(No Model.)

J. G. BUZZELL.

BUFFING MACHINE FOR BOOT AND SHOE SOLES.

No. 248,020. Patented Oct. 11, 1881.

Fig. 1.

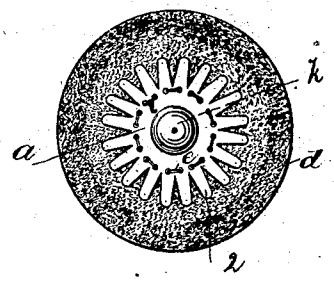


Fig. 2.

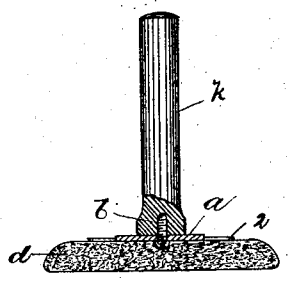
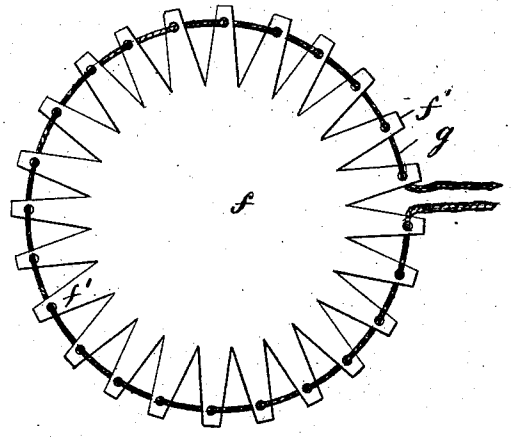


Fig. 3.



Witnesses.
L. F. Connor
B. J. Noyes.

Inventor
John G Buzzell
by Crosby & Gregory
Attys.

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

JOHN G. BUZZELL, OF LYNN, MASSACHUSETTS.

BUFFING-MACHINE FOR BOOT AND SHOE SOLES.

SPECIFICATION forming part of Letters Patent No. 248,020, dated October 11, 1881.

Application filed July 13, 1881. (No model.)

To all whom it may concern:

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

This invention is an improvement on that class of machines represented in Letters Patent of the United States No. 236,271, dated January 4, 1881, to which reference may be had; and it consists in a novel elastic or spring-metal backing or plate for the flexible foot and abrasive pouch to be connected therewith.

Figure 1 represents, in top view, a spindle and attached foot containing my present invention; Fig. 2, a partial side elevation and vertical section of Fig. 1; Fig. 3, an inner side view of the abrasive pouch spread open to better illustrate its shape.

In this my present invention the spindle *k* is the same as that represented by the same letter in the said patent, and it may be rotated in the same way. Instead of the india-rubber disk used in the said patent, I have secured at the lower end of the said spindle, by screw *b* or otherwise, a thin sheet-metal spring backing or plate, *a*, which is more durable, light, and quick in its movement than the india-rubber disk. This metal disk I have provided, as shown in Figs. 1 and 2, with a radial series of prongs or fingers, 2, extended out over the upper side of the circular part of the foot *d*, composed in this instance of a thick piece of felt larger in diameter than the spring-plate *a*, the felt being secured to the said thin metal plate or backing *a* by means of a wire or thread, *e*, inserted through suitable holes in the metal plate and into the felt foot. These fingers 2 yield more or less, and act quickly and independently to best adapt the foot and pad *d* to the inequalities of the material under it, or to the upward pressure of the sole against the foot or the abrasive pouch *f*, which in practice will be placed thereon. The abrasive pouch *f*, which is to envelop or inclose the said foot, instead of being composed of a circular piece of cloth having an unbroken edge, as in the patent referred to, is composed of a piece of fabric of greater diameter than the foot, the said fabric being notched or cut at its circumference, as in Fig. 3, to thus form a series of projections, *f'*, more or less in number, the notches extending back to that part of the pouch, so that the latter, when applied to the foot *d* and turned up about the edge thereof, will so fold about the foot as to completely obviate the formation of wrinkles or plaits in the pouch at the under side of the foot *d*. The under side of this pouch *f*, or a portion thereof substantially equal to the diameter of the foot, is provided with an abrasive substance, such as emery or glass, or equivalents. The projections *f'* are each provided with a hole to receive a shirring-cord, *g*, by which the projections may be drawn together at the upper side of the foot *d* to confine the pouch thereto.

I claim—

1. The spindle and the thin sheet-metal spring-plate, provided with the series of fingers 2, combined with the yielding or flexible foot *d*, to operate as and for the purpose described.

2. In a buffing-machine, the flexible foot *d*, combined with the abrasive pouch *f*, notched at its edges to form projections *f'*, and with the shirring-string extended through the said projections, to contract or gather the said projections together at the upper side of the said foot, all substantially as described.

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

JOHN G. BUZZELL.

Witnesses:
G. W. GREGORY,
L. F. CONNOR.