(No Model.)

C. J. BLAKELY.

BURNISHING MACHINE FOR BOOTS OR SHOES.

No. 323,901. Patented Aug. 11, 1885.

FIG. 1.

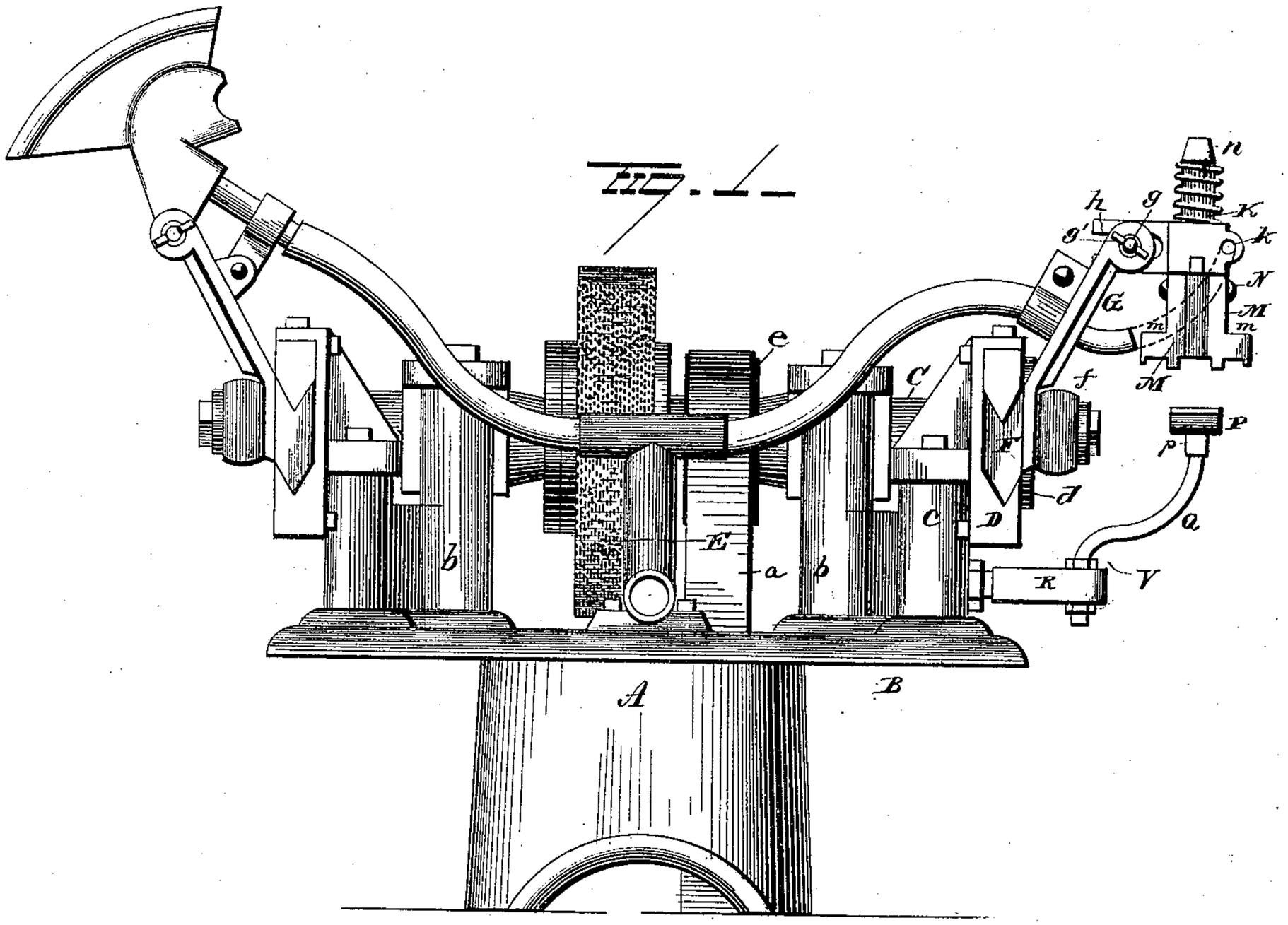


FIG. 2.

