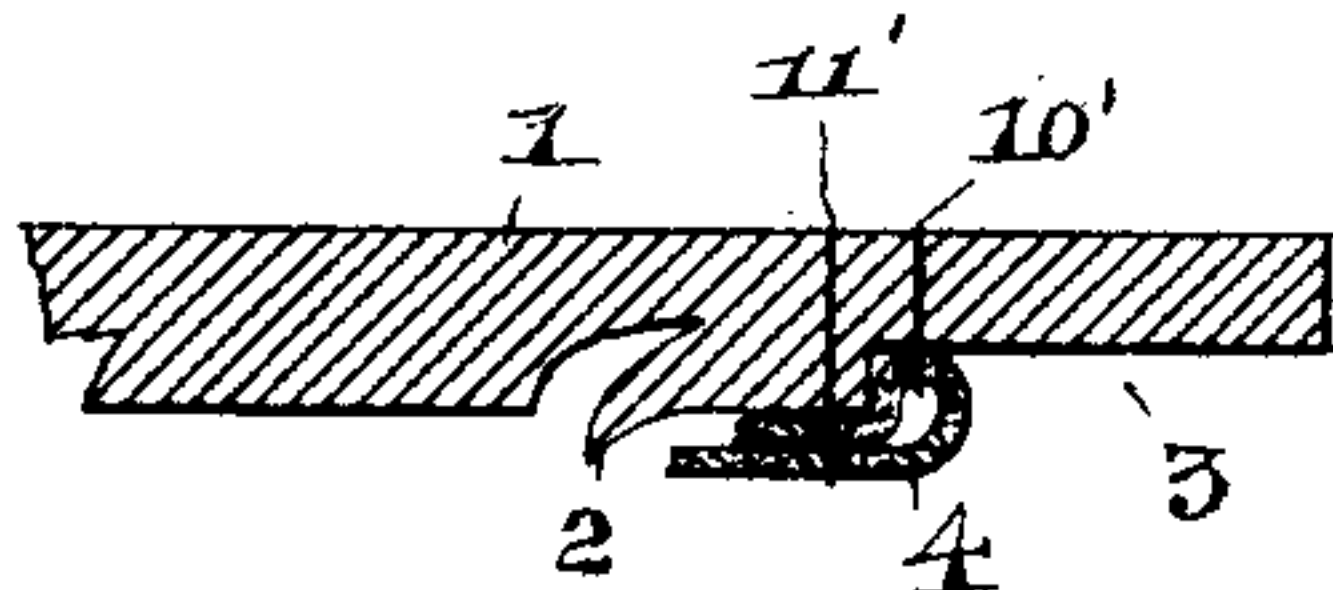
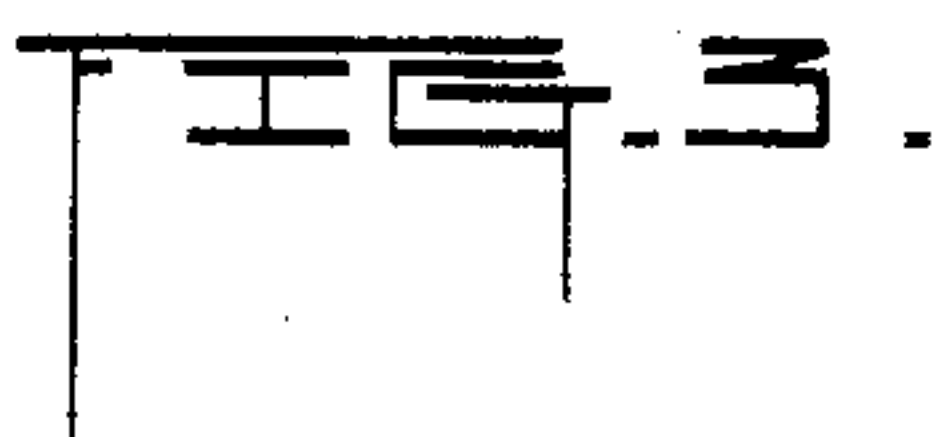
