L. M. NUTE.

Machinery for forming Heel-Blanks.

No. 149,056. Patented March 31, 1874.

Fig. 3.

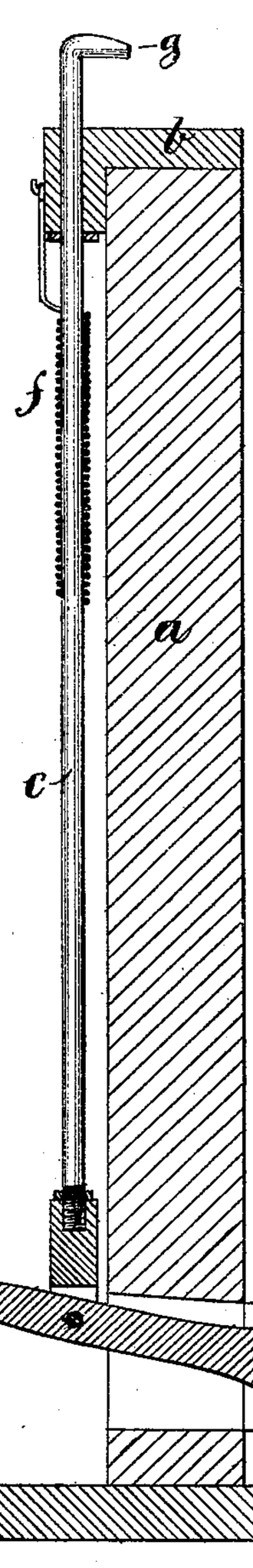


Fig. 2.

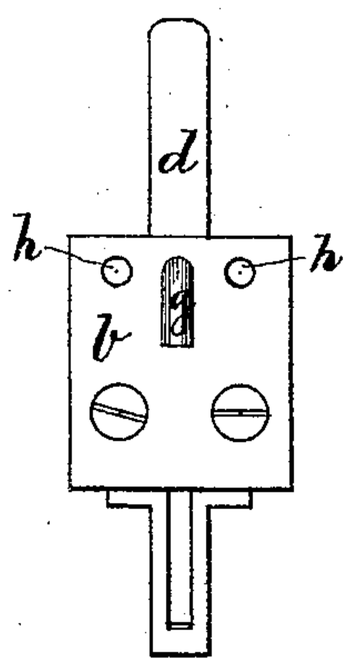


Fig. 4.

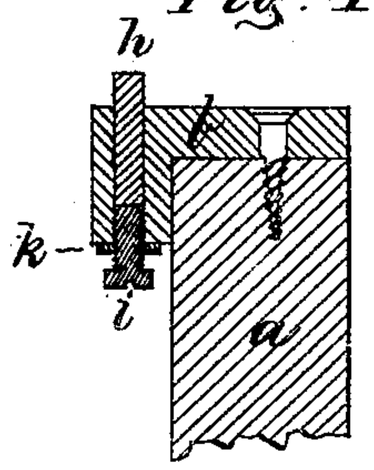
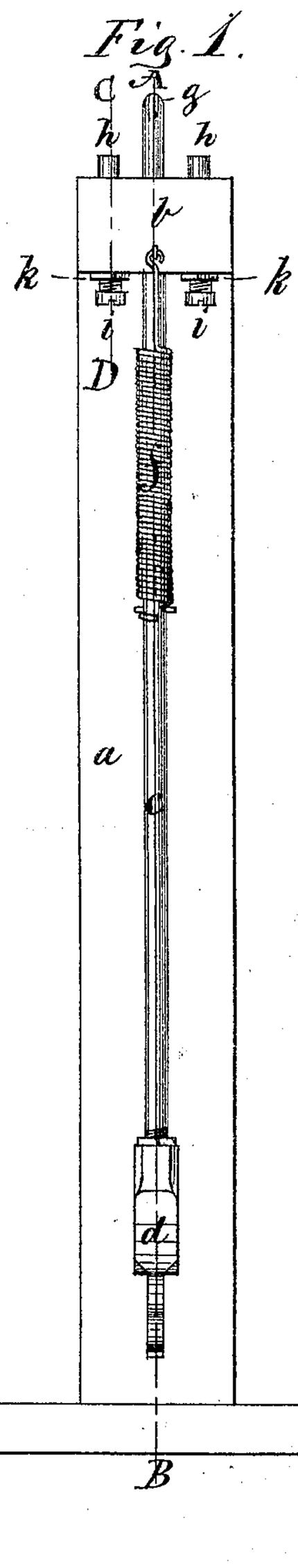


Fig. 1.



