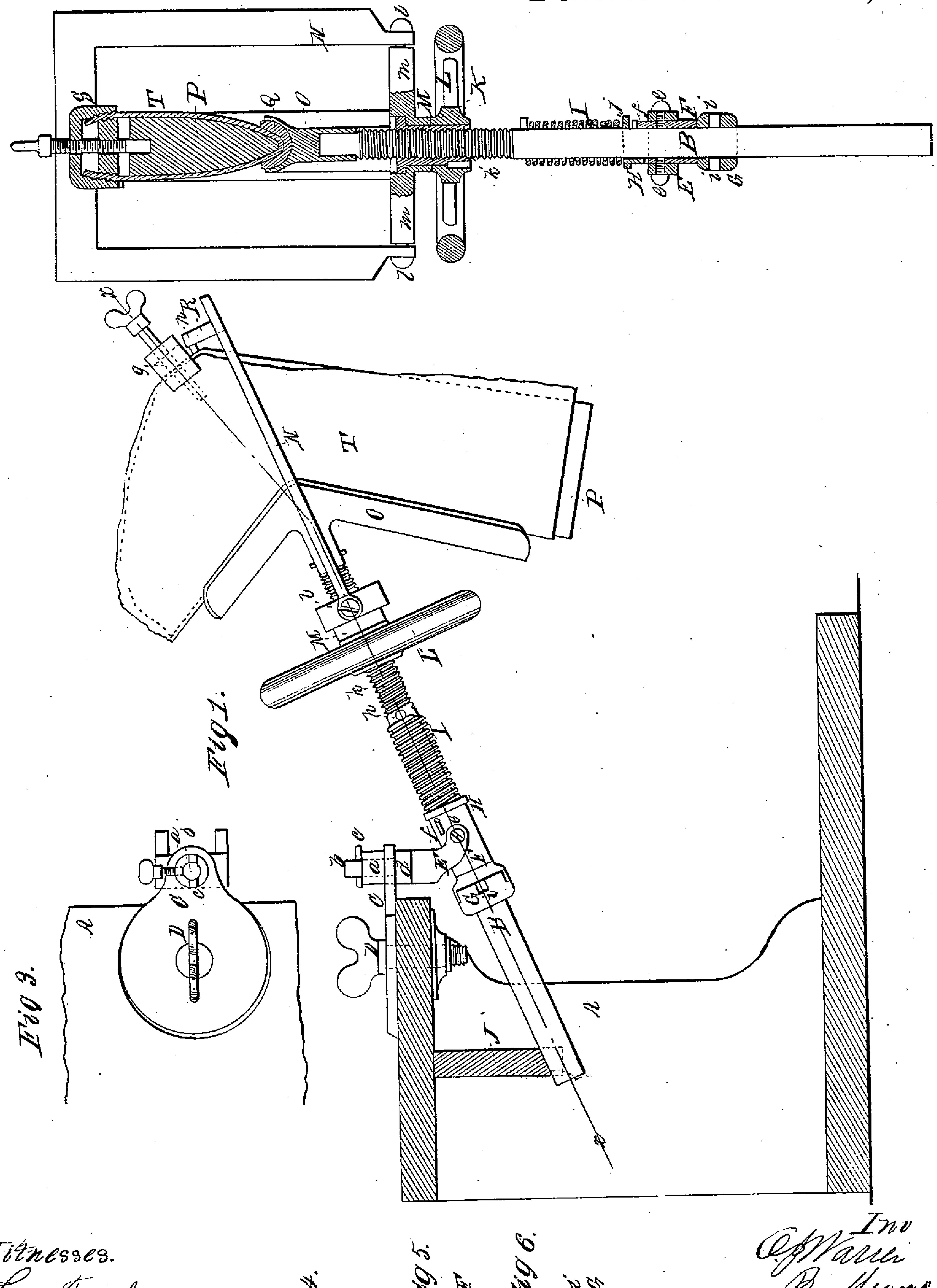
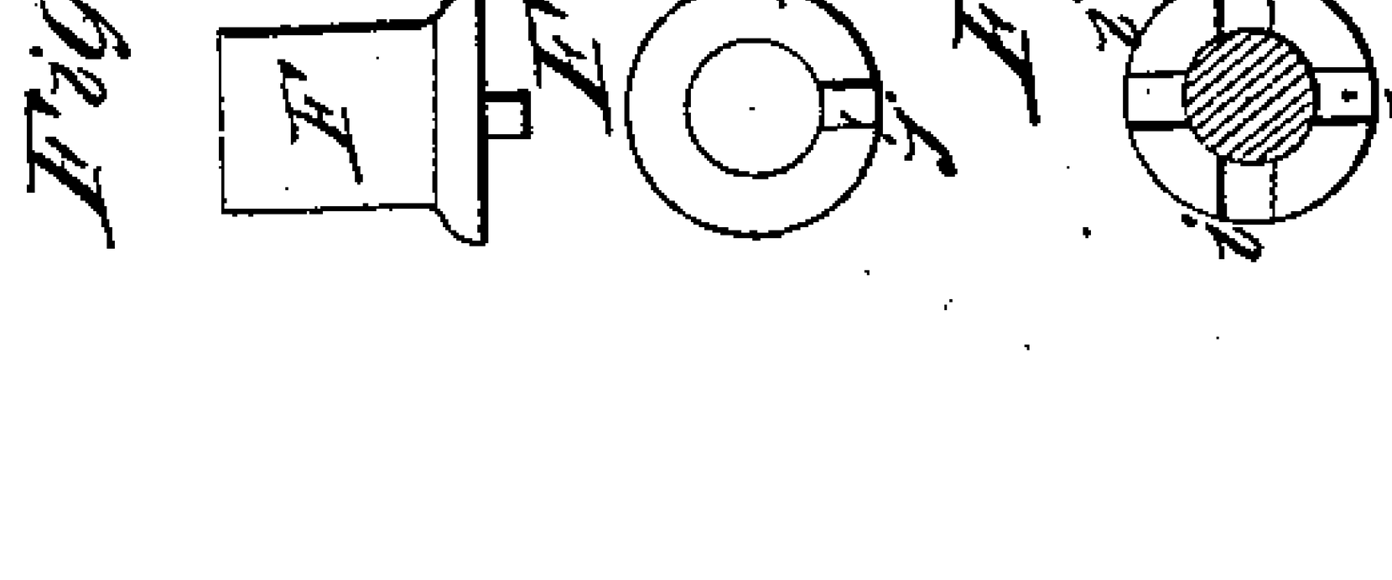
O. J. Warren

