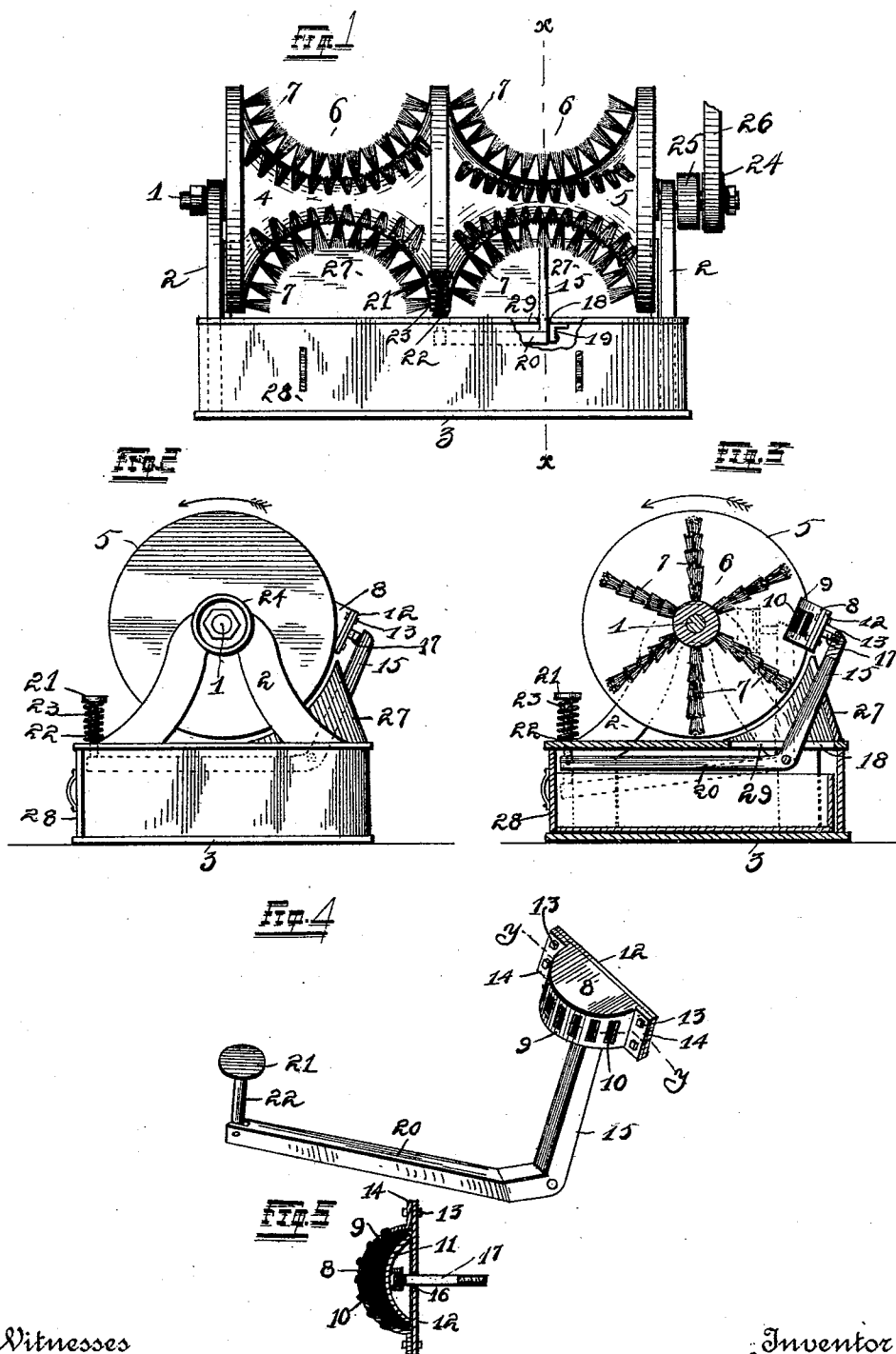


(No Model.)

T. H. LEVER.
MACHINE FOR BLACKING BOOTS OR SHOES.

No. 500,502.

Patented June 27, 1893.



Witnesses
Alfred A. Eicks
Herbert S. Robinson.

