(No Model.)

E. F. ARNOLD.

WELT GUIDE FOR SHOE SEWING MACHINES.

No. 359,239. Patented Mar. 15, 1887.

Fig. 1

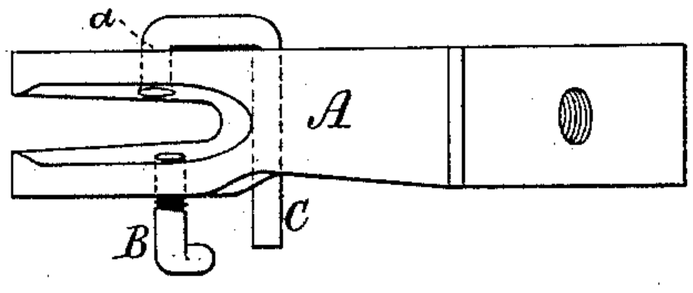


Fig. 5.

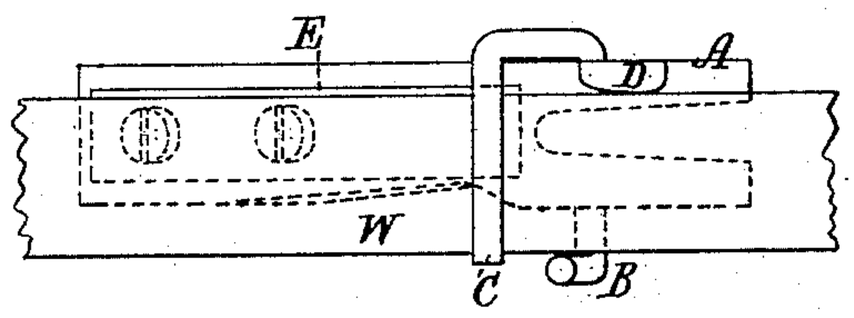
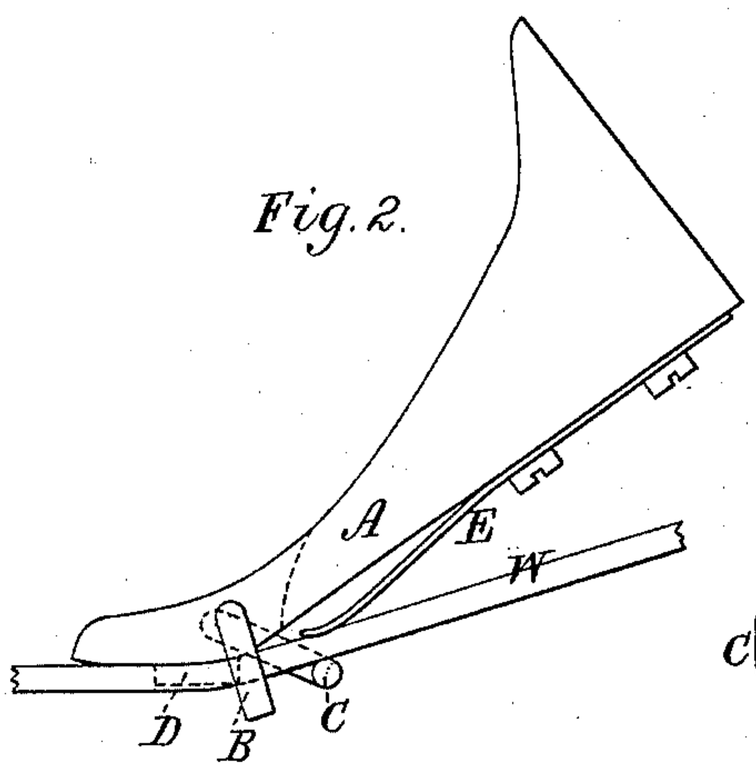


Fig. 4

Fig. 2.



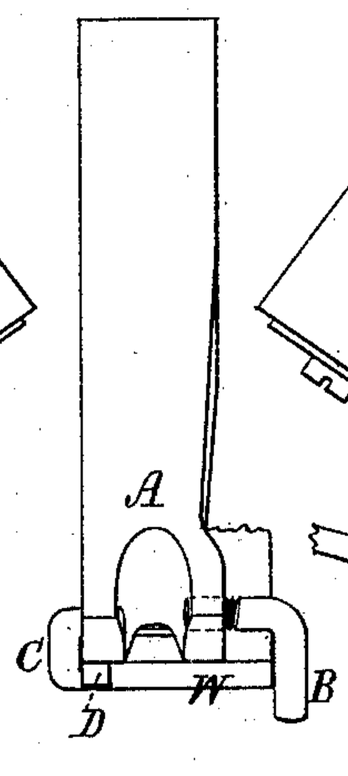


Fig. 3.

