

(No Model.)

J. H. STEVENS.
LEATHER BUFFING MACHINE.

No. 256,252.

Patented Apr. 11, 1882.

Fig:1.

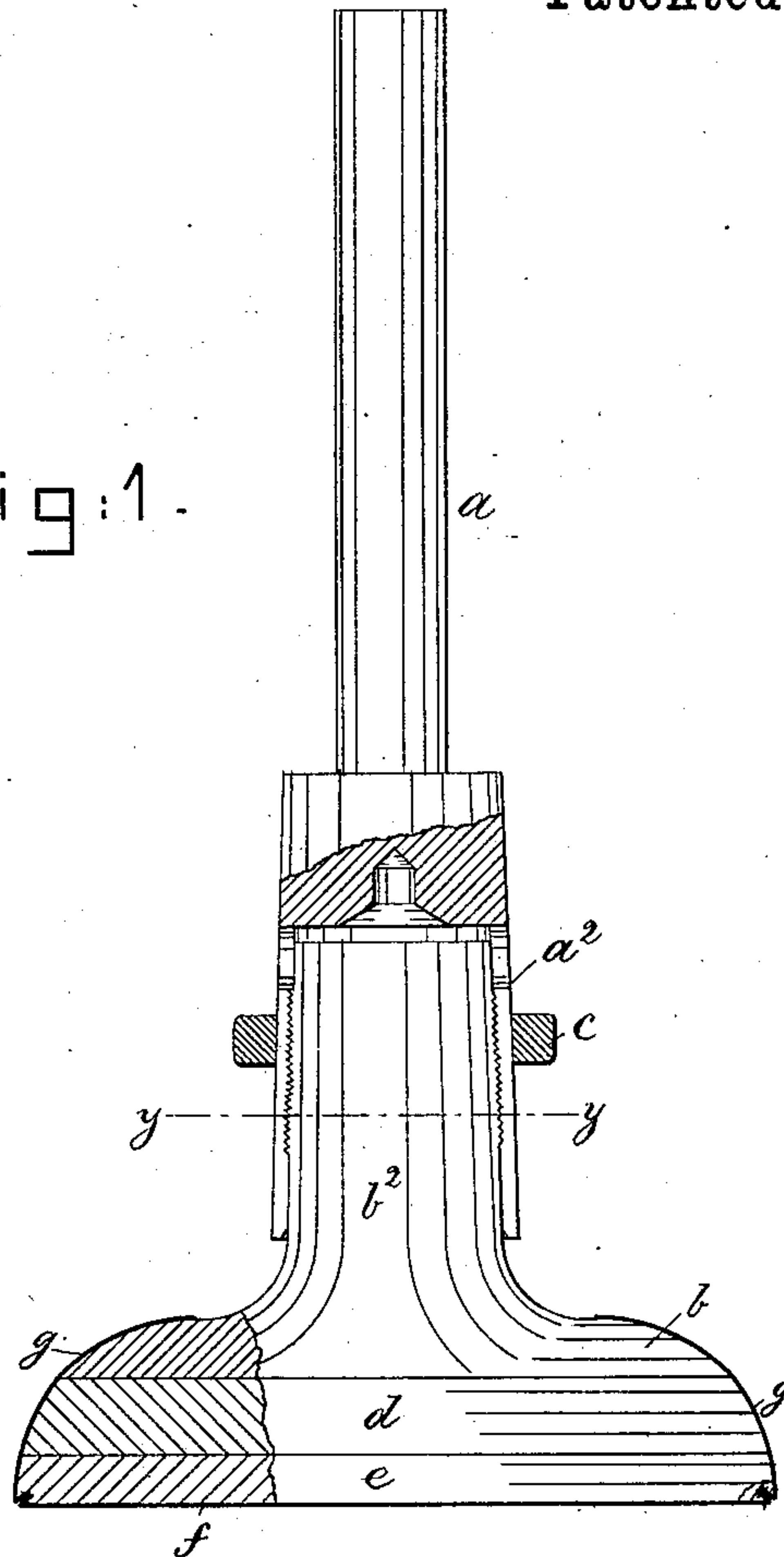


Fig:2.

