

(No Model.)

S. S. EDDY, J. T. COLLINS & A. T. PIKE.

RAND AND WELT GUIDE FOR SEWING MACHINES.

No. 535,686.

Patented Mar. 12, 1895.

Fig. 1.

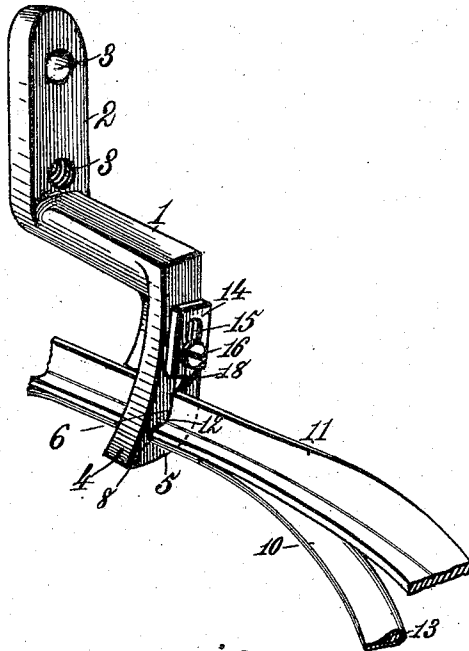


Fig. 2.

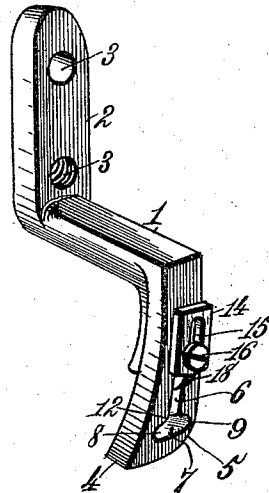
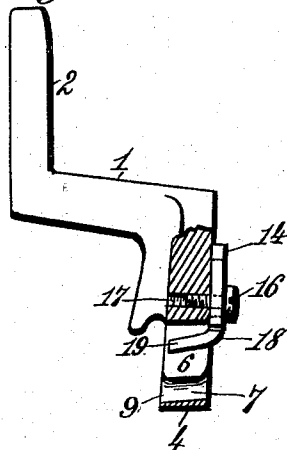


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

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RAND AND WELT GUIDE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 535,686, dated March 12, 1895.

Application filed October 10, 1894. Serial No. 525,527. (No model.)

To all whom it may concern:

Be it known that we, SAMUEL S. EDDY, JAMES T. COLLINS, and ALBERT T. PIKE, citizens of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented new and useful Improvements in Rand and Welt Guides for Sewing-Machines, of which the following is a specification.

10 This invention has for its object to provide a new and improved attachment for welt sewing-machines, whereby a rand and a welt can be simultaneously guided and sewed together to constitute or provide a box, chamber, or receptacle on the bottom of the insole of a boot
15 or shoe for the reception of a cork sole.

The invention has also for its object to provide a novel attachment which is so constructed that a rand and a welt are firmly
20 pressed together and guided in this condition to the stitch-forming mechanism of a sewing-machine.

The invention also has for its object to provide a novel slide-gage for gaging the width
25 of the rand and welt as they move in contact through a single guide opening in the attachment, whereby rands and welts of different width can be applied by the same guide device.

In the ordinary manufacture of boots and
30 shoes having a chamber or receptacle on the bottom of the insole to receive cork, the rand and welt are applied and sewed separately, which is objectionable, owing to the time and expense involved. By our invention the rand
35 and welt are practicably and effectually applied and sewed at one operation, which is very advantageous and desirable in many respects.

To accomplish the object of our invention,
40 we provide a guide composed of a pendent arm formed or provided with a horizontally arranged rand-channel, and a vertically arranged welt-channel leading from and communicating with the rand-channel centrally
45 between the sides thereof, said vertically-arranged welt-channel having a creasing angle

projecting at its junction with the rand-channel for longitudinally creasing the rand and welt, and adapting them for proper presentation to the stitch-forming mechanism of a sewing-machine, whereby the rand and welt are pressed against each other, guided, and simultaneously sewed together and to the proper parts of the boot or shoe.

The invention also consists in certain other
55 features of construction and combination or arrangement of parts hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a detail perspective view of the
60 improved rand and welt guide for a boot or shoe sewing-machine, the rand and welt being exhibited in the rand and welt channels of the guide. Fig. 2 is a similar view, omitting the rand and welt for the purpose of more
65 clearly illustrating the peculiar form and arrangement of the rand and welt-channels; and Fig. 3 is a side elevation showing the pendent arm of the bar in section for the purpose of
70 more clearly illustrating the peculiar construction of the gage device.

In order to enable those skilled in the art to make and use our invention, we will now describe the same in detail, referring to the drawings, where it will be observed that the
75 improved guide comprises a bar 1 of metal having an upwardly projecting shank 2, provided with screw-holes 3, by which the guide can be rigidly secured to the head of a boot or shoe sewing-machine of any well known or
80 desired construction. The bar 1 is also provided with a pendent-arm 4 extending approximately at right angles to the bar and having its lower extremity rounded or curved, as at 5, and formed or provided with a welt-channel
85 6 and a rand-channel 7.

