

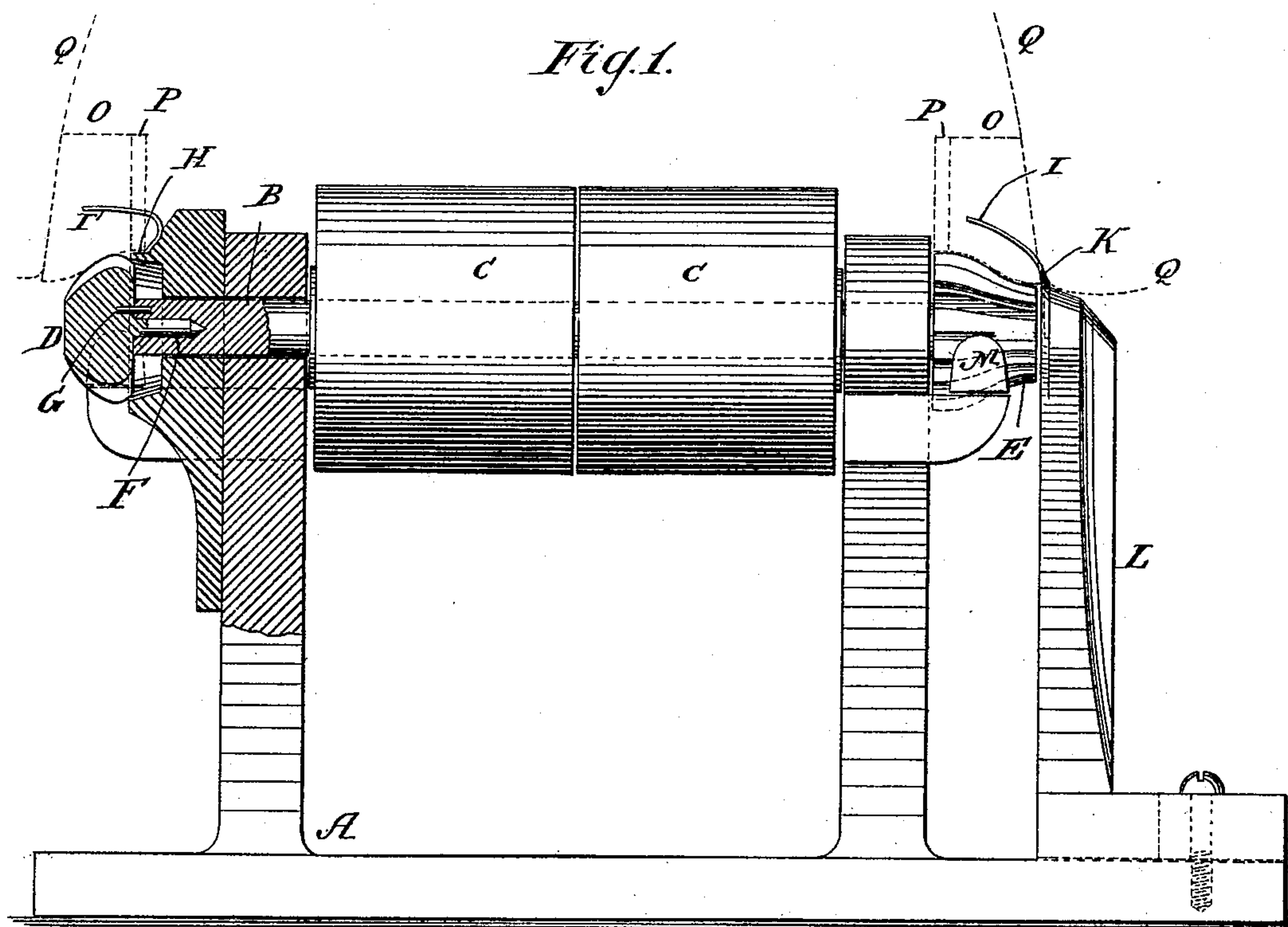
(No Model.)