Crimping Leather

№ 53508. Patented Mar. 27, 1866.





Witnesses.
Theo Tusch
Wm B Comington

Inv
O J Warren
By Munn & Co
Attys

UNITED STATES PATENT OFFICE.

O. J. WARREN, OF NEW YORK, N. Y.

IMPROVEMENT IN CRIMPING BOOTS.

Specification forming part of Letters Patent No. **53,508**, dated March 27, 1866; antedated March 9, 1866.

To all whom it may concern:

Be it known that I, O. J. WARREN, of the city, county, and State of New York, have invented a new and Improved Machine for Crimping Boots; and I do hereby declare that the following is a full, clear and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of my invention; Fig. 2, a section of the same, taken in the line *x x*, Fig. 1; Fig. 3, a plan or top view of a swivel-support pertaining to the same; Figs. 4, 5, and 6, detached views of a lock or catch to control the adjustment of the shaft of the device.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved machine for crimping boots and shoes, and is designed for holding the leather snugly over or on the edge of the form and preventing the leather from wrinkling or corrugating on said edge while being stretched over the form during the process of crimping.

The invention also affords facilities in turning the form so as to render all parts of the leather on the form accessible to the operator and facilitating, generally, the crimping operation throughout, as hereinafter set forth.

A represents a bench to which my invention is applied, and B is a shaft connected to the bench as follows: A horizontal plate, C, is secured to the top of the bench near its edge by a screw, D, one end of the plate projecting beyond the edge of the bench and provided with an upright tube or socket, *a*, at the projecting end, through which a pintle, *b*, passes, and is sustained therein by a pin, *c*, the pintle being provided with a shoulder, *d*, which bears against the under side of the plate. The lower end of the pintle *b* has a fork, E, attached to it, in which a sleeve, F, is secured by pivots, *e e*, the sleeve being allowed to swing freely on said pivots, and through said sleeve the shaft B passes and is allowed to turn freely in it. The shaft B has a hub, G, secured firmly upon it against which the lower end of the sleeve F bears, and on the shaft above sleeve F there is fitted a loose collar, H, having an oblong slot, *f*, made longitudinally in it to receive a pin, *g*, on shaft B, and between the outer end of the collar H and a pin, *h*, in shaft B, a spiral spring, I, is placed, said spring being coiled around the shaft. This spring I has a tendency to keep the hub G in contact with the lower end of the sleeve F, as will be fully understood by referring to Fig. 1.

