

H. W. DANFORTH.

Adjustable Heel-Plates for Heel Burnishing-Machines.

No. 153,319.

Patented July 21, 1874.

Fig. 1.

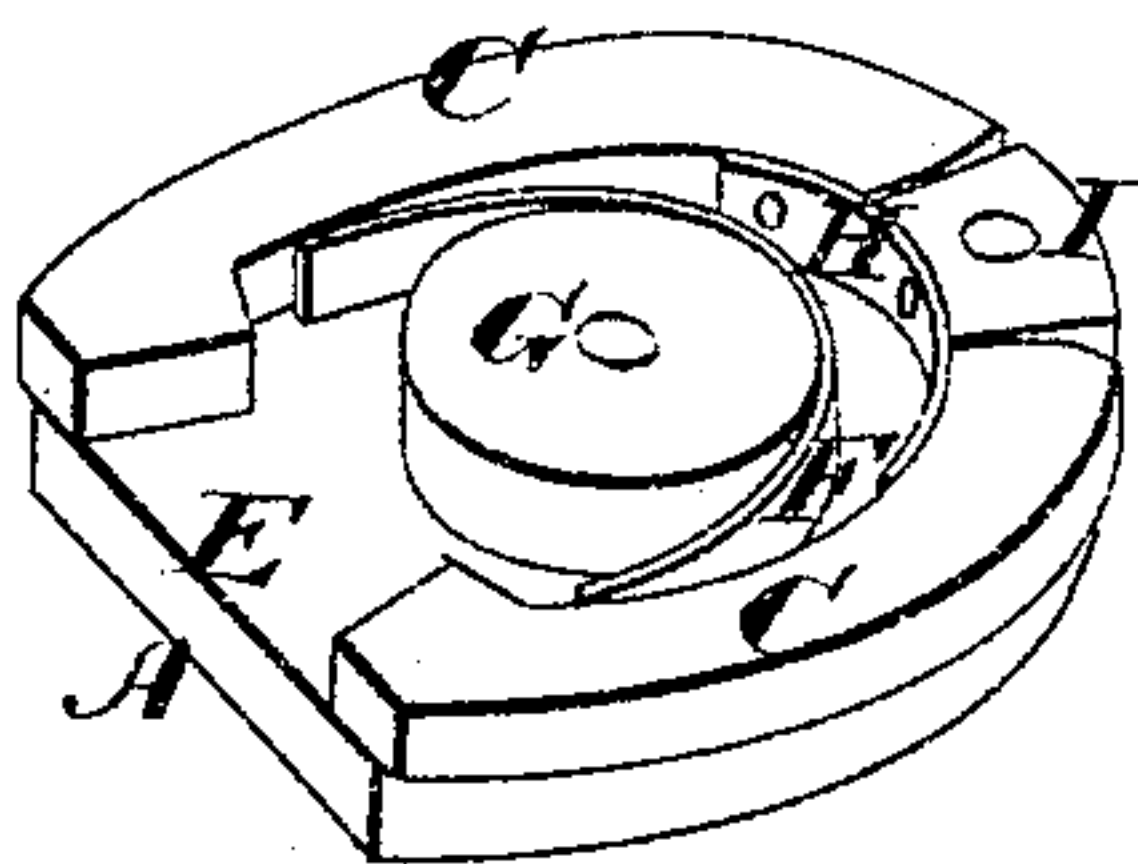


Fig. 2.