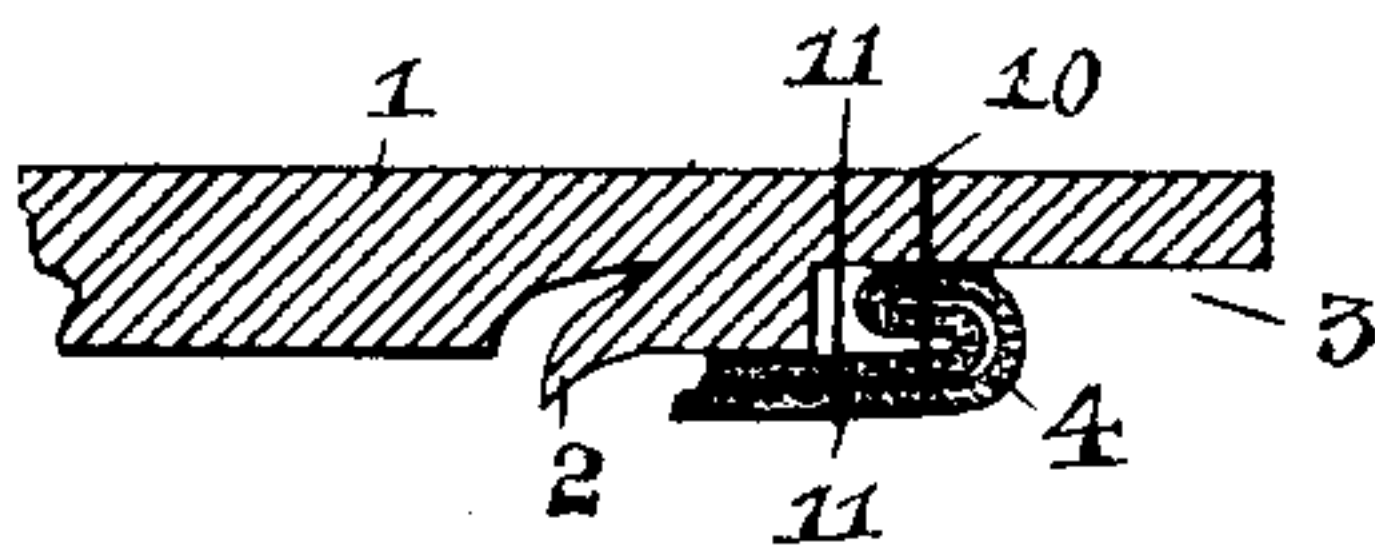
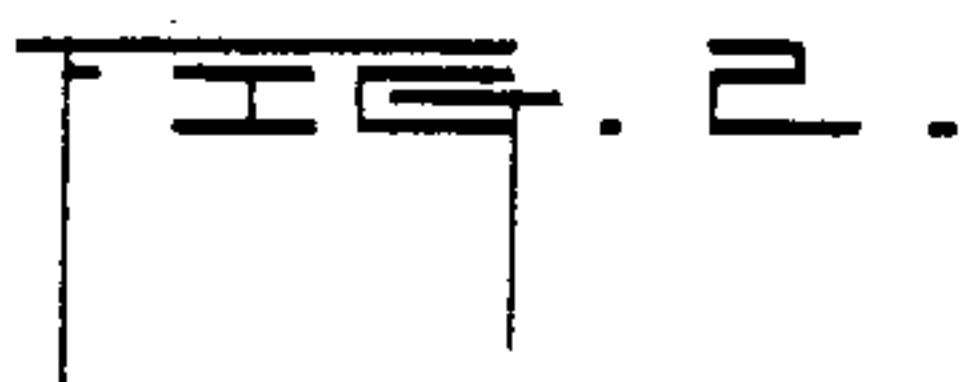
