## J. B. HADAWAY. BOOT OR SHOE.

(Application filed Nov. 16, 1901.)

(No Model.)

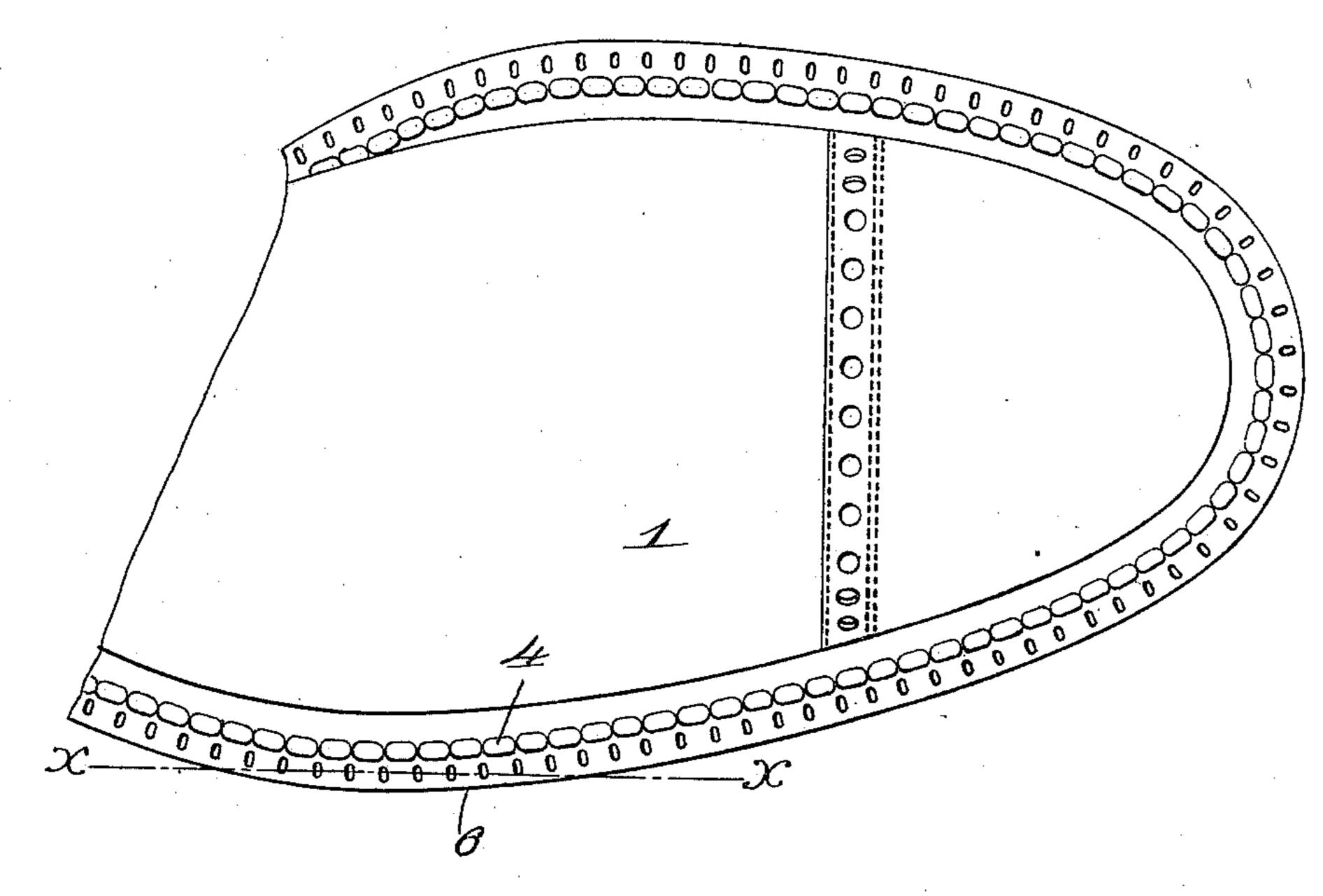


Fig.1.

