(No Model.) 2 Sheets—Sheet 1.

J. E. TARBOX.

HEEL BURNISHING MACHINE.

No. 270,150. Patented Jan. 2, 1883

Fig. 1.

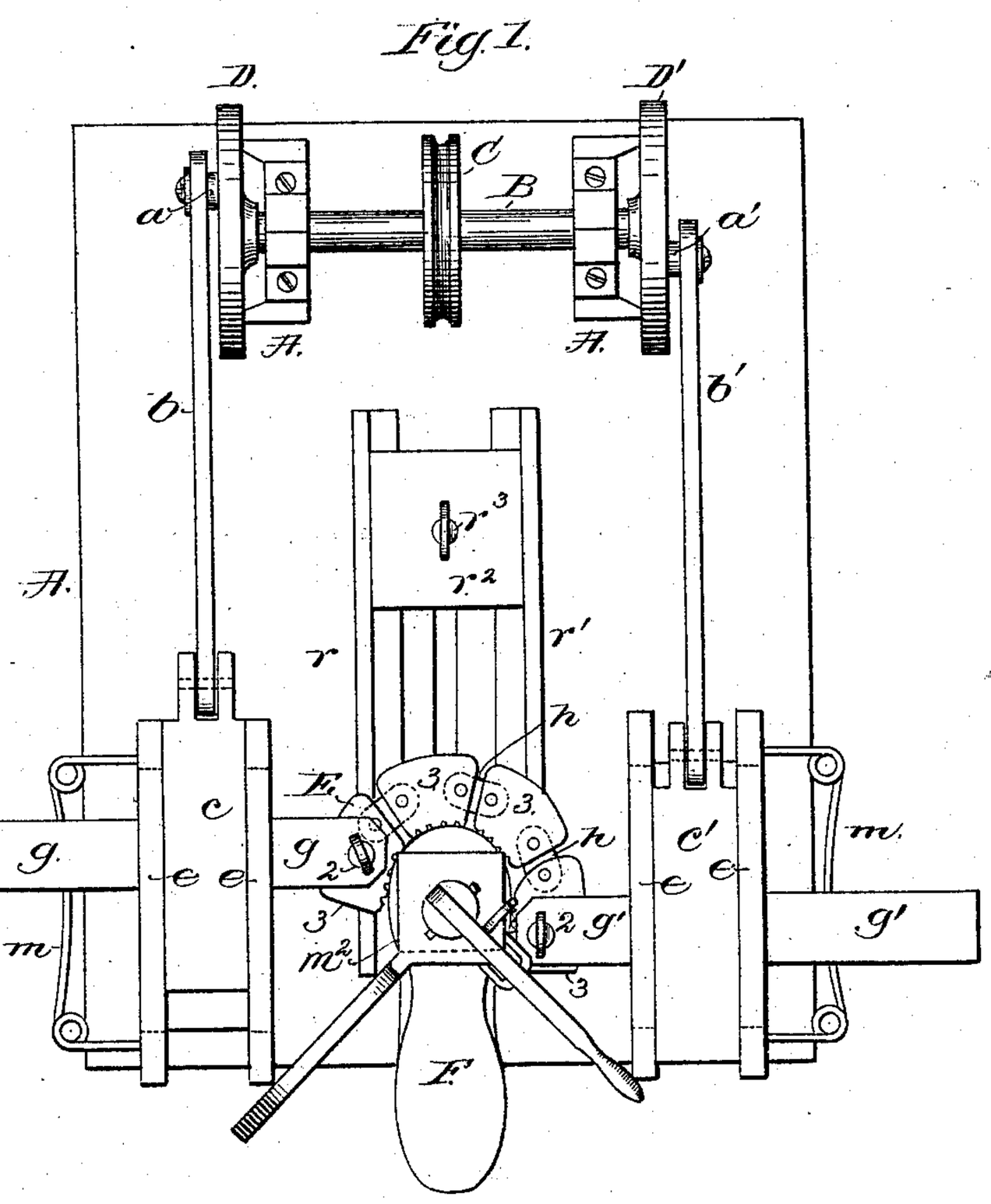
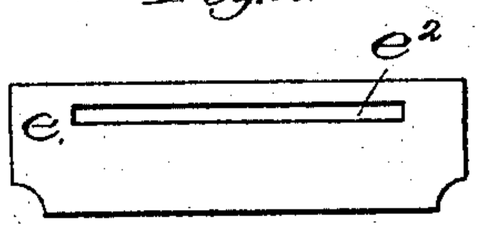


Fig. 2.



