

No. 608,373.

Patented Aug. 2, 1898.

A. EPPLER, JR.  
GUIDE FOR SHOE SEWING MACHINES.

(Application filed June 8, 1895.)

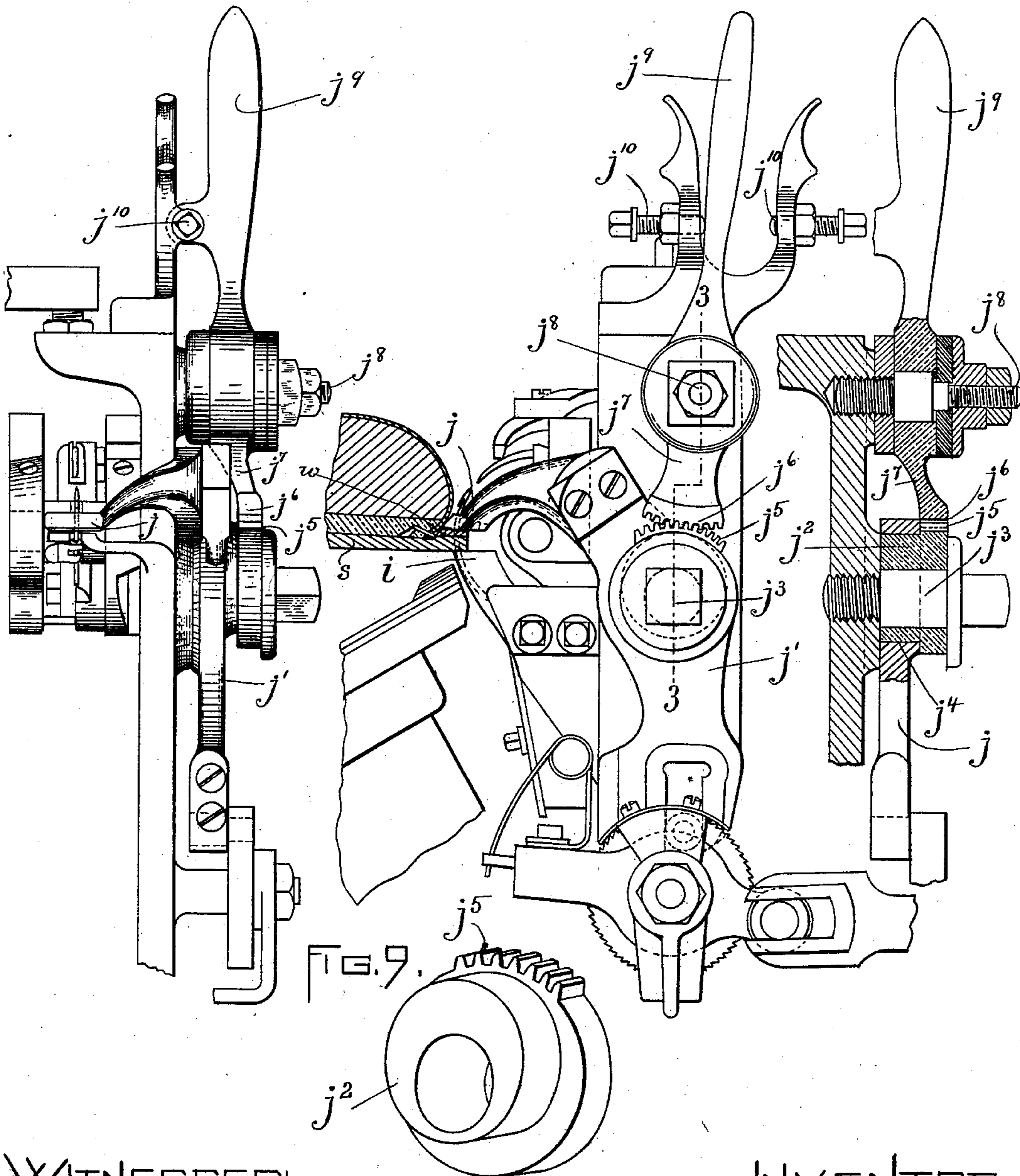
(No Model.)

2 Sheets—Sheet 1.

FIG. 2.

FIG. 1.

FIG. 3.



