

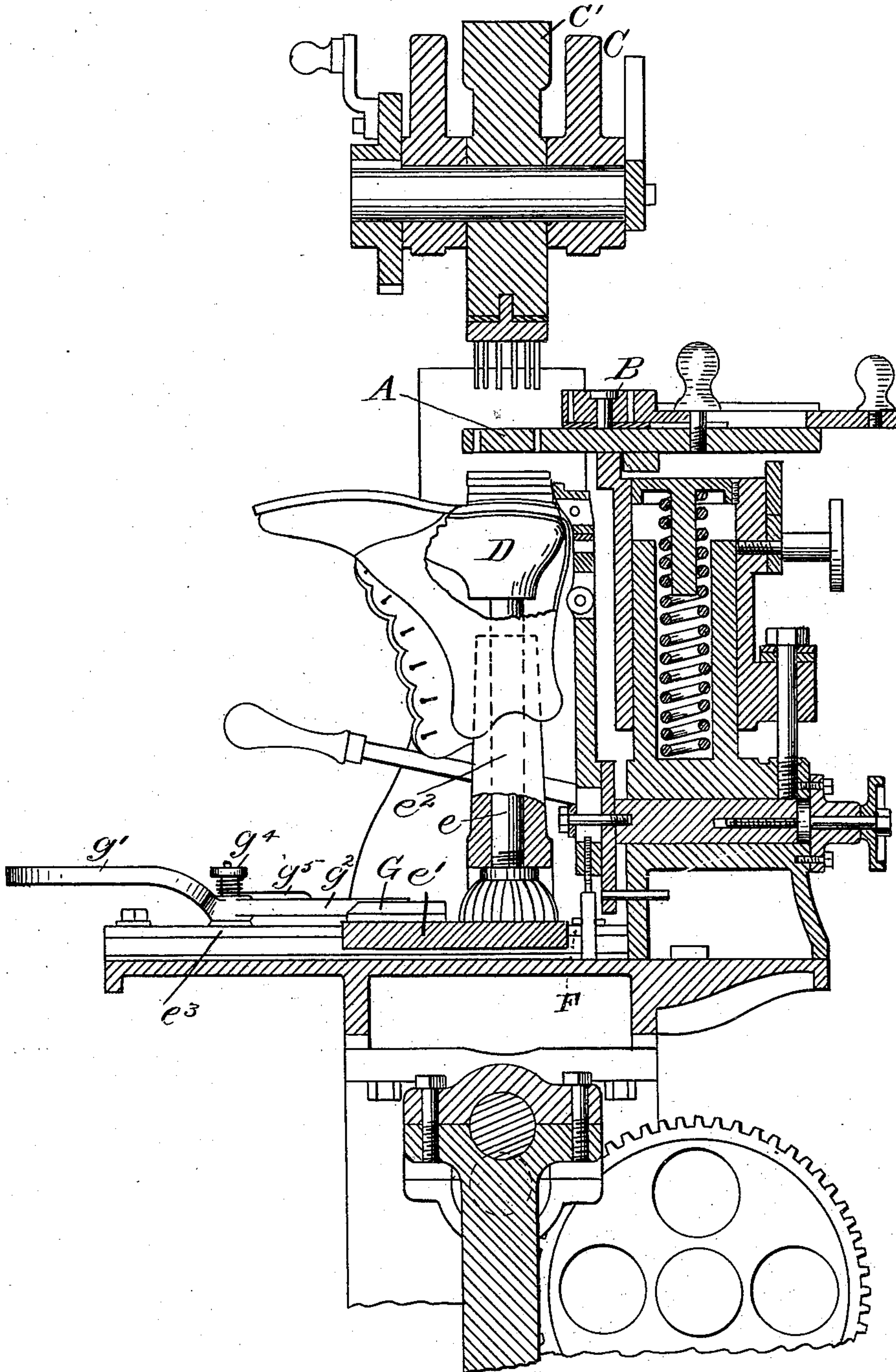
(No Model.)

