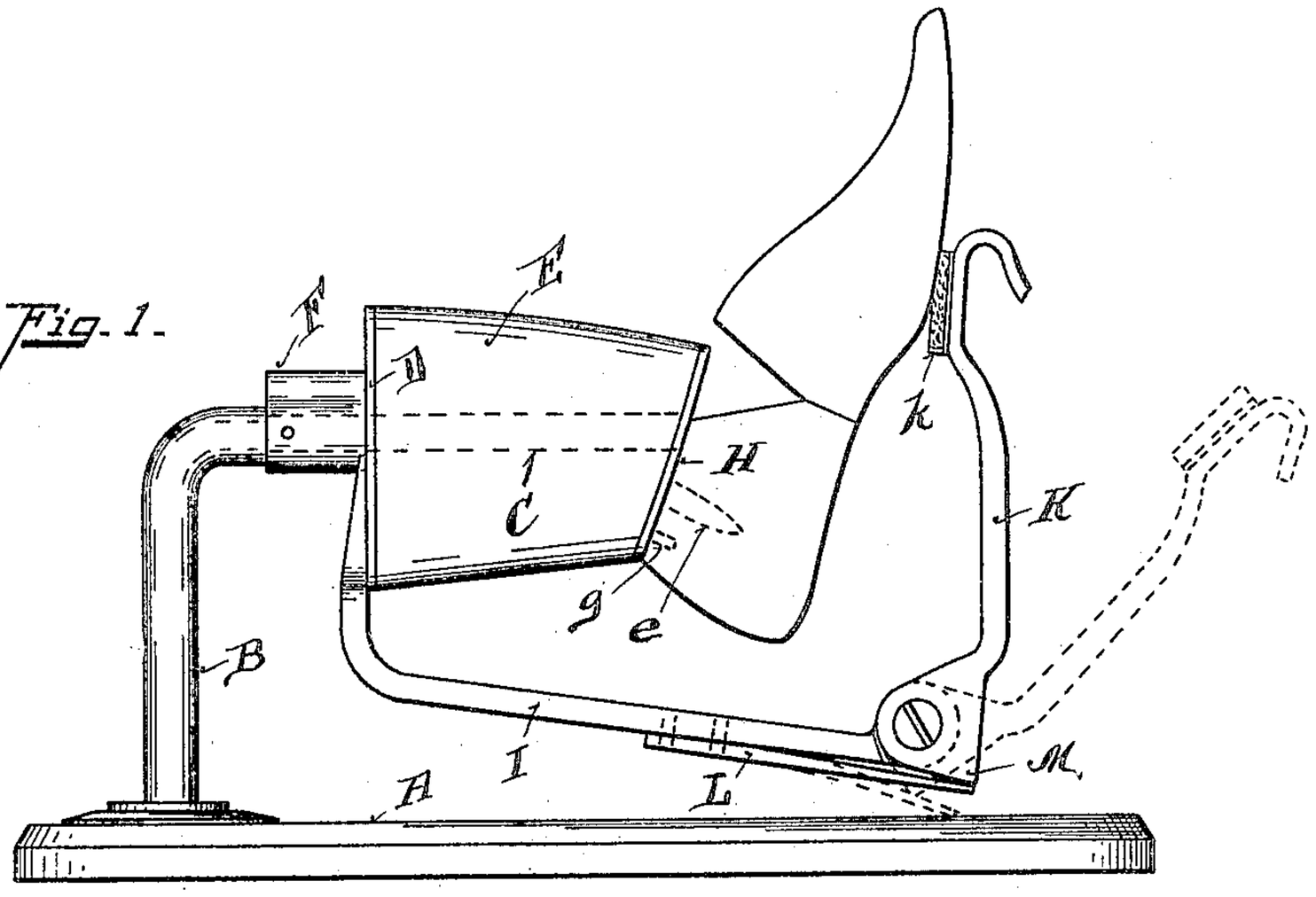
No. 821,018. PATENTED MAY 22, 1906.

H. D. COFFMAN.

SHOE IRONING JACK.

APPLICATION FILED SEPT. 19, 1904.

Fig. 1.



