

J. K. BLANCHARD, F. S. HUNT & A. C. CAREY.
Machine for Burnishing Shanks for Boots and Shoes.
No. 127,838. Patented June 11, 1872.

Fig. 2.

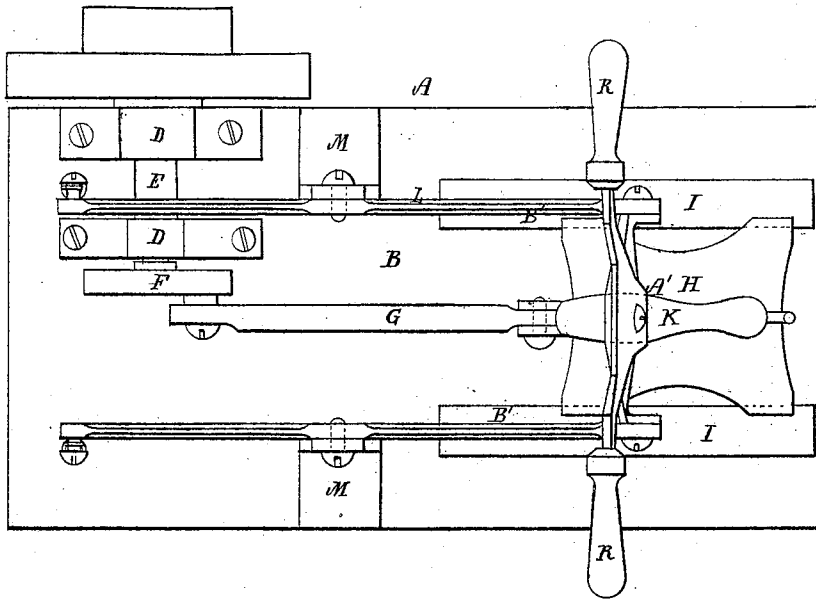
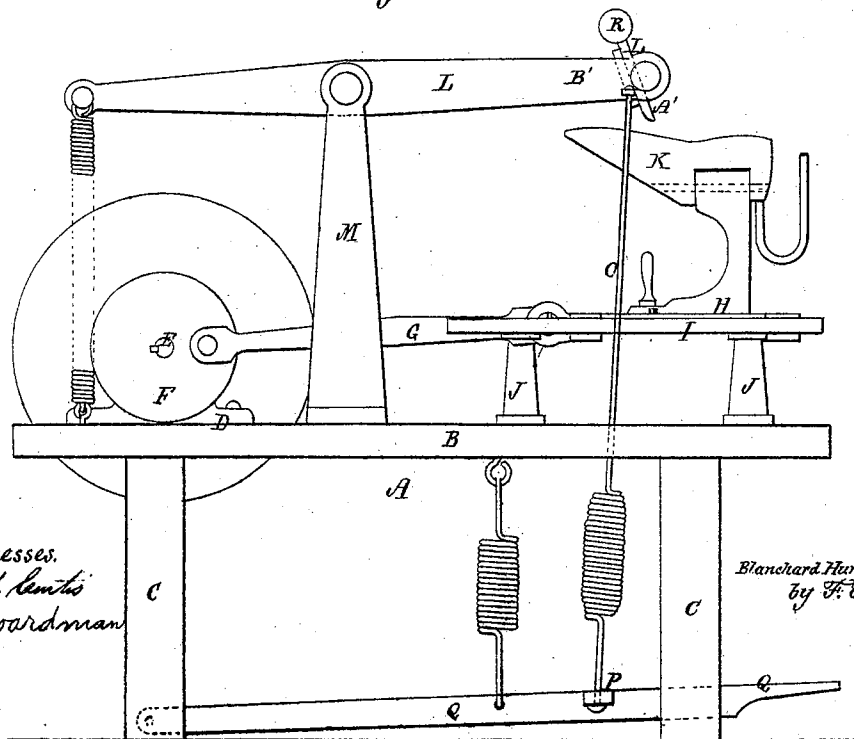


Fig. 1.