Witnesses:

George C. Phelps.

S. W. Chamberlin

Inventor:

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by Alban Andrew
atty.

UNITED STATES PATENT OFFICE.

LEANDER M. NUTE, OF GREAT FALLS, NEW HAMPSHIRE, ASSIGNOR OF ONE-HALF HIS RIGHT TO DAVID H. NUTE, OF SAME PLACE.

IMPROVEMENT IN MACHINERY FOR FORMING HEEL-BLANKS.

Specification forming part of Letters Patent No. **149,056**, dated March 31, 1874; application filed March 7, 1874.

To all whom it may concern:

Be it known that I, LEANDER M. NUTE, of Great Falls, in the county of Strafford and State of New Hampshire, have invented certain new and useful Improvements in Heel-Fitting Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements on machines for fitting heels for boots and shoes, and consists in the employment of a hooked presser-foot, operated by means of a foot-treadle and a spring, or its equivalent, in combination with a pair of adjustable guide-pins that project above the work-plate a distance equal to the thickness of the heel that is to be fitted together, in a manner as will now be more fully shown and described.

On the drawing, Figure 1 represents a front elevation of my invention. Fig. 2 represents a ground plan. Fig. 3 represents a central longitudinal section on the line A B, (shown in Fig. 1;) and Fig. 4 represents a vertical section on the line C D, (also shown in Fig. 1.)

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

In fitting heels for boots and shoes, it is desirable that all of them should be of equal thickness, and to accomplish this object rapidly, and in such a manner that the operator shall have both hands ready for the picking up of the material and fitting it together, I make use of the following invention:

a represents a post or standard, secured to the floor or otherwise, as may be convenient. To the top of said standard *a* is secured a metallic work-supporting plate, *b*, as shown. Through the front of the plate *b* is the presser-foot bar *c*, made to slide up and down. The downward motion of the said bar is obtained by pressure from the operator's foot on the treadle-lever *d*, to which the lower end of the bar *c* is connected in a suitable manner. The treadle-lever *d* is made to move on a fulcrum, *e*, arranged, in a suitable manner, in connection with the lower end of the standard *a*, as fully shown in Fig. 3. When the pressure on the treadle *d* is removed, the bar *c* is raised automatically by means of the coiled spring *f*, that surrounds the bar *c*, and is secured in its lower end thereto, and in its upper end to the work-supporting plate *b*, as shown. The upper end of the bar *c* extends horizontally as a presser-foot, *g*, (shown in Fig. 3,) and serves for the purpose of pressing the different layers together of which the heel is composed, and for the purpose of holding them in their proper relative position till they are nailed together by the operator. A pair of adjustable guides, *h h*, are arranged on each side of the presser-foot *g*, and can easily be made to project more or less above the work-supporting plate *b* by the turning of the set-screws *i i*, and their check-nuts *k k*. The guide-pins *h h* should project above the work-supporting plate *b* a distance equal to the thickness of the desired heel that is to be made. Should the combined thickness of the layers constituting a heel be a little larger than the projecting parts of the guides *h h*, the heel parts can easily be pressed together, by means of the presser-foot *g*, previous to nailing the heel parts together.

The operation of my machine is as follows: The guide-pins *h h* are adjusted to project above the plate *b* a distance equal to the desired thickness of the heels. The operator picks up and places heel-pieces over each other on the plate *b* till their combined thicknesses are equal to the projecting parts of the guides *h h*, when the presser-foot *g* is moved down on the heel, so as to hold it in position for the purpose of nailing and clinching it together. As soon as the heel is nailed together, the operator relieves the pressure on the treadle *d*, when the spring *f* causes the presser-foot *g* to rise above the heel, when it is quickly removed by the operator, and a new one commenced with in a similar manner.

Having thus fully described the nature,

construction, and operation of my invention, I wish to secure by Letters Patent, and claim—

In combination with the standard *a* and its plate *b*, the presser-foot *c g*, lever *d*, spring *f*, and the adjustable guide-pins *h h*, with their screws *i i* and check-nuts *k k*, as and for the purpose shown and described.

In testimony that I claim the foregoing, I have hereunto set my hand this 25th day of February, 1874.

LEANDER M. NUTE.

Witnesses:

ALBAN ANDRÉN,

GEORGE E. PHELPS.