

(No Model.)

J. H. STEVENS.

Buffing Machine for Boot and Shoe Soles.

No. 239,682.

Patented April 5, 1881.

FIG. 1

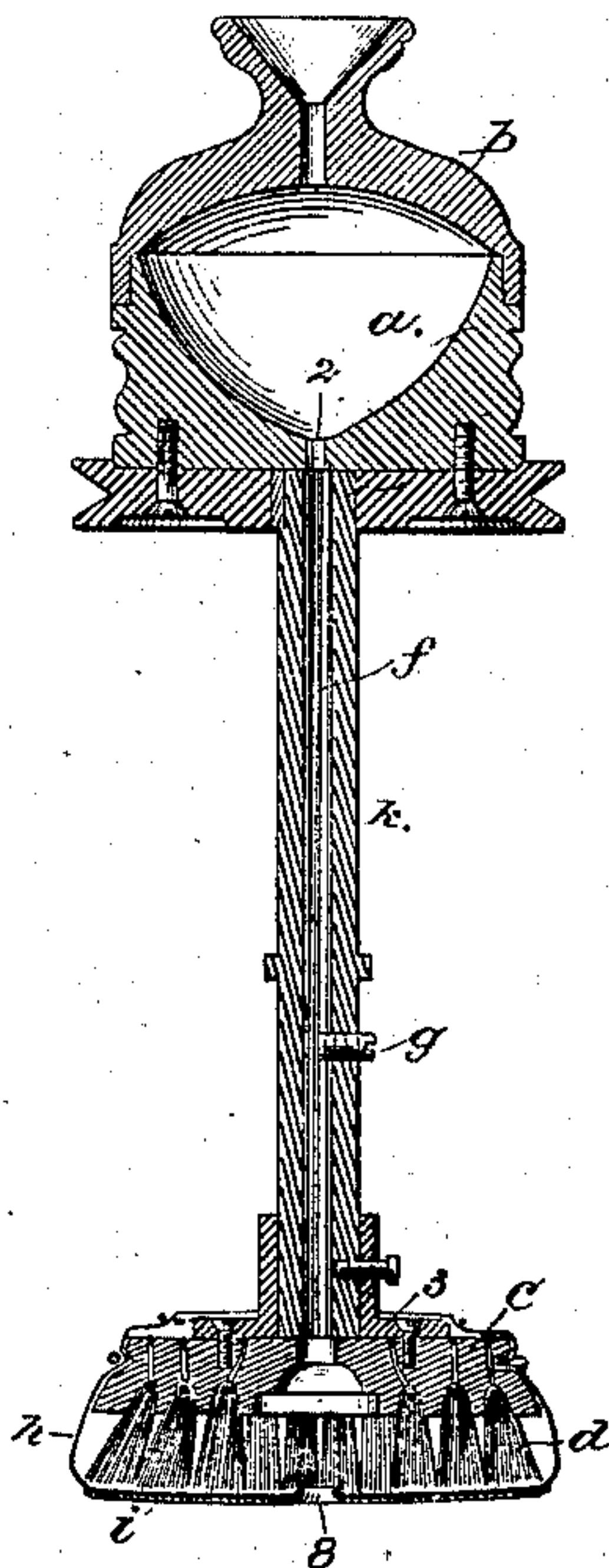


FIG. 2.

