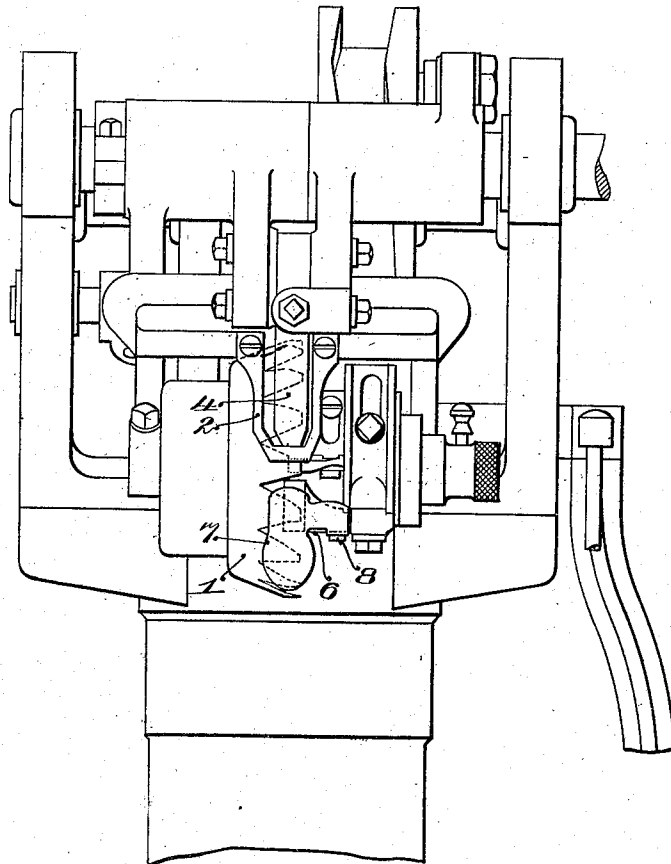


F. H. HAWKINS & A. BOURGEOIS.
INSEAM TRIMMING MACHINE.
APPLICATION FILED JAN. 13, 1908.

939,498.

Patented Nov. 9, 1909.
2 SHEETS—SHEET 1.

Fig. 1.



Witnesses

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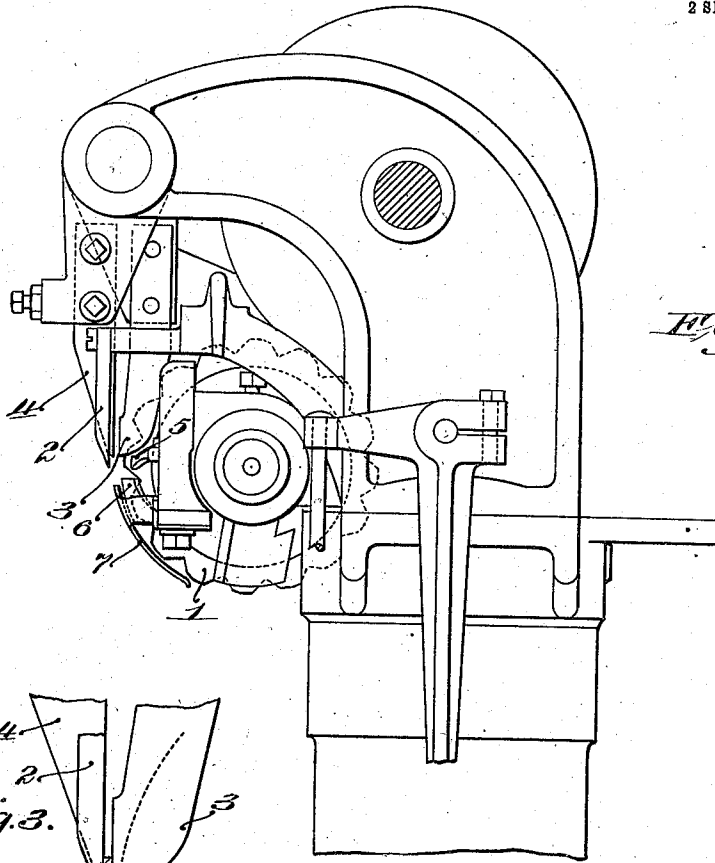


Fig. 2.