C. H. HELMS.

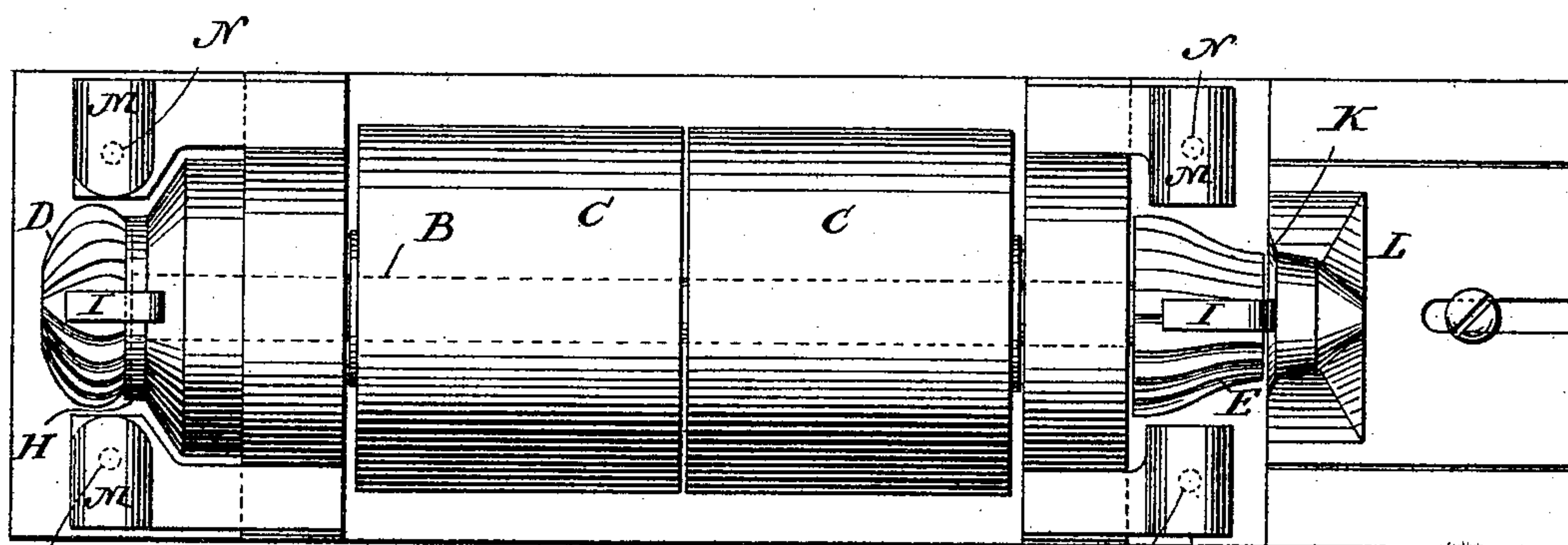
HEEL TRIMMER.

No. 397,000.

Patented Jan. 29, 1889.



*Fig. 2.*



WITNESSES:

*Eduard Wolff.*

*William Miller*

INVENTOR,

*Charles H. Helms.*

BY

*Van Santwood & Hauff*

his ATTORNEYS.



# UNITED STATES PATENT OFFICE.

CHARLES H. HELMS, OF POUGHKEEPSIE, NEW YORK, ASSIGNOR TO HIMSELF  
AND CHARLES H. GOODSSELL, OF SAME PLACE.

## HEEL-TRIMMER.

SPECIFICATION forming part of Letters Patent No. 397,000, dated January 29, 1889.

Application filed September 20, 1888. Serial No. 285,922. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES H. HELMS, a citizen of the United States, residing at Poughkeepsie, in the county of Dutchess and State of New York, have invented new and useful Improvements in Heel-Trimmers, of which the following is a specification.