The upper or face side of the hub G has a series of notches, *i*, made in it, (four are shown in Fig. 6,) and the lower end of the sleeve F is provided with a projection, *j*, which fits in any one of the notches *i* and prevents the shaft B from turning casually. The four notches, however, admit of the shaft B being turned in four different positions, and the shaft may be turned by pressing it down so that the notch in which the projection *j* fits is free from the latter, and when the shaft is turned the spring I will bring back the shaft, the latter being relieved of pressure, so that the projection will catch or fit into another notch, *i*.

The collar H serves as a washer between the upper end of the sleeve and the spring, and said collar always turns with the shaft, but does not prevent the latter being pressed down to free the notches *i* from the projection *j*, as the oblong slots *f* admit of the pin *g* moving therein a requisite distance to effect that result.

The inner end of the shaft B bears against a pendant, J, at the under side of the top of the bench A, the length of the pendant giving the proper degree of inclination to the shaft. This pendant may be made adjustable, if desired, in order that the inclination of the shaft may be varied.

On the shaft B there is cut a screw, *k*, on which a nut, K, is fitted, and L is a hand-wheel, the hub of which is the nut K. On this nut K there is fitted loosely a collar, M, to which a rectangular frame or yoke, N, is attached, and on the end of the shaft B there is secured a curved or bent bar, O, which is grooved longitudinally to receive the edge of the form P, the bar O being of such a shape as to correspond to the shape of the edge of the form which it receives. (See Fig. 1.)

The groove of the bar O has a strip of india-rubber, Q, fitted in it, and the yoke N is connected by pivots or screws *l* to arms *m*

m projecting from the collar M, which admits of the yoke being turned over the form, as shown in Figs. 1 and 2, or moved off free from it. The outer end of the yoke N is provided with a short horizontal arm, R, having a pin, *n*, projecting from it.

S is a clamp, which is applied to the form P at the angle at its outer edge, to draw the leather T over the form. This clamp may be constructed in the usual or in any proper manner.

The device is used as follows: The leather T is placed on the form P and adjusted properly to it, and the inner edge of the form fitted in the groove of bar O, the yoke N being then turned over the form, with the pin *n* fitted in a hole in the outer edge of the form. The hand-wheel L is then turned, and the nut K on the screw *k* forces or draws the yoke N inward and presses the inner edge of the form with the leather upon it into the groove of bar O. The clamp S is then applied and the leather stretched over the form in the direction indicated by the arrow 1, and the operator crimps or rubs the leather from the bar O outward in the direction indicated by the arrows 2, thereby removing all wrinkles and corrugations. The form is turned from time to time by turning the shaft B, as previously explained, so that all portions of the leather, at both sides of the form, will be accessible. The yoke N may also be turned independently of the nut K, so as not to interfere with the crimping operation. This is done by the collar M, placed loosely on nut K.

In consequence of having the groove of the bar O lined with india-rubber, Q, the leather is prevented from wrinkling or becoming corrugated on the inner edge of the form; for the rubber, while pressing firmly on the leather on the inner edge of the form, will yield or give to a certain extent with the leather while the latter is being stretched, and this effectually prevents the wrinkling alluded to.

The form, it will be seen, in consequence of the shaft B being suspended or hung, as described, to the bench, may be adjusted to the right or left, as convenience may require, during the crimping operation.

I do not claim, broadly, the application of india-rubber to boot-crimping devices irrespective of the particular adaptation of the rubber to effect the end herein described, but

I do claim as new and desire to secure by Letters Patent--

1. The lining of the bar O with india-rubber, Q, when the same is made to serve the office of a holder, and is used in connection with a form, P, applied to the rubber through the medium of a yoke, N, or its equivalent, substantially as and for the purpose herein set forth.

2. The nut K on the screw *k* of shaft B connected with the yoke N through the me, dium of the collar M, for the purpose of allowing the yoke to be turned independently of the nut, for the purpose specified.

3. The sleeve F on shaft B, provided with a projection, *j*, in combination with the notched hub G, collar H, and spring I, substantially as and for the purpose set forth.

4. The coupling by which the shaft B is attached to the bench, the same being composed of a plate, C, secured to the bench by a screw, D, and provided with a socket, *a*, to receive a pintle, *b*, of a fork, E, which is secured to the sleeve F by pivots *e e*, when said coupling, thus constructed, is used in connection with the boot-crimping apparatus attached to shaft B, and for the purpose specified.

O. J. WARREN.

Witnesses:

M. M. LIVINGSTON,

C. L. TOPLIFF.