L. E. de WARU.

Guides for Shoe Sewing.

No. 143,969. Patented Oct. 28, 1873.

Fig. 1.

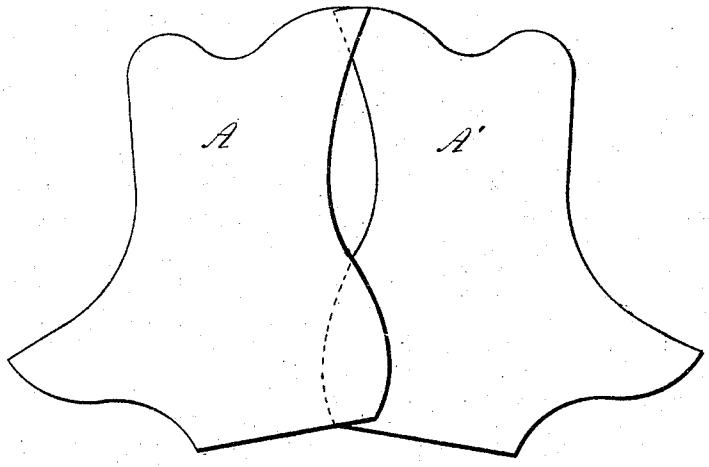
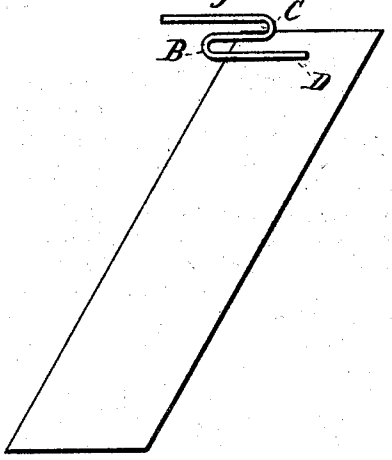


Fig. 2.



Witnesses

Gideon Barton George

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LAURENS EMMANUEL DE WARU, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN GUIDES FOR SHOE-SEWING.

Specification forming part of Letters Patent No. **143,969**, dated October 28, 1873; application filed May 28, 1873.

To all whom it may concern:

Be it known that I, LAURENS EMMANUEL DE WARU, of the city of Baltimore and State of Maryland, have invented certain Improvements in Double Gages for Sewing-Machines for the Forming and Closing of Lap-Seams in Boot and Shoe Heels, of which the following is a specification; and I do hereby declare that in the same is contained a full, clear, and exact description of my said invention, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My invention consists in a double gage so adapted to a convenient part of the machine as to cause the right and left quarters of the shoe to be guided, one lapping the other, in a direct line toward and past the needle, yet in a direction coinciding with the curvature of the heel part of the said quarters, which curvature is necessary to produce the swell and depression of the heel part of the shoe.

In the accompanying drawing forming a part of this specification, Figure 1 shows the right and left quarters of the shoe-upper lapped in the manner in which they are first entered at the double gage. Fig. 2 shows a perspective view of the double gage applied to the shuttle-race cover of a Howe sewing-machine.

To admit of the proper manipulation of the right and left quarters of the shoe-upper, it is imperatively necessary, unless the seams are first stitched, which is a tedious and expensive operation, that the quarters at the heel must not only be lapped evenly, but allowed to approach the needle in that direction above referred to. To accomplish this result, it becomes necessary to use a double gage of such character as is herein described, through which the quarters, properly and evenly lapped, may be passed in such manner that they, in following a course dependent upon that right and left curvature found at the respective heel parts of the quarters, do in reality, by reason of the freedom of the quarters to rise and fall as they are sewed, advance in a right line with reference to the needle. To admit of this freedom of the quarters to advance in a right line, and still to rise and fall in conformity with the swell or depression of the heel of the shoe, I form the gage of a round wire, around and through which the quarters move freely at the will of the operator, without danger of deviation from their course. This deviation would inevitably occur were the gage made of a flat plate, or were it of a width which would interfere with the rise and fall of the quarters in following the swell or depression of the heel of the shoe.

In applying the quarters to the double gage, the inner curved edge of the quarter A is inserted in the left-hand or upper opening of the gage B C D, and the corresponding edge of the quarter A′ in the right-hand or lower opening of the gage. The quarters are thus given the desired width of seam, which is readily and perfectly maintained as the work is run through the gage and past the needle.

It will be seen that, from the roundness of the gage, the quarters are allowed that freedom of movement, before referred to, necessary to the proper closing of the heel, whether in a forward line, as following the curvature of the quarters, or in that rising and falling required, by reason of the swell or depression of the heel of the shoe.

The gage, as above stated, is herein shown secured to the shuttle-race cover of a Howe sewing-machine; but it can, if so preferred, be applied to the bed of the machine, the needle-plate, or the presser-foot.

I am aware that guides for forming lap-seams in which the curvature of the edges is not sharp or marked are not new; but as such guides are of flat metal and broad, the results obtained by the use of the guide herein set forth cannot be accomplished by them; but

Having described my invention, what I claim as new, and wish to secure by Letters Patent of the United States, is—

The double gage B C D, formed of wire, and arranged, with reference to the needle and cloth-plate, as and for the purposes set forth.

LAURENS EMMANUEL DE WARU.

Witnesses:

GIDEON BARTON GEORGE,

GEORGE WASHINGTON SCATES.