

C. J. ADDY.

Improvement in Heel-Trimming Machines.

No. 130,686.

Patented Aug. 20, 1872.

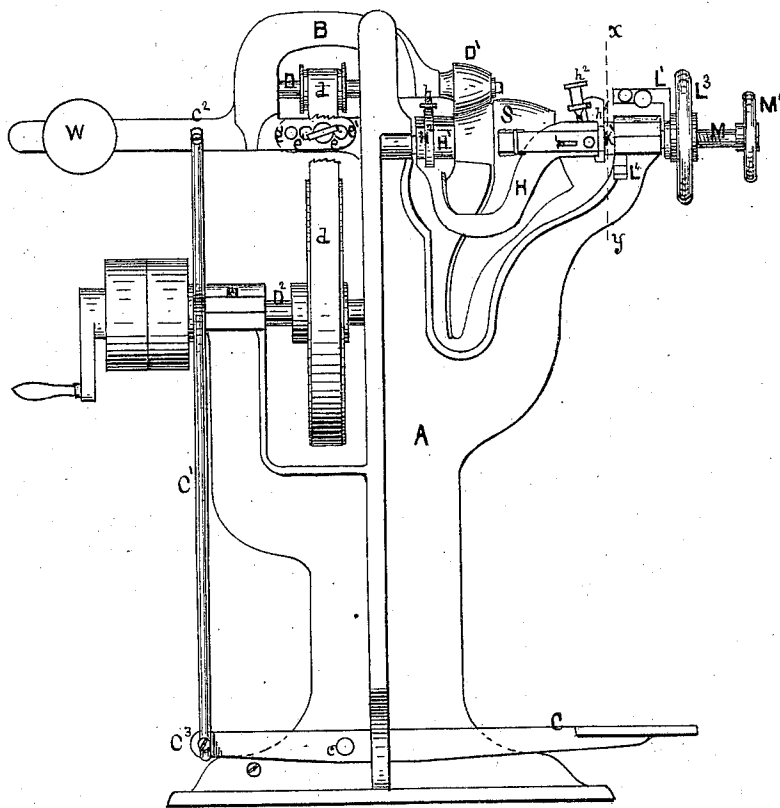


Fig. 1.

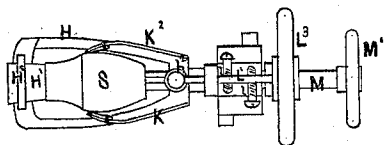


Fig. 2.

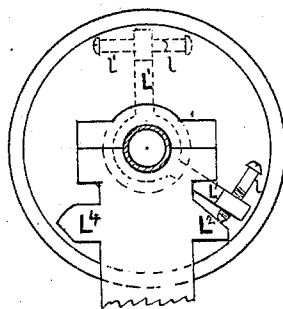


Fig. 3.

WITNESSES

Franklin Parker  
H. Lloyd Thurston

INVENTOR

Charles J. Addy  
William Leason atty.

# 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. 130,686, dated August 20, 1872.

*To all whom it may concern:*

I, CHARLES J. ADDY, of Boston, in the county of Suffolk and State of Massachusetts, have invented a certain new and useful Improved Machine for Trimming Heels, of which the following is a specification:

### *The nature of the Invention.*

The nature of my invention consists, first, in hanging the cutter of the trimming-machine upon a swinging bar or arm, said arm being pivoted in or nearly in a line with the driving-belt, so that the swinging of the arm does not interfere with the driving of the cutter-wheel; second, in combination with the above swinging arm, a guide or pattern and an adjustable gage-screw; third, in combining with the swinging arm a link and treadle for operating the same; fourth, in the detail of construction of the holding-jack, which may be best understood by reference to the drawing and specification.

### *Description of the Drawing.*

Figure 1 is an elevation of the entire machine. Fig. 2 is a plan, showing the jack and its adjuncts. Fig. 3 is an enlarged section, showing a device for limiting the motion of the jack.