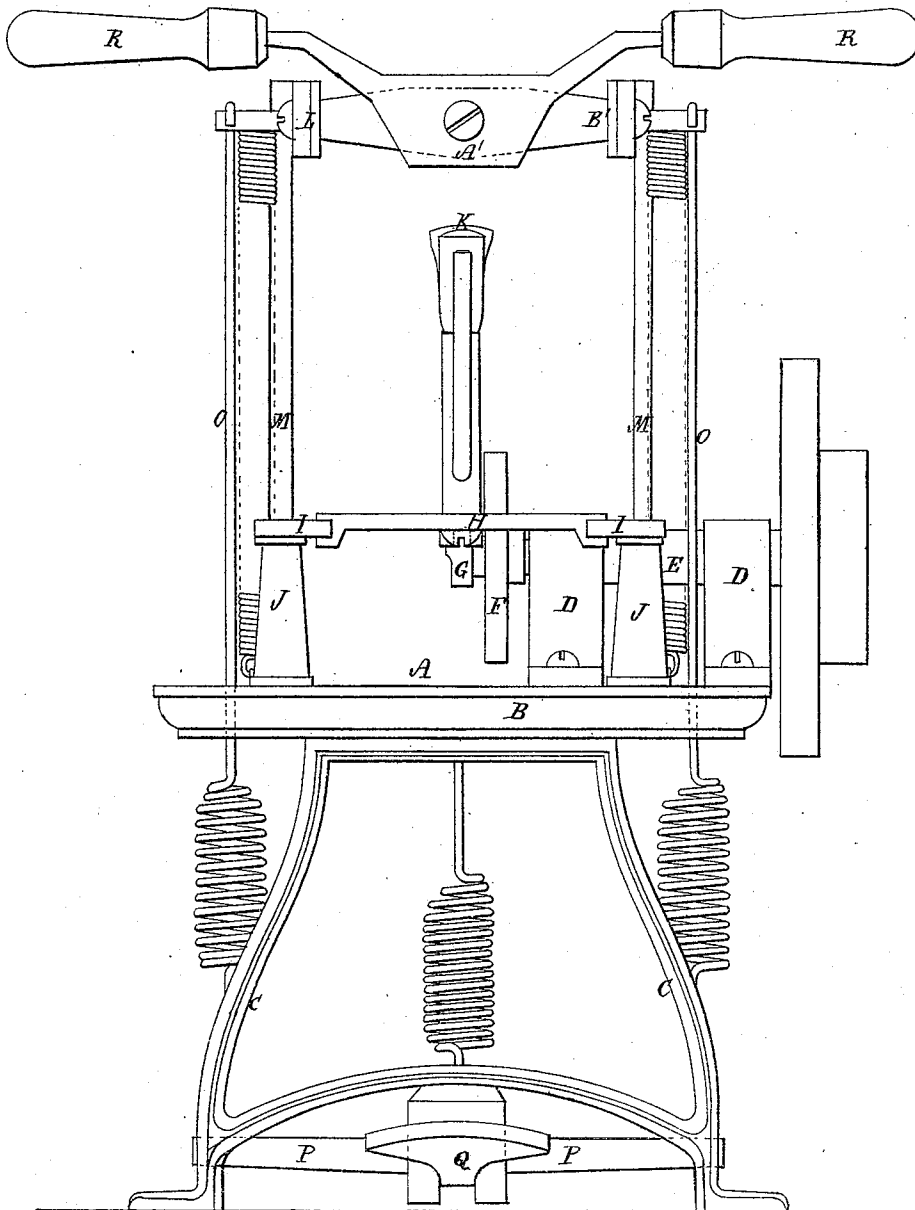


Witnesses.
H. A. Smith
W. E. Boardman

Blanchard Hunt & Carey.
by H. Curtis
Att'y.

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Fig. 3.
Enlarged.



Witnesses.
H. A. Smith
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UNITED STATES PATENT OFFICE.

JAMES K. BLANCHARD AND FRED. S. HUNT, OF LYNN, AND AUGUSTUS C. CAREY, OF MALDEN, ASSIGNORS TO DEAN PEABODY, TRUSTEE, OF LYNN, MASSACHUSETTS.

IMPROVEMENT IN MACHINES FOR BURNISHING SHANKS FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. 127,838, dated June 11, 1872.

Specification descriptive of certain Improvements in Machinery for Burnishing or Polishing the Shanks of Boot and Shoe Soles, invented by J. K. BLANCHARD and F. S. HUNT, of Lynn, Essex county, Massachusetts, and A. C. CAREY, of Malden, Middlesex county, State of Massachusetts.

