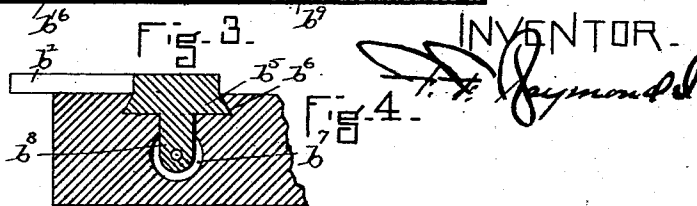
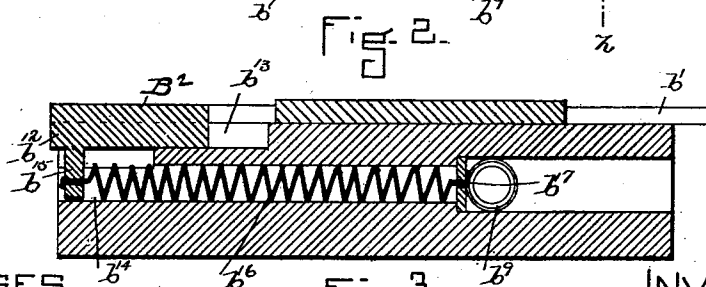
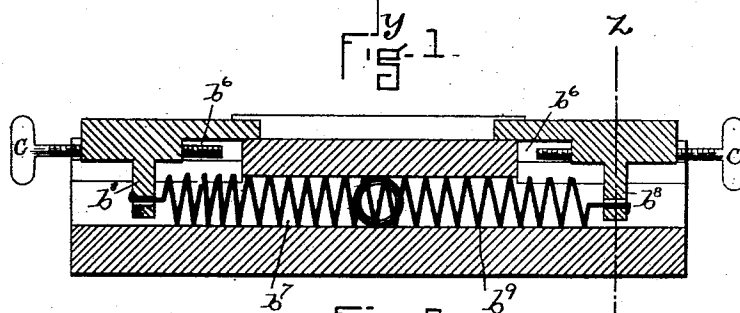
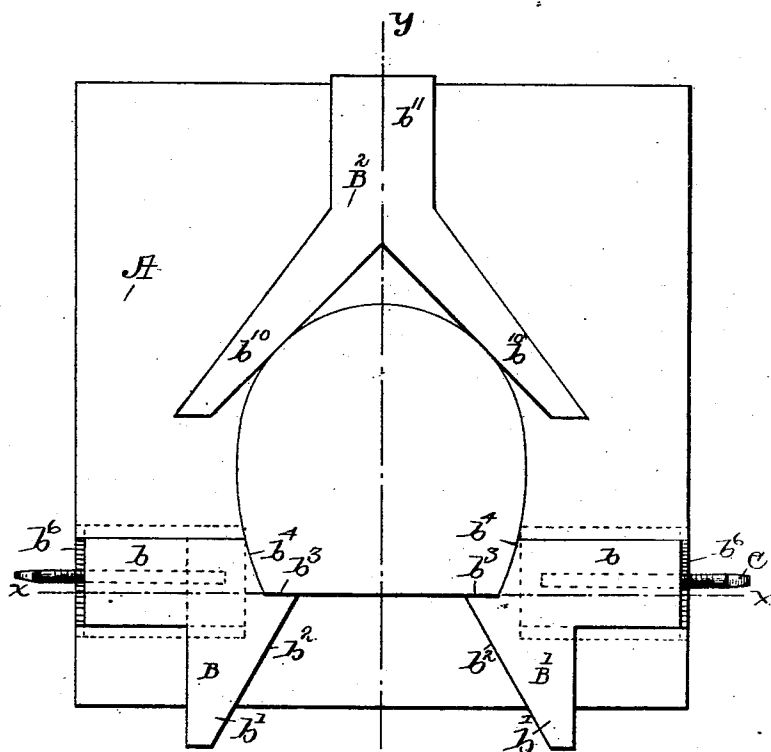


(No Model.)

F. F. RAYMOND, 2d.
HEEL NAILING MACHINE.

No. 569,055.

Patented Oct. 6, 1896.



WITNESSES.

