

L. P. HAWKINS.

Heel-Nailing and Shaving-Machines.

No. 135,911.

Patented Feb. 18, 1873.

Fig. 1.

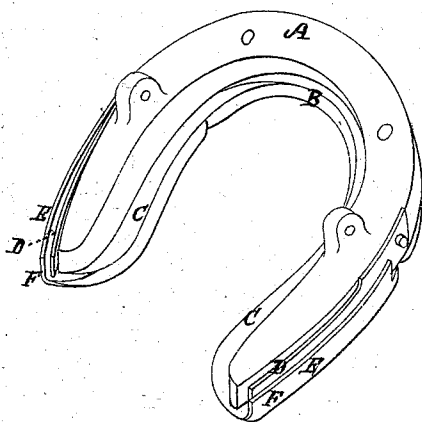
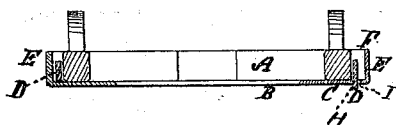


Fig. 2.



Witnesses.
L. H. Mills.
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UNITED STATES PATENT OFFICE.

LORENZO P. HAWKINS, OF LYNN, MASSACHUSETTS, ASSIGNOR TO NICHOLAS COOMBS, OF SAME PLACE.

IMPROVEMENT IN HEEL NAILING AND SHAVING MACHINES.

Specification forming part of Letters Patent No. **135,911**, dated February 18, 1873.

To all whom it may concern:

Be it known that I, L. P. HAWKINS, of Lynn, Essex county, Massachusetts, have invented certain Improvements in Heel Nailing and Shaving Machines, of which the following is a specification:

This invention relates to improvements in machinery for nailing and shaving the heels of boots and shoes, in which the boot is confined within a horizontal horseshoe-shaped support or clamp, which enters the rand-seam of the heel, the shaving-knife being attached to a cutter-head which describes a curved sweep in a circular arc about the heel-edge, the variation in the curves between the outline of the heel and the path described by the knife being compensated by a spring attached to each end of the clamp, against which the cutter-stocks (or an adjustable stop applied thereto) brings up at the end of its stroke.

Heretofore, in the operation of these machines, the spring above-named often becomes fractured, or its force spent, and the shaving-knife, having no effectual guard, takes a cut into the heel or the sole and ruins the boot. The frequency with which this happens has induced me to devise my present improvement, which consists in applying to one or both ends of the yoke or clamp before named a guard-plate, which overlaps or covers the spring, and interposes a shield between it and the heel, the knife-carrier or its adjustable stop striking against this plate in lieu of the spring, and affording a protection to insure the spring from fracture, or, in the event of a fracture, to prevent the knife from taking into the heel or sole edge to an undue extent.

The drawing accompanying this specification represents in Figure 1 a perspective view, and in Fig. 2 a section, of my improvement.

In this drawing, A represents a clamp or clasp, composed of a yoke-shaped bar of iron, of the form in horizontal section of the heel

of a boot, and provided, upon its lower side, with an inwardly-projecting lip or flange, B, which enters the rand-seam of the heel, and by this maintains the heel in its proper position, depending from the clamp, a portion of each side of this ledge being an independent plate, C, pivoted at its inner end to the side of the clamp, and pressed inwardly against the outer face of this side by a plate-spring, D, applied and operating as shown in Fig. 2 of the drawing.

In carrying out my improvement, I apply to the under side of one or both of the arms or sides of the clamp a plate, E, formed with an upright lip or guard, F, which rises alongside of the outer surface of the arm, and with a space between the two for reception of a plate-spring, D, a small stud, H, depending from the outer and free end of such spring, which enters a small orifice, I, made in the plate E, by means of which the spring, when perfect, throws the lip F toward the adjacent arm of the clamp.

The spring D, under this arrangement, performs all the useful offices required of it, while the shield or guard F interposes a barrier to protect the spring from concussion or contact of the cutter-block as it brings up against it in completing its stroke, by which means the spring is seldom broken or incapacitated from duty, while the shield serves as a means of preventing the knife from taking too deep a cut into the leather, as it retains the knife at a given distance from the heel-edge.

Claim.

I claim—

In combination with the clamp A and spring D, the guard or shield F, independent of the spring, and forming part of plate E, substantially as and for the purposes stated.

LORENZO P. HAWKINS.

Witnesses:

F. CURTIS,
W. E. BOARDMAN.