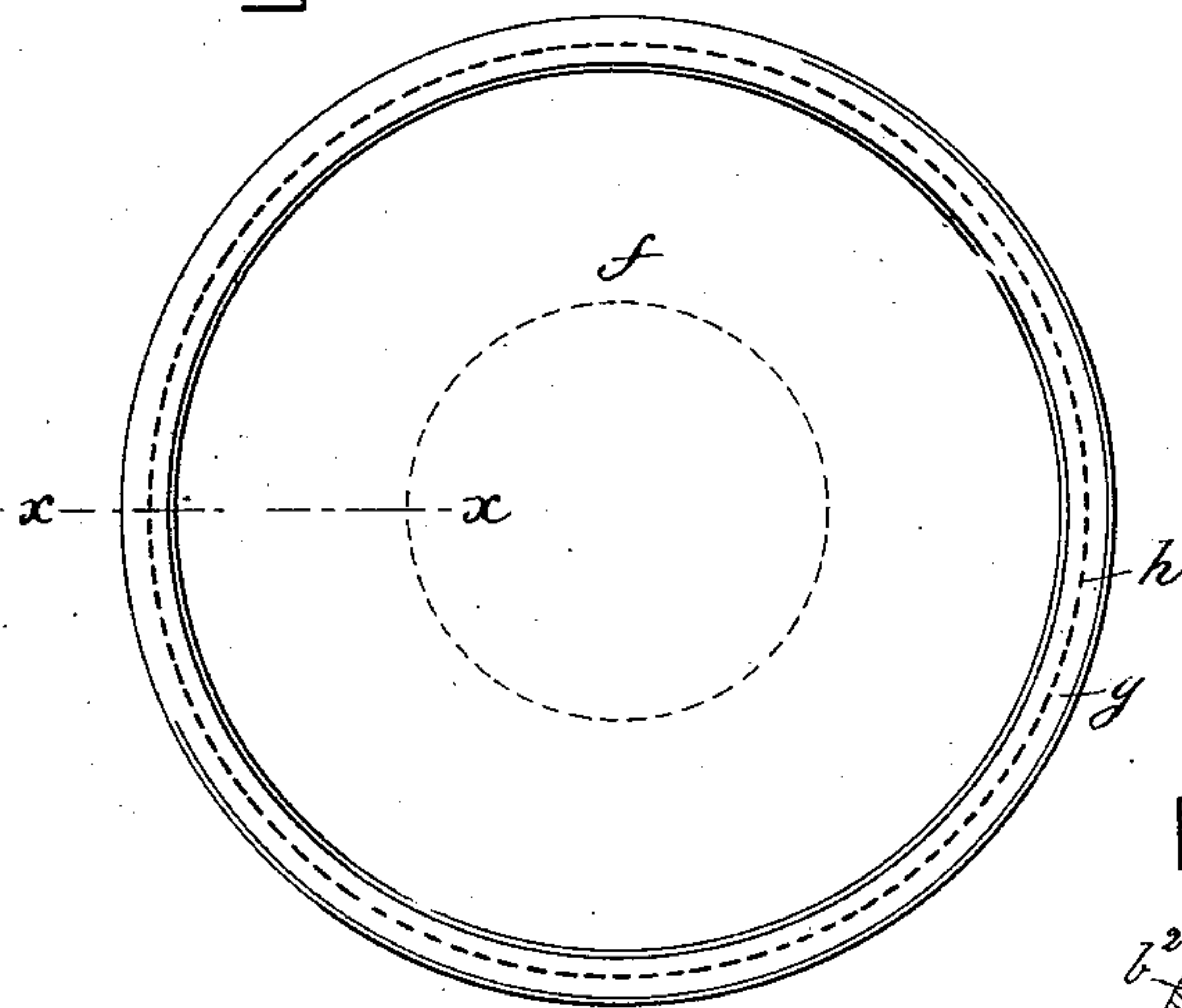


Fig:3.

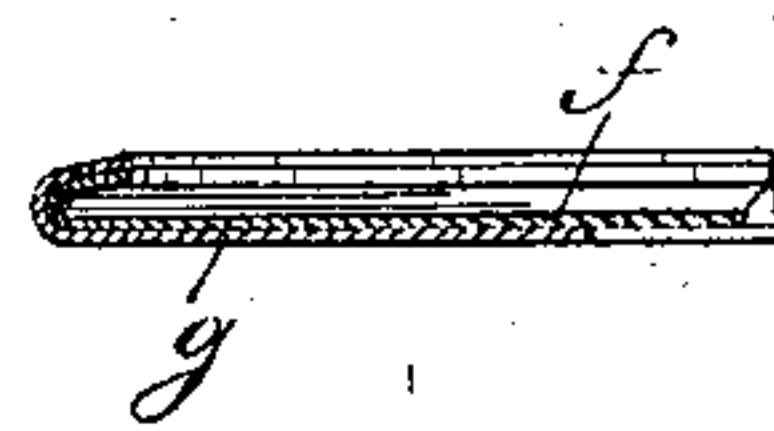
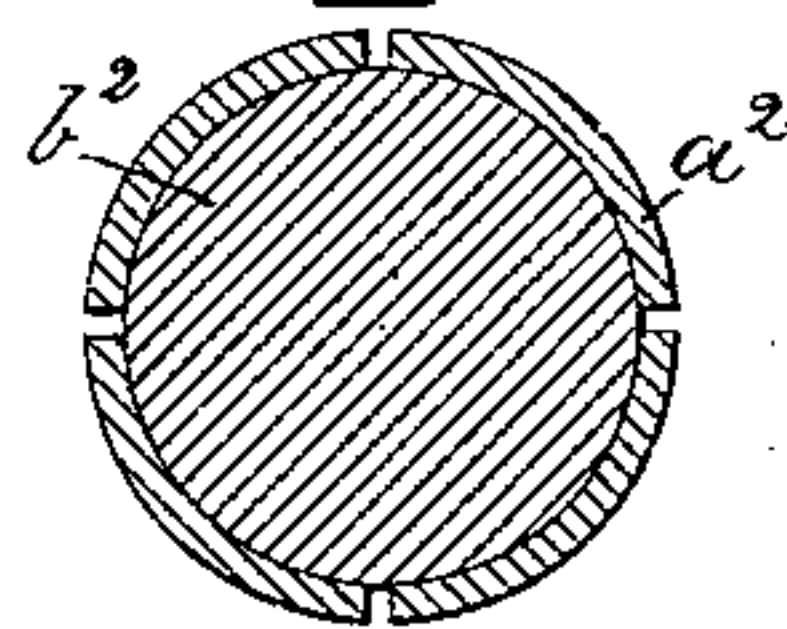