2 Sheets—Sheet 1.

E. E. ORR.
HEEL NAILING MACHINE.

No. 375,458.

Patented Dec. 27, 1887.



WITNESSES

J. M. Dolan.

Fred. B. Dolan.

FIG. 1.

INVENTOR

Edward E. Orr
by his attys
Clark & Raymond

(No Model.)

2 Sheets—Sheet 2.

E. E. ORR.
HEEL NAILING MACHINE.

No. 375,458.

Patented Dec. 27, 1887.

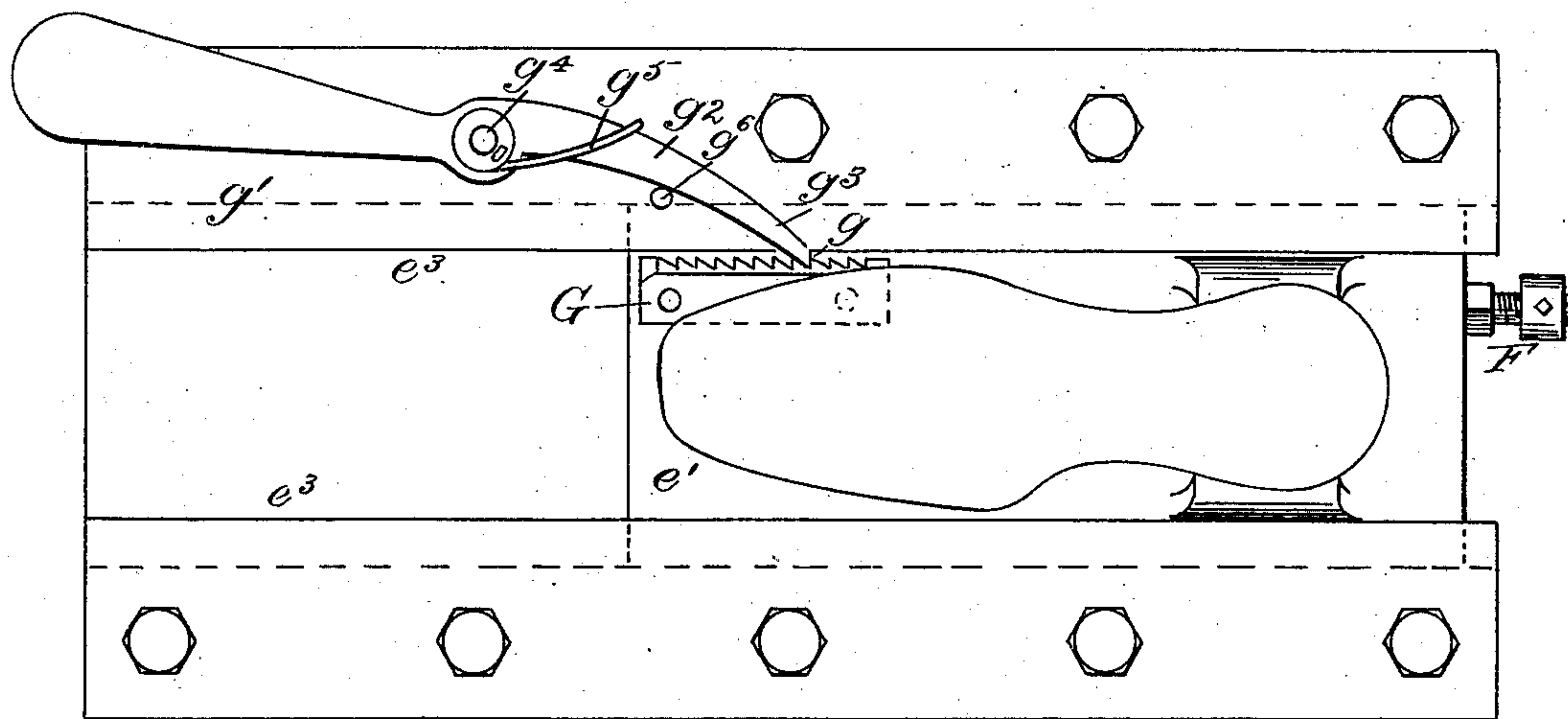


Fig. 2.