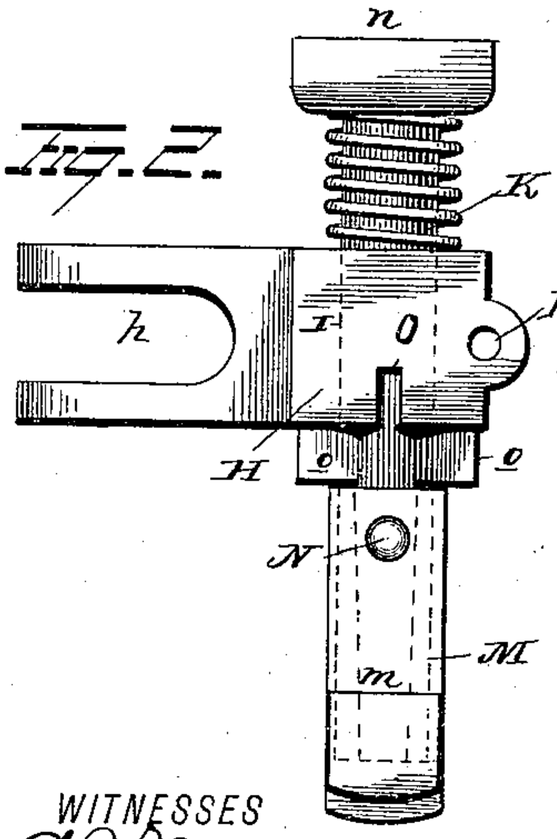


FIG. 4.

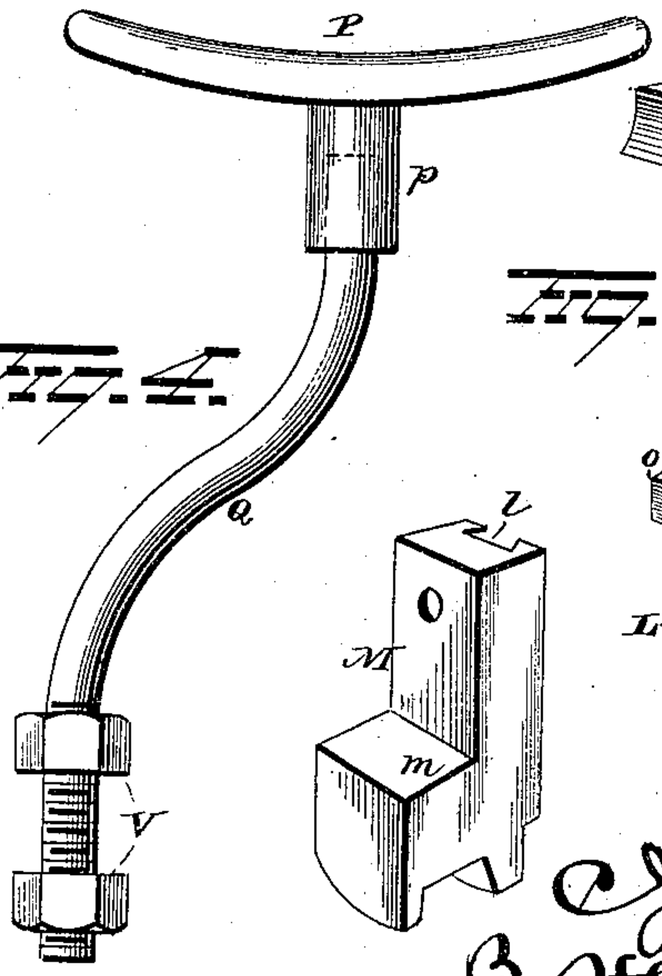
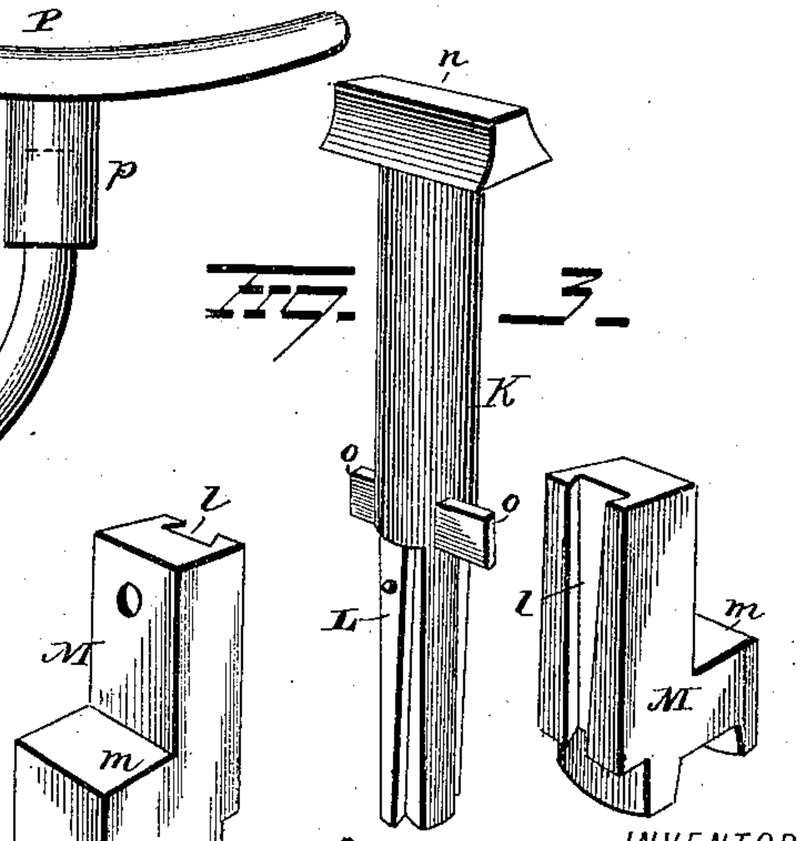