Fig:4.



Witnesses
L. F. Connor.
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UNITED STATES PATENT OFFICE.

JOHN H. STEVENS, OF LYNN, ASSIGNOR TO FREEMAN WINSLOW, TRUSTEE
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LEATHER-BUFFING MACHINE.

SPECIFICATION, forming part of Letters Patent No. 256,252, dated April 11, 1882.

Application filed September 9, 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 an Improvement in Leather-Buffing Machines, of which the following description, in connection with the accompanying drawings, is a specification.

This invention in leather-buffing machines has for its object improvements in the foot and abrasive pouch to be applied thereto.

The improved foot herein described is what is known as a "flexible" foot, and is composed of a flexible disk having a connected flexible shank suitably connected above the disk with the spindle which revolves the foot.

The improved abrasive pouch is composed of a circular piece of abrasive material, having stitched to it an india-rubber annulus, the latter being adapted to be stretched or expanded to fit over the foot and its attached felt washers, the contraction of the said annulus retaining the pouch upon the foot.

Figure 1 represents in elevation and partial section a spindle, flexible foot, and abrasive pouch embodying my invention; Fig. 2, a view of the pouch turned wrong side out to show the seam uniting the circular piece of abrasive material and the india-rubber annulus, the greater portion of the latter being shown in dotted lines. Fig. 3 is a partial section of Fig. 2 on the dotted line xx , and Fig. 4 a section of the flexible shank of the disk and the surrounding part of the spindle on the dotted line yy .

The spindle a will be operated as and it is adapted to be used in connection with mechanism, substantially such as shown in my United States Patent No. 236,271, dated January 4, 1881, to which reference may be had. In that patent I employed an india-rubber pad or disk for the foot. In this, my present invention, I employ a flexible disk, b , shown as composed of india-rubber, the said disk having a flexible shank, b^2 , connected with or forming part of it. This flexible shank, composed of india-rubber, is herein shown as connected with the spindle by being screwed or inserted into a socket, a^2 , forming the lower end of the spin-

dle, the said socket being split longitudinally at two or more places (see Fig. 4) to form elastic arms, which may be held or forced closely in contact with the flexible shank b^2 by means of a ring, c .

At the under side of the disk b I have secured washers d e of felt. The lower end of the socket a^2 terminates short of the top or upper side of the flexible disk b , thus leaving the connected flexible shank free to yield between the said disk and socket. The flexible shank enables the foot and its abrasive pouch or other covering to adapt itself to the contour or position of the sole or other substance being buffed as freely as the human hand, and much more readily than when the flexible disk is connected directly with the spindle, as in my former patent referred to.

The pouch is herein shown as composed of a circular piece of abrasive cloth, f , and an india-rubber annulus, g , united by a line or series of stitches, h , (see Fig. 2,) wherein the pouch is supposed to be wrong side out and the main part of the annulus g at the under side, the longer edge of the annulus being turned over upon the wrong side of the abrasive cloth, as shown. When this pouch is turned the narrow edges of the cloth and annulus beyond the seam h fall within the pouch, as shown in Fig. 1.

To apply this pouch to the foot it is only necessary to stretch or distend the annulus, place it about the foot above the disk b , as in Fig. 1, and permit it to contract, the contraction of the annulus holding the pouch firmly on the foot, thus doing away with a shirring-string, such as heretofore commonly used.

I claim—

1. In a buffing-machine, the flexible disk and connected flexible shank, combined with the washers or felt, substantially as described.

2. The spindle a , combined with and carrying the flexible disk, having the connected flexible shank, substantially as described.

3. The spindle provided with a split socket and the ring, combined with the disk b and its flexible shank b^2 , inserted in the said socket, substantially as described.

4. The pouch composed of the circular piece of material *f* and the india-rubber annulus stitched thereto, substantially as described.

5. The india-rubber disk and its flexible shank *b*² and the felt washers, combined with the abrasive pouch composed of the abrasive cloth and connected india-rubber annulus *g*, substantially as described.

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

JOHN H. STEVENS.

Witnesses:

JOS. P. LIVERMORE,
B. J. NOYES.