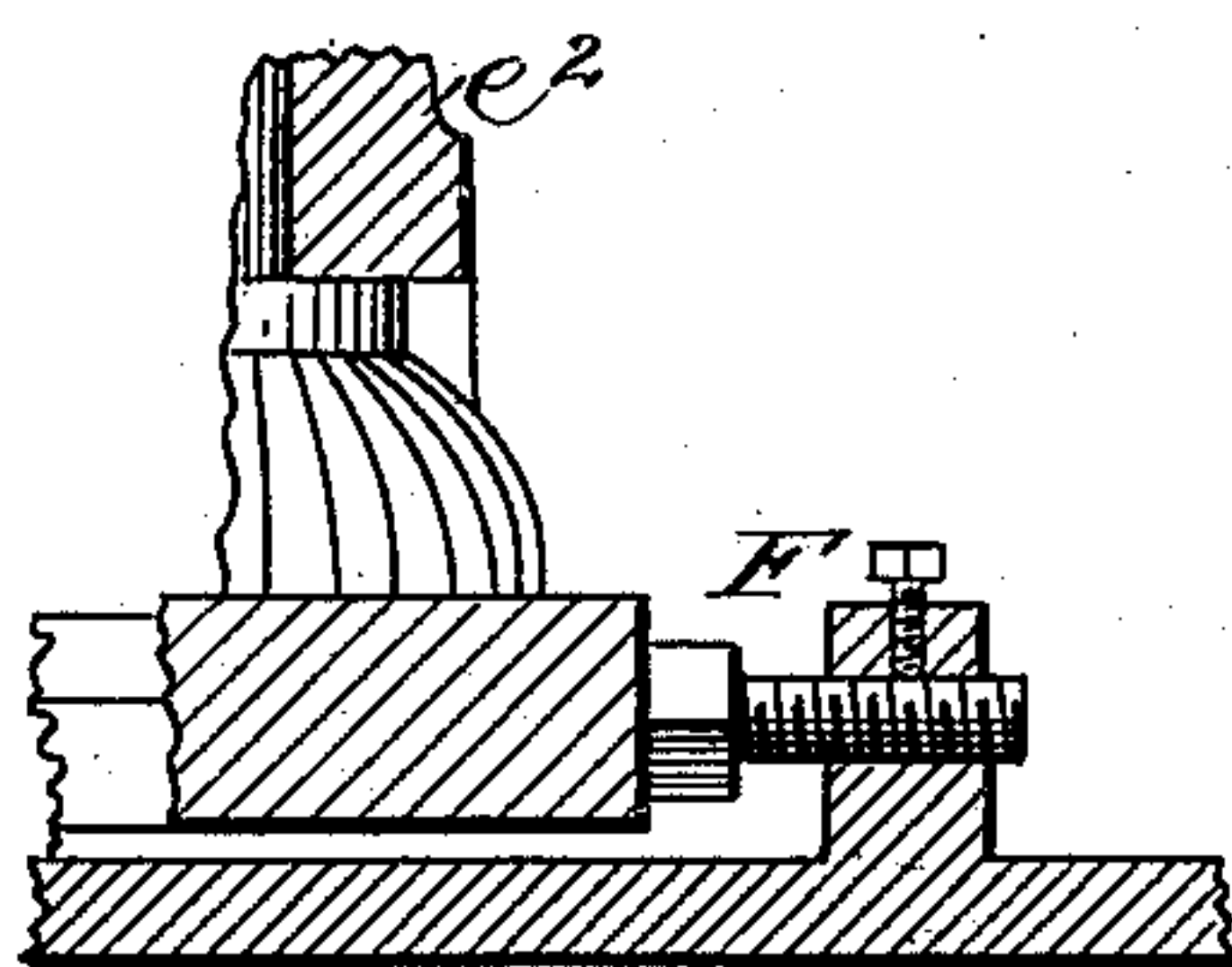


Fig. 3.

