

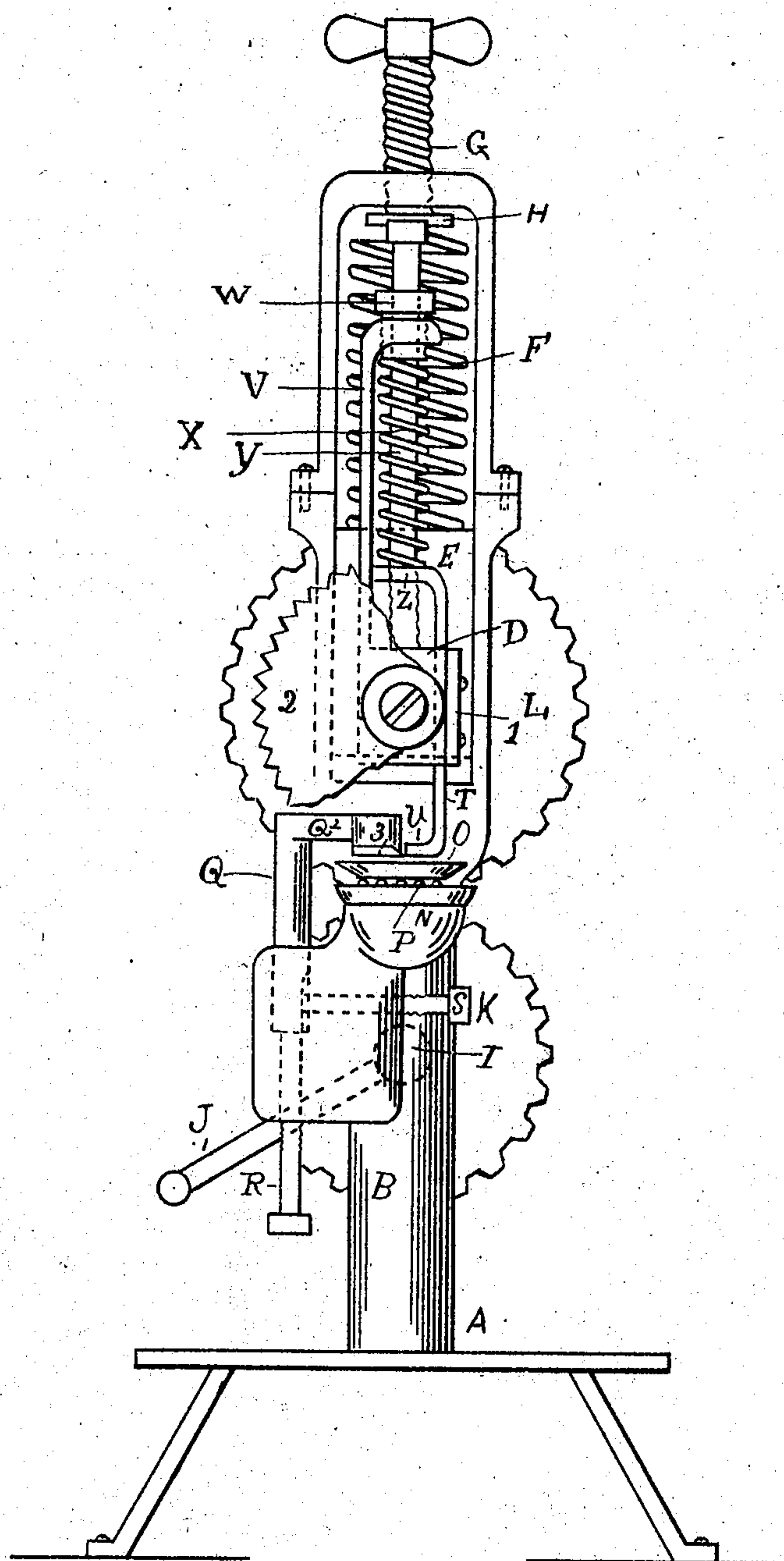
No. 815,702.

PATENTED MAR. 20, 1906.

L. P. HAWKINS.  
SKIVING MACHINE.

APPLICATION FILED MAR. 7, 1904.

2 SHEETS—SHEET 1.



Witnesses:  
Lauren M. Sanford.  
Marion Richards.

Fig. 1.

