

Heel Trimming-Machines.

No. 135,745.

Patented Feb. 11, 1873.

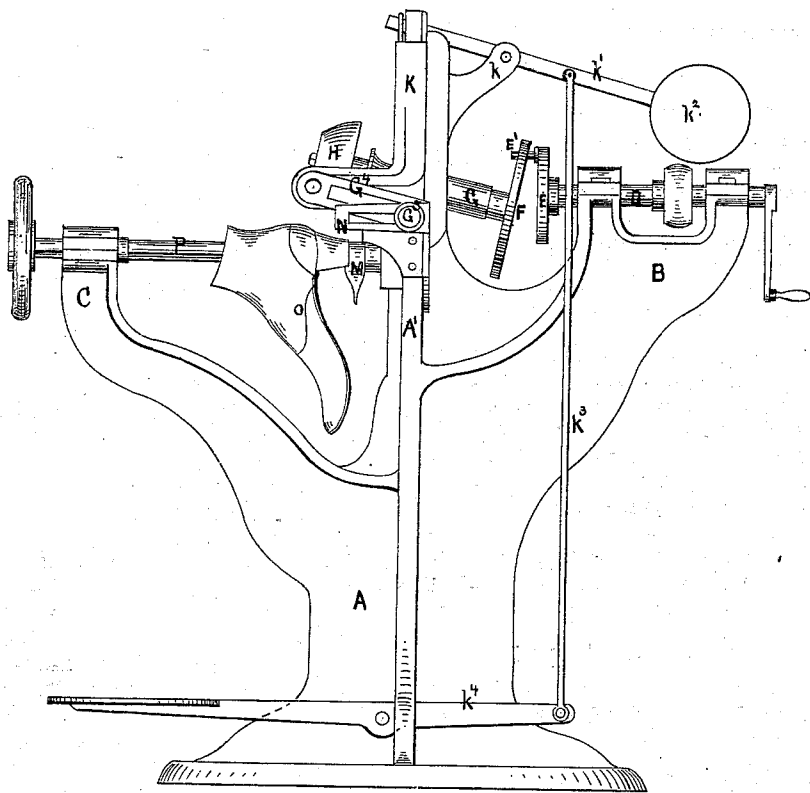


Fig. 1.

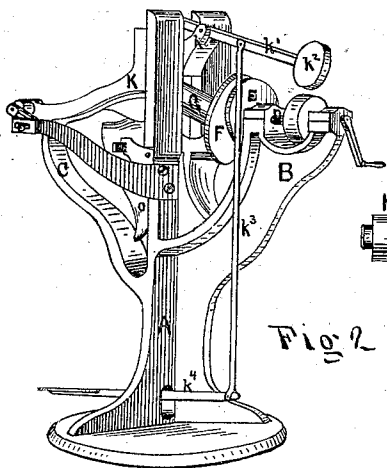


Fig 2

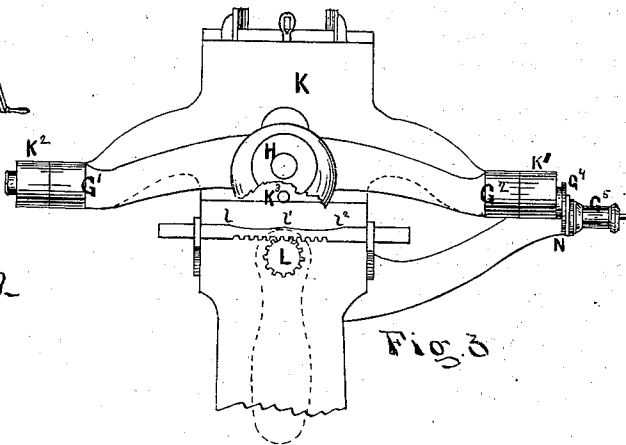


Fig. 3

WITNESSES
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UNITED STATES PATENT OFFICE.

CHARLES J. ADDY, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-
HALF HIS RIGHT TO JOHN R. FOLSOM, OF SAME PLACE.

IMPROVEMENT IN HEEL-TRIMMING MACHINES.

Specification forming part of Letters Patent No. 135,745, dated February 11, 1873.

To all whom it may concern:

Be it known that I, CHARLES J. ADDY, of Boston, in the county of Suffolk and State of Massachusetts, have invented a certain new and useful Improvement in Heel-Trimming Machines, of which the following is a specification:

Nature and Object of the Invention.

The nature of my invention consists in hanging the operating-wheel upon a swing-shaft so that, by moving a lever or some similar device, the shaft and its operating-wheel, cutter, or burnisher may be brought to the work and inclined at any desired angle. The invention also consists in an improved guide or guard, by which the cutting action of the wheel is limited, the guide moving as the shoe moves, so that the cutter will shape the heel to any desired pattern.

Description of the Drawing.

Figure is an elevation of my machine. Fig. 2 is a perspective view of the same. Fig. 3 is a front elevation of a part of the same.

General Description.

A B C represent the frame to which the several parts of the machine are attached. K K¹ K² is a slide working vertically on the upright A'. This slide K has arms K¹ K², Fig. 3, which serve as housings for the swinging frame G¹ G², Fig. 3. G, Figs. 1 and 2, is a quill extending from the swinging frame G¹ G², and serves as a housing for the shaft for the cutting or burnishing wheel H. As this wheel H is hung upon the swinging frame G¹ G², which, in its turn, is hung upon the vertically-sliding frame K, it is evident that it is free to move up and down, and also that its shaft may be inclined at any angle. G⁴ is a link rigidly attached to the swinging frame G¹ G², and connected, by a pin, G⁵, to the slotted arm N, so that the pin G⁵ becomes a second center, about which the swing frame G¹ G² swings

as the sliding frame K is moved up and down. The amount of inclination given to the axis of the wheel H by the motion of the sliding frame K may be varied by changing the position of the pin G⁵ in the slots in N and G⁴. D is the driving-shaft, and communicates motion to the wheel H by means of the disk E and pin E', Fig. 1. The pin E' presses through a slot in the disk, so that, though the relative positions of the two disks may change, one will always drive the other. k¹ is a weighted lever, having a fulcrum at k, and serves to operate the sliding frame K, and through it and the swinging frame G¹ G² the cutting-wheel H. k⁴ is a foot-lever which, operating through the link k³, moves the lever k¹. The weight k² on the lever k¹ serves to throw up the cutting-wheel H when not in use. The cutting action of the wheel H is limited and regulated by the moving guide l l' l'', Fig. 3. This guide has a rack on its under side which engages with the pinion L, Fig. 3. The slide K, the motion of which governs the cutting action of the wheel H, is provided with a pin, K³, which rests, when the machine is in action, upon the sliding guide l l' l'', and, as the guide l l' l'' is moved by the action of the heel-piece M, it will limit the motion of the cutter and cause it to cut the heel into the proper shape, the exact shape being governed by the guide l l' l''. The angle of the edge of the heel is automatically regulated by the motion of the arm G¹ G² as the shoe revolves.

I claim as my invention—

1. The combination of the cutter H, the arm G¹ G², and the sliding frame K, substantially as described, and for the purpose set forth.

2. In a heel-trimming machine, the sliding guide l l' l'', operating, in combination with the cutter H, substantially as described, and for the purpose set forth.

CHARLES J. ADDY.

Witnesses:

FRANK G. PARKER,
WILLIAM EDSON.