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UNITED STATES PATENT OFFICE.

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MASSACHUSETTS, TRUSTEES.

HEEL-NAILING MACHINE.

SPECIFICATION forming part of Letters Patent No. 569,055, dated October 6, 1896.

Application filed September 24, 1889. Serial No. 324,919. (No model.)

To all whom it may concern:

Be it known that I, FREEBORN F. RAYMOND, 2d, a citizen of the United States, residing at Newton, in the county of Middlesex 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.

The invention relates especially to devices for holding and centering top lifts and heel-blanks of boots and shoes.

Referring to the drawings, Figure 1 is a view in plan of a top-lift spanker-block provided with my invention. Fig. 2 is a section upon the dotted line *xx* of Fig. 1. Fig. 3 is a section upon the dotted line *yy* of Fig. 1. Fig. 4 is a section upon the dotted line *zz* of Fig. 2.

A represents a spanker-block. Upon it are mounted the front gages B B' and a back gage B². Each of the front gages is represented as comprising a slide-block *b* and a forward extension *b'*, having the angular edge *b²* extending to the shoulder *b³*. Each slide may also have the side shoulder *b⁴*. These gages are preferably made in one piece and have a dovetail section *b⁵*, arranged to enter a dovetail recess *b⁶*, extending from each side edge of the spanker-block. There is also formed through the spanker-block from end to end the hole *b⁷*, which connects or opens into the dovetail recesses *b⁶*, and there extends from each of the gage-blocks into said hole a stud *b⁸*, (see Figs. 2 and 4,) and these studs are connected with each other by a closing-spring *b⁹*, contained in said cross-hole *b⁷* and acting to draw the gages toward each other or upon the top lift and to maintain them in such position. Each gage-block may also have the adjustable stop C for limiting and governing the extent of its closing or inward movement. The back gage B² preferably has diverging arms *b¹⁰*, extending from a slide-block *b¹¹*. The slide-block has a dovetail base *b¹²*, which enters a dovetail recess *b¹³* in the

rear part of the spanker-block, and there is formed in the spanker-block, extending from the rear or back end, a hole *b¹⁴*, which opens into the dovetail recess *b¹³*, and into which a stud *b¹⁵* on the slide-block *b¹²* extends, and this hole contains a spring *b¹⁶*, fastened at its front end *b¹⁷* and secured at its rear end to the stud *b¹⁵*. The office of the spring is to draw the slide and diverging arms of the gage forward toward the front gages.

Instead of connecting the gages B B' with each other by a common spring, there may be used two springs, one for each gage-block, or if one spring is employed it may be fastened in its hole at the center of its length, which will in effect answer the purpose of two springs.

In use the back edge of the top lift or heel-blank is pressed against the surface *b²* of the front gages and the gages thereby moved from each other sufficiently to allow the top lift or heel-blank to come into contact with the back gage and pass the shoulders *b³*, and after the shoulders *b³* are passed the gages close upon the heel-blank, the shoulders coming in front of the breast, and the back gage pressing against the back of the heel forces it into contact with the shoulders, so that the top lift or heel-blank is held centered between the arms *b¹⁰*, the shoulders *b³*, and between the shoulders *b⁴*. As above stated, however, it is not always essential to employ the shoulders *b⁴*.

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

1. The combination in a top-lift or heel-blank holding and centering device of the block A, having the recesses *b⁶*, the slide-blocks *b b'*, one in each recess, the gage-blocks B B' attached respectively to said slide-blocks and a spring or springs for moving said slide-blocks toward each other, as and for the purposes described.

2. The combination in a top-lift or heel-blank holding and centering device of the block A, having the recesses *b⁶*, the gage-blocks B B' arranged to slide therein, the hole *b¹⁴* connecting the recesses *b⁶*, studs upon the

blocks to enter said recesses and a spring connecting said studs contained in the hole 6¹⁴, substantially as described.

3. A heel lift or blank holder having a flat
5 face, a yielding V-shaped back-stop upon said face and independent breast-gages B attached to said block having independent lateral

movements in relation to each other, as and for the purposes described.

FREEBORN F. RAYMOND, 2D.

In presence of—

J. M. DOLAN,

A. P. PORTER.