

(No Model.)

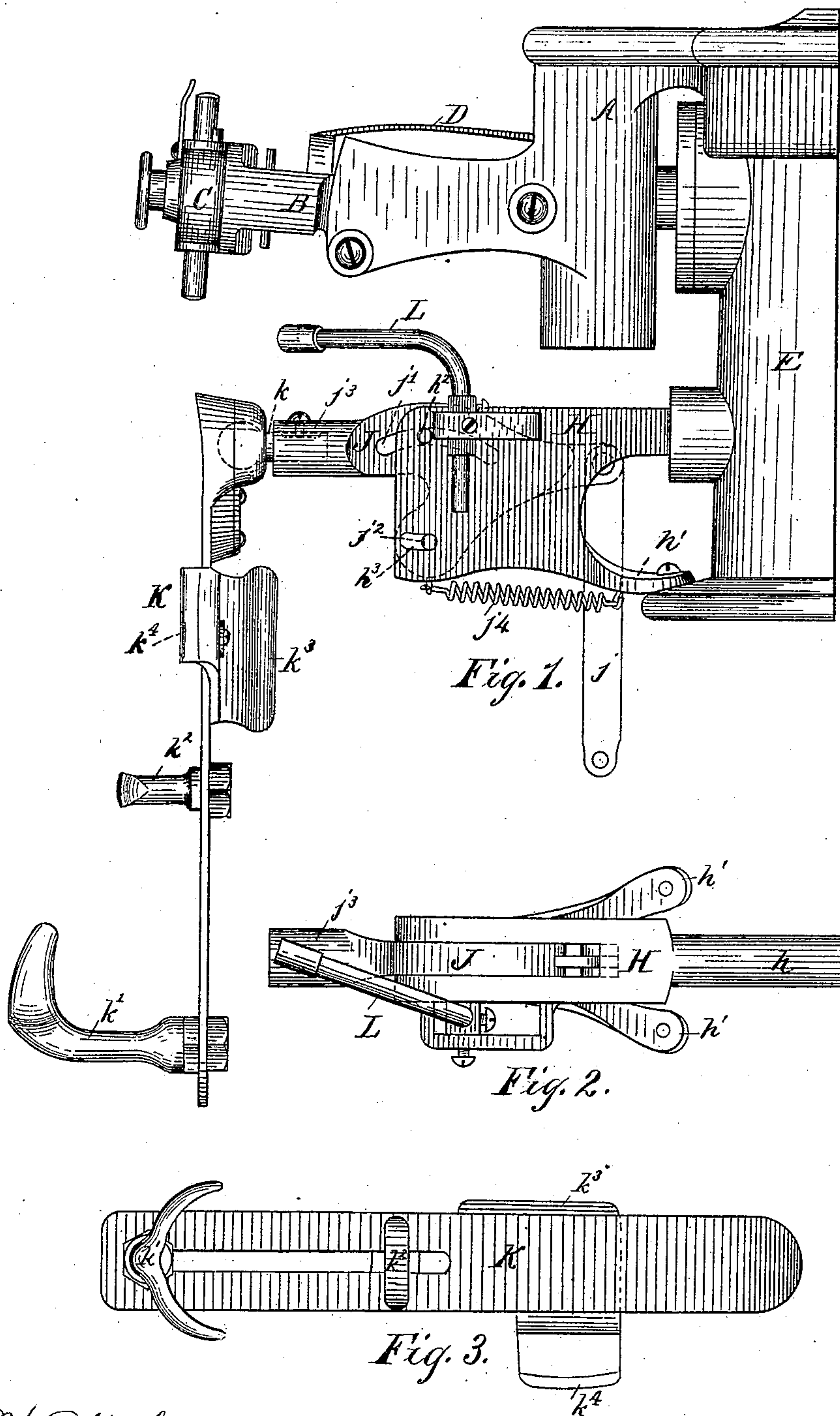
2 Sheets—Sheet 1.

G. A. FULLERTON.

SOLE EDGE BURNISHING MACHINE.

No. 252,874.

Patented Jan. 31, 1882.