Witnesses,
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Bernice J. Noyes.

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(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

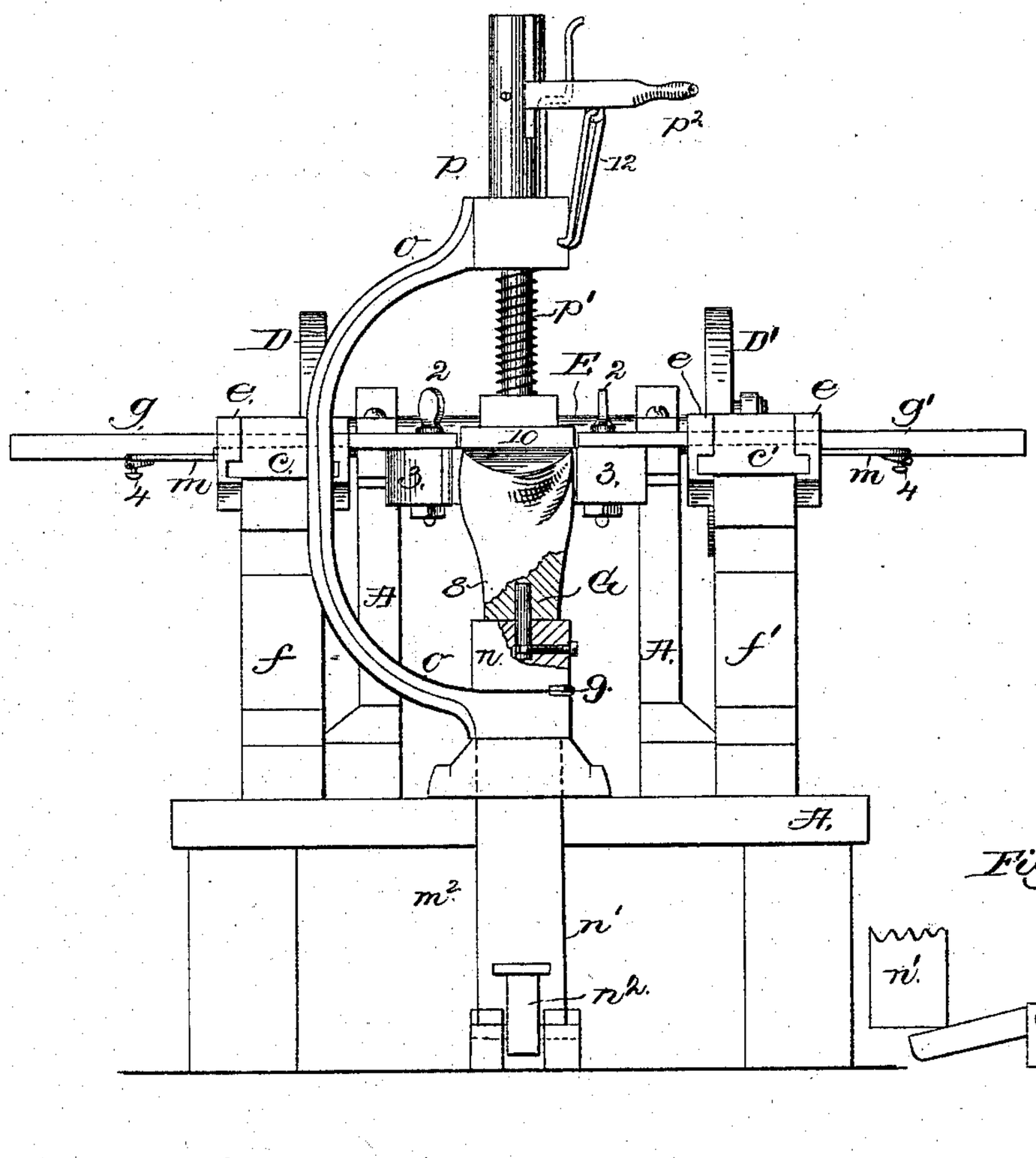

Fig 4.

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UNITED STATES PATENT OFFICE.

JAMES E. TARBOX, OF LYNN, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO SAMUEL M. PORTER, OF SAME PLACE.

HEEL-BURNISHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 270,150, dated January 2, 1883.