### *General Description.*

A is a frame or standard, to which the several parts of the machine are attached. B is a swinging arm, pivoted to the frame of the machine at *e*, or, if desirable, at either one of the holes *e'* *e'*, &c., it being desirable to have the swinging arm pivoted nearly in line with the driving-belt. D' is a revolving cutter, made fast to the shaft D, which runs in the swinging arm B. C' is a link, pivoted to the swinging arm B at C<sup>2</sup>, and to the foot-lever C at C<sup>3</sup>, the foot-lever C being pivoted to the frame of the machine at *e*. W is a counterpoise attached to the swinging arm B, and serves to throw up the cutter D' from contact with the heel of the shoe S. *h* is a guide-screw screwing into the frame B, its head resting upon the guide-plate H<sup>2</sup>. The guide plate or pattern H<sup>2</sup> is connected with the jack H, and revolves with it and the shoe. D<sup>2</sup> is the main shaft of the machine, to which the driving power may be communicated. H, Figs. 1 and 2, forms a part of the jack, one end

swinging upon a pivot at H<sup>1</sup>, and the other end swinging with the hollow journal K<sup>1</sup>. L<sup>2</sup> is a hand-wheel attached to the journal K<sup>1</sup>, and serves to revolve the jack H and shoe S so as to present all parts of the heel to the action of the cutter. L<sup>1</sup> is an arm attached to the hand-wheel L<sup>2</sup>, and is provided with check-screws *l* *l'*. (See Figs. 2 and 3.) These check-screws strike upon the shoulders L<sup>2</sup> and L<sup>4</sup> and thus limit the motion of the jack and shoe. *h*<sup>1</sup>, Fig. 1, is a wedge-shaped key, which passes through the hollow journal K<sup>1</sup> and through the end of the jack H, so as to hold them together and at the same time to act as an adjusting device for moving the jack and shoe into proper relative position with the cutter D'. A coiled spring in a part of the jack H<sup>1</sup> reacts against the wedge *h*<sup>1</sup>, so the jack is always held steadily in position. *h*<sup>2</sup> is a screw having a disk which engages in a notch in the wedge *h*<sup>1</sup>, so that any motion of the screw gives a corresponding motion to the wedge or key *h*<sup>1</sup>. M is a screw passing through the hollow journal K<sup>1</sup>, its end resting upon the inner sole of the shoe, opposite the center of the heel. M' is a hand-wheel attached to this screw, and serves to operate it. K and K<sup>2</sup>, Fig. 2, are adjustable checks attached to the jack, and their ends pressing against the counter of the shoe, as shown in Figs. 1 and 2. These checks assist in centering the shoe.

To operate my machine I proceed as follows: The proper gage plate or pattern H<sup>2</sup> is fastened to the jack; then the adjusting gage-screw *h* is set so as to govern the motion of the swinging arm B, after which the shoe is placed in the jack and fastened by means of the screw M. When everything is ready the cutter is brought down into position by means of the treadle C, and the shoe is revolved so that the cutter may act upon all parts of the heel to be trimmed.

I claim as my invention—

1. The combination of the swinging bar B and revolving cutter D' with the guiding device *h* H<sup>2</sup> or its equivalent, substantially as described, and for the purpose set forth.

2. The combination of the swinging arm B and revolving cutter D' with the treadle C and link C', substantially as described, and for the purpose set forth.

3. The combination of the swinging arm B and the revolving cutter D<sup>1</sup> with the adjustable fulcrum *e e' e'*, &c., substantially as described, and for the purpose set forth.

4. The combination of the adjustable checks K K<sup>2</sup> with the jack H, substantially as described, and for the purpose set forth.

5. The combination of the hollow journal K<sup>1</sup>, the key-wedge *h*<sup>1</sup>, the adjustable screw *h*<sup>2</sup>, and

the jack H, substantially as described, and for the purpose set forth.

6. The combination of the shoulders *ll'* with the jack H, operating substantially as described, and for the purpose set forth.

CHARLES J. ADDY.

Witnesses:

H. FLOYD FAULKNER,

FRANK G. PARKER.