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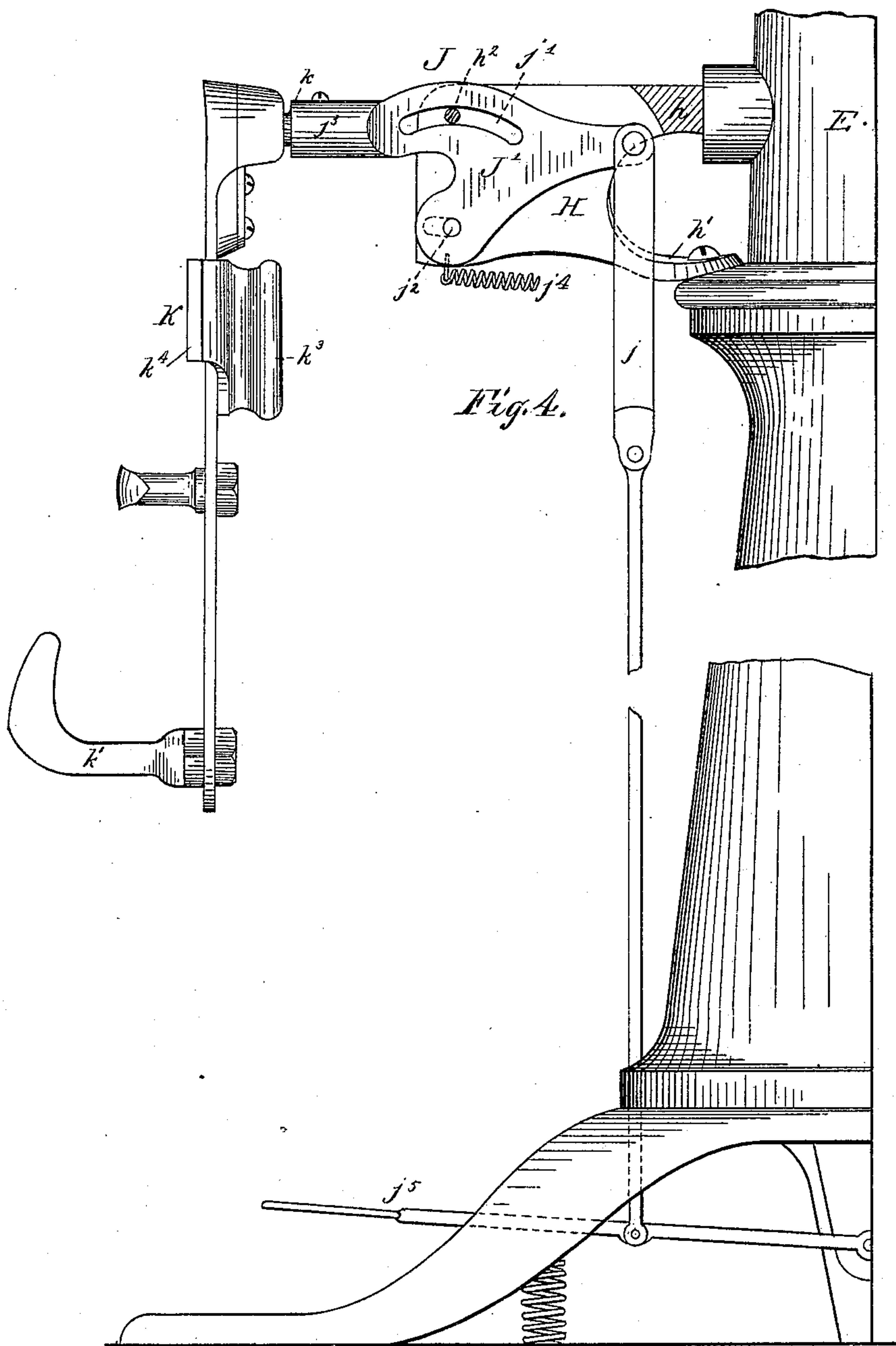
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UNITED STATES PATENT OFFICE.

GEORGE A. FULLERTON, OF BOSTON, MASSACHUSETTS.

SOLE-EDGE-BURNISHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 252,874, dated January 31, 1882.

Application filed November 21, 1881. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. FULLERTON, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Sole-Edge-Burnishing Machines, of which the following is a specification.

My invention relates to sole-edge-burnishing machines in which the burnishing-tool reciprocates with great rapidity; and the object of my invention is to provide an adjustable holder to retain the shoe when the edge of the sole around the toe is in contact with the rapidly-reciprocating tool.

My invention consists in a novel jack for holding the shoe and a carrier for supporting and controlling the jack, and adapted to be attached to a burnishing-machine in place of the finger-rest heretofore used.

In the accompanying drawings, Figure 1 is a side elevation of a burnishing-machine with my improved holder attached. Fig. 2 is a plan view of the jack-carrier and the standard in which it is mounted. Fig. 3 is a front elevation of my improved jack. Fig. 4 is an elevation of the lower parts of the machine with one side of the standard removed, and showing the jack-carrier and the treadle for operating it.

The carriage A, tool-stock B, tool-supporter C, and spring D are parts of a well-known burnishing-machine.

