

I. R. Rogers.

Manufacture of Shoes.

N^o 71331

Patented Nov. 26, 1867.

Fig. 2.

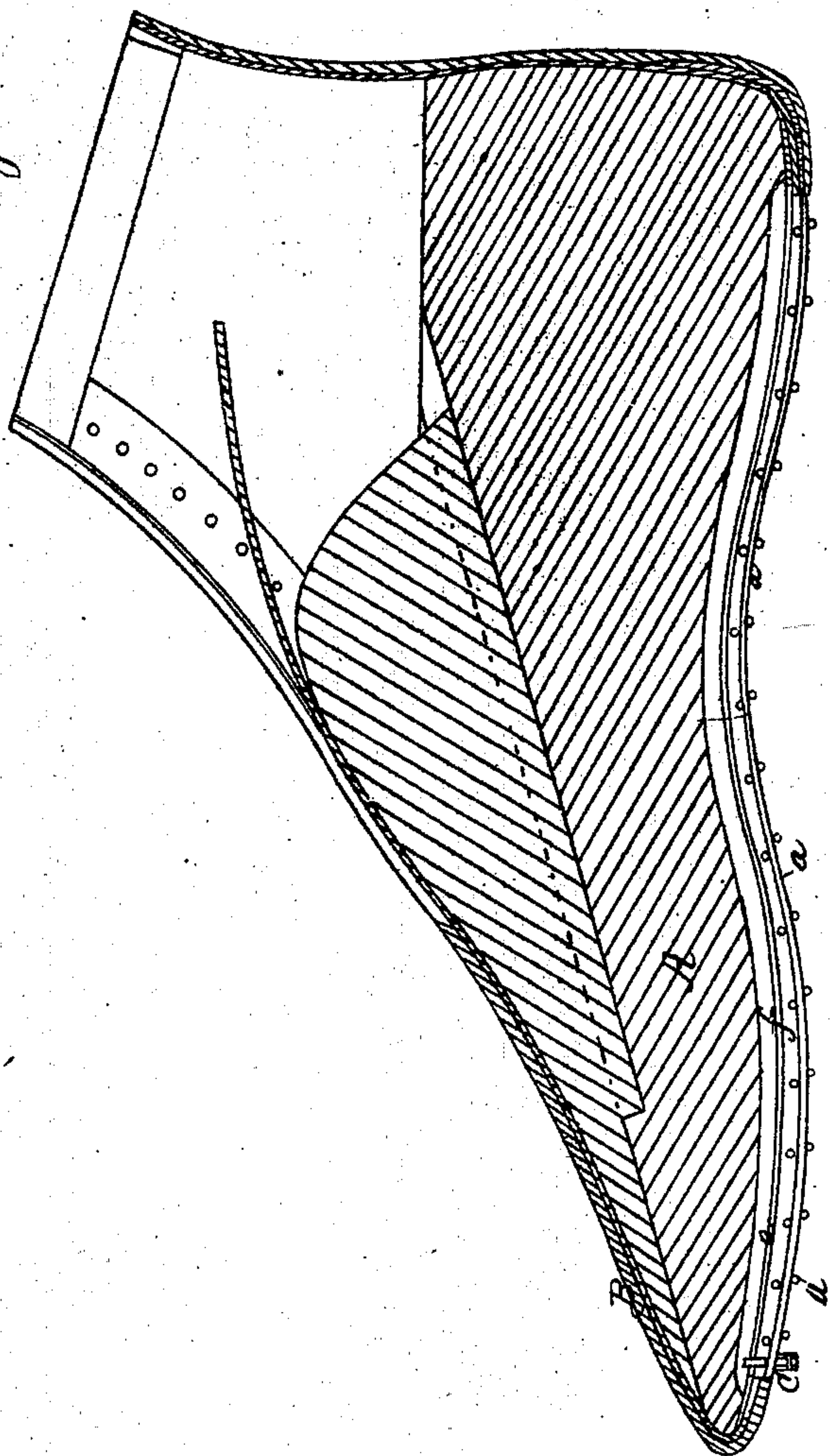


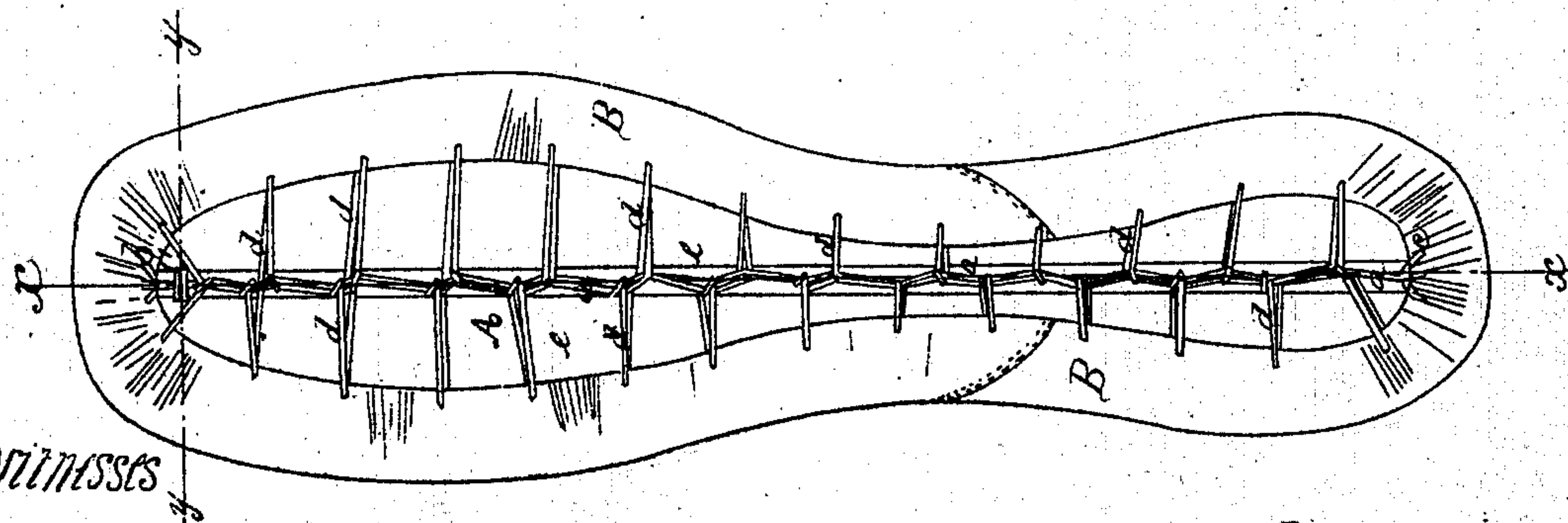
Fig. 4



Fig. 3



Fig. 1



WITNESSES

J. B. Thompson

N. W. Stearns

INVENTOR

I. R. Rogers

United States Patent Office.

ICHABOD R. ROGERS, OF LYNN, MASSACHUSETTS, ASSIGNOR TO HIMSELF,
JOHN WOOLDREDGE, AND GEORGE E. BARTLETT, OF SAME PLACE.

Letters Patent No. 71,331, dated November 26, 1867.

IMPROVEMENT IN THE MANUFACTURE OF SHOES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ICHABOD R. ROGERS, of Lynn, in the county of Essex, and State of Massachusetts, have invented certain Improvements in the Manufacture of Boots and Shoes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a plan of the bottom of a last, showing my improved method of attaching the "upper" thereto in the operation of "lasting."

Figure 2 is a longitudinal vertical section on the line $x x$ of fig. 1.

Figure 3 is a transverse section on the line $y y$ of fig. 1.

Figure 4 is a perspective view, enlarged, of the sliding guide or traveller detached.

In the manufacture of boots and shoes, where they are pegged, nailed, or sewed by machinery, without being turned, the "upper" leather has heretofore been "lasted" with an inner sole, for the purpose of supporting it while the outer sole was being attached. This inner sole increased the cost of the boot or shoe, and also rendered it less flexible to the foot; and when the inner and outer soles are sewed together, there is a liability of the stitches being worn out and broken at the point of contact between the two soles.

My invention has for its object to overcome these objections, and enable me to dispense entirely with the inner sole, thus reducing the cost of manufacture, while the boot or shoe is rendered more flexible to the foot, and equal to those which are made by hand without an inner sole, and turned in the process of making. And my invention consists in connecting the "upper" leather at the toe and heel, when first placed upon the last, by means of a cord, wire, or its equivalent, to which the edges of the "upper" are secured by stitches, so as to hold it tightly in place on the last as required, without the use of tacks, as has heretofore been customary. And my invention also consists in supporting this central cord near the bottom of the last, and preventing it from being drawn to one side or the other, as the side stitches are being formed, by means of a guide or traveller, provided with an eye, which slides along the bottom of the last.