Inventor:  
Lorenzo P. Hawkins,  
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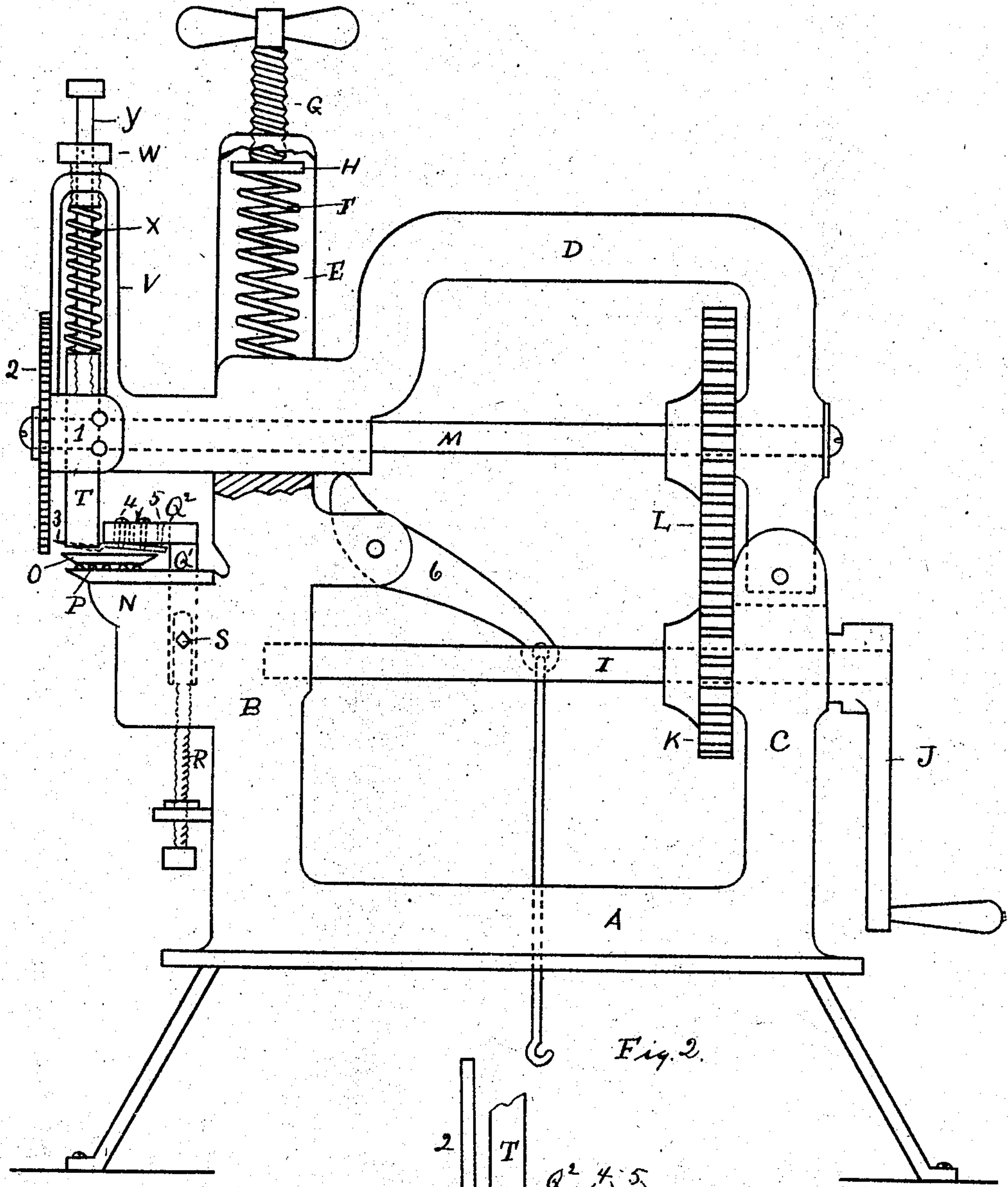
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2 SHEETS—SHEET 2.



Witnesses:  
Lauren M. Sautorn.  
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# UNITED STATES PATENT OFFICE.

LORENZO P. HAWKINS, OF PORTLAND, MAINE.

## SKIVING-MACHINE.

No. 815,702.

Specification of Letters Patent.

Patented March 20, 1906.

Application filed March 7, 1904. Serial No. 196,811.

*To all whom it may concern:*

Be it known that I, LORENZO P. HAWKINS, a citizen of the United States, residing at Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Skiving-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in welt-skiving machines, and more particularly to machines arranged to skive or bevel a welt after the welt has been attached to a lasted upper and insole, and it relates more particularly to means for holding the welt while being skived and for feeding the welt.

To this end it consists of a work-support having its under outer edge beveled and adapted to travel in the groove between the upper and the welt, a knife suitably positioned relative to said work-support, a presser-foot positioned directly in front of said knife and close to the cutting edge thereof, means for holding said presser-foot yieldingly upon the welt, and means for feeding the welt spaced apart from the support, the feed-roll being positioned relative to the other parts so that it travels upon the solid portion of the welt at or beyond the seam where the welt is attached to the insole.

It further consists in means for holding the vertically-adjustable head which carries the presser-foot and feed-roll yieldingly upon the work.