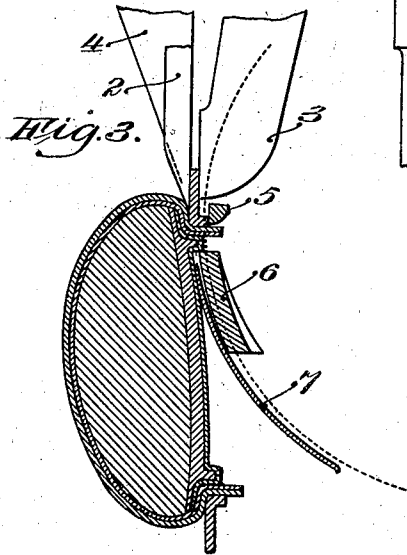


Fig. 3.

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UNITED STATES PATENT OFFICE.

FRANK H. HAWKINS AND ADELORD BOURGEOIS, OF LYNN, MASSACHUSETTS, ASSIGNORS TO UNITED SHOE MACHINERY COMPANY, OF PATERSON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

INSEAM-TRIMMING MACHINE.

939,498.

Specification of Letters Patent.

Patented Nov. 9, 1909.

Application filed January 13, 1908. Serial No. 410,706.

To all whom it may concern:

Be it known that we, FRANK H. HAWKINS and ADELORD BOURGEOIS, citizens of the United States, both residing at Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Inseam-Trimming Machines; and we 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.

The present invention relates to inseam trimming machines and more particularly to that type of inseam trimming machines in which the trimming knife is cylindrical in shape.

The invention is intended primarily as an improvement on the inseam trimming machine disclosed in the patents to French and Meyer, No. 558,379, dated April 14, 1896, No. 590,831, dated September 28, 1897, and Selby, No. 788,796, dated May 2, 1905, but is also applicable to other inseam trimming machines comprising a cylindrical trimming knife.

The machine disclosed in the patents above referred to has been provided with a sole guide or rest extending outside of the knife as illustrated in the patents to French and Meyer, or with a sole guide or rest arranged to extend inside of the knife as illustrated in the patent to Selby. The guides disclosed in the patents to French and Meyer, are of such construction that they are necessarily placed in the machine so as to bear upon the sole at a considerable distance from the point at which the inseam is being trimmed. That the guides cannot be placed so as to bear upon the sole close to the inseam will be apparent from an inspection of the patent drawings. The sole guide when located as disclosed in the French and Meyer patents, does not act in a reliable manner to prevent the knife from cutting the stitches of the inseam, and considerable skill and care is required on the part of the operator to properly trim the shoe. Also the guide renders the manipulation of the shoe somewhat difficult especially when shoes having narrow shanks are operated upon. The guide dis-

closed in the patent to Selby engages the sole close to the inseam but inasmuch as this guide extends inside of the cutting edge of the knife, the shoe can be manipulated so as to bring the stitches of the inseam into contact with the knife edge and nearly as much care and experience is required on the part of the operator to properly trim a shoe as when the guides illustrated in the patents to French and Meyer are used. Furthermore the guide disclosed in the patent to Selby leaves the cutting edge of the knife exposed so that there is nothing to prevent the operator from accidentally bringing his hand into contact with the knife edge.

The object of the present invention is to provide an improved sole guide for inseam trimming machines comprising a cylindrical knife, which guide can extend outside of the knife and at the same time engage the sole of the shoe close to the point of operation of the knife on the inseam.

Other objects of the invention are to provide an improved sole guide extending outside of a cylindrical trimming knife, of such construction as not to interfere with the proper manipulation of a shoe and which can, if desired, inclose the knife edge for a sufficient distance to protect the hand of the operator.

With the above objects in view the present invention contemplates the provision, in an inseam trimming machine provided with a cylindrical trimming knife, of a guard consisting of a thin sheet extending outside of the knife in close proximity thereto and arranged to bear on the insole inside of the inseam. By making the guard in the form of a thin sheet, the guard does not take up an objectionable amount of space between the shoe sole and the knife, so that the guard can bear on the sole close to the inseam and still permit the seam to be trimmed as close as may be desired. Inasmuch as the guard extends outside of the knife and bears upon the sole close to the inseam, it acts in a very efficient manner to guide the shoe and prevent the shoe from being manipulated so as to cut the inseam stitches. The guard also can be curved in the direction of the cutting edge of the knife to permit the shoe to be manipu-

lated properly whether or not it is provided with a narrow shank. Preferably the guard is extended in the direction of the edge of the knife and parallel thereto a sufficient distance to form a protection for the hand of the operator. The guard may be supported in the machine in any desired manner but preferably the support for the guard is located in front of the cutting edge of the knife, the support, when so located, acting in an efficient manner to prevent the guard from being displaced by the shoe so as to dull the edge of the knife. Also the support for the guard preferably extends inside of and beyond the cutting edge of the knife so as to form a clearing device to remove chips or other obstructions which may have become lodged thereon.