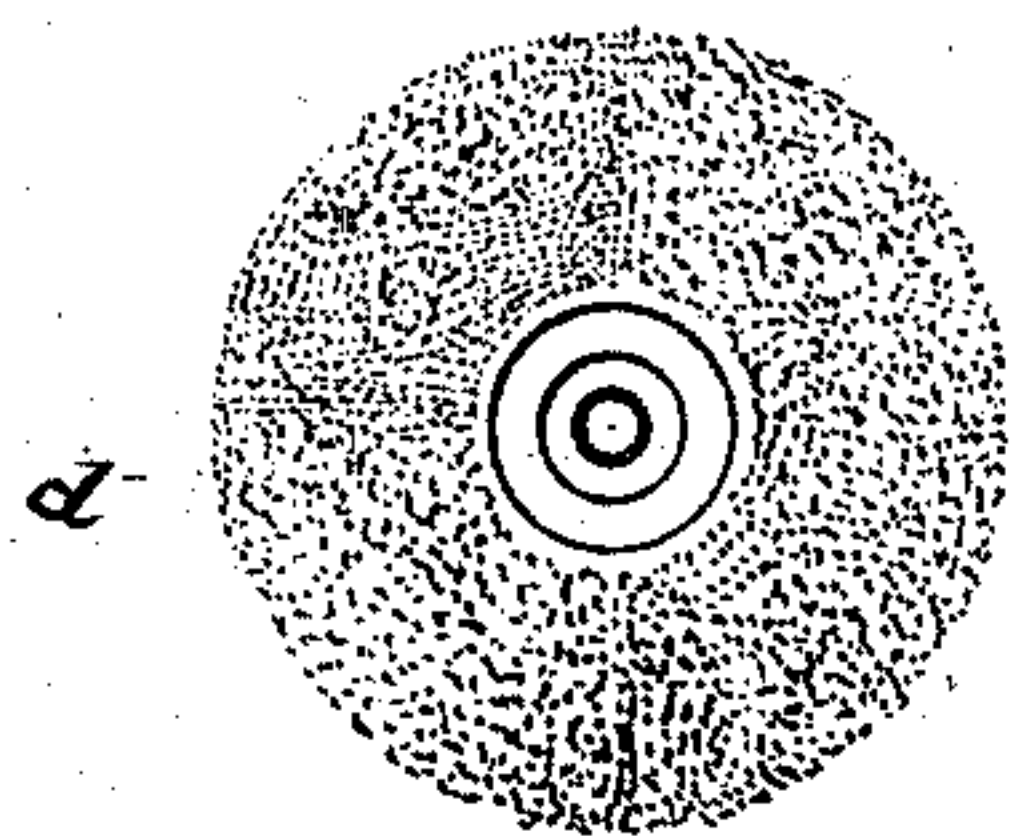
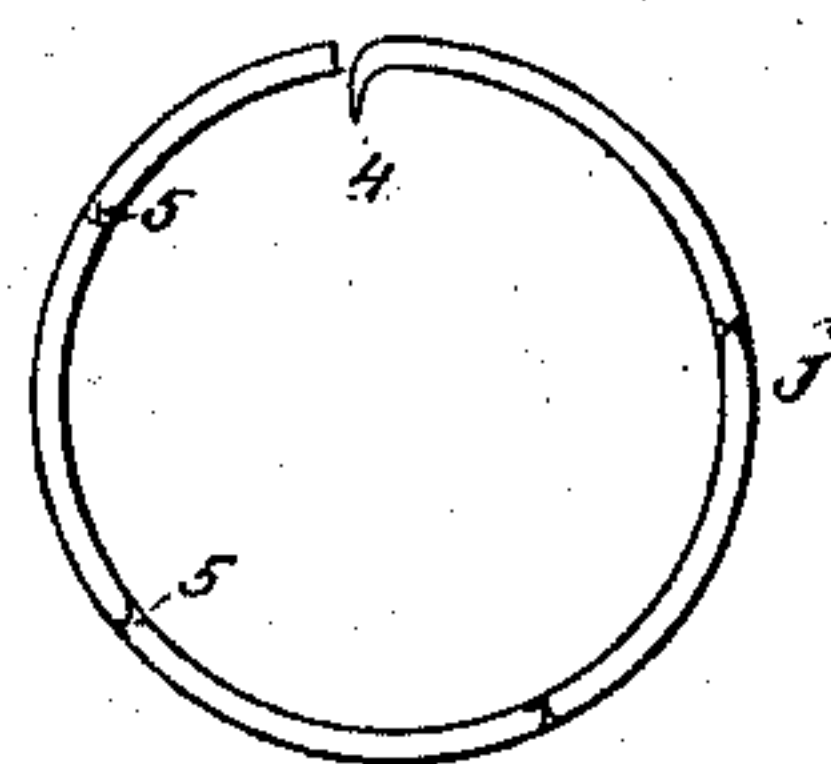


FIG. 3.



Witnesses.

Arthur Reynolds  
Bernice J. Noyes

Inventor.

John H. Stevens,  
by Crosby & Morgan  
Atty's.



# UNITED STATES PATENT OFFICE.

JOHN H. STEVENS, OF LYNN, MASSACHUSETTS.

## BUFFING-MACHINE FOR BOOT AND SHOE SOLES.

SPECIFICATION forming part of Letters Patent No. 239,682, dated April 5, 1881.

Application filed February 26, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN H. STEVENS, of Lynn, county of Essex, and State of Massachusetts, have invented a new and useful Improvement in Buffing-Machines for Boot and Shoe Soles, of which the following description, in connection with the accompanying drawings, is a specification.

