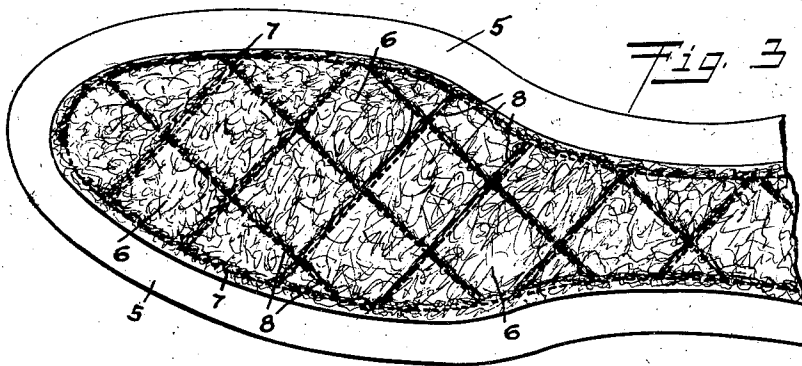
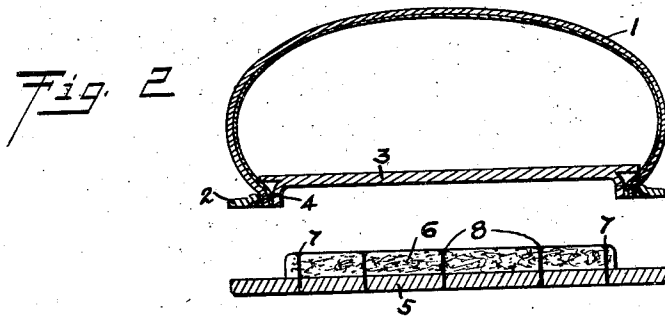
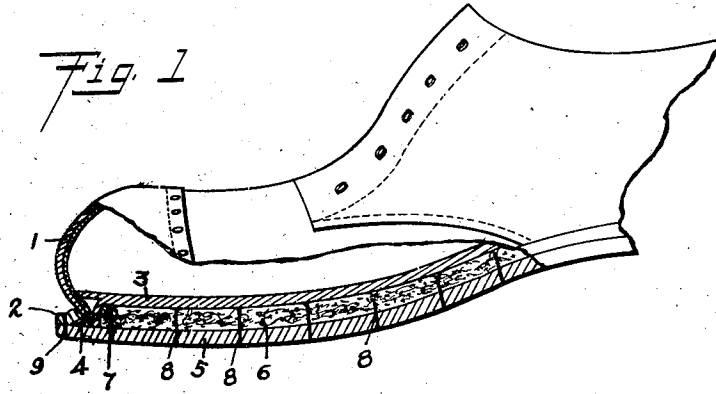


DE ROY AUSTIN.
SHOE.
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Patented Nov. 25, 1913.

1,079,535.



DeRoy Austin, Inventor.

Witnesses:
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UNITED STATES PATENT OFFICE.

DE ROY AUSTIN, OF OMAHA, NEBRASKA.

SHOE.

1,079,535.

Specification of Letters Patent.

Patented Nov. 25, 1913.

Application filed December 7, 1911. Serial No. 664,502.

To all whom it may concern:

Be it known that I, DE ROY AUSTIN, a citizen of the United States, and a resident of Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Shoes, of which the following is a specification.

My invention relates to the manufacture of boots and shoes and more especially to the sole-construction thereof.

It is the object of my invention to provide in a shoe a resilient body secured between the insole and outsole in such a manner that it cannot be displaced from the points where it receives the greatest pressure and become localized in lumps and bunches.

Further objects of my invention are to provide certain air-spaces adjoining the lower side of the insole, to secure free play and movement between the insole and the resilient filler, and to increase the durability of the outsole.

In the accompanying drawings, Figure 1 is a partial longitudinal section of a shoe constructed in accordance with my invention, Fig. 2 is a transverse section of the shoe before the sewing of the outseam, the outsole being shown separated therefrom, and Fig. 3 is a plan view of the front part of the outsole as prepared for securing to the welt.

In carrying out my invention the upper 1, welt 2 and the insole 3 are prepared and secured together by the inseam 4 in the usual manner, it being preferable that the insole be of relatively pliable leather. The outsole 5 is prepared for attachment to the welt by having secured onto the upper side thereof a sheet 6 of fibrous resilient material such as felt, shaped so as to fit within the space below the insole and between the lips turned down from the edges thereof for the inseam. The resilient sheet is preferably secured to the outsole by a seam 7 extending around the edge thereof, and a number of intersecting seams 8 extending diagonally across the same. The exact arrangement of the latter seams is not arbitrary and any arrangement thereof may be employed by which there is no considerable area of the fibrous sheet left unattached to the outsole. After being prepared as above described the outsole is secured to the welt by the usual outseam 9 and the shoe is completed in the ordinary manner.

The seams 7 and 8 are made with com-

paratively heavy thread, which, it has been found, wears longer than leather so that the durability of the outsole is increased by said seams. Where the seams pass through the resilient sheet the same is drawn down and compressed so that the surface thereof is depressed along the lines of the seams, as shown. When the parts are assembled the said lines of depression form air-channels adjoining the lower side of the insole which assist in ventilating and keeping the sole dry.

It will be observed that while the filler formed by the fibrous sheet is securely held in place so that there is no chance for it to work out from under the points which receive the greatest pressure from the foot, there is free relative movement permitted between the insole and the filler. By permitting such movement between the insole and filler the shoe is made more flexible than those of similar structure in which the filler is secured to the insole by sewing, pasting or cementing the same thereto. Also, where paste or cementing material is used with a fibrous material, the paste penetrates and fills up the pores of the material and causes it to form a compact non-resilient mass, so that by securing the filler in place without paste or cement I am able to preserve the full resiliency of the filler material.

Now, having described my invention, what I claim and desire to secure by Letters Patent is:

1. In a shoe, an outsole, an insole, a filler of fibrous resilient material disposed between the outsole and the insole, and seams passing only through the outsole and the filler to secure them together.

2. In a shoe, an outsole, an insole, a filler comprising a sheet of fibrous resilient material disposed between the outsole and insole, and means for positively securing together the outsole and the edges and intermediate parts of the filler sheet, whereby the filler sheet is attached only to the outsole.

3. In a shoe, an upper, a welt and a leather insole, an inseam securing them together, a leather outsole secured to the welt, and a sheet of fibrous resilient material disposed between the outsole and the insole and secured only to the outsole.

4. In a shoe, an outsole, a sheet of fibrous resilient material disposed on the upper side

thereof, a seam securing together the out-
sole and the edge portions of the fibrous
sheet, and seams securing together the mid-
dle portions of the outsole and the fibrous
5 sheet, whereby the fibrous sheet is attached
only to the outsole.

In testimony whereof I have hereunto

subscribed my name in the presence of two
witnesses.

DE ROY AUSTIN.

Witnesses:

D. O. BARNELL,
EDWARD L. BRADLEY.