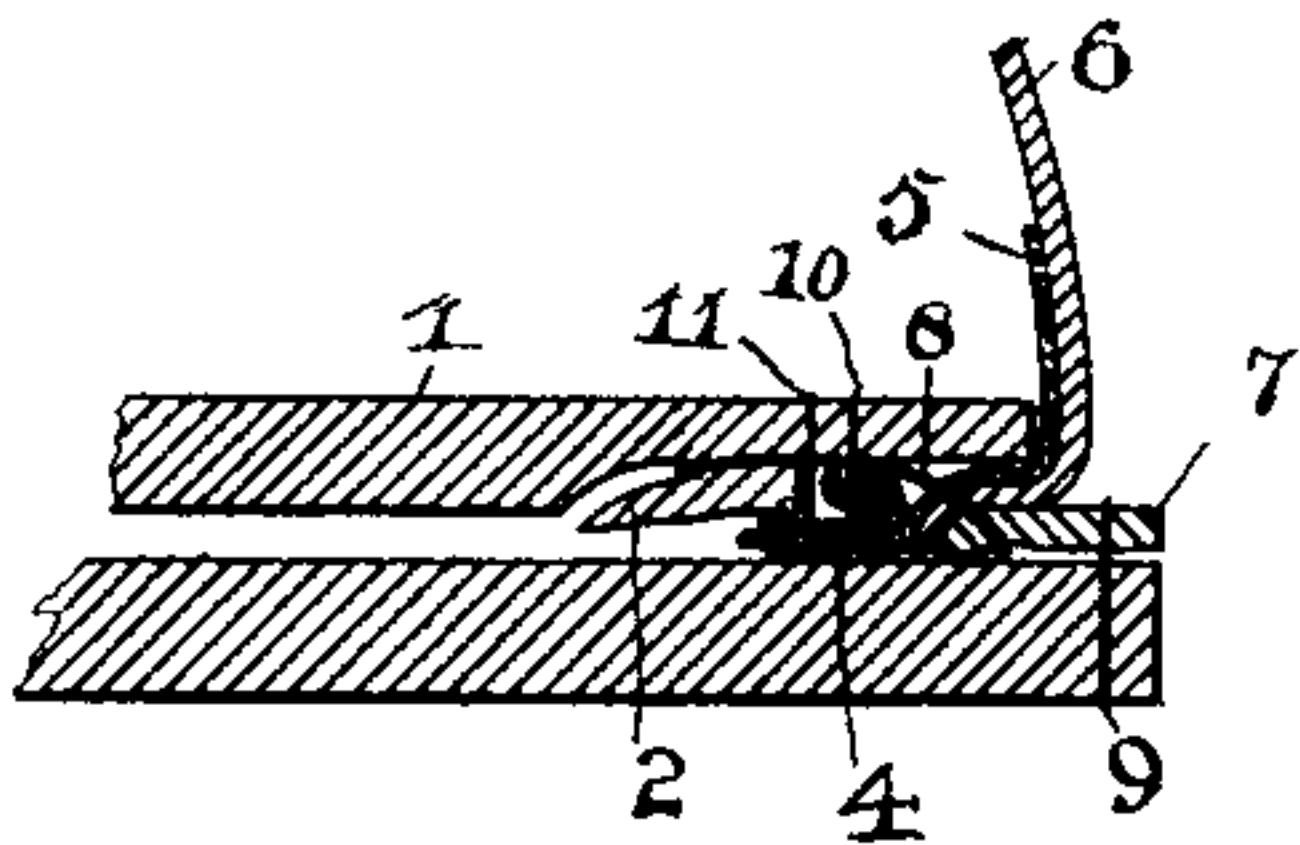
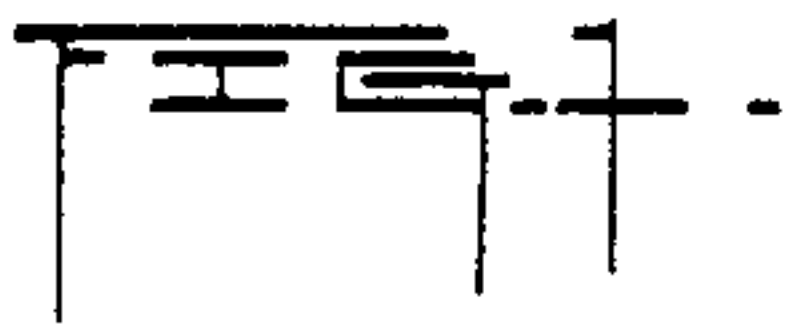