WITNESSES:

A. D. Hanson

Rollin Abell

INVENTOR:

A. Eppler, Jr.

by Wright Brown & Company  
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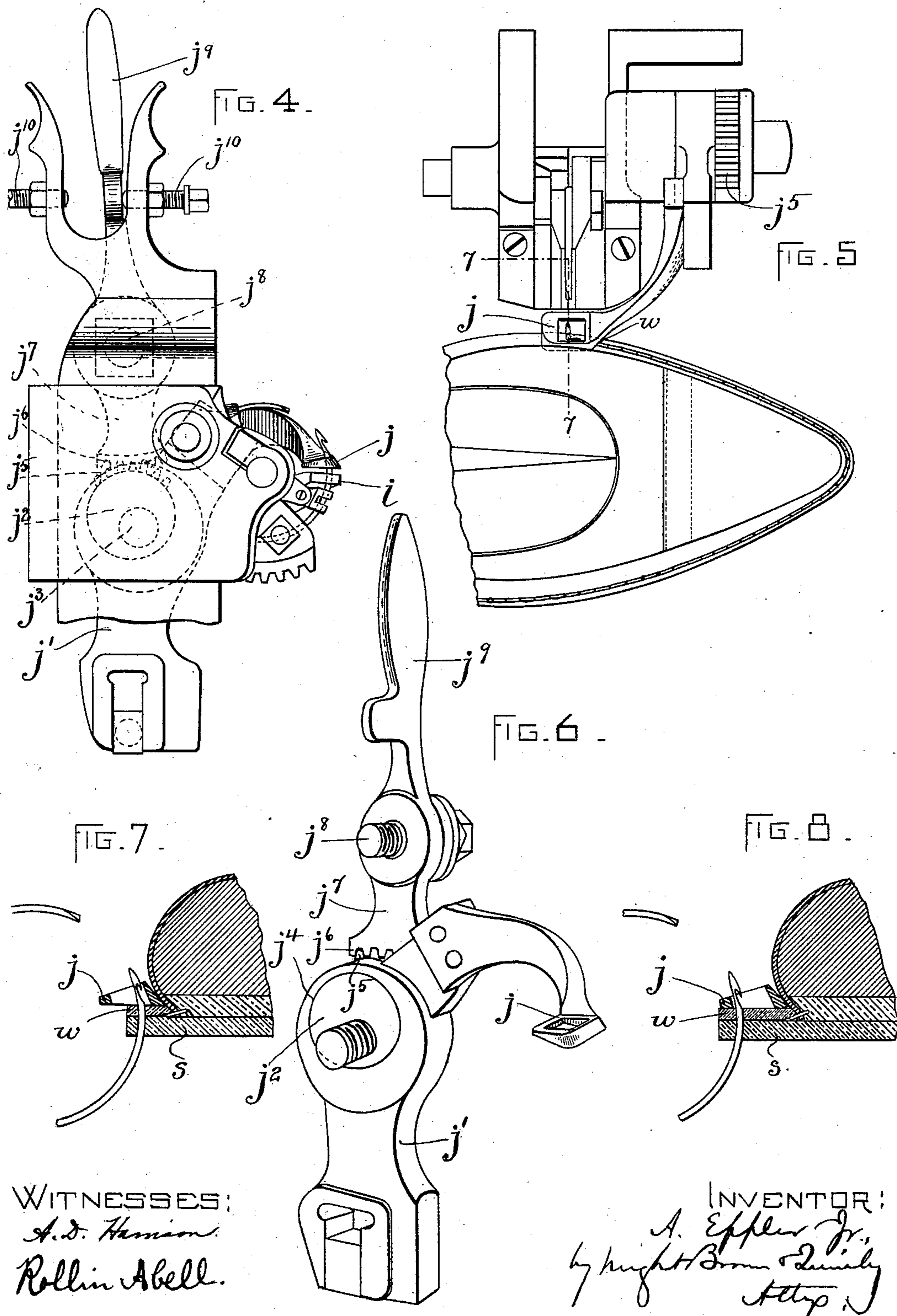
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A. D. Harmon.  
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# UNITED STATES PATENT OFFICE.

ANDREW EPPLER, JR., OF NEWTON, MASSACHUSETTS.

## GUIDE FOR SHOE-SEWING MACHINES.

SPECIFICATION forming part of Letters Patent No. 608,373, dated August 2, 1898.

Application filed June 8, 1895. Serial No. 552,083. (No model.)

*To all whom it may concern:*

Be it known that I, ANDREW EPPLER, Jr., of Newton, in the county Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Sewing-Machines, of which the following is a specification.

This invention relates to a new and useful improvement in guides for sewing-machines; and it consists in the novel features of construction and relative arrangement of parts hereinafter fully described in the specification, clearly illustrated in the drawings, and particularly pointed out in the claims.

Reference is to be had to the accompanying two sheets of drawings, forming a part of this application, in which like characters indicate like parts wherever they occur.

Figure 1 represents a side elevation showing portions of a sewing-machine, including the work-support or channel-guide, the presser-foot, and the means for adjusting the presser-foot in accordance with my invention. Fig. 2 represents a front elevation of the mechanism shown in Fig. 1. Fig. 3 represents a section on line 3 3 of Fig. 1. Fig. 4 represents an elevation taken from the side opposite that shown in Fig. 1. Fig. 5 represents a top view of the mechanism shown in Figs. 1, 2, and 4. Fig. 6 represents a perspective view of the presser-foot and its supporting-lever and the adjusting devices comprising my improvements. Fig. 7 represents a sectional view showing a portion of a boot or shoe in the position it occupies while the outer sole and welt are being stitched together, the presser-foot being shown in the position it occupies when a comparatively narrow edge is being stitched. Fig. 8 represents a view similar to Fig. 7, showing the presser-foot in the position it occupies when a wider edge is being stitched. Fig. 9 represents a perspective view of one of the parts of my improved presser-foot-adjusting mechanism.