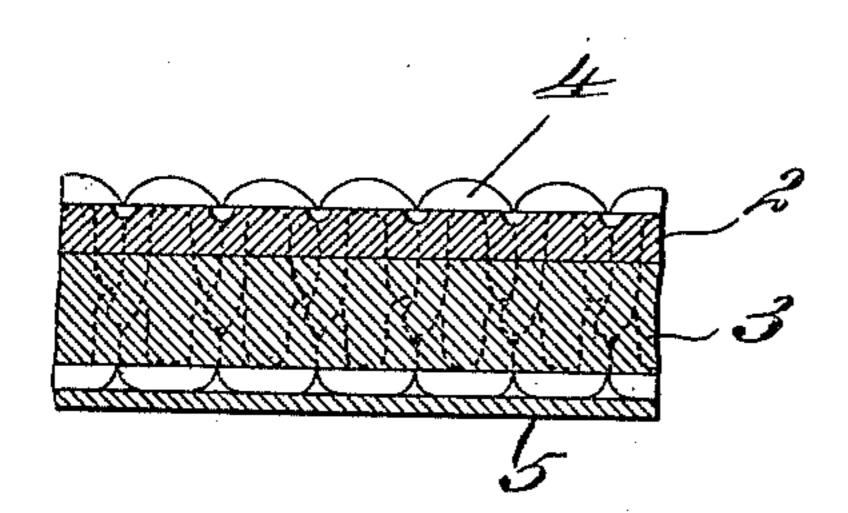


Fig.R.

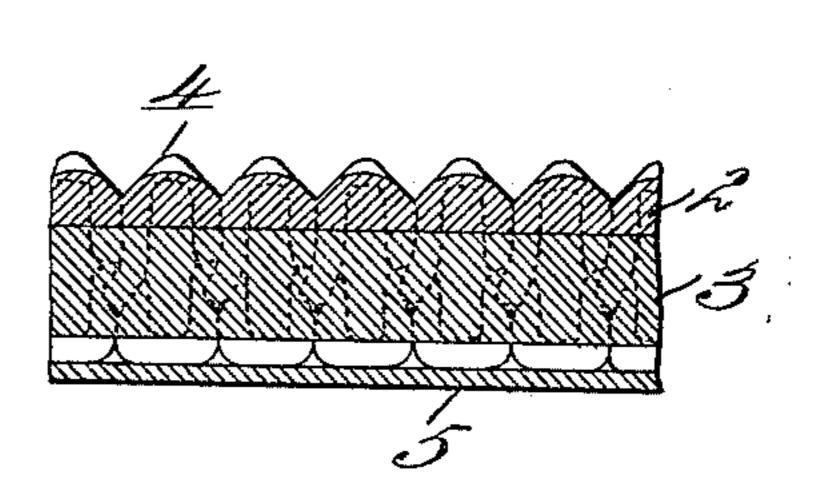


Fig.3.

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John B. Hadaway by his attorney Benjamin Philips

## United States Patent Office.

JOHN B. HADAWAY, OF BROCKTON, MASSACHUSETTS.

## BOOT OR SHOE.

SPECIFICATION forming part of Letters Patent No. 705,231, dated July 22, 1902.

Application filed November 16, 1901. Serial No. 82,542. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. HADAWAY, a citizen of the United States, residing at Brockton, in the county of Plymouth and State of 5 Massachusetts, have invented certain new and useful Improvements in Boots or Shoes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in 10 the art to which it appertains to make and use the same.

The present invention relates to an im-

provement in boots and shoes.

