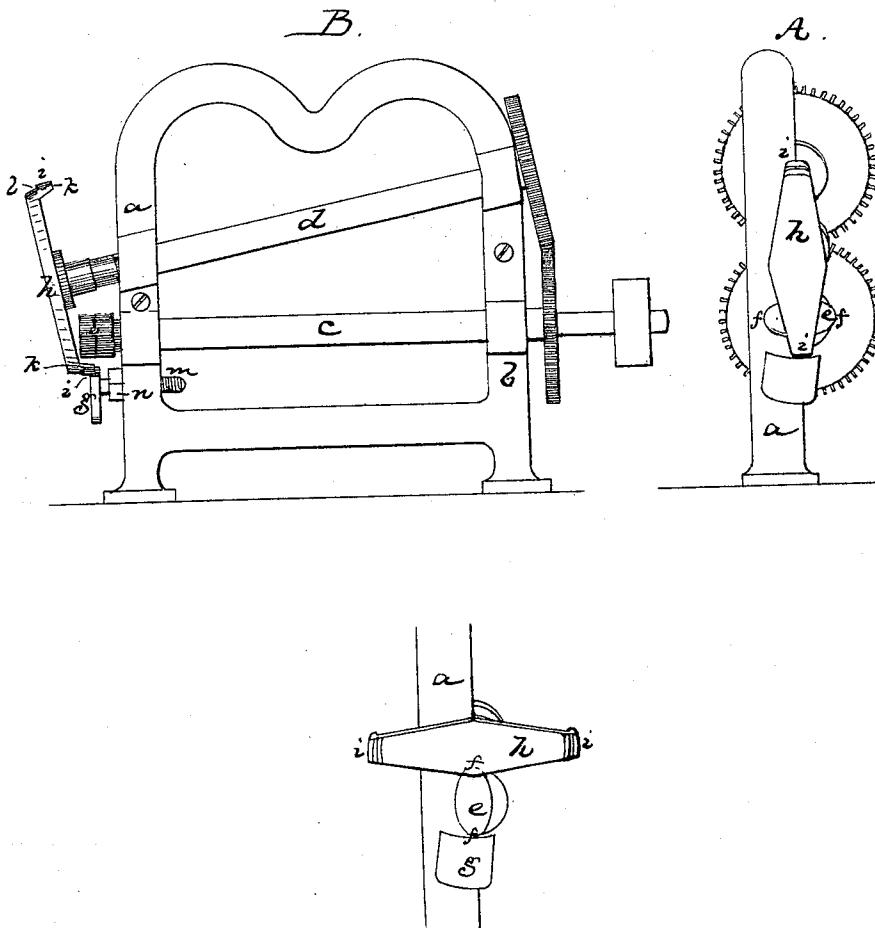


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Improvement in Sole-Edge Burnishing-Machines for
Boots and Shoes.

No. 129,457.

Patented July 16, 1872.



Witnesses.

M. W. Frothingham.
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By his Attys.
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UNITED STATES PATENT OFFICE.

AUGUSTUS C. CAREY, OF MALDEN, ASSIGNOR TO HIMSELF AND DEAN PEABODY, OF LYNN, MASSACHUSETTS.

IMPROVEMENT IN SOLE-EDGE-BURNISHING MACHINES FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. 129,457, dated July 16, 1872.

To all whom it may concern:

Be it known that I, AUGUSTUS C. CAREY, of Malden, in the county of Middlesex and State of Massachusetts, have invented an Improvement in Edge-Burnishing Machines; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

In burnishing the edges of the soles and heels of boots and shoes it is customary to use sometimes a rotary burnishing-wheel, and sometimes a reciprocating tool. The use of a wheel is not productive of very satisfactory results, as the fiber of the leather is pressed down and condensed only in one direction, and roughs up and becomes loose in wear, and, although the reciprocating tool remedies this defect, the rotary-wheel machine would be preferred, especially in burnishing sole edges, but for its action upon the leather only in one direction.

In my invention I use a rotary burnishing-tool, but I construct the tool in such manner that its action is intermittent, and I combine with it another rotary tool, constructing and operating the two, so that each supplements the action of the other, each tool having, preferably, two burnishing faces, and one face of one tool acting and then passing out of action upon the edge as one face of the other tool comes into action with the edge, the two having rapid rotation imparted to them, causing them to act alternately and in opposite directions of rotation upon the edge to be burnished. It is in such an organization that my invention primarily consists.

The drawing represents a machine embodying my invention.

A shows the machine in front elevation. B is a side elevation of it. C shows each burnisher in a position right angular to its position shown at A. *a b* denote two uprights or stands in which are journaled two rotary shafts, *c d*. The lower one of these shafts is a horizontal shaft, having at its front end a burnisher-wheel or plate, *e*, which plate is of an oblong or oval shape, with two opposite end edges, *f*, that constitute the burnishing-faces. Below this rotary burnishing-tool is a rest and guide-plate, *g*, against which the bottom of the boot or shoe is held in presenting the heel

or sole edge to the action of the burnisher. The upper shaft *d* has at its front end an oblong or oval burnishing-wheel or plate, *h*, and this wheel is made of long diameter, so that its opposite burnishing-edges *i*, in its path of rotation, act upon the sole or heel edge in the same horizontal plane that the edges of the wheel *e* act, the two shafts *c d* being geared together and rotating in opposite directions at the same speed, and the two wheels rapidly alternating in their action upon the edge, so that by their action every part of the edge to be burnished is operated upon in opposite directions by the two burnishing-tools. The two shafts *c d* may be parallel, but, for the purposes of gearing and of bringing the acting surface of plate *h* as much as practicable beneath the wheel *e*, the upper shaft may be inclined, as shown, each projection *k* being inclined to the face of the plate, so as to bring its burnishing-face into a horizontal plane at its moment of action. Each burnishing-surface is preferably so made as to extend in beyond the plane of the front face of the rest-plate *g*, and to give acting burnishing-surfaces of just the same width each projection *k* may be shouldered, as seen at *l*. The rest-plate *g* may be adjusted in position by means of a screw-shank, *m*, working in a nut-thread in the upright *a*, and a check-nut, *n*, or by any other suitable means.

I claim—

1. A burnishing-machine having two rotary burnishing wheels or tools acting alternately and intermittently in opposite directions, and in the same plane or at the same point, substantially as described.

2. Also, the two oblong rotary burnisher wheels or plates *e h*, rotating in concert, the wheel *h* having a projection, *k*, to form the burnishing-face, substantially as shown and described.

3. Also, in combination with the two rotary burnisher wheels or plates, operating as described, the rest-plate *g*, substantially as shown and described.

Executed this 29th day of May, A. D. 1872.
AUGUSTUS C. CAREY.

Witnesses:

GEO. N. JOHNSON,
WM. STURGIS,