

G. C. HAWKINS.

Machines for Burnishing the Soles of Boots
and Shoes.

No. 136,322.

Patented Feb. 25, 1873.

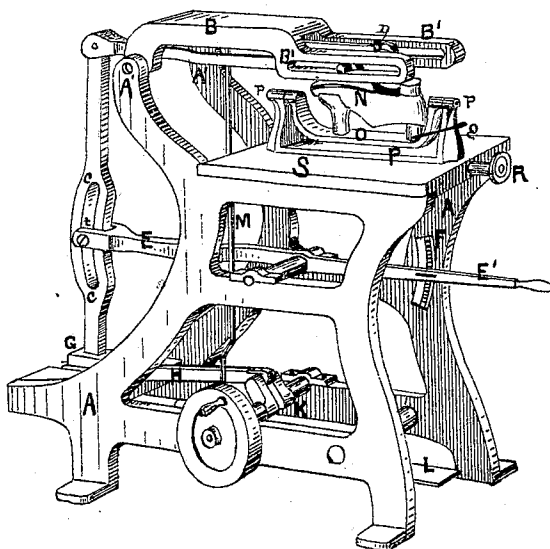


Fig. 1.

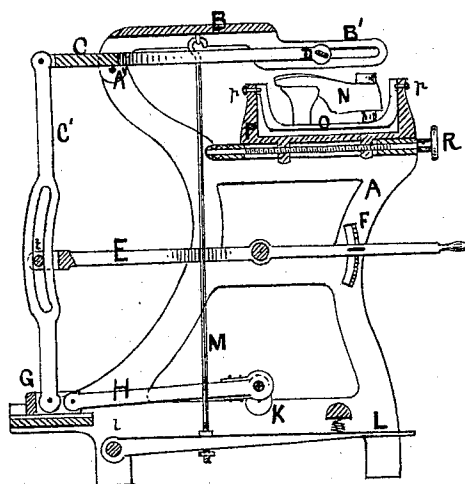


Fig. 2.

WITNESSES

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GARDNER C. HAWKINS, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN MACHINES FOR BURNISHING THE SOLES OF BOOTS AND SHOES.

Specification forming part of Letters Patent No. 136,322, dated February 25, 1873.

To all whom it may concern:

Be it known that I, GARDNER C. HAWKINS, of Boston, in the county of Suffolk and State of Massachusetts, have invented a certain new and useful Machine for Burnishing the Soles of Boots and Shoes, of which the following is a specification:

The Nature of the Invention.

The nature of my invention consists in an arrangement and organization of parts by which I am enabled to pass the burnisher over all parts of the sole, and to get any desired pressure and length of stroke; also, to limit the action of the burnisher to any part of the sole.

The construction of my device is of that class which may be best understood by reference to the drawing and specification.

Description of the Drawing.

Figure 1 is a perspective view showing the entire machine. Fig. 2 is a vertical section of the same.

General Description.

The general frame of the machine to which the other parts are attached is indicated by A A. P is a sliding frame on the table S of the machine, and is actuated—that is, moved—in the direction of the length of the shoe by the screw R. A swinging jack, O, is attached to this frame P by the pivots *p p*, so that the sole of the shoe N held by the jack may be presented to the burnisher D. Hence, by rocking the shoe on its longitudinal axis, the burnisher may be made to contact with all parts of the sole. Q is a handle for controlling the jack O. The burnisher D slides in a swinging frame B B' B'—said frame being pivoted at A' A', Fig. 1, and connected to the foot-lever L by the rod M, so that any desired degree of force may be exerted to cause the burnisher to press upon the sole of the boot or shoe being operated upon. The burnisher D is attached to the forked link C, which is connected to the lever C'. H is a pitman operated by the crank K, and operating the slid-

ing box G to which the lower end of the lever C' is pivoted, so that, by causing the crank K to revolve, the lever C' is made to swing on the pivot *t*, and a reciprocating motion is given to the burnisher D. The length of stroke given to the burnisher D depends upon the position of the pivot *t* or fulcrum in the slot *c c*. Thus, if the end E of the lever E E' is raised, the pivot *t* will move up, and the stroke of the burnisher will be short; if the end E is moved downward, the stroke will be long. F is a ratchet attached to the frame A, and serves to hold the lever E E' in any desired position.

To operate with my machine, I proceed as follows: The burnisher D is rigidly attached to the fork C, so that it burnishes by a rubbing motion. To assist the burnishing action of the burnisher it is kept hot by any suitable device. The shoe is made fast in the jack in any desired manner, then the jack is moved to the required position by the screw R or by any suitable mechanical device. After this the length of the stroke of the burnisher is adjusted to suit the work, this adjustment being effected, as already described, by moving the lever E E'. The lever L is brought down so as to give the required pressure to the burnisher, and the operation of burnishing the bottom proceeds.

I claim as my invention—

1. The operating-lever C', with its fulcrum-slot *c c* and sliding box G, in combination with the adjustable fulcrum *t* and the fulcrum-adjusting lever E E', substantially as described and for the purpose set forth.

2. In a burnishing-machine, the reciprocating burnisher D, when arranged in combination with the fork C and operating-lever C', so that the length of its stroke may be adjusted by moving the fulcrum *t*, operating substantially as described, and for the purpose set forth.

GARDNER C. HAWKINS.

Witnesses:

WILLIAM EDSON,
FRANK G. PARKER.