

No. 725,096.

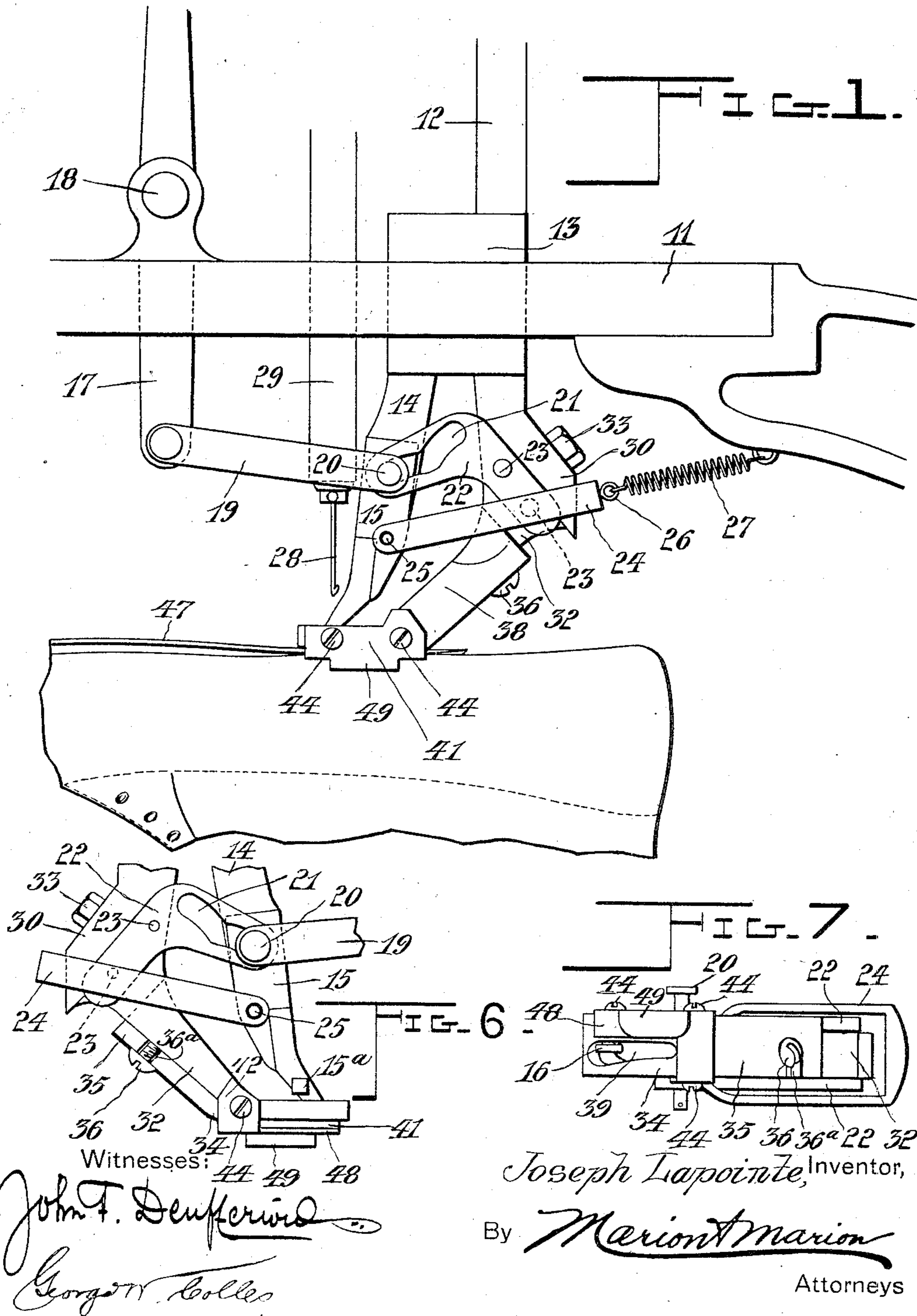
PATENTED APR. 14, 1903.

J. LAPOINTE.
GUIDE FOR SHOE SEWING MACHINES.

APPLICATION FILED JUNE 2, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



No. 725,096.