The rand-channel is arranged approximately horizontal, and its front and rear sides, 8 and 9, are rounded or curved to properly receive and accommodate the edges of the
90 rand 10. The welt-channel is arranged vertically and leads from the rand-channel be-

tween the front and rear sides 8 and 9 thereof. The height of the welt-channel is greater than the width of the rand-channel, and its capacity is such as to properly receive the welt 11 in such manner that a portion of such welt will lie in an approximately vertical plane, and another portion will extend forward toward the rounded side 8 of the rand-channel 7, and lie approximately in a horizontal plane.

At the junction of the rand-channel with the welt-channel is located a solid creasing angle 12, which, as here shown, is an integral part of the arm 4, and is slightly rounded or curved. The object of this creasing-channel is to crease the welt longitudinally, and thus place it in such form as to adapt it for proper presentation to the boot or shoe and to the stitch-forming mechanism of the sewing-machine. The rand-channel lies approximately at right angles to the welt-channel, and when the rand and welt are passed through the two channels, the rand lies approximately horizontal with its beaded or outer edge 13 projected slightly upward, while the welt is—by the peculiar arrangement of the welt-channel relatively to the rand-channel—caused to be bent into an approximately right angular form, so that when sewed together and to the proper parts of the boot or shoe, a box, chamber, or receptacle is provided on the bottom of the insole of the boot or shoe for the reception of a cork sole or a cork composition, or other suitable material.

The bar 1, and the arms 2 and 4 are one solid piece of metal, and the rand and welt-channels are formed directly through the lower end of the arm 4, so that a practicable device is provided, wherein there are no parts liable to become disarranged. This is a very desirable and important feature of the device.

In order to adapt the one guide for rands and welts which vary in width, we provide a gage composed of a vertical slide 14, having a vertical slot 15, through which passes a screw 16. The screw enters a screw-threaded orifice 17 in the arm 4. The lower end of the slide is formed with a contracted or finger-like extension 18 which projects downward a slight distance from the slide, and then extends approximately horizontal to form the gage-finger 19. The gage-finger is of a width substantially the width of the welt-channel 6, and extends therinto, and is movable vertically within the same. As here shown, the finger 19 extends entirely through, or nearly through, the welt-channel, and bears against the upper edge of the welt.

By properly manipulating the screw 16, the slide and gage-finger can be raised or lowered, for the purpose of adapting the gage to rands and welts which vary in width, whereby

the same guide is susceptible of practicable use with rands and welts differing in width.

The construction and arrangement of the rand and welt-channels are such that in combination with the adjustable gage extending into or through the welt-channel, the rand and welt are firmly pressed together, and given the proper shape, so that they are simultaneously guided through the guide and presented to the stitch-forming mechanism of the sewing-machine, thereby enabling the rand and welt to be simultaneously sewed together and to the proper parts of the boot or shoe.

It will be observed that in our improved guide the superimposed angularly bent rand and welt both pass through the horizontal and vertical rand and welt channels. To accomplish this the said channels communicate, and this communication is effected by the vertical welt channel opening into the horizontal rand channel about centrally between the opposite rounded sides thereof. By this means the superimposed angularly bent rand and welt are united by the same seam.

It is advantageous to make the bar 1, shank 2, and pendent arm 4 in one single piece, and it is also advantageous to provide the rand and welt channels in the form of practicably a single hole through which both the rand and welt pass. This construction renders it possible for the laterally projecting gage-finger to press the welt upon the rand as said rand and welt move through the communicating channels.

The construction of the bar with the arms 2 and 4 of a single piece of metal, and the provision of the peculiar rand and welt-channel disclosed, render the device susceptible of doing very efficient work, while there are no parts to become disarranged, and therefore the device is not liable to get out of order.

Having thus described our invention, what we claim is—

1. A rand and welt-guide for a sewing-machine, consisting of a bar having an upwardly extending shank and a pendent-arm formed with two channels lying approximately at right angles to each other to provide a horizontally-arranged rand-channel and a vertically-arranged welt-channel which leads from the rand-channel centrally between the sides thereof and through both of which channels the superimposed, angularly bent rand and welt pass to be united by the same stitches, and a vertically adjustable gage secured to said pendent-arm and having a laterally projecting gage-finger extending into and vertically movable in the said welt-channel, substantially as described.

2. A rand and welt guide for a sewing-ma-

chine, consisting of an arm provided with a horizontally-arranged rand-channel and a vertically-arranged welt-channel leading therefrom and through both of which channels the
5 superimposed, angularly bent rand and welt pass to be united by the same stitches, said rand-channel having rounded sides, and said welt-channel leading from the rand-channel between the rounded sides and provided with
10 a creasing angle at its junction with the rand-channel for longitudinally creasing the superimposed rand and welt, and a vertically adjustable gage mounted on the said arm and having a laterally projecting gage-finger extending into the welt-channel, substantially
15 as described.

In testimony whereof we have hereunto set our hands and affixed our seals in presence of two subscribing witnesses.

SAMUEL S. EDDY. [L. S.]
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ALBERT T. PIKE. [L. S.]

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