The same letters of reference indicate the same parts in all the figures.

In the drawings, *i* represents a work-support which is adapted to bear upon the outer surface of the outer sole *s* of a welted boot or shoe, said support corresponding to the part called the "channel-guide" in the patent above mentioned, although it is not necessarily provided with an upwardly-projecting rib

formed to enter the channel in the outer surface of the sole *s* and may have simply a flat surface at its upper end. Hence I term it a "work-support."

*j* represents a work-guide which is affixed to a lever *j'*, the latter being mounted to oscillate on a support on the frame of the machine, so that the work-guide alternately approaches and recedes from the work-support *i*, said work-guide being arranged to bear upon the upper surface of the welt *w*, as shown in Figs. 1, 7, and 8. The work-support *i* and work-guide *j* are relatively arranged and operated substantially like the parts designated, respectively, the "channel-guide" and "presser-foot" in the patent above mentioned, the work-guide and work-support alternately grasping and releasing the work, holding it in position while it is being penetrated by the awl and needle and during the stitch-forming operation, and feeding the work while the needle is retracted. The machine may be provided with mechanism similar to that shown in the above-mentioned patent for causing these operations, and as my present improvement only concerns the means for laterally adjusting the work-guide I do not deem it necessary to describe the other mechanism, as the same may be readily understood by reference to the patent above mentioned.

In carrying out my present invention instead of mounting the lever *j'* upon a fixed stud or center of rotation I mount it upon a center which is laterally movable and provide the center with means whereby it may be moved to vary the position of the work-guide with relation to the path of the needle, and thus cause the upper guiding edge of the work-guide to stand close to the path of the needle, as shown in Fig. 7, or at a considerable distance therefrom, as shown in Fig. 8. To this end I employ as the stud or center upon which the lever *j'* oscillates an eccentric *j<sup>2</sup>*, which is mounted to turn upon a fixed supporting-stud *j<sup>3</sup>* and is snugly fitted in a socket *j<sup>4</sup>*, formed for its reception in the lever *j'*. On the eccentric *j<sup>2</sup>* is formed a rack-segment *j<sup>5</sup>*, which is concentric with the stud *j<sup>3</sup>* and is engaged with a similar rack-segment *j<sup>6</sup>*, formed on a lever *j<sup>7</sup>*, which is mounted to oscillate upon a fixed stud *j<sup>8</sup>* and is provided with an operating-handle *j<sup>9</sup>*.

It will be seen that a movement of the lever  $j^7$  in one direction will partially rotate the eccentric  $j^2$ , and thus vary its lateral position, so that it will support the lever  $j^7$  farther from  
 5 or nearer to the path of the needle, as the case may be, a rotation of the cam  $j^2$  in one direction causing the work-guide to move away from the path of the needle, while a rotation of the cam in the opposite direction causes  
 10 said work-guide to move toward the path of the needle. It will also be seen that the described improvement enables the work-guide to be adjusted, as described, while the machine is in operation. The movements of the  
 15 lever  $j^9$  may be limited by adjusting-stops  $j^{10}$  on the supporting-frame.

I do not limit myself to the details of mechanism here shown for changing the center upon which the work-guide-carrying lever  
 20 oscillates, as said center may be changed by other equivalent means without departing from the spirit of my invention.

I claim—

1. In a sewing-machine, the combination  
 25 with the work-support, the work-guide and its carrier, and the needle: of a laterally-adjustable center upon which the guide-carrier oscillates, and means for adjusting said center to vary the distance between the guide  
 30 and the needle.

2. In a sewing-machine, the combination

with the work-support, the work-guide and its carrier, and the needle: of an eccentric mounted to turn on a fixed stud and engaged with said carrier, said eccentric having gear-teeth, and an operating-lever having gear-teeth meshing with the teeth on the eccentric. 35

3. In a machine for sewing the outer sole of a boot or shoe to the welt thereof, while such boot or shoe is on the last, the combination with stitch-forming mechanism, of a rest for externally supporting the shoe, and upon which the sole or the welt may be placed, and a guide for continuously and externally engaging and guiding the boot or shoe, said  
 45 guide being movable during the operation of the stitch-forming mechanism, whereby to vary and control the position of said boot or shoe with relation to the stitch-forming mechanism, and means for giving the said rest  
 50 and guide complementary movements of translation to alternately grasp and release the work.

In testimony whereof I have signed my name to this specification, in the presence of  
 55 two subscribing witnesses, this 6th day of June, A. D. 1895.

ANDREW EPPLER, JR.

Witnesses:

A. D. HARRISON,  
 ROLLIN ABEL.