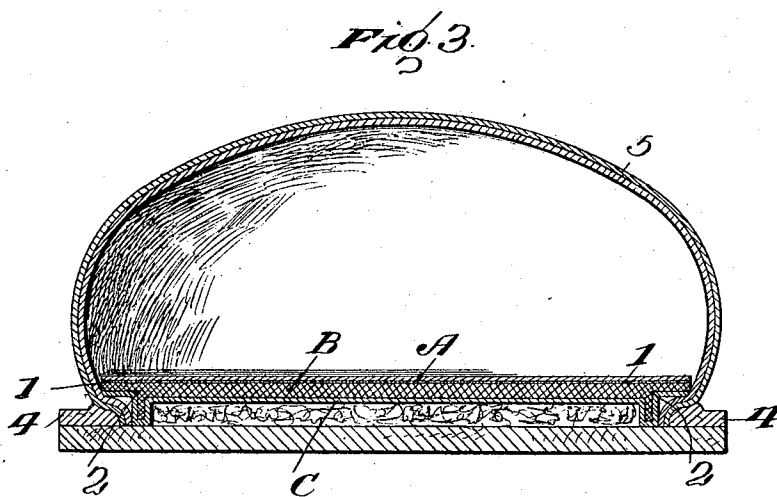
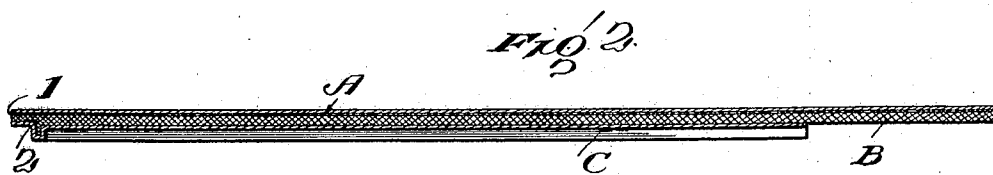
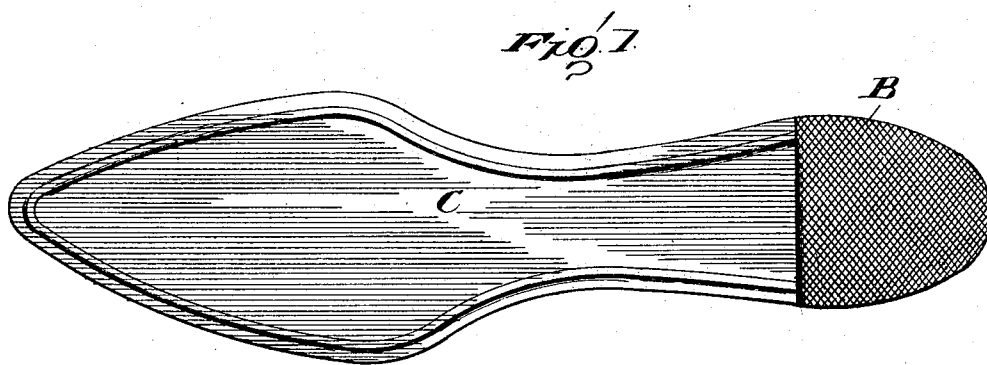


W. E. CLAYTON.
WELT INSOLE FOR SHOES.
APPLICATION FILED JAN. 27, 1916.

1,217,153.

Patented Feb. 27, 1917.



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UNITED STATES PATENT OFFICE.

WILLIAM E. CLAYTON, OF PORTSMOUTH, OHIO.

WELT-INSOLE FOR SHOES.

1,217,153.

Specification of Letters Patent.

Patented Feb. 27, 1917.

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To all whom it may concern:

Be it known that I, WILLIAM E. CLAYTON, a citizen of the United States, residing at Portsmouth, in county of Scioto and State of Ohio, have invented certain new and useful Improvements in Welt-Insoles for Shoes, of which the following is a specification.