It is now customary in the manufacture of 15 boots and shoes to indent the upper surface of the projecting edge of the sole between the stitches which there appear to separate the stitches and bring them into prominence and to impart a finished and pleasing appear-20 ance to this portion of the boot or shoe. The stitch-separating or indenting operation is performed either during the formation of the seam, the stitches of which appear upon the upper surface of the sole, or after the seam 25 has been finished. In all boot and shoe work the stitches vary more or less in length, and all practically operative stitch-separating machines which act on the shoe after the seam has been finished are provided with 30 means for compensating for the variations in the lengths of the stitches to cause the indentations to be located in the intervals between the stitches. In the operation of these machines the stitches of the seam are di-35 rectly acted upon by and cooperate with certain instrumentalities of the machines to determine the location of the indentations.

The object of my invention is to provide the sole of a boot or shoe with means adapted 40 to cooperate with suitable instrumentalities of a stitch-separating machine whereby the location of the indentations can be determined during the stitch-separating operation without the utilization of the stitches of the 45 seam; and to this end my invention contemplates providing the projecting edge of the sole with a series of depressions located at varying distances apart corresponding to the varying lengths of the stitches. These de-50 pressions may be made deeper and more pro-

stitches of the seam and afford a more reliable means for determining the location of the indentations during the stitch-separating operation. The instrumentalities of the 55 stitch-separating machine which act on the depressions need not be so delicate in their operation or so finely adjusted as instrumentalities which are arranged to act on the stitches of the seam, and the location of the 60 indentations can be determined with greater accuracy and certainty than is the case when the inequalities in the seam are depended upon in determining the location of the indentations. The depressions may be of any 65 suitable size or shape and may be located upon either surface or upon the edge of the sole in any desired position with relation to the stitch intervals. In the preferred form of my invention illustrated in the drawings 70 accompanying this application the depressions are located on the upper surface of the projecting edge of the sole outside of the stitches of the seam. With the depressions so located the stitch-separating operation can 75 be performed either before or after the sole is trimmed and the depressions can be readily engaged by the instrumentalities of the stitch-separating machine.

Referring to the drawings, Figure 1 is a 80 plan view of the fore part of a shoe embodying my invention in its preferred form. Fig. 2 is a sectional view on the line x x, Fig. 1; and Fig. 3 is a sectional view similar to Fig. 2, illustrating the appearance of the sole af- 85

ter the stitch-separating operation.

The shoe illustrated in the drawings is a welted shoe, 1 indicating the shoe-upper; 2, the welt; 3, the outsole; 4, the outseam, which secures the outsole to the welt, and 5 the 90 channel-flap, which covers up the stitches of the outseam on the tread-surface of the sole. The portion of the welt which projects beyoud the upper, together with the projecting portion of the outsole, is commonly termed 95 the "projecting edge" of the shoe-sole. On the upper surface of this projecting edge outside of the stitches of the seam 4 is located a series of depressions 6. Each depression is located opposite a stitch interval in a line 100 extending through the stitch interval normal nounced than the intervals between the to the outline of the shoe-upper. As in all

boot and shoe work, the stitches of the outseam 4 vary in length, and the depressions 6 are consequently located at varying distances apart corresponding to the varying lengths of the stitches. In the stitch-separating operation these depressions are utilized instead of the stitch intervals or the crowns of the stitches to determine the location of the indentations. During the stitch-separating operation the depressions 6 may be obliterated by the indenting-tool, as shown in Fig. 3.

While my invention is particularly applicable for use in the manufacture of welted shoes, it will be understood that it is not limited thereto, but may be utilized in the manufacture of any boot or shoe provided with a line of indented or separated stitches or imitation stitches appearing upon the upper surface of the projecting edge of the sole.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent of the United States—

An article of manufacture comprising a boot or shoe upper, a sole and a line of unseparated stitches appearing upon the upper 25 surface of the projecting edge of the sole, the projecting edge of the sole being provided with a series of depressions located at varying distances apart corresponding to the varying lengths of the stitches for determining 30 the location of the indentations during the stitch-separating operation, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN B. HADAWAY.

Witnesses:

FRED O. FISH,
ALFRED H. HILDRETH.