This invention relates to buffing-machines for boot and shoe soles, and is an improvement on United States Patent No. 236,271, granted to me January 4, 1881, to which reference may be had. In that application I employ an abrasive-pouch, made of fibrous material, placed upon a flexible india-rubber pad or foot. In this my invention, instead of the india-rubber pad or foot there described, I employ a brush-like foot composed of bristles set in a back, the abrasive-pouch being secured about it by means of a barbed-wire ring, which securely holds the said pouch in contact with the head of the brush, suitably grooved to receive the ring.

In some instances I desire to apply directly to the bottoms and heels of boots and shoes emery, powdered pumice-stone, or any equivalent gritty matter, and sometimes powdered chalk; and to do this I have provided the brush with an axial opening, and have made the spindle hollow to thus supply the said brush or foot with emery or other material, as stated, and have provided it with a valve to regulate the quantity of emery, &c., which shall be discharged continuously through the said spindle from a suitable receptacle and carried at its top.

Fig. 1 represents in vertical section a sufficient portion of an operating machine, taken in connection with the drawings of the patent referred to, to illustrate my invention; Fig. 2, an under-side view of the brush, and Fig. 3 a separate view of the fastening-ring.

The spindle *k*, having upon it the same letter as in my patent referred to, will be held in the frame-work and be driven all as described in my said patent, so I have deemed it unnecessary to herein show the frame-work, the exhaust-fan, draft-pipe, &c., which will be employed with this spindle as in that patent. At the upper end of this spindle *k* is a receptacle or box, *a*, to receive emery, pulver-

ized pumice-stone, chalk, or other substance, which it is desired to have discharged in regulated quantities upon the bottom of the sole or end of the heel of a boot or shoe. This receptacle is closed by a cover, *b*. The spindle *k* is made hollow, or as a tube, and intersects a hole, 2, in the bottom of the receptacle *a*, and also a hole, 3, in the back of the brush *c*, which is to constitute the foot, it having bristles *d*, of any usual material employed in brushes and of any desired length. The opening *f* in the spindle *k* may be more or less closed by the valve *g*, herein shown as a screw, which may be turned out from or into the opening *f*.

The abrasive-pouch *h*, substantially like that employed in my said patent, and composed of cloth having emery applied to its central portion, as at *i*, is secured in place upon the back of the brush-like foot by means of the open wire ring *j*, having a hooked or pointed end, 4, and a suitable number of barbs or notches, 5. The pouch being applied to the brush-like foot, as shown in Fig. 1, has the fastening-ring placed about it opposite the annular groove in the head of the brush, and the pointed end 4 of the ring is inserted in a small notch or opening in the said head, as at the right of Fig. 1, the said point preventing the ring from being rotated about the head of the brush. The barbs 5 on the fastening-ring engage the cloth of the pouch and prevent it from rotating or twisting about upon the head of the brush and becoming detached therefrom.

Sometimes I desire to use free emery or equivalent gritty matter in addition to the emery-surface of the pouch, and I have therefore provided the pouch, near its center, with an opening, 8.

The bristles of the brush or foot may be more or less fine, the finer bristles being best adapted to serve as a backing for the pouch, and the coarser for direct application to the sole.

It will thus be seen that I may, with the construction in Fig. 1, discharge at the center of the pouch or brush and in line with the spindle *k*, a regulated amount of emery or other material to assist the work of the emery-surface of the pouch; but, if desired, I may remove the pouch *h* and operate upon the bottom of the sole or heel with the brush alone supplied with emery or other material, as stated.

I do not broadly claim a brush with a number of openings made in its back for the passage through it of emery or other material.

I claim—

5 1. The rotating hollow spindle, the receptacle *a* for emery, chalk, or equivalent materials, and brush-like foot, combined with a valve or device to permit a regulated quantity of emery or other material to be sent through  
10 the said spindle, substantially as described.

2. The rotating spindle and its brush-like foot connected therewith, combined with an abrasive-pouch to inclose the brush-like pad, substantially as described.

3. The rotating spindle and its connected 15 brush-like foot and abrasive-pouch inclosing the said foot, combined with the fastening-ring *j*, to connect the pouch firmly with the foot and hold it in place, substantially as described.

In testimony whereof I have signed my 20 name to this specification in the presence of two subscribing witnesses.

JOHN H. STEVENS.

Witnesses:

JOS. P. LIVERMORE,  
BERNICE J. NOYES.