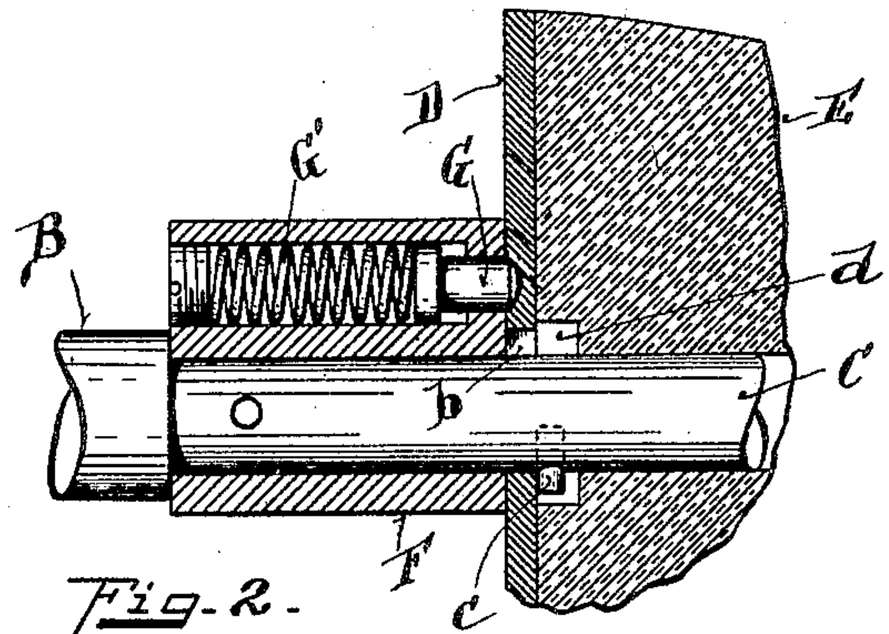


Fig. 2.

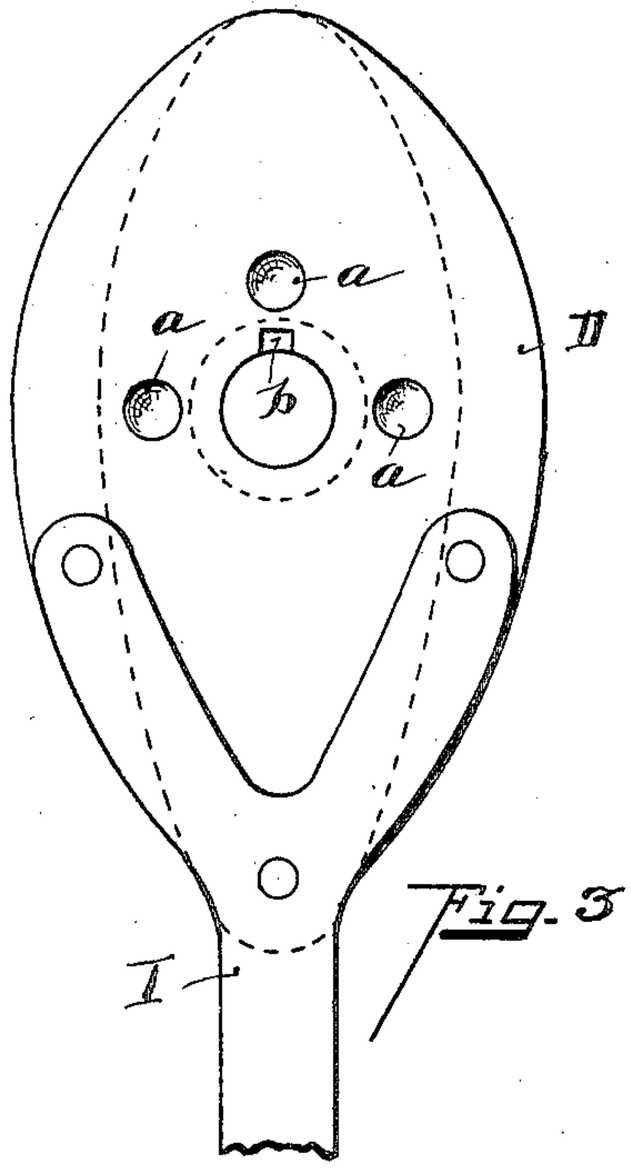


Fig. 3.