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A represents the last, over which is stretched the "upper" B, in a well-known manner. A piece of cord or twine, a , is then made fast to the toe of the "upper" at b , and is stretched tightly across to the heel, where it is again made fast at c . This serves to draw the "upper" smoothly over the last, in a longitudinal direction, and hold it temporarily in place. The cord a , however, may be first made fast at the heel, and stretched across to the toe, if preferred. The edge of the "upper" is then secured all around to the central cord a by means of stitches, d , the cord a being supported in a central position, close to the bottom of the last, and prevented from being drawn to one side or the other, by a guide or traveller, C, to be presently described. The bottom of the last is covered with a thin metallic plate, e , in which is cut a long slot that lies over a groove, f , formed in the last. In this groove f runs the traveller C, (seen detached and enlarged in fig. 4,) which is formed of two pieces, 5 and 6, hinged together at 7, the two pieces, when closed, forming an eye, 8, through which the cord a passes.

Before commencing to form the side stitches d , the guide C is spread apart and placed over the cord a , so as to confine it within the eye 8, and the lower ends 9 of the guide are then placed in the groove f , so that the guide may be pushed along and kept just in advance of the point where the stitch is being formed, thus supporting the cord a in a central position, as before described, and when the "upper" is sewed all around, as seen in fig. 1, the traveller C is turned around, so that it can be taken out of the groove and separated from the cord a . The last is then removed and the outer sole sewed on to the "upper" by machinery, in a well-known manner. The inner sole being thus entirely dispensed with, the boot or shoe is rendered flexible to the foot, and the cost of manufacture is at the same time considerably reduced.

Instead of the cord a , a piece of wire, tape, or other suitable material may be used, if preferred, and it is evident that the "upper" may be secured to the last by means of the cord a and stitches d , without employing the traveller C, although the work cannot be so readily or perfectly performed. I do not, therefore, wish to

confine myself to its use. Instead of the traveller C sliding in a groove, *f*, some other device may be employed to guide it as it slides along the bottom of the last.

Claim.

What I claim as my invention, and desire to secure by Letters Patent, is—

Connecting the "upper" leather at the toe and heel by means of a cord, *a*, to which the edges of the "upper" are secured by stitches *d*, as herein described.

I also claim, in combination with the above, the sliding guide or traveller C, with its eye 8, for supporting the cord *a* in a central position, close to the bottom of the last, while the stitches *d* are being formed, substantially as set forth.

I. R. ROGERS.

Witnesses:

P. E. TESCHEMACHER,

N. W. STEARNS.