## J. H. Brown. Soling Boots & Shoes. Patented Dec. 22, 1868

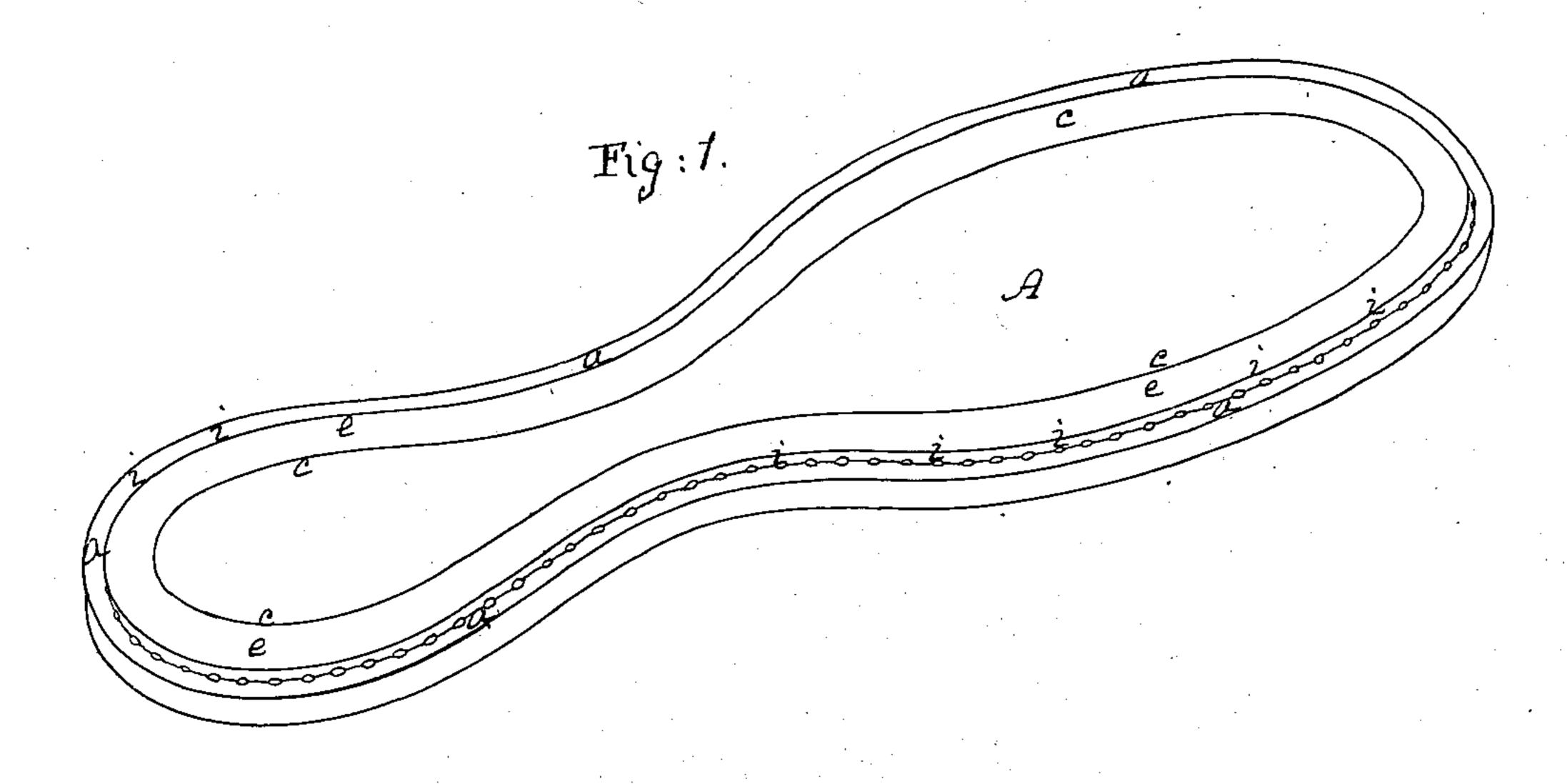


Fig: 2

Mitnesses In D. Patten By ally. A.B. Stoughton.

## UNITED STATES PATENT OFFICE.

JOHN H. BROWN, OF WATERTOWN, MASSACHUSETTS, ASSIGNOR TO MOSES K. MOODY, OF NEW YORK CITY.

IMPROVED MACHINE-MADE CHANNELLD AND PIERCED SOLE FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. 85,207, dated December 22, 1868.

To all whom it may concern:

Be it known that I, John H. Brown, of Watertown, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Machine-Made Channeled and Pierced Soles for Boots or Shoes, and ready to be sewed on by machinery; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a perspective view of one of the soles channeled and pierced, and ready to be sewed onto a boot or shoe by machinery. Fig. 2 represents a cross-section

through the same.

I am aware that channeled shoe-soles made by machinery are sold in the market as a commodity or commercial article, and that possibly some of these soles may have been channeled by hand. However made, I lay no claim to a channeled sole.

My invention relates to a new article of manufacture, viz., a boot or shoe sole that is both channeled and pierced and ready to be sewed on by machinery, and by even a needle so blunt as not to be capable of piercing the

material of which the sole is made.

In sewing on channeled soles by a needle that must pierce the leather or other material of which the sole is made, it is found that such work will be irregular, uneven, and unsightly. It forces the needle to do more work than it can do well, and is very destructive on needles.

But the main objection to the needle making its own holes is that the stitching is not uniform and does not come out even and true, and hence soles that are simply channeled have no very great commercial value or advantages in machine-sewing; but a sole that is channeled and pierced both, so that even a blunt needle will carry the thread through, and, indeed, slightly move the sole should the hole not be exactly in the line of the needle, enables a machine to sew on such soles with the greatest facility and dispatch, and the stitches will be, of course, as regular and come out as even as the lines of holes or punctures, which i are made with the greatest exactitude.

My invention consists in a new article of manufacture, viz., a boot or shoe sole that is both channeled and pierced, and ready to be sewed on by machinery, without requiring the needle to pierce the leather, but merely to find

the holes already pierced for it.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings, first premising that as I claim no special kind of machinery for channelling and piercing the holes, but purpose using that already well known or in use, I have shown no machinery in the drawings, but simply the product or thing made.

With any ordinary channeling-machine the groove a is cut around the margin of the sole A, and the gash c is at the same time cut under the projecting portion e that is left upon

the sole near its margin.

The sole thus channeled is passed through a piercing-machine, in which it is pierced by an awl and at regularly-spaced distances, as seen at i. The awl may be a curved one and enter in the undercut gash c, which raises up the edge of the gash for the easy entrance of the needle afterward.

The point of the awl or piercing instrument comes out in the groove a, and without marring or raising the leather there where it would it be seen, while the part or portion where it enters is covered by the upper when it is sewed thereto, the upper being sewed on and then turned in a way well known to shoemakers.

Having thus fully described my invention, I would state that I do not claim channeling a shoe-sole; but

What I do claim, and desire to secure by Letters Patent, as a new article of manufacture, is—

A boot or shoe sole channeled and pierced, so as to facilitate its afterward being sewed to the upper by machinery, as herein described and represented.

JOHN H. BROWN.

Witnesses: EDWIN F. CORRY, Jr., EDWARD KAUFMANN.