My invention relates to an improvement in welt insoles for shoes.

All welt insoles must have an abutment of some kind to which the welting and upper are sewed. This abutment must be a part of the material of which the insole is made, or must have something sewed on to which to fasten the material. If the material of which the insole is made has enough substance and texture, it can be split and an abutment made, and thus do away with the so-called gem operation, but if not, then it is necessary to fasten something to the material to serve in the place of the abutment.

One of my objects is to provide an insole which affords enough substance and texture to admit of splitting the same in order to provide the required abutment.

A further object of my invention is to produce a very flexible insole that can be manufactured cheaply and in a practical way.

A still further object of my present invention is to provide an insole which will practically preclude the penetration of moisture from the foot; and also to provide one which will admit of repair work being done after the first sole is worn through; in short it is my purpose to afford as good a substance as would an entire leather insole for repairing, if for no other purposes.

With the foregoing objects in view, my present invention comprises an all canvas welt insole.

In the accompanying drawings:—

Figure 1 is a plan view of the under side of the insole;

Fig. 2 is a longitudinal section thereof; and

Fig. 3 is a transverse sectional view of the insole.

A, represents the uppermost layer of the insole. This is coated on the lower surface with an adhesive substance 1, which, when heated, will cause the canvas duck layer A to adhere to the layer B, which is of relatively thick canvas.

After these two layers are thus pasted to-

gether, the lower edges of the canvas B are channeled as at 2, this channeling extending only part way, say one-half, through the canvas layer B. After being thus channeled, the channel is turned up, as shown in Fig. 3. When thus turned up, a layer of canvas duck C is cemented to the under surface of the canvas B and made to surround the channel.

In this manner, an all canvas welt insole is provided which is very light and flexible, and comprises as set forth two outer layers of canvas duck pasted to an intermediate layer of thick canvas, the edges of which, save the heel are channeled, thereby inclosing the channeling and forming a soft flexible insole with an abutment made from two of the layers.

The intermediate part of this abutment is an integral portion of the intermediate layer, so that in stitching through the welt 4, upper 5, and the abutment, the stitches extend through a substantial and solid abutment of at least three layers of canvas, one of which is part and parcel of the intermediate layer of the insole.

I am aware that cushion inner soles for shoes have been patented, which have been composed of a thick layer of strong pianofelt, but felt lacks strength and texture to hold the sewing or inseaming of the upper and the welt to the same, and consequently required reinforcing of calf-skin or other soft leather on the upper side of the sole, together with heel reinforcing, because the felt did not have sufficient strength to hold the heel-nails. Asbestos has been used also in this general type of insole to keep the cold and dampness from the foot, but my present invention differs from these because it is an all-canvas welt insole possessing enough substance and texture to admit of splitting at the edge to form the abutment. When thus constructed, I do not have to reinforce the heel with the leather to provide sufficient substance as a fastening for the heel, nor do I require sheep-skin as a lining for the upper side to give it a smooth surface for the foot.

Thus I am able to produce a much less expensive insole, which at the same time is as flexible as any other, and possesses the required strength and body.

I claim:

1. A welt insole comprising a compara-

tively thick layer of canvas having a portion of its edges channeled to form a flap, said flap being bent away from the edge.

2. An all-canvas welt insole composed of
5 three layers only, the intermediate layer being relatively thick and having a portion of its edges channeled, to form a flap, said flap being bent away from the edge, and one
10 layer of the canvas made to adhere to and inclose the flap thus formed on both sides.

3. A welt insole comprising three layers,

the intermediate layer being of relatively thick canvas, and having a portion of its edges channeled, to form a flap, said flap being bent away from the edge, a thin layer
15 of material cemented thereto and forming a cover, and a layer of canvas made to adhere to and inclose the flap on both of its sides.

In testimony whereof I affix my signature. 20

WILLIAM E. CLAYTON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."