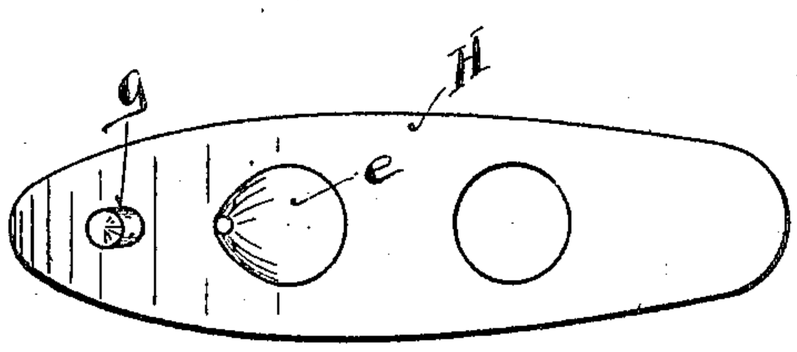


Fig. 4.

Witnesses

Olivier B. Kaiser

Lee O. Donnell

Inventor

Harry D. Coffman

By Wood & Wood

Attorneys

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. 821,018. Specification of Letters Patent. Patented May 22, 1906.

Application filed September 19, 1904. Serial No. 225,007.

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 which is primarily adapted for ironing, dressing, and finishing a shoe on the second last.

One of the objects of my invention is to provide a convenient means for ironing the shoe on the second last, having a proper-shaped stock and means for connecting it so as to hold the ankle portion of the shoe in position for ironing and dressing the shoe and allowing it to dry without removing the last, thus insuring a perfect shape.

Another object of this invention is to provide a suitable device for holding the shoe rigidly in position on the jack, together with means for easily removing the shoe.

The 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, showing the last in position with the shoe removed. Fig. 2 is a sectional elevation showing the device for locking the shoe-holder in position. Fig. 3 is a sectional elevation of the rear stock-plate and clamping-arm in section. Fig. 4 is a plan view of the front stock-plate.

A represents the base of the jack.

B represents a supporting-post rigidly secured to the base-plate. The top portion of the post is bent substantially at right angles to the vertical portion of the post and provided with a spindle C, upon which the stock is adapted to be rotatably adjusted.

D represents the rear stock-plate.

E represents the ankle-stock for the anchor-support, rigidly secured thereto.

F represents the sleeve fixed on the spindle independent of the stock and plate.

a (see Fig. 3) represents three locking indents countersunk into the face of the stock-plate D.

G represents a pin or keeper having a concave point seated in a recess *a*, formed in plate D, G′ a spring placed in a bore in the sleeve F, so that the keeper-pin will automatically engage one of the indents *a* and will be automatically released successively from said indents under torsional strain applied to said last, so that the last may be readily turned to various positions to the convenience of the workman.

It is to be understood that the stock E is to be placed on the spindle C and locked against longitudinal movement thereon except at the position at which the stock has to be turned relative to the spindle for attaching and detaching the stock. To accomplish this, the stock is provided with a substantially central longitudinal bore to receive the length of the spindle, as indicated in dotted lines, Fig. 1. At the inner end of the stock the longitudinal spindle-receiving bore is enlarged to form the annular recess *d* (see Fig. 2) of greater diameter than the spindle. The plate D is formed with a similar spindle-receiving bore which is alined with the bore of the stock. The peripheral edge of this orifice in plate D has formed therein the notch *b*. (See Figs. 3 and 4.) The spindle C is provided with a radial pin *c* a suitable distance from the end of the spindle, said pin being of sufficient length to pass through the peripheral notch *b*. It is obvious that if the stock be presented endwise to the spindle with the notch *b* alined with the pin *c* the pin may be thus caused to enter the recess *d* in rear of the plate D and that when the stock is turned to bring one of the indents *a* in engagement with the keeper-pin G the pin *c* will occupy a position behind the unnotched portion of the peripheral edge of the spindle-receiving bore in plate D. Thus the stock may be adjusted to selected positions around the spindle C without danger of longitudinal displacement.

H represents the front stock-plate. The front end of the stock and the stock-plate are shaped to fit the top face of the last.

e represents a pin rigidly secured to the plate H and of the size and shape to fit the usual vertical hole in the heel of the last.

g represents a second pin entering a second hole in the last, and this is the preferred form of making a rigid engagement of the last to the plate H.