FIG. 3.



WITNESSES

E. J. Nottingham

Geo. F. Downing

INVENTOR

C. J. Blakely.

By Thos. Hyde

ATTORNEY

UNITED STATES PATENT OFFICE.

CALEB JOSHUA BLAKELY, OF JANESVILLE, WISCONSIN, ASSIGNOR OF TWO-THIRDS TO DAVID E. FIFIELD AND LUCIUS NATHAN WILLIAMSON, OF SAME PLACE.

BURNISHING-MACHINE FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 323,901, dated August 11, 1885.

Application filed November 22, 1884. (No mod-l.)

To all whom it may concern:

Be it known that I, CALEB JOSHUA BLAKELY, of Janesville, in the county of Rock and State of Wisconsin, have invented certain new and useful Improvements in Boot and Shoe Burnishing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in burnishing-machines; and it consists in certain features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of a portion of a boot and shoe burnishing-machine embodying my invention. Fig. 2 is a view of the tool-holder, unlocked from and partially turned around on its shank. Fig. 3 is a detached view of the rotary burnishing-iron support, with the irons removed therefrom, and Fig. 4 is a detached view of the hand-rest and its support.

A is the pillar, upon which the machine is conveniently supported, having a drive-wheel (not shown) journaled in suitable bearings in the pillar; B, a cross-head or bed-plate secured to the upper end of A; *b*, standards secured to the head B and adapted to support a shaft, C; and *c*, upright supports, to which are secured the guideways D. The shaft C is provided on each end with crank-wheels *d*, and at its central portion, between its bearings, with a band-pulley, *e*, and brush-wheel E. Slides F, adapted to fit in the guideways D, are connected by pitmen *f* with the crank-wheels *d*, and are reciprocated by the revolution of the shaft driven by a band, *a*, connecting the pulley *e* and said drive-wheel. (Not shown.) Forked brackets G are secured at their lower ends to the slides F, and are provided at their upper ends with cross-bolts *g*, having draw-nuts *g'*.

The machine as thus far described is quite similar in its construction and operation to the machine shown and described in Letters Patent No. 270,729, granted to me January 16, 1883, and is introduced in this present application to more clearly show the location and operation of the parts which form the subject-matter of my present invention.

A tool-holder shank, H, is provided at its rear end with the transverse open slot *h*, adapted to fit on the bolt *g* between the branches of the forked bracket G, and by means of the draw-nut *g'* is locked in a rotary adjustment thereon. The forward end of the shank H is provided with a vertical perforation, I, (shown in dotted lines in Fig. 2,) in which the rotary burnisher-iron support K is adapted to fit and slide. The front portion of said shank is further provided with a perforation, *k*, adapted to receive a small steam-pipe or furnish an inlet and exhaust for steam introduced by a flexible pipe connected with one end thereof, by means of which the support K and irons immediately connected therewith are kept heated.