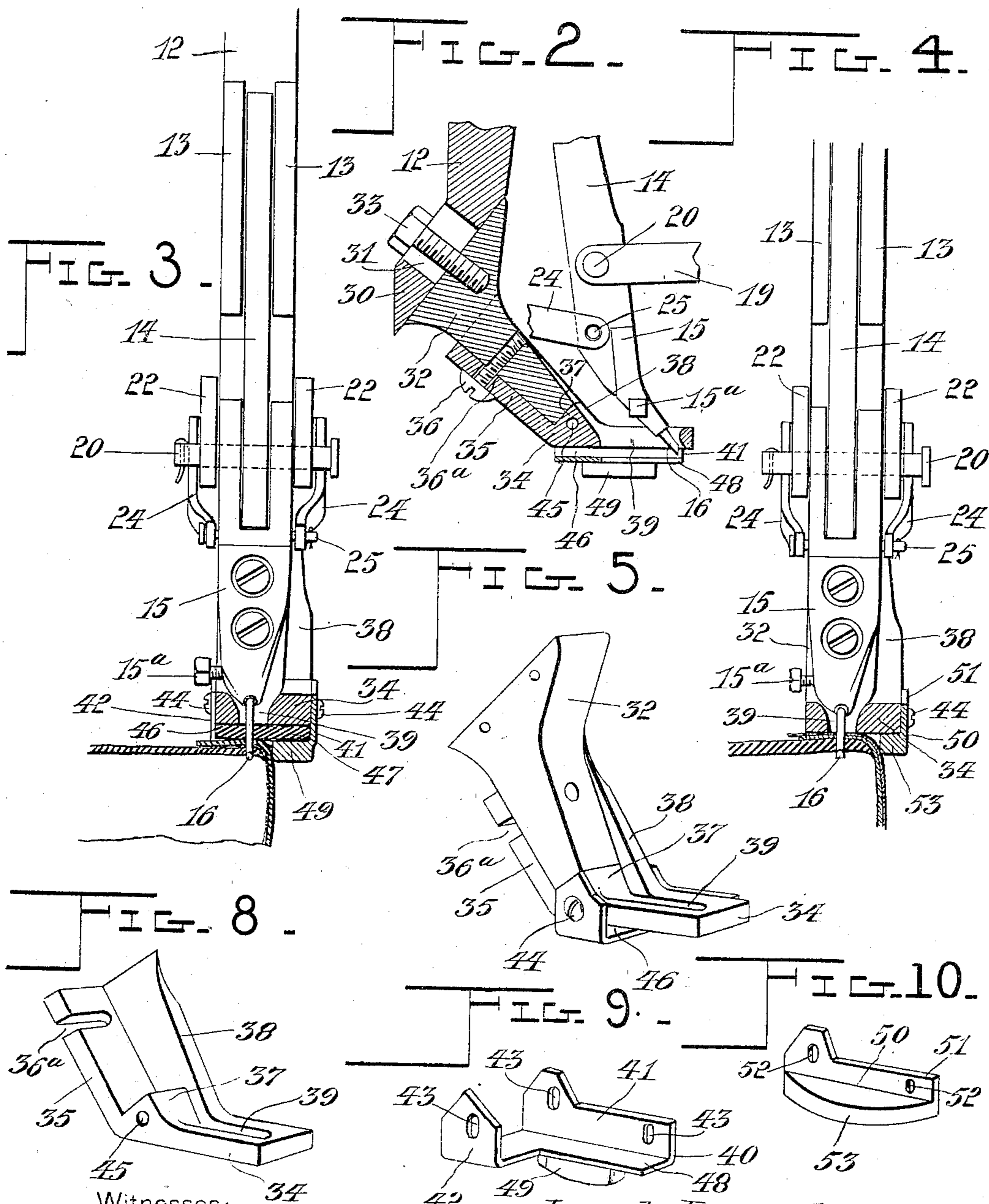
PATENTED APR. 14, 1903.

J. LAPOINTE.
GUIDE FOR SHOE SEWING MACHINES.

APPLICATION FILED JUNE 2, 1902.

NO MODEL.

2 SHEETS—SHEET 2.



Witnesses:
John F. Deufferwil
George W. Colles

Joseph Lapointe, Inventor,
By *Marion Marion*
Attorneys

UNITED STATES PATENT OFFICE.

JOSEPH LAPOINTE, OF ST. SAUVEUR DE QUEBEC, CANADA.

GUIDE FOR SHOE-SEWING MACHINES.

SPECIFICATION forming part of Letters Patent No. 725,096, dated April 14, 1903.

Application filed June 2, 1902. Serial No. 109,849. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH LAPOINTE, of St. Sauveur de Quebec, county of Quebec City, (East,) Province of Quebec, Canada, have invented certain new and useful Improvements in Shoe-Sewing-Machine Attachments; and I do hereby declare that the following is 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.

My invention relates to an attachment adapted for that class of leather-sewing machine known as the "McKay" machine, which employs a reciprocating straight barbed needle adapted to pass in and out through the work and an awl adapted to perforate and to advance the work as the stitches are formed; but it will be understood that my improvement is by no means confined to this type of machine, for I may also utilize it on other kinds and forms of machines to which it may be found adaptable.