WITNESSES

J. M. Dolan.

Fred. B. Dolan.

INVENTOR

Edward E. Orr
by his attys

Chapin & Raymond

UNITED STATES PATENT OFFICE.

EDWARD E. ORR, OF WEYMOUTH, MASSACHUSETTS, ASSIGNOR TO THE
NATIONAL HEELING MACHINE COMPANY, OF PORTLAND, MAINE.

HEEL-NAILING MACHINE.

SPECIFICATION forming part of Letters Patent No. 375,458, dated December 27, 1887.

Application filed December 29, 1886. Serial No. 222,864. (No model.)

To all whom it may concern:

Be it known that I, EDWARD E. ORR, a citizen of the United States and a resident of Weymouth, in the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Heel-Nailing Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification in explaining its nature, in which—

Figure 1 is a view in section of a machine having my invention. Fig. 2 is a plan view of the jack and bed. Fig. 3 is a detail view.

In heel-nailing machines having a last or work support horizontally movable in relation to the templet and nailing device there is upon the movement of the work-support toward the templet or of the templet toward the work-support a liability of the work-support being thrown or moved horizontally slightly in a forward direction, and this is especially liable to happen if the last or work support is well rounded backward at the heel and if stock well filled with oil is used for insoles; and my invention relates to a device for positively locking the work-support so that it cannot be thus slipped or moved.

The invention is represented as applied to a national heeling-machine; but its use is of course not limited to said machine.

A represents the templet; B, the nail-carrier; C, the cross-head which carries or supports the revolving head; C', carrying a gang of awls, a gang of drivers, and a top-lift-attaching device.

D is the last or work-support.

e is the spindle supporting the same. e' is the plate, which has a post, e², carrying the spindle e. This plate slides in the ways e³ in the bed of the machine to move the last or work-support in and out of position beneath the templet.

F is the back-stop, which preferably is made adjustable horizontally. The sliding jack-plate e' carries a block, G, having ratchet-teeth g placed closely together.

To the guide-plate g' there is fastened a lever-pawl, g², which is arranged so that its point or latching end g³ is held in contact with the teeth of the ratchet-block. This lever-pawl is pivoted at g⁴, and a spring, g⁵, maintains its latching end in contact with the teeth. A pin, g⁶, prevents the end of the lever-pawl from being thrown too far into the slideway when the pawl is not in contact with the ratchet-teeth—as, for instance, when the jack is moved forward.

In operation, the jack is moved in until the back end of the plate e' comes in contact with the back-stop, and the pawl or latch then automatically engages the teeth of the ratchet-block and rides upon them until the jack comes to rest, when it locks or moves behind the one then in line with it, and thereby serves to lock the last or work support firmly between the back-stop and the end of the pawl. By providing the ratchet-bar with a number of teeth it is of course apparent that the jack may be locked in any desired position, which position is of course determined by the location of the back-stop.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination, in a heel-nailing machine, of the last or work support, the jack having the ratchet-bar G, and the detent or locking-arm g², substantially as described.

2. The combination of the last or work support, the jack-plate g', the back-stop F, the ratchet-bar G, carried by the jack-plate, the detent or pawl g², pivoted as described, and having the handle and a spring, g⁵, all as set forth.

3. The combination of the jack having the ratchet-bar G, the spring-pawl g², having the handle, the spring g⁵, and the pin g⁶, substantially as described.

EDWARD E. ORR.

Witnesses:

NATHAN H. PRATT,
PRESTON LEWIS.