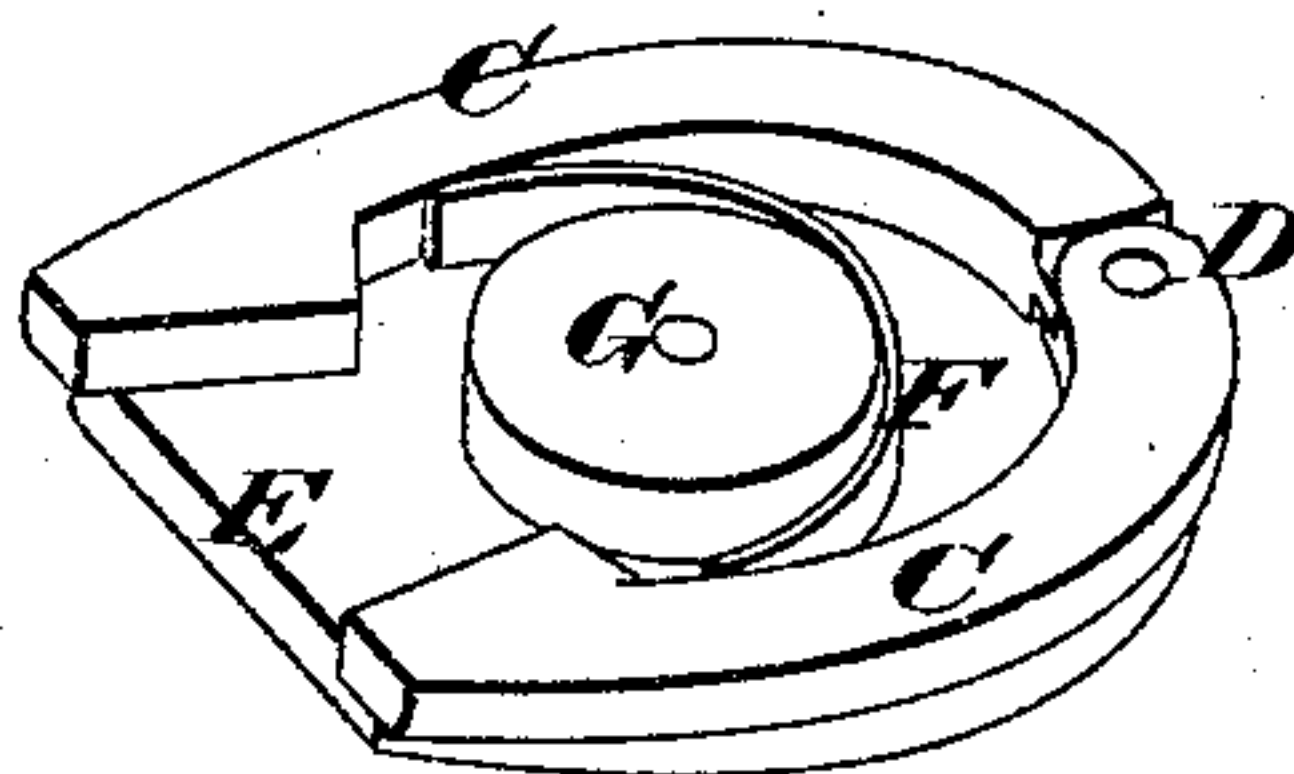
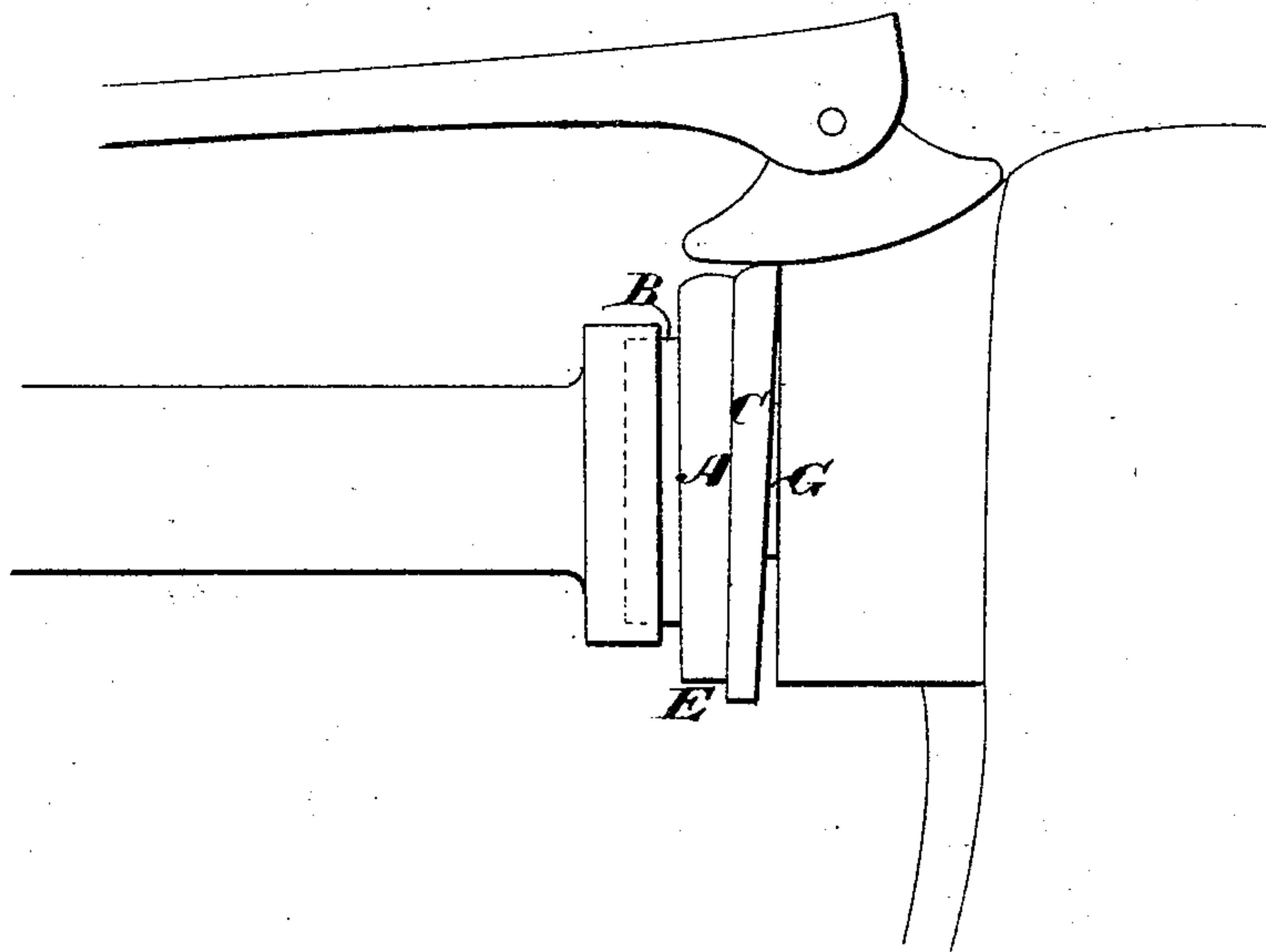