These improvements have their origin in certain machinery for burnishing the shanks of boot and shoe soles, which is described and claimed in Letters Patent of the United States, numbered 124,479, and issued to us on the 12th day of March, 1872; the elementary features of which patented machine consist in a jack for receiving and supporting a boot while its sole-shank is undergoing the burnishing process and a heated burnishing-tool traversing the shank in long reciprocations, the said tool being combined with a spring-treadle, whereby it may act upon the shank with any desired pressure, and the boot-supporting last being pivoted horizontally to its post in order that it may be rocked to either side to present the burnishing-tool to the entire surface of the shank. The organization of these elements in our patented machine is such that the boot remains stationary while the burnishing-tool reciprocates over its sole-shank; and we have found that under some conditions it is preferable to move the boot while the burnishing-tool remains stationary, or to move both boot and tool.

It is in this adaptation of the elements of the machine that our present improvements mainly consist, and in carrying them into practice in one form—by moving the boot while the tool remains stationary—we proceed as follows, reference being had to the accompanying drawing, in which—

Figure 1 is a side elevation, Fig. 2 a plan, and Fig. 3 an end elevation, of a machine embodying our invention.

In this drawing, A represents a bench or table of suitable form, whereof B is the operating platform or tablet; CC, its legs or standards. At the rear end of the tablet B we erect a suitable box or bearing, D, and mount within the same a horizontal transverse shaft, E, to one face of which we connect, by a suitable

crank or crank-wheel, F, one end of a pitman, G, the opposite end of such pitman being in turn pivoted to the rear end of a horizontal reciprocating carriage or slider, H, which traverses horizontal guides or ways I I, mounted upon posts J J, which are erected upon the front end of the tablet B. The pitman G, by the rotation of the crank-wheel F, effects longitudinal reciprocations of the carriage H, and of the boot-supporting last K, which is carried by it, as represented in the drawing. The burnishing-tool A', as herein shown, is attached to the front extremity of an oscillating beam or lever, L, whose forward extremity is forked or open, as shown at B', and which is fulcrumed at about its center to the top of a standard, M, which springs from the rear end of the tablet B, the height of this standard being such that the said burnishing-tool stands above the last K, and directly over it. The outer end of the lever L is connected with the tablet B by a coiled spring or its substitute, which serves to elevate the tool A' above the boot, while to the forward ends of such arm we connect the upper ends of two rods, o o, whose lower ends in turn are connected to a horizontal cross-bar, P, which makes part of a treadle, Q, disposed below the tablet B, the connection between the rods and treadle being an elastic one, in order that the burnishing-tool when depressed upon the boot-sole by the treadle, may accommodate itself to the irregularities of the outline of such sole. The burnishing-tool A', before named, is pivoted at its center to the forward end of the lever L, or the open or forked head B' of the same, and is provided at each end with a handle, R, by means of which the workman guides the tool. The purpose in pivoting the burnishing-tool to its support, as stated, is to enable it to be rocked laterally, and presented to all parts of the shank as the latter reciprocates below it. The last K may also be rocked upon its support for a like purpose; but as it will in many instances move quite rapidly, the best method will, undoubtedly, be that of pivoting the tool as stated.

The preliminary operation of jacking the boot in this machine is similar to that explained

fully in our patent before referred to. Having jacked the boot, the machine is put in motion, which causes the boot to travel in a reciprocating rectilinear path below the burnishing-tool. The workman now depresses (by means of the treadle Q) the burnishing-tool upon the sole, which effects a series of strokes upon the blacked portion of its shank for the entire length thereof, the tool or last, or both, being rocked laterally to adapt the tool to the entire surface of the said blacked portion of the shank. As the operation of this machine is substantially the same as that shown in our former patent, the difference being that in this the boot and its support travel while the tool is stationary, we refer to such patent should a fuller description be desired.

We have contemplated in some contingencies transposing the parts of this machine in such manner that the act of burnishing may be effected by motions of the burnishing-tool or the boot, or both tool and boot, in a direction across the shank in lieu of lengthwise thereof, as herein shown; but as this would be a mere variation of the elementary principles of our original machine, as shown in our Letters Patent now issued, we have not

herein described the particular mechanism for carrying out such result.

Claims.

1. In machinery for polishing boot and shoe shanks by the working of a burnishing or polishing tool upon the surface of the shank of a jacked boot or shoe, we claim the arrangement of the boot jack or support, substantially as shown and described, so that it may reciprocate longitudinally to and fro in relation to the polisher or burnisher.

2. In machinery substantially such as specified, a reciprocating last or boot support, in combination with a stationary burnishing-tool, substantially as and for the purposes set forth.

3. In machinery substantially such as specified, the combination, with a reciprocating last or jack, of a burnishing-tool capable of a lateral rocking or inclination to adapt it to work upon all portions of the surface of the shank, substantially as shown and set forth.

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