One of the main objects of my present invention is to improve the operation of the machine by means of an improved form of presser-foot which is adapted to press downwardly upon the work on all sides thereof around the stitch in process of formation, and thus prevent it from becoming displaced, and making the stitches more regular.

Another object of my invention is to provide means for readily guiding the work being sewed by providing a work-gage of peculiar type, which work-gage is of a form adapted to receive and hold the welt in that kind of work in which a welt is used and to keep the seam regular and parallel with the edge of the welt or work, as the case may be.

To these ends my invention consists in providing a presser-foot attachment which is secured to the depending bar which carries the awl and its carrier, and this presser-foot surrounds the seam and has a slot formed through its center through which both the awl and the needle are adapted to pass and in which the said awl is adapted to reciprocate.

My invention further consists in a plate having a guide-lug formed on one side thereof, said plate being adapted to be attached by screws or other fastenings to the said presser-foot, thus holding the edge of the work at a fixed distance from the slot therein and pro-

ducing regular stitches, and when welt-sewing is required I provide this work-gage in the form of a U-shaped plate which embraces both sides of the presser-foot and depends therefrom, forming a slot through which the welt-strip is adapted to be passed, thus holding it in line.

My invention further consists in the construction and combination of parts hereinafter described, and more particularly pointed out in the claims accompanying this application.

I have shown in the drawings accompanying this application the preferred form of my attachment as connected to a machine of the McKay type, hereinabove referred to, and therein—

Figure 1 is a side elevation of the operative parts of the machine with which my invention is connected, showing the parts in the act of sewing a shoe. Fig. 2 is a longitudinal section through the presser-foot as provided with my attachment for welt-sewing. Fig. 3 is a transverse section of the same. Fig. 4 is a similar section to Fig. 3, but showing the presser-foot as provided with the work-gage attachment for turn-sole sewing. Fig. 5 is a perspective view of the presser-foot attachment, having the work-gage shown in Figs. 1, 2, and 3. Fig. 6 is a side elevation of the same. Fig. 7 is a reverse plan view of the same. Fig. 8 is a perspective view of the presser-foot. Fig. 9 is a similar view of the work-gage attachment for welt-sewing, and Fig. 10 is a similar view of the work-gage attachment for turn-sole sewing.

The same numerals of reference denote like parts in all the figures of the drawings.

In Fig. 1 at 11 is shown a portion of the frame of the machine which carries the vertically-reciprocating bar 12, having near its lower extremity an offset 13, in which is reciprocally mounted an intermediary bar 14, to which is pivoted the awl-block 15, at the lower end of which is secured, by means of a set-screw 15^a, the awl 16. The awl is shown as being operated by means of a cam-lever 17, which is pivoted at 18 on the frame of the machine and connected by a link 19 to the pivot-pin 20, which connects the awl-block 15 to the intermediary bar 14 and reciprocates in the cam-slot 21, formed in the cam-

bracket 22, which is riveted or otherwise secured to the bar 12, as shown at 23. The awl-block is kept resiliently drawn back by means of a U-shaped strap 24, whose ends are pivoted on a pin 25, carried by the awl-block, and to the rear end of which is attached, by means of an eye 26, a tension-spring 27, connected to the frame of the machine, as shown. When the cam-lever 17 is reciprocated by its cam to the left, the pin 20 being at the upper end of the slot 21, the awl 16 will be thrust downwardly through the work, as shown in Fig. 3, and will be subsequently drawn forward to advance it into the position shown in Fig. 1, wherein the awl-hole is directly under the needle 28, which is carried by the reciprocating needle-bar 29.

All of the parts above described are old and belong to the well-known McKay shoe-sewing machine, so that they need not be further described herein, as their collocation and mode of operation will be readily recognized by those skilled in the art.

The lower end of the bar 12 has, as shown in Fig. 2, an obliquely-offset lug 30, which has a transverse slot 31, and to which is adapted to be bolted a rectangularly-extending piece 32 by means of a screw-bolt 33, passing through the slot 31, thus enabling the piece 32 to be properly set in position. The piece 32 is adapted to support the presser-foot 34, which is of my invention, and is provided with an obliquely-extending tongue 35, adapted to be secured to the piece 32 by means of a screw 36, passing through a transverse slot 36^a, and the presser-foot 34 has also a heel 37 and a cheek-plate 38, which are adapted to abut, respectively, against the end and side of the piece 32 to fix the presser-foot solidly in place. The lower end or body of the presser-foot is of the form best shown in Figs. 5 and 8, being adapted to project horizontally over the positions occupied by the awl and needle, and to this end it is provided with a longitudinal slot 39, through which the awl and needle are adapted to pass and in which the former is adapted to reciprocate, as indicated in Fig. 2. It will be seen that the presser-foot holds down the work at all sides of the stitch during the operation of sewing.