It further consists in providing antifriction ball-bearings for the work-support.

The underlying principles involved in my invention are well illustrated in the drawings herewith accompanying and making a part of this application; but it is not intended that the invention should be limited to the precise forms herein shown, except as specifically stated in the claims.

In said drawings, Figure 1 is a front elevation of a skiving-machine, showing my improvements attached thereto, parts being broken away. Fig. 2 is a side elevation of the same, parts being broken away; and Fig. 3 is a detail view, partly in section, showing the position of the work-support, knife, presser-foot, and feed-roll relative to the work.

Same letters of reference refer to like parts.

In said drawings the frame of the machine is represented by the base A and the upright

columns B and C at the front and back, respectively. Pivotaly secured to column C is an arm D, which extends forwardly through an opening E in column B. A spring F, interposed between said arm and the top of column B, holds the arm down with yielding tension. The efficiency of the spring can be increased by means of a set-screw G in the top of said column engaging said spring or a plate H on the top thereof. Mounted in said columns is a driving-shaft I, on one end of which is a crank J, or a pulley may be substituted for the crank if it is desired to drive the machine by power. Mounted on shaft I is a gear K, which meshes with a gear L on a counter-shaft M, mounted in the arm D. Column B is provided with a bracket N, which supports a combined work-support and work-guide O, which is mounted on antifriction ball-bearings P and adapted to rotate in a horizontal plane, said work-support being adapted to enter and travel in the crease between the welt and upper of the shoe. In a socket in said bracket is a knife-carrier Q, having a vertical supporting portion Q' and a horizontal knife-carrying portion Q<sup>2</sup>; said knife-carrier being adapted to rotate in a horizontal plane in the socket in which it is mounted. It is given a vertical adjustment by means of threaded screw R, extending upwardly through the bottom of the bracket into engagement with the lower end of the carrier. The carrier is adapted to be held against horizontal rotation by means of a set-screw S. A presser-foot T is secured near the end of said arm directly over the work-support. Said presser-foot has its lower extremity bent over, as seen at U. Mounted in a bracket V on the arm is a screw-threaded adjusting-nut W, between which and the top of the presser-foot is inserted a coil-spring X, which tends constantly to force the presser-foot downwardly with a yielding tension upon the work. Passing through the adjusting-nut is a rod Y, which also passes through with screw-threaded engagement the bent-over top Z of the presser-foot, the lower extremity of said rod having bearing on the top of the arm. By this means it will be readily apparent that the distance between the presser-foot and the work can be positively regulated by means of said rod and the tension of the presser-foot upon the work can be regulated by said adjusting-nut. The presser-foot may be held in position upon the arm by means of strap 1. On the end of shaft M is a feed-roll



2, which is positioned directly beneath the presser-foot, but is spaced apart some distance from work-support, as clearly shown in Figs. 2 and 3. On the under side of the knife-carrier is a skiving-knife 3, projecting upwardly and forwardly over said work-support close behind the part U of the presser-foot. Said knife may be horizontally adjusted by means of screws 4, working in slots in the knife-support, and may be angularly adjusted by means of screw 5, passing through the work-support and impinging the top of the knife-handle, as clearly seen in Fig. 3. The arm, together with the presser-foot and feed-roll, can be raised to receive the work by means of cam-lever 6, secured to the frame and working against the arm. Said cam-lever may be operated by hand or by a foot-treadle (not shown) attached to a link connecting said foot-treadle with the arm of said cam-lever.

The operation of my improved skiving-machine is clearly shown in Fig. 3, in which 9 represents the inner sole, 10 the channel, 8 the upper, and 7 the welt, of a shoe. The work-support enters the space between the upper and the welt, the welt resting on work-support O, the seam formed by sewing together the welt, inner sole, and upper lying beyond the edge of the work-support. The

presser-foot T rests upon the welt directly over the work-support and in close proximity to the front or cutting edge of the knife. The feed-roll, however, rests upon the seam or hard part of the work, thereby always having a firm unyielding bearing. This is one of the most essential features of my invention, for I have found by experiment that when the feed-roll works directly upon the free or floating edge of the welt the feed is uneven, resulting in uneven skiving of the welt and great injury to the shoe.

Having thus described my invention and its use, I claim—

In a welt-skiving machine, a work-support, a knife-carrier comprising a vertical rotary supporting-post and a horizontal knife-carrying arm, means for supporting said knife-carrier, a knife adjustably secured to said arm and means for feeding the work over said work-support.

In testimony whereof I have hereunto affixed my name, in the presence of two subscribing witnesses, this 5th day of March, 1904.

LORENZO P. HAWKINS.

In presence of—

ELGIN C. VERRILL,  
MARION RICHARDS.