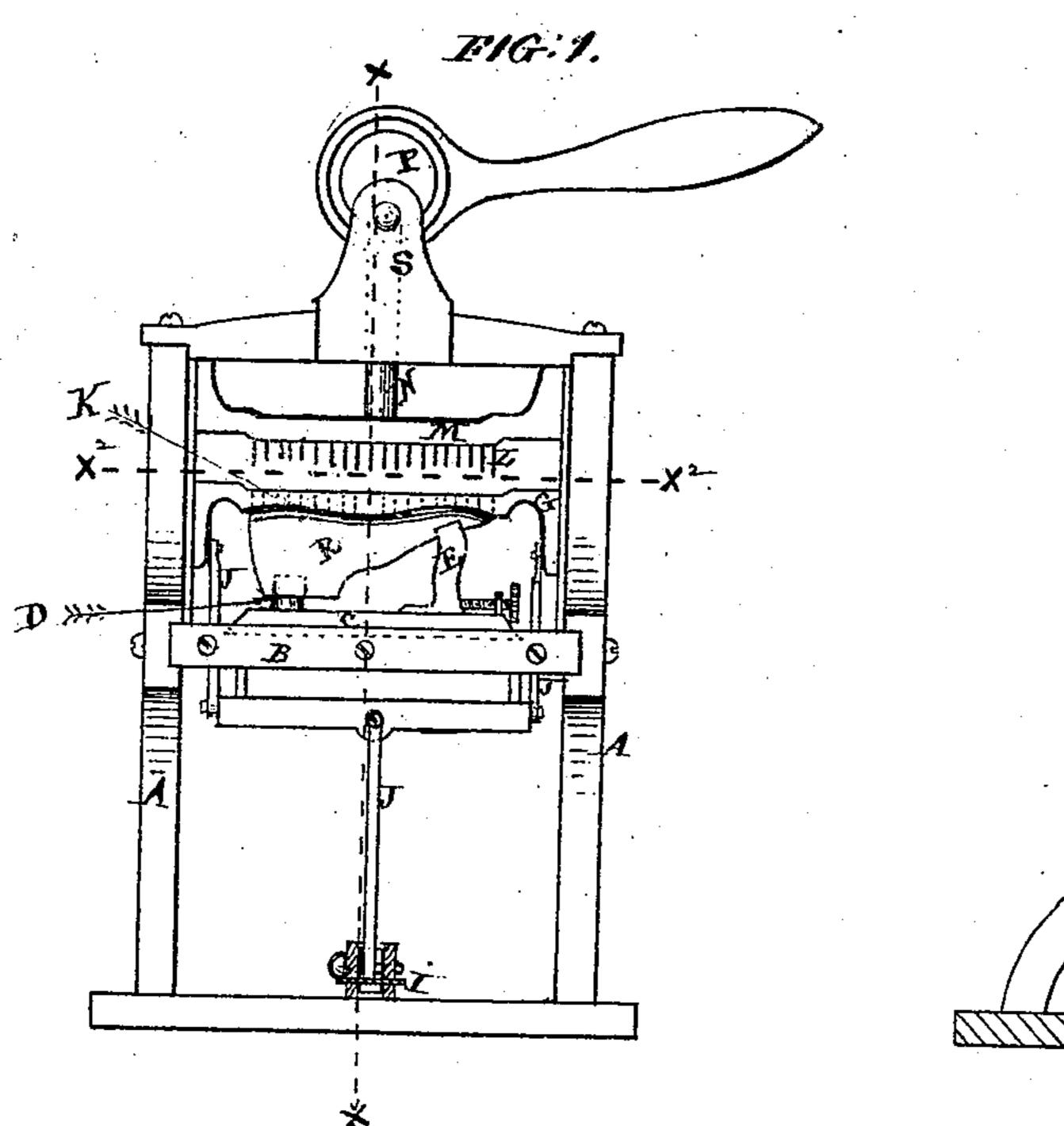
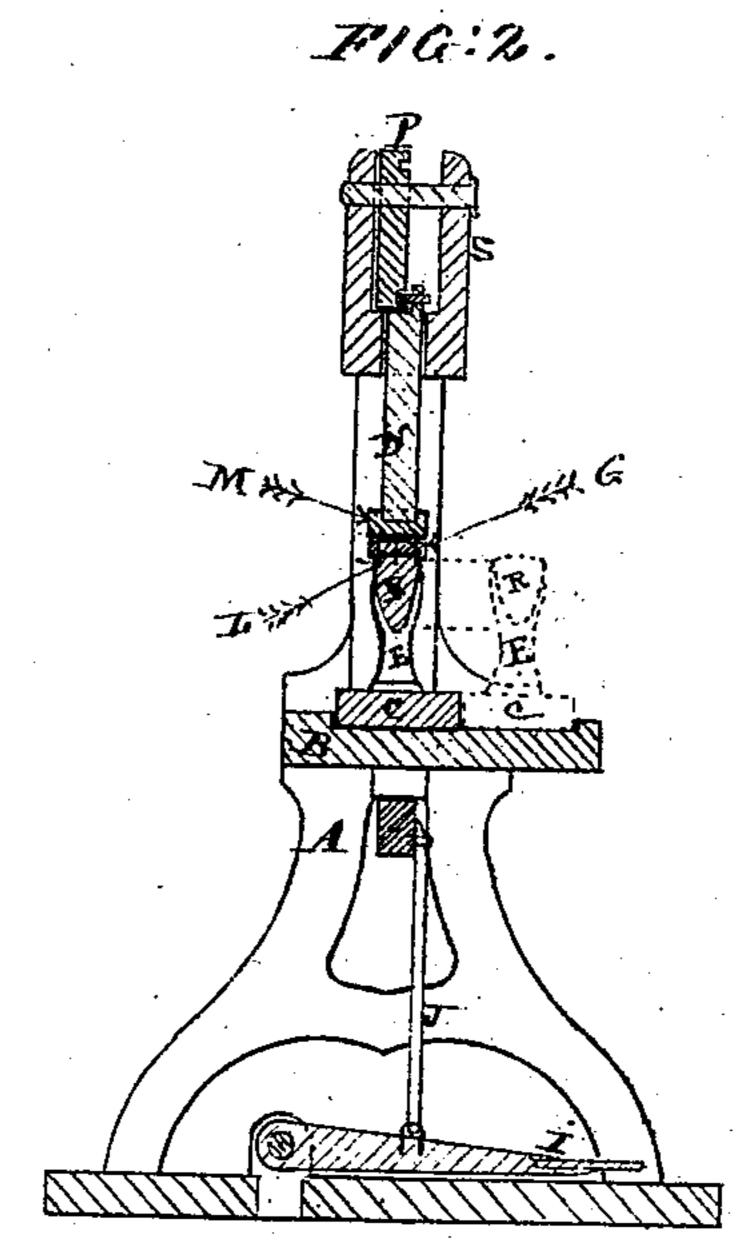
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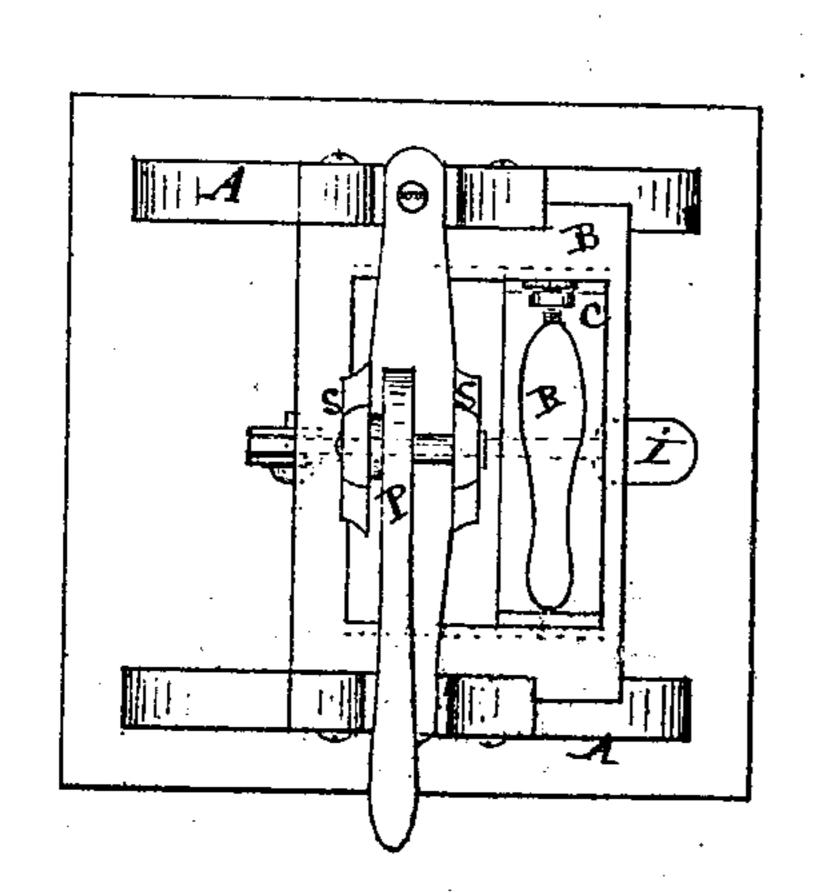
Fegging Machine. No. 107.369.