Application filed September 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES E. TARBOX, of Lynn, county of Essex, State of Massachusetts, have invented an Improvement in Heel-Burnishing Machines, of which the following description, in connection with the accompanying drawings, is a specification.

This invention relates to burnishing-machines for burnishing the heels of boots and shoes; and it consists essentially of a jointed or chain-like burnishing-belt attached to arms of two reciprocating cross-heads, connected by links with crank-pins of two rotating disks or cranks, which reciprocate the said cross-heads in opposite directions, one being moved forward while the other is being drawn backward.

Figure 1 represents in plan view a burnishing-machine embodying this invention; Fig. 2, a detail showing one of the side pieces of one of the guides in which the cross-heads slide; Fig. 3, a front view of Fig. 1, and Fig. 4 a detail of the devices for raising and lowering the jack.

The frame-work A, of proper shape to hold the working parts, has suitable uprights provided with boxes for the main shaft B, which, driven by a belt on a suitable pulley, C, has, as herein shown, disks D D′ at its opposite ends; but instead of disks it might have cranks. These disks have crank-pins *a a′*, connected respectively by links *b b′* with the cross-heads *c c′*, made T-shaped, as shown in Fig. 3, and fitted to slide between the grooved side pieces, *e*, which form guides for the said cross-heads. The guides are erected upon the upper end of parts *f f′*, and each side piece, *e*, is slotted, as shown at e^2, Fig. 2, to receive the arms *g g′*, extended through the cross-heads *c* and *c′*, respectively, at right angles. The inner ends of these arms *g g′* are connected by pins or screws 2 with the endmost block 3 of a series of blocks united by links *h* (see Fig. 1) to form a chain-like burnishing-belt, E. Each arm *g g′*, at its under side, has a pin or stud, 4, against which acts a spring, *m*, to force the arms toward the shoe-heel in a yielding manner, suitable shoulders at the under sides of the said arms preventing them from being moved too far inward by the said springs. As the cross-heads are reciprocated in right lines in opposite directions, the said arms pull alternately upon the said belt E, and cause it to rub about the curved surface of the heel of the boot or shoe, the said chain adapting itself to the curve of the heel, and, by the edges and faces of its blocks 3, burnishing the said heel.

The shoe is mounted upon a last, G, of usual shape, the foot 8 of which is provided with a pin or pivot entering a socket in a block, *n*, secured to the upper end of a sliding bar, *n′*, engaged by a treadle, n^2, by which it is raised and lowered to place and hold the shoe and last in correct position for the action of the belt E against the heel of the boot or shoe. The block *n* is hinged upon the bar *n′* at 9, to enable the shoes to be easily removed from the last by tipping the said block laterally, when a shoe or boot may be readily removed from or applied to the last.

Rising and falling with the block *n* is a yoke, *o*, which, at its upper end, receives and guides the spindle *p*, provided at its lower end with the heel-presser or hold-down 10, shaped to correspond substantially with the top-lift of the heel. This spindle is surrounded by a spiral spring, *p′*, which acts to depress the spindle, a hand-lever, p^2, having its fulcrum on a standard, 12, serving to lift the spindle when it is desired to lift the heel-presser.

The carriage m^2, by which the last, yoke, spindle, and heel-presser are mounted, constitutes a jack, which may be slid or adjusted horizontally, as may be desired, to place the heel of the boot or shoe well back into the curved or concaved face of the chain E. In this instance the carriage has backwardly-projecting arms *r r′*, which are acted upon by a clamping-plate, r^2, joined by thumb-screws r^3 with a block or washer (not shown) below the main part of the frame, the said clamp holding the carriage in adjusted position.

I do not broadly claim a burnishing-belt or a burnishing-chain moved continuously in one direction.

I claim—

1. The burnishing chain or belt, the arms with which it is connected, the cross-heads to carry the said arms, and the guides to receive the cross-heads, combined with the links and cranks to move the cross-heads, all constructed substantially as described.

2. The guides for the cross-heads, the cross-heads, their arms *g g'*, springs to hold them pressed forward, and the belt or chain E, combined with the links and cranks to reciprocate the cross-heads in opposite directions at the same time, substantially as described.

3. The adjustable or movable jack to hold the shoe, the chain E to burnish the heel of the shoe, and the arms and cross-heads, combined with the guides for the cross-heads, and the links and cranks to move the cross-heads, substantially as shown and described.

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

JAMES E. TARBOX.

Witnesses:
JOS. P. LIVERMORE,
B. J. NOYES.