My work-gage attachment consists of one of the two forms shown in Figs. 9 and 10. That form shown in Fig. 9 is, as above mentioned, adapted to welt-sewing, and consists of a trough-shaped plate 40, having vertical sides 41 and 42, which are provided with vertical slots 43, through which pass securing-screws 44, seated in the apertures 45, formed in the presser-foot. When the plate 40 is screwed up in place, it occupies the position shown in Figs. 2, 3, and 5, leaving a rectangular slot 46 between it and the lower side of the presser-foot, and this slot is of suitable width and depth to receive the welt-strip 47, which passes therethrough. The horizontal portion of the plate 40 is carried forward at one side, as shown at 48, to the full length

of the presser-foot, but is cut away under and around the slot 39 to permit free motion of the awl and needle and also to enable the shoe and welt to be pressed firmly together. At the lower side of the extended portion 48 projects a lug 49, which is of curved or segmental form, as shown, and is adapted to abut against the edge of the work, (see Fig. 3,) so as to keep the seam at a uniform distance therefrom.

When turn-sole stitching, in which no welt is used, is being done, the operation is as shown in Fig. 4. In this case the gage 40 is replaced by a gage 50, which has an upstanding flange 51, with screw-slots 52 formed therein, adapted to be secured by the screws 44 on one side of the presser-foot, and this work-gage has a horizontally-extending lug 53, which performs the same function as the lug 49 in striking against the edge of the shoe or seam. The gages 40 and 50 may be readily removed at any time and replaced by others of different dimensions in case it is desired to vary the thickness of the welt or the distance of the seam from the edge of the shoe.

From the above description it will be observed that a shoe can be stitched with my attachment not only more rapidly but more accurately than could heretofore be done, thus increasing the capacity and output both of the machine and the operative, as well as improving the quality of the work.

While I have shown in the accompanying drawings the preferred form of my invention, it will be understood that I do not limit myself to the precise form shown, for many of the details may be changed in form or position without affecting the operativeness or utility of my invention, and I therefore reserve the right to make all such modifications as are included within the scope of the following claims or of mechanical equivalents to the structures set forth.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An attachment for shoe-sewing machines comprising a presser-foot adapted to surround all sides of the stitch on the upper face of the seam and having a longitudinal slot therethrough through which the awl and needle are adapted to pass, and a channel-shaped gage-plate embracing both sides of said presser-foot and forming a slot on the under side thereof through which the welt is adapted to pass and to be guided thereby, said gage-plate having a guide-lug projecting from its lower surface against which the edge of the work is adapted to abut.

2. In a shoe-sewing machine, an attachment comprising a presser-foot support having a depending end oblique to the presser-foot bar, and a presser-foot piece having a shoulder abutting against the end, an upstanding lateral flange abutting against the side, and a heel abutting against the bottom of said support, and having also a longitudi-

nal slot therein through which the awl and needle are adapted to pass.

3. In a shoe-sewing machine, an attachment comprising a presser-foot support having a depending end oblique to the presser-foot bar, a presser-foot piece having a shoulder abutting against the end, an upstanding lateral flange abutting against the side, and a heel abutting against the bottom of said support, and having also a longitudinal slot therein through which the awl and needle are adapted to pass, and a guide-lug projecting from the lower surface of said presser-foot against which the edge of the work is adapted to abut.

4. In a shoe-sewing machine, an attachment comprising a presser-foot support having a depending end oblique to the presser-foot bar, a presser-foot piece having a shoulder abutting against the end, an upstanding lateral flange abutting against the side, and a heel abutting against the bottom of said support, and having also a longitudinal slot therein through which the awl and needle are adapted to pass, a channel-shaped gage-piece embracing both sides of the presser-foot and extending across the lower side

thereof to form a slot or channel through which the welt is adapted to pass and by which it is adapted to be guided, and a guide-lug projecting from the lower side of said gage-piece and against which the edge of the work is adapted to abut.

5. An attachment for shoe-sewing machines comprising a trough-shaped gage-plate having its sides bent at right angles and separated by a distance equal to the width of the welt-strip, means for attaching said sides to the opposite sides of the presser-foot so that the middle member of the gage-plate will be below the presser-foot and separated from its lower side by a distance equal to the thickness of the welt-strip, and a downwardly-projecting guide-lug on the lower surface of said gage-plate adapted to abut against the edge of the work, substantially as described, in combination with the presser-foot.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

JOSEPH LAPOINTE.

Witnesses:

PHILEAS ROUSSEAU,
LÉON LOITRE.