(No Model.)

E. McDONALD.
SHOE.

No. 482,456.

Patented Sept. 13, 1892.



WITNESSES

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UNITED STATES PATENT OFFICE.

EVAN McDONALD, OF ROCHESTER, NEW YORK.

SHOE.

SPECIFICATION forming part of Letters Patent No. 482,456, dated September 13, 1892.

Application filed May 20, 1892. Serial No. 433,746. (No model.)

To all whom it may concern:

Be it known that I, EVAN McDONALD, a resident of Rochester, in the county of Munroe and State of New York, have invented certain
5 new and useful Improvements in 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 the art to which it pertains to make and use the same.

10 The invention relates, primarily, to what is known as a "Goodyear" welt or hand-sewed shoe; and it has for its object to increase the flexibility of the sole and to diminish the quantity of filling required between the in-
15 ner and outer soles and also to diminish the thickness of the insole combined with attached parts.

The invention consists in the matters hereinafter described and pointed out.

20 In the accompanying drawings, Figure 1 is a partial transverse section of a shoe, the parts being unduly enlarged and separated to more clearly illustrate the construction. Fig. 2 is a similar view of the insole on a
25 larger scale, and Fig. 3 is a like view of a modification.

Numerals 1 indicates the insole, and 2 a flap formed by channeling or cutting the insole on its bottom. The insole is recessed or cham-
30 fered at 3, substantially as shown.

4 indicates canvas, leather, or other material sewed to the insole. It is important that the material or fabric shall have sufficient body in connection with the shoulder of the
35 sole to resist the cutting action of the threads in sewing, and the device used for this should be situated in the recess. Folded canvas, leather, or other material will offer suitable resistance to the cutting action of the thread
40 and any such material may be used.

5 denotes a lining, 6 the upper, and 7 the welt, of a shoe made according to my invention.

8 denotes a thread which secures the welt,
45 upper, lining, and insole together, and 9 a thread or stitch that secures the outer sole to the welt, the thread 8 representing a series of stitches which pass through the upper and under the strip 4 at the angle of the shoulder
50 formed by the recess 3 and out through the upper surface of the insole.

The object of the canvas strip or equivalent is to reinforce the leather of the insole to prevent the threads from cutting it. It is doubled and stitched to the insole in the
55 channel 3, as indicated at 10. The doubled canvas is then turned back over the shoulder of the channel and stitched in the recess close to the shoulder and within the first seam, as indicated at 11. 60

In Fig. 3 a modification is shown in which the first line of stitches 10' passes through a single thickness of canvas, which is then folded back over the shoulder and both thick-
65 nesses stitched to the insole near said shoulder 11. The stitches 8 are subjected in sewing as well as in use to strain which render it necessary ordinarily to supplement the leather to prevent cutting, which purpose is
70 effected by the fold of the canvas strip securely fastened to the insole. Preferably, two lines are employed to fasten the strip and are situated in the recess 3, whereby the fold of the canvas is prevented from pro-
75 truding above the plane of the bottom of the sole, thereby securing flatness of seam and rendering less filling between the two soles necessary than would otherwise be the case. Not only can a lighter sole be used because
80 of the thread-support, but by my improvement the edges of the upper and its lining are made to lie in recess 3 close to the outer line of the strip or thread-support, also situated in said recess, so that the combined thickness
85 of the parts is diminished, whereby the appearance of the shoe is improved as well as the flexibility of the shoe-bottom, which beneficial results are also attended with a saving in material.

As respects the insole provided with chan-
90 nel 3, its advantages are not all dependent upon the use of the particular strip or lines of stitches or of any strip, because the flatness of the main seam is increased and the necessity of a thick filling dispensed with in-
95 dependently of the strip; neither is the shoe-lining nor the flap essential to all the advantages of the improvement.

The improvement, though primarily intended for women's shoes, is not confined
100 thereto, as it is applicable also to men's and children's shoes.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

5 The shoe provided with an insole having a portion cut away at its edges, forming a recess below the surface of the sole, and a shoulder, combined with a folded strip of canvas, leather, or other material fastened in the bottom of said recess and with the upper se-

cured to the insole by stitches passing through the upper under the strip at the bottom of said recess and through the insole within the recess, substantially as set forth.

EVAN McDONALD.

Witnesses:

WILLIAM J. HAWKINS,
JOSIAH SULLIVAN.