Fig. 3.



Witnesses.

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HORACE W. DANFORTH, OF LYNN, MASSACHUSETTS.

IMPROVEMENT IN ADJUSTABLE HEEL-PLATES FOR HEEL-BURNISHING MACHINES.

Specification forming part of Letters Patent No. **153,319**, dated July 21, 1874; application filed May 25, 1874.

To all whom it may concern:

Be it known that I, HORACE W. DANFORTH, of Lynn, in the county of Essex and State of Massachusetts, have invented a new and Improved Adjustable Top-Lift Plate for Heel-Burnishing Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings forming part of this specification, in which—

Figure 1 is a perspective view of the top-lift plate detached from the machine. Fig. 2 is a similar view of a modification; and Fig. 3 is an edge view, showing its application to a heel.

Similar letters of reference in the accompanying drawings indicate the same parts.

The object of this invention is to provide a heel-burnishing machine with an adjustable top-lift plate adapted to guide the burnishing-tool, and at the same time prevent it from turning the edge of the heel and forming a "burr" thereon. To this end the invention consists, first, in providing the face of the plate with two yielding guide-arms, held apart or expanded by a spring, for the purpose of protecting the edges of the top lift, and to adapt the plate to heels of different sizes and forms. It also consists in the provision of means for supporting the shoe-heel upon the plate and preventing it from interfering with the movements of the yielding guide-arms.

In the accompanying drawings, A is the heel-plate, corresponding in shape to the top lift of a boot or shoe heel, and provided, upon its back, with a tongue, B, adapted to slide into a socket in the outer clamping-plate of a jack, to secure the plate thereto. C C are the curved arms, pivoted together at one end upon the face of the plate, as shown at D, so that their free ends shall extend to or beyond the breast E of the plate, while their outer edges follow the curvature thereof, projecting somewhat beyond it. The arms are expanded or held apart by a spring, F, secured to a box, G, cast or otherwise secured centrally upon the face of the plate between the arms. The heel to be burnished rests upon this boss, which is made of suffi-

cient thickness to take the pressure of the heel off the curved arms, and allow them to turn laterally upon their pivot.

When the burnishing-machine is in operation, the burnisher bears upon the edge of the heel and against the curved edges of the arms, which yield under its pressure until their edges are flush with edge of the top lift of the heel. In this position they serve to guide the burnisher around the heel, while the tension of the spring holds them against the burnisher and prevents it from turning over the edge of the top lift, or spreading it out so as to form a burr. In other words, the pressure of the burnisher forces the arms inward until it finds a solid bearing against the edge of the heel, and the spring keeps them expanded to bear against the burnisher and protect the edge of the top lift.

By constructing the arms to yield under the pressure of the burnisher, the plate is adapted for use in burnishing heels of all forms and sizes, affording a complete guide for the burnisher, and a protector for the edges of the top lifts.

I propose to construct the arms of brass or other soft metal, to prevent them from scratching and thereby injuring the face of the burnisher.

I also propose to use the plate upon all classes of burnishing-machines, whether those in which the shoe or heel is moved, or those in which it is held stationary.

Instead of hinging the arms C together upon a common pivot, they may be attached to an additional spring, H, as shown in Fig. 1, which is firmly secured at or near the center to a short block, I, upon the heel-plate. The method of connecting the arms, however, may be varied in many different ways without departing from my invention.

Having thus described my invention, what I claim is—

1. A top-lift plate for heel-burnishing-machines, provided with yielding guide-arms, to protect the edge of the top lift and adapt the plate to heels of different sizes, substantially as described.

2. A top-lift plate for heel-burnishing ma-

chines, provided with yielding guide-arms and a central boss, to support the heel and prevent it from binding the yielding arms, substantially as described.

3. The combination of the spring F with the pivoted curved arms of the top-lift plate, substantially as described, for the purpose specified.

4. The combination, in the top-lift plate, of the spring F with curved side arms, attached by a separate spring to each other, substantially as described.

HORACE W. DANFORTH.

Witnesses:

JAMES W. BROOKS,
ARTHUR E. JONES.