Inventor
Thomas H. Lever
By his Attorneys
Higdon & Higdon & Longau.

UNITED STATES PATENT OFFICE.

THOMAS H. LEVER, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-FOURTH TO
EDWARD A. CARTER, OF SAME PLACE.

MACHINE FOR BLACKING BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 500,502, dated June 27, 1893.

Application filed August 3, 1892. Serial No. 442,024. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. LEVER, of the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Machines for Blacking Boots or Shoes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

10 My invention relates to an improved machine for cleaning and polishing boots or shoes, and consists in the novel arrangement and combination of parts hereinafter described and designated in the claims.

15 The object of my invention is to provide a cheap, simple and effective machine for cleaning and polishing boots or shoes, which shall have separate polishing and blacking brush-spools mounted to revolve simultaneously.

20 A further object of my invention is to provide improved devices for mounting and revolving the brush-spools, and for distributing blacking to the tufts of the blacking brush during movement.

25 In the drawings, Figure 1, is a front elevation of a machine embodying my invention, parts being broken away. Fig. 2, is an end elevation of the same. Fig. 3 is a section on the line *x x* of Fig. 1. Fig. 4 is a detail view, in perspective, of a movable blacking-receptacle and its connections, detached. Fig. 5 is a sectional plan view of the blacking-receptacle taken on line *y y* of Fig. 4.

30 1 indicates a horizontal shaft revolubly mounted in bearings carried by vertical supports 2 projecting from the base 3 of the machine, one support adjacent each end of said base.

4 and 5 indicate, respectively, separate polishing and blacking brush-spools, each of which is mounted upon and fixed to revolve with the shaft 1. The outer periphery of each spool is provided with a U-shaped groove 6, or with a peripheral-groove approximating in cross section the shape of the upper of a boot or shoe when fitted upon the foot of the wearer.

7 indicates a series of tufts of bristles or

other brush material, disposed in longitudinal separate lines upon each of the spools 4 and 5, in the peripheral grooves 6 thereof, so that the free ends of said tufts form a brush surface conforming to the curve of the peripheral surface of said spools. Of course the brush surface may have its tufts arranged in any known manner, different from that above described.

8 indicates a movable blacking receptacle, which is adapted to contain the ordinary blacking or polishing material and distribute it to the tufts of the blacking spool 5 during operation. This receptacle is provided with an internal chamber for containing the blacking, with a curved front wall 9, conforming in shape to the curved surface of the blacking brush, and having a series of vertical discharge slots 10, through which latter the blacking is ejected by a curved follower 11 mounted in said chamber. Of course the specific shape of the slots 9 may be varied—instead of being rectangular as shown, they may be circular.

One side, preferably the rear side, of the receptacle 8 is made removable, so that the follower 11 may be removed from said chamber and blacking or polishing material be supplied to said chamber. The rear plate 12 of the receptacle 8 is removably secured in position by means of suitable screws, rivets or bolts 13, passed through said plate and through the projecting flanges 14 formed on said receptacle. The top or bottom plate could be made removable in a similar manner by an ordinary mechanic and for a like purpose.

The receptacle 8 is movably mounted upon, or connected to the upper end of a rocking arm 15, and is disposed at a point adjacent the blacking spool 5, preferably in the rear thereof, so as to be moved into contact with the revolving tufts of the blacking brush during operation, and rest out of contact therewith normally. The rear plate 12 is provided with an angular aperture 16 in which an angular shank 17 is loosely mounted to slide, and this shank is connected at its outer ends

to the upper end of the arm 15, and carries the follower 11 upon its inner end. The follower 11 is fixed upon the inner end of the shank 17 so as to move therewith, while the receptacle 8 is loosely mounted upon said shank, to slide, in the manner hereinafter stated. The lower end of the arm 15 is pivotally secured to some fixed portion, of the base 3. It preferably extends downward through a slot 18 formed in the top of the base, and is pivotally mounted upon a bracket 19 secured to the said base. Extending forward from and connected to the lower end of said arm 15 is a horizontal arm 20 which extends beneath the top plate of the base to a point adjacent the front side of the same, and is there provided with a depressible foot-piece 21, which latter is provided with a vertical shank 22 projecting upward from said arm 20 through the top plate of said base, at a point convenient for the foot of the operator.

