

A. F. SMITH.

Apparatus for Drying Shoe Soles.

No. 123,585.

Patented Feb. 13, 1872.

Fig. 1.

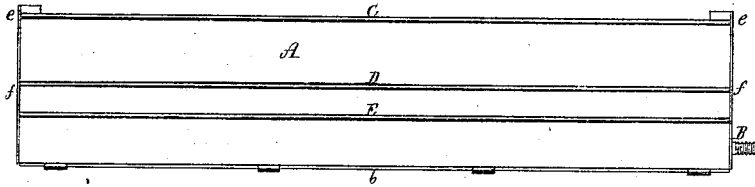


Fig. 2.

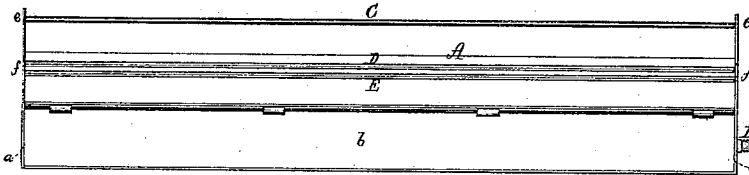


Fig. 3.

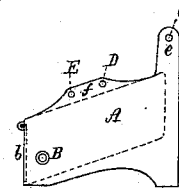


Fig. 4.



Witnesses.
S. A. Piper
L. N. Moller

Aaron F. Smith.
by his attorney
H. H. Hedy

UNITED STATES PATENT OFFICE.

AARON F. SMITH, OF LYNN, MASSACHUSETTS.

IMPROVEMENT IN APPARATUS FOR DRYING SHOE-SOLES.

Specification forming part of Letters Patent No. 123,585, dated February 13, 1872.

To all persons to whom these presents may come:

Be it known that I, AARON F. SMITH, of Lynn, of the county of Essex and State of Massachusetts, have invented a new and useful Apparatus for Drying Shoe-Soles for being Buffed; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 is a top view; Fig. 2, a front elevation; Fig. 3, an end view; and Fig. 4, a longitudinal section of it.

In drying shoe-soles for being buffed by a buffing-wheel or machine it has been the practice heretofore to place the shoes in a drying-room or chamber and submit them to the desiccating powers of heated air contained therein. By this process the heat has been applied to the whole shoe. As a consequence it frequently happens that the sole, or the heel, or both, becomes warped or cracked and the upper more or less injured, all of which is avoided by the use of my apparatus, which is intended simply to dry the lower surface of the shoe-sole and the sole to a trifling depth below such—viz., enough to or a little more than will suffice for the performance of the buffing—leaving the rest of the sole to be dried slowly in the atmosphere.

My apparatus enables shoes to be dried for the buffing operation much more expeditiously than by the use of a hot-room or chamber, as practiced before my invention.

In carrying out my said invention, I make use of a case or box, A, made of thin sheet metal, of the proper size and shape, giving the preference to a prism whose section transversely is an inclined parallelogram, such box being provided at its front side with an opening, *a*, having a door, *b*. Within the box, and extending longitudinally in it, is a foraminous or perforated tube, B, projected therein from one end of such box, and intended, when in use, to couple with a flexible pipe or conduit to lead inflammable gas into the pipe B. There is arranged on the top of the said box three rails, C D E, supported by standards *e e f f* projecting up from the box. The two front rails are disposed at a short distance from the top of the box, the back rail being elevated higher,

as shown, as it serves to support the shoes at their heels, which hang on it while the soles are resting on the other rails.

When shoes are to be dried they are to be placed on the rails, in manner as explained, in which case the soles will be in close proximity with the top of the box. On gas being introduced into the pipe B, and fired as it may pass out of the educts thereof, the upper surface of the box will be soon heated by the flame of the gas and will radiate such heat upward, and as a consequence operate very effectively in drying the soles of shoes when over it and upon the support-rails.

I do not limit my invention to the precise form as shown, as such may be varied, more or less, without materially affecting the principle of it. The means of heating the box may be also changed in form or construction, as may be desirable.

This little apparatus, simple as it is, has been found to be of great advantage, as it can be placed on the bench of a workman close to the buffing-wheel or machine; and if made large enough to support a dozen pairs of shoes each shoe may be dried to the extent necessary for being buffed, fresh shoes being put in the place of those removed. It saves the expense of drying-rooms, and the labor required to transport the shoes thereto, remove them therefrom, as well as the care and attention necessary to effect the proper drying of them. It also avoids the cracking or injury done to the leather, or sole, or heel by the drying-room. It enables the shoe to be buffed while in a heated state, whereby the buffing can be done to better advantage, and saves all "glazing" of the shoe as frequently takes place when the shoes are dried by the old process.

The racks or rails keep the shoe out of contact with the top of the box so as to prevent it from burning or scorching the sole; and besides such racks admit the radiated heat to be uniformly distributed against the sole. The door, on being opened a little, will let in air to supply the flame, and also let out the combustible gases. The box, being a close chamber, with no outlet except in front, and being there provided with a door, will retain the heated air and gases to great advantage, and

accomplishes its object under a very small consumption of inflammable gas.

I claim as my invention, and as a new manufacture—

The apparatus, substantially as described, composed of the heating-box, the gas-tube, and the rails, constructed and arranged as set

forth, and in manner and for the purpose as explained.

AARON F. SMITH.

Witnesses:

R. H. EDDY,

J. R. SNOW.