The support K is provided on its lower end with two longitudinally-extending diametrically-opposed dovetail projections, L, which are adapted to be received in corresponding dovetail slots, *l*, formed in the backs of the burnishing-irons M.

The irons M are cut away on their front sides, as shown at *m*, thereby forming shoulders a short distance above the rubbing-faces. The stems of the irons M are provided with set-screws N, which are adapted to engage countersinks in the faces of the dovetail projections L and lock the irons in working adjustment.

The support K is provided at its upper end with a thumb-rest or handle, *n*, for convenience in turning, and is further provided with a spring, preferably a spiral spring, located between the handle *n* and the shank H, the tension of which holds the upper ends of the irons snugly in contact with the under face of the shank. The under face of the shank is provided with slots O, adapted to receive lugs *o* secured on the support K, and lock the support against a rotary motion in the shank.

By the above construction the irons M may be made to change places by pressing downwardly on K until the lugs *o* are disengaged from the slots O, and turning K half around—

a very simple and quick operation—and there is a sufficient amount of play allowed in the lock between the lugs and the slot in which they move to enable the irons to play back and forth, and allow them to follow the curve of the shoe either around the toe or at the sides without unlocking them. Furthermore, the accumulation of metal caused by locating the irons opposite one another on the support prevents them from cooling as rapidly as when placed on opposite sides of the shank, thereby economizing heat. Again, the shoulders on the front sides of the irons serve to guard the fingers of the operator from the heat and flame, when the irons are heated by a gas-flame, and also prevent the flame from smutting the rubbing-faces of the irons. The ready and secure adjustment of the irons on the support is also a great advantage over the former method of securing them in sockets, since it obviates all clatter, which often disturbs the nerves of the operator and reduces the amount of work he is capable of doing, and the open slot adjustment of the shank H on the bolt *g*, between the branches of the forked brackets, admits of a quick and easy removal of one set of irons and the substitution of another.

To enable the operator to present the shoe to the face of the burnishing-iron in an advantageous manner, and hold it in contact therewith without great expenditure of strength, I have provided a rest, P, adapted to receive the back of the hand and adjust itself to the motions of the hand as the shoe is held in different positions.

The rest P has a concave padded face, and is provided with a socket-stem, *p*, which fits loosely on the end of a curved arm, Q. The lower end of the curved arm Q is threaded and provided with two nuts, V, adapted to engage the opposite sides of a perforated lug or support, R, and thereby lock the arm in the required position beneath the irons M.

As the hand turns to present the shoe in new positions the rest turns on the end of the arm Q, and when for any cause the rest and arm are not needed or are in the way the arm may be removed in a moment's time by removing one of the nuts V.

It is evident that slight changes may be made in the form and arrangement of the several parts described without departing from the spirit and scope of my invention; hence I do not wish to limit myself strictly to the construction herein set forth; but

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an attachment for burnishing-machines, the combination, with a shank adapted to be attached to a burnishing-machine and a support journaled in said shank, of separable and independent burnishing-irons secured to said support on opposite sides thereof, substantially as set forth.

2. The combination, with a shank, a rotary support journaled in said shank, and a spring encircling said support at one end and resting on the shank, of separable burnishing-irons secured to the other end of the support on opposite sides thereof, substantially as set forth.

3. The combination, with a tool-holder shank having a slotted face, a support journaled in said shank and provided with lugs registering with the slots on the shank, and a spring encircling one end of the support and bearing against the shank, of separable burnishing-irons secured in diametrically-opposite position on the same end of the support, substantially as set forth.

4. The combination, with a shank having a slotted face, a support journaled in said shank and provided with lugs registering with the slots on the shank, and a spring encircling one end of the support and bearing against the shank, of a burnishing-iron secured to said support.

5. In a burnishing-machine, the combination, with a reciprocating slide and a shank secured to said slide, of a tool-support journaled in said shank, devices for locking said support at every half-turn, and separable burnishing-irons secured on diametrically-opposite sides of the same end of the support, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CALEB JOSHUA BLAKELY.

Witnesses:
C. E. BOWLES,
L. M. WILLIAMSON.