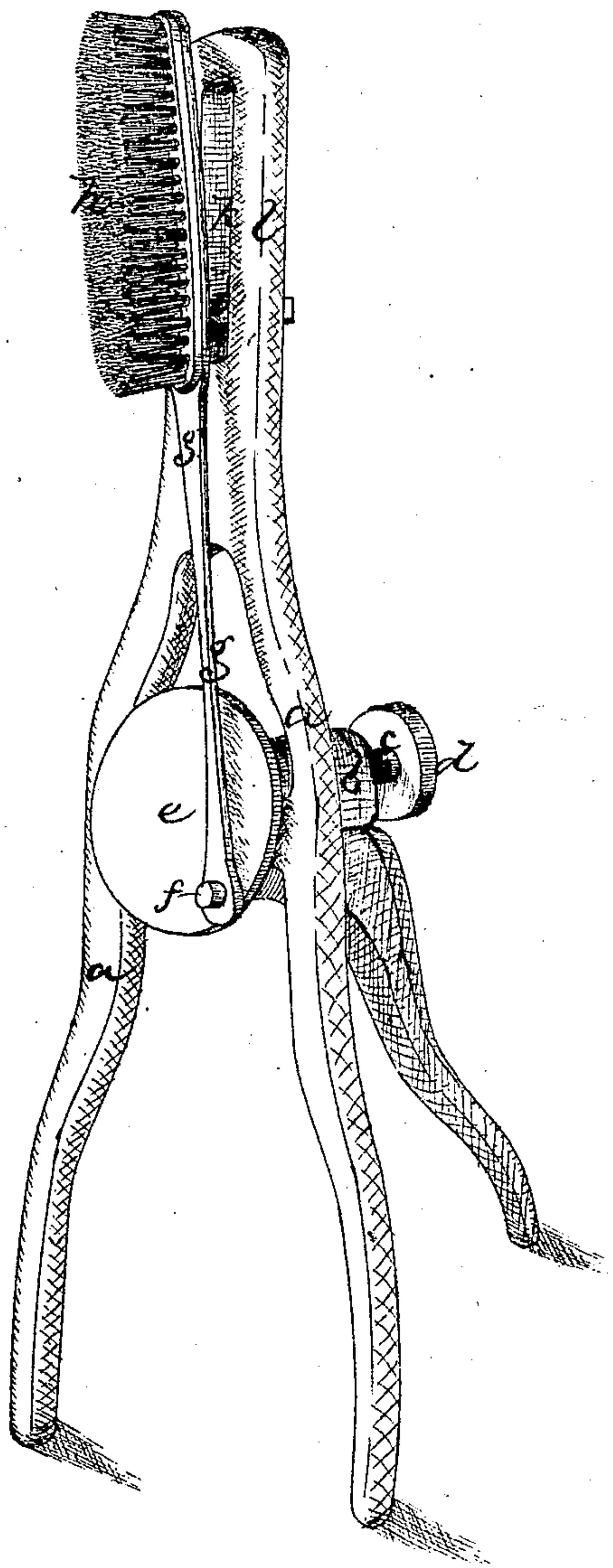


N. B. BRIGGS & C. F. STETSON.

Improvement in Machines for Brushing Boot and Shoe Soles.

No. 132,435.

Patented Oct. 22, 1872.



Witnesses.

J. B. Kipper.

L. H. Lattimer.

Inventor.

N. B. Briggs  
C. F. Stetson  
by their attys.

Crosby & Gould

# UNITED STATES PATENT OFFICE.

NATHANIEL B. BRIGGS, OF EAST ABINGTON, AND CHARLES T. STETSON,  
OF WEST HANOVER, MASSACHUSETTS.

## IMPROVEMENT IN MACHINES FOR BRUSHING BOOT AND SHOE SOLES.

Specification forming part of Letters Patent No. **132,435**, dated October 22, 1872.

*To all whom it may concern:*

Be it known that we, NATHANIEL B. BRIGGS, of East Abington, and CHARLES T. STETSON, of West Hanover, all in the county of Plymouth and State of Massachusetts, have invented jointly an Improved Machine for Brushing Stained Boot and Shoe Bottoms; and we do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of our invention sufficient to enable those skilled in the art to practice it.

In finishing the soles or bottoms of boots and shoes it is customary, after sand-papering the sole to produce a uniform surface, to brush the sole for the purpose of producing a finished surface. As the motion of the brush has to be irregular or somewhat elliptical, the sole being oblong, the brush has always been actuated by hand, rendering the operation lengthy and laborious. The object of our invention is to facilitate the operation of brushing such boot and shoe soles, to accomplish which we make an upright stand or frame, with a horizontal driving-shaft, having at one end a crank-wheel, to the crank-pin of which is jointed a long arm or bar that carries at its upper end an oblong and vertical brush, which brush has projecting from its back, and near its lower end, a stud that extends into and slides in a vertical slot made in an upward extension of the frame, the bristles of the brush standing out horizontally, so that their front ends form the brushing surface. The motion of the shaft and crank impart a vertical and elliptical movement to the brush, so that if a boot or shoe sole is simply presented to it its surface may be very quickly and perfectly finished.

The drawing represents a machine embodying the invention.

*a* denotes the frame; *b*, a bearing, in which is journaled the horizontal shaft *c*, carrying at one end a driving-pulley, *d*, and at the other end a wheel, *e*, from which extends a crank-pin, *f*. To this pin is jointed a rod or bar, *g*, that carries at its upper end the oblong vertical brush *h*, the bristles of which stand as seen in the drawing. From the back of the brush projects the slide-stud *i*, which extends through a guide-slot, *k*, in an upright extension, *l*, of the frame *a*.

It will readily be seen that as the shaft is rotated there will be imparted to the brush the peculiar oblong and elliptical motion which would be imparted by hand, and in brushing boot and shoe bottoms the hand-work of three men can be accomplished by one, and the work will be as well or even better accomplished.

The bar *g* may be jointed to the crank-wheel by a slotted connection for the purpose of adjustment of vertical throw of the brush, and the bar and slide-stud may be connected in a similar manner to adjust the lateral movement of the brush.

We claim—

The brush *h*, slide-stud *i*, guide-slot *k*, bar *g*, and crank-wheel *e*, combined and arranged to operate substantially as shown and described.

NATHANIEL B. BRIGGS.  
CHARLES T. STETSON.

Witnesses to BRIGGS and STETSON:  
JAMES JENKINS,  
FRANCIS GOULD.