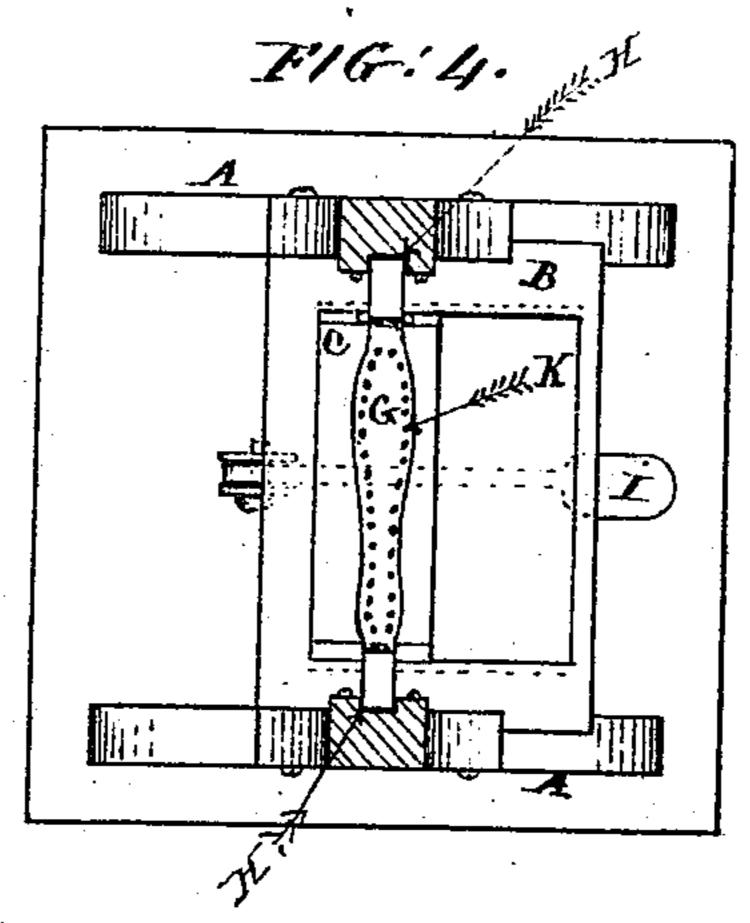
Fateriled, Sept. 13. 1870.