This invention has for its object to provide novel means for supporting and trimming the heels of boots and shoes and protecting the uppers from contact with the trimmers, whereby the top lift serves as a guide for trimming the remainder or body of the heel and the boot or shoe rand serves as a guide for finishing the heel and its top lift.

The invention consists in the novel combination and arrangement of devices hereinafter described and claimed, reference being made to the accompanying drawings, in which—  
Figure 1 is a side elevation, partly in section, of a heel-trimmer. Fig. 2 is a plan view of a heel-trimmer.

Similar letters indicate corresponding parts.

The letter A indicates a frame or support. A shaft, B, has pulleys C C, one being fast, the other loose. By shifting a driving-belt (not shown) onto the fast or loose pulley the shaft B is rotated or allowed to come to rest, as desired. The shaft B is provided at its ends, respectively, with cutters D E. By securing the cutters to the shaft by pins F G the cutters will rotate with the shaft; but said cutters can be readily removed from the shaft when desired.

A top-lift rest, H, is arranged around the inner end of the cutter D, and, as here shown, this rest is a part of the supporting-frame A. A rand-rest, K, is arranged around the outer end of the cutter E and is shown as on a standard, L. A guard, I, projects over each cutter substantially in line with the axis of the cutter, and one guard is secured to the frame A, while the other is attached to the standard carrying the rand-rest.

The heel O, as is known, is composed of a number of lifts, the outer or top lift, P, alone being indicated in the drawings. When a heel is to be trimmed by the cutter D, the top lift is made to rest against the rest H, and as said heel is then turned to bring various parts

thereof into contact with the cutter, the top lift, P, being continually kept in contact with the rest H, said top lift forms a guide, which causes the cutter to give to the heel the proper shape in cross-section. At certain times during the operation it may be required to rest the heel upon one of the swivel-rests M. As said swivel-rests turn on pivots N, said swivel-rests allow the heel to be brought properly against the cutter.

To prevent the shoe from being turned or moved to such an extent that the body or upper Q would be injured by the cutter, a guard, I, is secured near each cutter. If the shoes indicated in Fig. 1 should be turned toward the guards, such motion, if continued, would, in the absence of guards, finally bring the upper Q into contact with a cutter; but by providing the guards I the upper will in the case of such turning come against a guard, I, and be kept out of contact with the cutter.

As seen in Fig. 1, the cutter D does not act on the top lift, P, as during the operation with the cutter D the top lift is kept in contact with the rest H. When the heel has been sufficiently trimmed by the cutter D, the heel is subjected to the action of the cutter E. The rand of the shoe or boot is caused to rest against the rand-rest K, formed on the support L, and said rand is kept continually in contact with the rest K, while the heel is turned or moved so as to bring the various parts thereof into contact with the cutter E.

The cutters in the drawings are shown adapted to trim a curved heel or heel of the kind commonly called "French heel," but said cutters can be adapted to trim a heel of any well-known form.

What I claim as new, and desire to secure by Letters Patent, is—

1. A heel-trimming machine consisting of a supporting-frame, a rotary shaft, a cutter on the shaft for trimming a heel, a stationary rest at one end of the cutter to support a heel, a fixed guard projecting over the upper side of the cutter, and two swiveled heel-rests pivoted, respectively, to the frame at opposite sides of the cutter beneath the guard which projects above the latter, substantially as described.

2. A heel-trimming machine consisting of  
a supporting-frame, a rotary shaft, a heel-  
trimming cutter on the shaft, a heel-rest at  
one end of the cutter, and two opposite hori-  
5 zontally-swinging heel-rests pivoted, respect-  
ively, to the frame at opposite sides of the cut-  
ter, substantially as described.

In testimony whereof I have hereunto set  
my hand and seal in the presence of two sub-  
scribing witnesses.

CHARLES H. HELMS. [L. S.]

Witnesses:

W. C. HAUFF,

E. F. KASTENHUBER.