In order to clamp the last rigidly against the top and plate, I provide the following devices: I represents a bent arm forked at the rear end and rigidly secured to the plate D. To the forward end of the arm I is pivoted a clamping-arm K. L represents a flat spring-bar rigidly secured to the arm I, as shown in Fig. 1. Its free end projects forward and bears against the face of the cam M, which is

formed on the heel of the clamping-arm K. This spring holds the clamping-arm normally in rigid position, so that the pad *k* would bear against the sole of the shoe. When the clamping-arm K is moved into position, (shown in dotted lines, Fig. 1,) the cam has depressed the spring and the point of the cam has been carried back upon the spring-bar sufficiently past the center or pivot to automatically retain the arm in the open position until the same is tripped, when the spring will force the arm back into its clamping position.

The method of operating the jack for ironing and dressing the shoe is as follows: After a shoe has been lasted and the sole and upper are sewed together and the sock-lining inserted the shoe, with the second last therein, is attached to the stock E and the clamp-arm thrown up. The ankle portion of the shoe is stretched around the stock, and it is then ironed. It will be readily seen that the shoe may be turned three-fourths of a revolution, the spring-actuated keeper-pin yielding so that the operator can turn the same and hold it in any desired position for moving the upper of the shoe on the last and stock. The stock, last, and clamp turn as a unit on the spindle C as a center. Locking-sleeve F being fixed to the spindle serves to lock under a suitable tension the said rotatable element in different positions relative to the spindle center. The last may be readily detached from the stock and the stock may be readily detached from the spindle.

When the shoe has been ironed, a dressing is applied with the shoe and last still in position on the jack, after which they are removed from the jack to the drying-bench, the last remaining in the shoe and dried before removing the second last. In this way a constant use of jack can be had.

It will be observed that the stock E is readily removable from the spindle C for the purpose of changing to a different size; but the stock here shown is adapted not only to the ironing of all sizes of ladies' shoes, but to take all of the different sizes of second lasts, as well as all of the different makes of second lasts.

It has been found by experience that quite a saving of time in the ironing and finishing of a shoe is made from the use of this jack, also that a neater finishing of a shoe is obtained and the proper shape retained, because the wrinkles and creases are ironed out and the shoe left smoother and neater in appearance with the second last in than when the second last is taken from the shoe, as is the common practice.

It will be noted that the spring-controlled indent and detent devices formed between the abutting surfaces of the sleeve F and the stock E automatically interlock at predetermined positions of rotation of the stock on the spindle, constituting a provisional lock for the stock sufficient to hold it in position on the spindle for the purposes of ironing, but also adapted to yield and disengage when the operator applies torsional strains to the stock for provisionally locking the stock in a different position of rotatable adjustment.

Having described the invention, I claim—

1. In an ironing-jack for shoes, a spindle, a stock longitudinally bored to fit the spindle, the inner end of said stock-bore being enlarged to form an annular recess, a plate secured to the stock, provided with a spindle-receiving bore alined with the bore of the stock, one edge of said plate-bore having a notch, a radial pin on the spindle adapted to pass through said notch when alined and enter into said annular recess, a spring-controlled keeper-pin supported on the spindle, said stock-plate having indents adapted to be engaged with the keeper-pin, when the stock is rotated, a last, and means for securing the last to the stock, substantially as described.

2. In combination with a shoe-jack having a supporting-spindle, an ankle-stock adapted to support the last, journaled on said spindle, a supporting-arm connected to said stock and projecting forward under the last, and a spring clamping-arm journaled to said supporting-arm, and adapted to engage the sole of the shoe supported on said last, substantially as described.

3. In a shoe-ironing jack, a spindle, an ankle-stock detachably journaled thereon, means for holding said stock against longitudinal movement, means for locking said stock in selected positions of rotation, a last, alining devices between the meeting faces of the last and stock, and clamping mechanism adapted to engage the opposite faces of the last and stock, substantially as described.

4. In an ironing-jack, a spindle, an ankle-stock detachably journaled thereon, a sleeve fixed to the spindle, a lock between the spindle and stock permitting the rotation of the stock without longitudinal movement, a spring detent and indents between the sleeve and stock, adapted to hold the stock temporarily in selected positions of adjustment and to automatically engage and disengage under manual torsional strains, substantially as described.

In testimony whereof I have hereunto set my hand.

HARRY D. COFFMAN.

Witnesses:

H. V. RODGERS,

J. M. BAKER.