23 indicates a spring, coiled about the vertical shank 22 of the foot-piece 21, and having its upper end in engagement with said foot-piece and its lower resting upon the top plate of the base 3. The purpose of this spring is to normally draw the free end of the arm 20 upward and hold the blacking receptacle 8 out of engagement with the blacking brush.

24 and 25 indicate, respectively ordinary tight and loose pulleys, which are mounted upon a projecting end of the shaft 1 and arranged to be engaged by a belt 26, to revolve said shaft. The spools 4 and 5 may be revolved in this manner by steam or other power.

27 indicates a dust hood, having a closed rear side and end, and an open front side located closely adjacent the spools 4 and 5, upon the rear side of the machine, so as to catch the dirt and rubbish removed from the boots or shoes during the cleaning and polishing operations, and direct the same downward through a suitable opening in the top plate of the base and into a removable drawer or box 28 contained within said base.

The front side of the drawer is provided with suitable handles, for convenience in handling said drawer.

29 indicates the opening or passage in the top plate of the base, for passage of dirt and rubbish into the said base.

The operation is as follows:—The shaft 1 is to be continuously revolved in the direction indicated by the arrows in Figs. 2 and 3 so as to impart a simultaneous movement to the spools 4 and 5. Then the operator places his foot upon the top plate of the base 3 in such a position that the upper of his boot or shoe will be forcibly brought into contact with the projecting tufts of the cleaning spool, in which position it is held until said upper is thoroughly brushed and cleaned, after which the operator should place the same foot above the said spool and then such other parts of his boot or shoe as were not cleaned by the

former operation into contact with said tufts, and hold them there until they are thoroughly cleaned. Then the operator should place the boot or shoe beneath the spool 5 of the blacking brush, and place his other foot upon the foot-piece 21, which will have the effect of depressing the outer end of arm 20, and of forcing the blacking receptacle 8 toward said blacking brush, and of bringing the curved front wall 9 of said receptacle forcibly into contact with the revolving tufts of said brush. As the inward movement of the arm 15 continues the shank 17 carrying the follower 11 will be forced inwardly, and said follower will force the blacking contained in said receptacle outward through the slots 10 in said curved wall, and the blacking so fed will be removed and taken up by said revolving tufts, and applied to the upper of the boot or shoe. It will be observed that blacking will be distributed to each of the tufts of the blacking brush, by reason of the curved front wall of the blacking receptacle fitting the curved blacking surface of the brush. To apply blacking to the other portions of the boot or shoe, all the operator need do is to so adjust his foot that said portions will be forcibly brought into contact with some portion of the revolving blacking brush. To polish the boot or shoe it will now only be necessary to return to the cleaning and polishing brush, which was previously used to clean the boot or shoe, and proceed in the manner above described. Of course the operator can determine how much blacking is being fed from the blacking receptacle, and will regulate the pressure of his foot upon the foot-piece 21 accordingly. As soon as pressure is removed from the foot-piece 21, the spring 23 will cause the blacking receptacle to resume its normal position, which is that shown in solid lines in Figs. 2 and 3.

What I claim is—

1. In a machine for blacking boots and shoes, the combination, with a rotary brush, of a blacking receptacle normally withheld from contact therewith, said receptacle consisting of a casing, and a follower loosely mounted in said casing and adapted to automatically feed the blacking to the brush when the receptacle is brought into contact with said brush; substantially as and for the purpose set forth.

2. In a machine for blacking boots and shoes, the combination, with a rotary brush, of a blacking receptacle, a foot lever connected with and adapted to throw the receptacle into contact with the brush, and a spring for normally retaining the receptacle out of operative position; substantially as and for the purpose set forth.

3. In a machine for polishing boots and shoes, the combination of a revoluble blacking-brush, a movable blacking receptacle 8, a rocking-arm 15 pivotally mounted at a

point adjacent the blacking-brush and carrying the said blacking receptacle, a horizontal arm 20 extending from said rocking-arm, a foot-piece 21 having a shank 22 secured to said horizontal arm and located convenient for the foot of the operator, and a spring which normally holds said blacking-receptacle out of contact with said blacking-

brush, substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS H. LEVER.

Witnesses:

ED. E. LONGAN,
ALFRED A. EICKS.