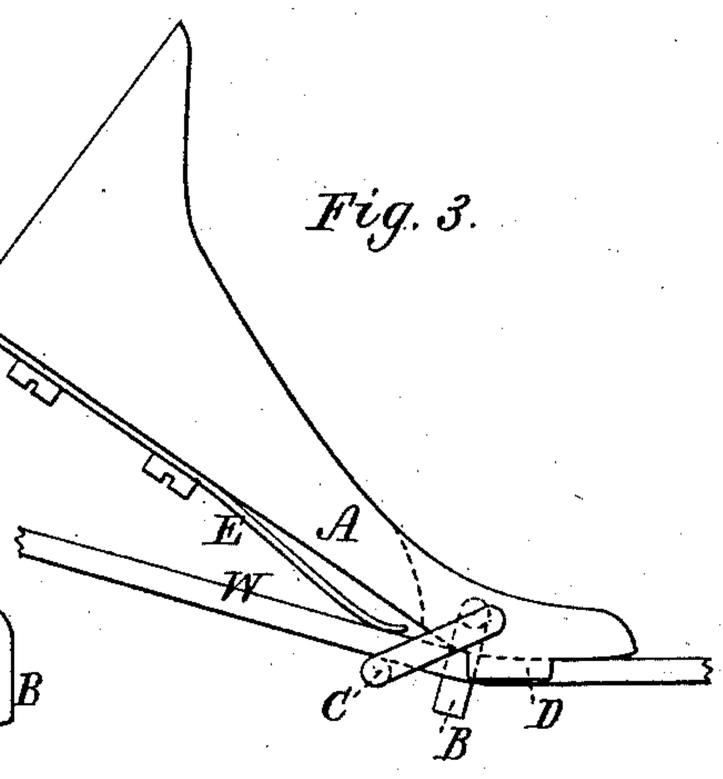


Fig. 7.

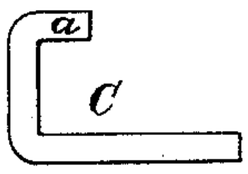
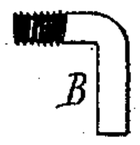


Fig. 6.



Witnesses.

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UNITED STATES PATENT OFFICE.

EDWARD FRANCIS ARNOLD, OF NORTH ABINGTON, MASSACHUSETTS.

WELT-GUIDE FOR SHOE-SEWING MACHINES.

SPECIFICATION forming part of Letters Patent No. 359,239, dated March 15, 1887.

Application filed August 2, 1886. Serial No. 209,773. (No model.)

To all whom it may concern:

Be it known that I, EDWARD FRANCIS ARNOLD, of North Abington, in the county of Plymouth, of the Commonwealth of Massachusetts, have invented a new and useful Improvement in Machines for Sewing Welts to Shoe or Boot Insoles and Uppers; and I do hereby declare the same to be described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, Figs. 2 and 3 opposite side elevations, Fig. 4 an end view, and Fig. 5 a bottom view, of a "McKay Sewing-Machine" presser-foot provided with my present invention, the nature of which is defined in the claims hereinafter presented. Figs. 6 and 7 are views of the stationary and movable welt-guides, to be hereinafter described.

In Letters Patent No. 329,426, granted to me on November 3, 1885, for an improvement in machines for sewing welts to shoe insoles and uppers, I have shown a presser-foot as provided with a welt-passage extending through it, in its heel or rear part, and have claimed the combination of such with the shoe-supporting horn and a rotary conical gage.

In carrying out my present improvement I dispense with such an appendage or passage to the presser-foot, and in lieu of it I use one stationary and one movable guide, as and arranged with a presser-foot, substantially as shown in the accompanying drawings, in which A denotes the presser-foot, B and D stationary guides, and C one movable guide.

The stationary guide B, as shown, is a piece of stout wire screw-threaded at one end, and bent downward at a right angle, and screwed into and so as to project laterally and downward from one side of the presser-foot in manner as represented. A side view of this guide is given in Fig. 6, the movable guide being shown in under side view in Fig. 7. The said movable guide C consists of a piece of strong wire bent twice at a right angle, so as to have the form shown in Fig. 7, its shorter arm *a* being inserted and pivoted within one side of the presser-foot. The longer arm extends underneath and across the said presser-foot in manner as represented, and at a short distance in rear of the fixed or stationary guide B.

The welt can readily be inserted edgewise between the two guides, so as to be directly underneath the presser and between it and the movable guide, as represented in Figs. 2, 3, 4, and 5, at W.

The presser-foot in descending upon the shoe or work causes the movable guide, by the latter, to be forced upward against the welt, so as to bind it firmly, and prevent it from slipping forward, under the action of the needle, while passing into and through it. The two guides also guide the welt while it is being moved forward with the shoe by the feed-point. Besides these there is to the presser-foot a third guide or guiding projection or abutment, D, that extends down, as represented, from such foot, and opposite, or about so, to the stationary guide B. The distance between the said projection and guide being equal to the width of the welt, the welt in passing between them bears at its opposite edges against them, it being held up to the foot by the movable guide. Furthermore, there is applied or fixed to the under side of the presser-foot and in rear of the movable guide a flat spring, E, having its end next to the guide free. This spring bears on the upper side of the welt, and with the guide aids in effecting tension on the welt, such spring being an important addition or auxiliary to the presser-foot and the stationary and movable guides thereof.

I claim—

1. The combination of the presser-foot A with the stationary welt-guide B, secured to the presser-foot on one side, and the movable welt-guide C, secured to and extending across the said presser-foot, as set forth.

2. The combination of the presser-foot A with the two stationary guides B D, one secured on each side of the presser-foot, and the movable guide C, secured to and extending across said presser-foot, as set forth.

3. The combination of the presser-foot A, the stationary guide B, secured to one side thereof, the movable guide C, secured to said presser-foot and extending across the same, with the spring E, secured to the presser-foot above the guide C, as set forth.

EDWARD FRANCIS ARNOLD

Witnesses:
R. H. EDDY,
S. N. PIPER.