The present invention will be clearly understood from an inspection of the accompanying drawings, in which—

Figure 1 is a view in front elevation of an in-seam trimming machine similar to that disclosed in the patents hereinbefore referred to with the present invention applied thereto; Fig. 2 is a view in end elevation of the machine illustrated in Fig. 1; and Fig. 3 is a detail sectional view showing a shoe in position in the machine, illustrating particularly the arrangement of the guard and its support with relation to the trimming knife.

With the exception of the guard, which constitutes the illustrated embodiment of the present invention, the parts of the machine illustrated in the drawings are constructed and arranged in the same manner as the corresponding parts of the machine disclosed in the patent to Selby, No. 788,796, 1 indicating the cylindrical trimming knife, 2 the crease guide, 3 the two-motion feed jaw, 4 the four-motion feed jaw, and 5 the guide which bears against the edge of the welt. The part 6, illustrated in the drawings, corresponds to the sole guide of the Selby machine, but this part, in the present invention, instead of being utilized as a sole guide, forms a support to which the guard of the present invention is secured.

In applying the present invention to the machine illustrated in the drawings, a guard 7 has been provided, which guard, as illustrated, consists of a thin sheet of metal extending from the support 6 outside of and beyond the cutting edge of the trimming knife. This guard is arranged to bear upon the sole of a shoe inside of the in-seam, as illustrated in Fig. 3, and is curved in the direction of the cutting edge of the knife so that it permits the shoe to be manipulated in any desired manner. The curved shape of the guard is particularly advantageous when shoes provided with narrow shanks are operated upon, as the guard offers no obstruction to the untrimmed portion of the in-seam

at one side of the shank of the shoe while the other side of the shank is being trimmed.

As will be apparent from an inspection of Figs. 2 and 3, the guard extends parallel to the edge of the knife a sufficient distance to protect the hand of the operator while holding the shoe in position in the machine.

The guard is provided with a lateral projection, as clearly shown in Fig. 1, which bears against the outer face of the support 6 and the guard is secured to the support by means of a screw 8 passing upwardly through a portion of the guard extending at right angles to the lateral projection and screwing into the lower portion of the support. The support 6 extends inside of and beyond the cutting edge of the knife and is sufficiently close to the knife to remove chips or other obstructions from the knife. The guard bears upon the support just in advance of the cutting edge of the knife so that the guard is prevented from being forced against the cutting edge of the knife by pressure exerted upon the shoe by the operator.

The nature and scope of the present invention having been indicated, and the preferred form of the invention having been specifically described, what is claimed is:—

1. An in-seam trimming machine, having, in combination, a cylindrical trimming knife, means for guiding a shoe during the trimming operation comprising a guard consisting of a thin sheet extending outside of the knife in close proximity thereto and arranged to bear on the sole inside of the in-seam and a support located in front of the knife from which the guard projects over the edge of the knife.

2. An in-seam trimming machine, having, in combination, a cylindrical trimming knife, means for guiding a shoe during the trimming operation comprising a guard consisting of a thin sheet extending outside of the knife in close proximity thereto, arranged to bear on the sole inside of the in-seam and extending parallel to the edge of the knife a sufficient distance to protect the hand of the operator and a support located in front of the knife from which the guard projects over the edge of the knife.

3. An in-seam trimming machine, having, in combination, a cylindrical knife, means for guiding a shoe during the trimming operation comprising a guard consisting of a thin sheet extending outside of the knife in close proximity thereto, and arranged to bear on the sole inside of the in-seam, and a support for the guard located in front of the cutting edge of the knife arranged to support the guard close to the edge of the knife.

4. An in-seam trimming machine, having, in combination, a cylindrical knife, means for guiding a shoe during the trimming op-

eration comprising a guard consisting of a thin sheet extending outside of the knife in close proximity thereto, and arranged to bear on the sole inside of the inseam, and a
5 support for the guard located in front of the cutting edge of the knife and extending inside of the knife beyond its cutting edge.

In testimony whereof we affix our signatures, in presence of two witnesses.

FRANK H. HAWKINS.
ADELORD BOURGEOIS.

Witnesses:

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