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Anited States Patent Office.

CHARLES H. HELMS, OF POUGHKEEPSIE, NEW YORK.

Letters Patent No. 107,369, dated September 13, 1870.

IMPROVEMENT IN MACHINE FOR FASTENING SOLES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, Charles H. Helms, of Pough-keepsie, Dutchess county, and State of New York, have invented certain new and useful Improvements in Sole-fastening Machines; and I do hereby declare that the following is a full description of the same:

The nature of my invention consists, in combination with the perforated clamp, of a movable pin or pointer-faced nail-driver plate, for the purpose of fitting into the perforations or nail-holes in the clamp, to force the nails into the sole of the shoe; but, to describe my invention more particularly, I will refer to the accompanying drawing forming a part of this specification, the same letters of reference, wherever they occur, referring to like parts.

Figure 1 is a front elevation of the machine.

Figure 2 is a vertical cut section of the same through

the line x x, fig. 1.

Figure 3 is a plan view of the machine, showing the last-holder slid out from under the nail-driver and clamp.

Figure 4 is a cut section of the machine through

the line x^2 x^2 , fig. 1.

Letter A represents the frame or sides of the machine, which may be made of iron or other suitable material.

At about half-way the height of the frame is secured a table, B. Upon this table is adjusted, in suitable guide-ways, a last-holder sliding plate, C, having on its upper side, at one end, a center pin, D, and at the other or opposite end an adjustable toe-rest or prop, E, which, by means of a set-screw, F, may be adjusted upon the plate C out or in, so as to fit the different sizes of lasts R to be operated on.

For the purpose of holding the shoe firmly on the last during the operation of nailing the sole on, a clamping-plate, G, having its ends fitting into guideways H, on the inner side of the frame C, is forced down upon the face of the sole by means of a footlever, I, acting through connecting-rods J, attached to the ends of the clamping-plate.

The face of this clamping-plate is made to correspond in shape with the size of the shoe to be operated on, and around its edges is perforated with numerous small holes, K. These holes are just large enough to admit of the easy adjustment or insertion of the nail with which the sole is to be fastened on the shoe. The object of this is to guide the nail, by holding it firmly in a vertical position while being driven into the sole, and thus secure a certain and uniform penetration of the nail. To accomplish this object, a series of pins, L, of corresponding size with the holes in the clamp, and arrangement of them, are secured into the lower face of a movable nail-driver plate, M, having its ends working in the guide-ways H, the same as the ends of the clamping-plate. The object of this is to insure at all times, and certainly, the pins L, entering the holes K, to drive the nail or screw-pointed fastener into the sole, to secure it to the shoe.

To operate the nail-driver plate a rod, N, is solidly secured to the upper side of the nail-driver, and extends up through a hole in the cross-bar of the frame C far enough to admit of a pin in its end engaging into a grooved cam-lever, P, secured in suitable bearings, S, attached to the cross-bar of the frame C. It will-thus be apparent that, by means of the handle of the lever P, the operator on the machine can readily exert power enough to drive home, at one operation, the whole set of nails that have been previously inserted into the guide-holes K, to secure the sole to

the upper leather of the shoe.

Having now described my invention, I will proceed to set forth what I claim and desire to secure by Let-

lers Patent of the United States.

I claim—
The combination of the nail-driver plate M, having the pins L secured therein, for the purposes set forth, with the perforated clamping-plate G, substantially as described and for the purposes set forth.

C. H. HELMS.

Witnesses:
CHARLES L. BARRITT,
FRANKLIN BARRITT.