The support E is made as usual, but has a standard, H, in which is mounted an adjustable jack-carrier, J, attached to it instead of the usual finger-rest.

The standard H consists of two plates joined together at one place, where there is formed an arm, *h*, that fits into a socket in the support E, heretofore used for the finger-rest. These plates are also provided with projecting arms *h'*, that are attached by screws to the support E.

The jack-carrier J consists of a lever, *J'*, having a pin, *j*², for its fulcrum, which pin *j*² works in slots *h*³ in the sides of the standard H. The lever *J'* is operated by a treadle, *j*⁵, connected to one of its arms by the rod or link *j*. It is thrown back out of the way, when the side edges of the sole are to be burnished, by the spring *j*⁴, which has one of its ends attached to the lever *J'* and its other end fast to the standard H. The other arm, *j*³, of the lever *J'* is provided

with a socket to receive the stem *k* of the jack K. By bearing on the treadle *j*⁵ the arm of the lever *J'*, to which it is connected, will be brought down until the left-hand end of the slot *j'* strikes the pin *h*², which is fast to the sides of the standard H, after which the pin *j*², fast to the lever *J'*, allows a further motion by moving in the slots *h*³ in the sides of the standard H. By these movements the jack K (connected to the jack-carrier J by the stem *k* in the socket in the arm *j*³ and carrying the shoe) is moved up, so as to allow all the parts of the edge of the sole around the toe to be brought to the action of the burnishing-tool. When the edges of the sides of the sole are to be burnished the treadle *j*⁵ is released, the lever *J'* is thrown back by the spring *j*⁴ until the pin *j*², fast to the lever *J'*, strikes the right-hand end of the slots *h*³ in the standard H, and the right-hand end of the slot *j'* in the lever *J'* strikes the pin *h*² in the standard H, the jack K is thus carried out of the way, and the shoe is held by hand, in the usual way.

The jack K consists of a sole-plate, to which the stem *k* is attached by a ball-and-socket joint, which allows a free oscillating movement to bring all of the toe part of the sole-edge to the action of the burnishing-tool.

To the sole-plate are attached an adjustable heel-clamp, *k'*, and an adjustable rest, *k*², which securely hold the heel part of the shoe, also a handle, *k*³, which is taken hold of by the fingers of the workman, while his hand presses against the side of the shoe to hold it against the projection *k*⁴ on one side of the handle to prevent lateral motion.

The usual gas-pipe, L, for heating the burnishing-tool, is attached to the standard H.

The operation is as follows: The workman places the shoe on the jack, which is brought back by pulling up the carrier, secures the heel between the heel-clamp and rest, takes hold of the handle with his fingers, and bears against the side of the shoe with one hand and takes hold of the heel with the other. He then depresses the treadle with his foot, thereby, through the intervention of the carrier and jack, bringing the edge of the sole of the shoe against the burnishing-tool, which is reciprocating about two thousand strokes per minute. While his foot on the treadle keeps the edge

of the sole pressed against the tool he oscillates the jack on its ball-and-socket joint, so as to bring all of the toe part of the edge of the sole to the action of the tool. When the toe
5 part is burnished the shoe is removed from the jack, which is drawn out of the way by the reaction of the spring, and the side parts of the sole-edge are burnished as usual.

In using sole-edge burnishers as heretofore
10 constructed it is difficult to prevent the shoe from partaking partially of the rapid reciprocations of the tool when the toe is being operated on, in which case the workman is obliged to take hold of a hook or finger-rest
15 with one finger of the hand that holds the toe part, while he presses his body up against the heel part. This requires experience, and none but skilled workmen can use the machine to advantage.

20 My improvement enables any one with a little experience to operate a burnishing-machine successfully and rapidly, since a pressure of the foot on the treadle will keep the sole-edge

against the burnisher, while the jack and carrier allow all necessary movements to bring the
25 edge of the sole against the burnishing-tool.

What I claim as my invention is—

1. The improved jack above described, consisting of the sole-plate K, swiveling stem k,
edge-rest k⁴, and handle k³, as set forth. 30

2. In a sole-edge-burnishing machine, the jack-carrier above described, consisting of the lever J, adapted to support the jack-swivel k,
in combination with standard H, substantially as and for the purposes set forth. 35

3. The combination of the jack K, jack-carrier J, and standard H with a burnishing-machine, the carrier J being operated, as described,
to hold the jack, with the edge of the sole, against the burnishing-tool in burnishing around the
40 toe, and to be got out of the way in burnishing the side edges, as set forth.

GEORGE A. FULLERTON.

Witnesses:

WM. ZITTEL,
J. R. SNOW.