

C. J. ADDY.

Machines for Burnishing Heels of Boots and Shoes.

No. 151,819.

Patented June 9, 1874.

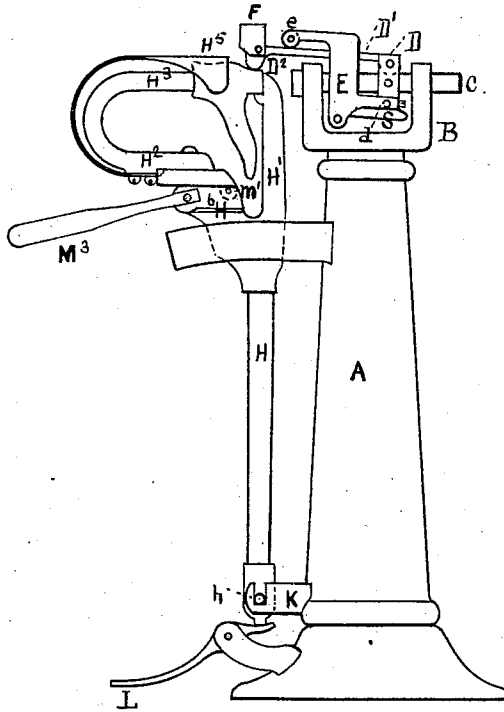


Fig. 1.

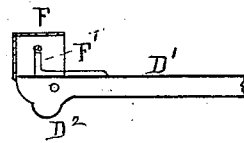


Fig. 2.

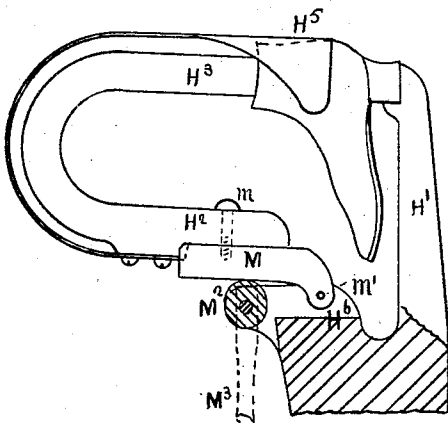


Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

CHARLES J. ADDY, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN MACHINES FOR BURNISHING HEELS OF BOOTS AND SHOES.

Specification forming part of Letters Patent No. **151,819**, dated June 9, 1874; application filed December 3, 1873.

To all whom it may concern:

Be it known that I, CHARLES J. ADDY, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Machines for Burnishing Boots and Shoes, of which the following is a specification:

The nature of my invention consists, first, in a device attached to the shank of the burnisher by which the pressure on the burnisher is equalized, so that the same may press equally at all parts of the stroke, and upon all parts of the heel or other part that is to be burnished; second, in improvements in the jacking device.

Figure 1 is an elevation of my machine. Fig. 2 shows an enlarged view of the burnisher and its heating device. Fig. 3 is an enlarged view of the upper part of the jack.

Upon any suitable standard like A I attach the head-block B, in which I hang the rocking shaft C. Motion may be communicated to this shaft C by any suitable means, it being necessary that the motion communicated be sufficient to throw the shaft through about two-thirds of a revolution—that is, enough to cause the burnisher D², which is attached to it, as will be explained, to move entirely around the blacked edge of the heel. To the shaft C the head-block D is permanently affixed, as shown in Fig. 1. At the upper end of this head-block D I pivot the shank D¹ of the burnisher D², so that the burnisher may be free to swing up and down. E is a bent lever, pivoted at *d*, on the lower end of the head-block B, Fig. 1. The upper end of this lever E is provided with a small roller, *e*, which rests upon the shank D¹ of the burnisher D². S is a spring, operating on the lever E to force it down, and thus to depress the burnishing-shank D¹, and through it the burnisher D². By arranging the bent lever E as described, and swinging on the pivot *d*, it will be seen that as the burnisher rises to do the higher part of its work the roller *e* will run back on the lever D¹, and thus lessen the leverage exerted by E on the shank of the burnisher, and thus lessen the effect of the spring S on the burnisher. This device is necessary, from the fact that as the burnisher rises the force required to bend the spring S

increases, this increase being compensated by the moving back of the point of contact at *e*, and thus lessening the leverage of the lever E. F, Figs. 1 and 2, is a metallic hood. Connected with the burnisher D², within this hood, I place a burner, F¹, which serves to heat the burnisher. By adjusting the height of this burner the temperature of the burnisher can be regulated at will. The jacking device consists of a standard, H H', which swings on a pivot, *h*, in the arm K, Fig. 1. This arm K furnishes a fixed support for the jack, and holds it in such a position that the heel of the shoe will be held at a proper point for the action of the burnisher for that part of the edge of the heel that is nearest the vamp where the heel is largest. As that part of the heel near the top lift, which is of smaller circumference, is brought under the burnisher, the radius of the arc of motion of the burnisher D² is so much lessened that the stroke of the burnisher is not long enough to reach the lower part of the edge of the heel. To obviate this difficulty I place the foot-lever L under the end of the jack H, as shown in Fig. 1. By placing the foot on this lever L the jack is thrown up, so as to bring the heel sufficiently high for the stroke of the burnisher to reach to the breast of the heel. Heretofore the jack has been set so that the stroke of the burnisher would extend low enough to reach the breast of the heel at the top lift. Then, when the large part of the heel was being burnished, the burnisher stroke would reach below the breast of the heel and injure the edge of the sole of the shank. H² H³ is a goose-neck, the upper end of which, H³, holds the boot or shoe. The lower end of this goose-neck is pivoted by *m* to the swing-block M, Fig. 3, so that the goose-neck and shoe or boot may be swung on the vertical axis of *m*, so that the boot or shoe may be taken off. H⁵ is a clasp or shield, which projects over the shoe to prevent its being taken off except the goose-neck be first turned on the axis *m*. The object of this is to cause the machine to be self-recording, as the recording device is located in *m*, and is operated by the turning of the goose-neck, as above. The block M is pivoted by *m*¹ to H⁶, as shown in Figs. 1 and 3, so that the goose-neck H² H³ can be thrown

up and forward by means of the eccentric M², which is operated by the lever M³, Fig. 3. By throwing up M³ the goose-neck H³ is thrown forward, so as to press the boot or shoe hard against the standard H¹, and hold it firm while being burnished.

I claim as my invention—

1. The combination of the lever E and spring S with the burnisher shank D¹, operating substantially as described, and for the purpose set forth.

2. The combination of the jack-support H, the arm K, and lever L, with the burnishing device D², lever D¹, block D, and shaft C, all

operating substantially as described, and for the purpose set forth.

3. The shield H⁵, in combination with the goose-neck H² H³, substantially as described, and for the purpose set forth.

4. The combination of the block M and the cam M² with the goose-neck H² H³, substantially as described, and for the purpose set forth.

CHARLES J. ADDY.

Witnesses:

WILLIAM EDSON,
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