Dec. 25, 1928. 1,696,457

M. A. SHANAHAN

VENTILATING MEANS FOR BOOTS AND SHOES

Filed March 15, 1928

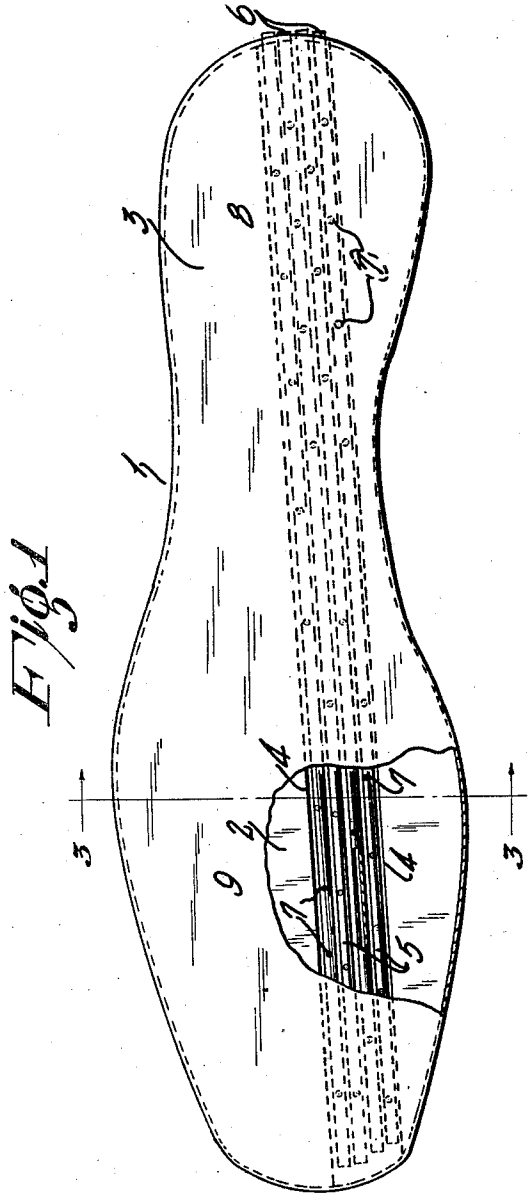


Fig. 1

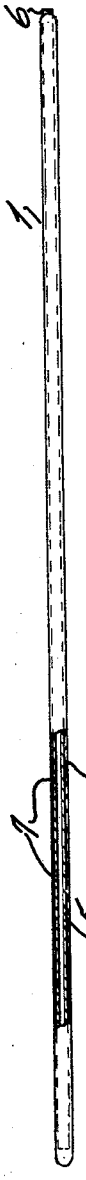


Fig. 2

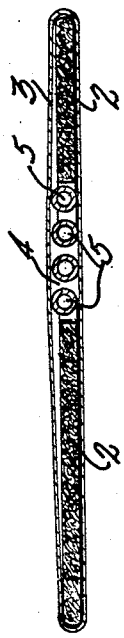


Fig. 3

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UNITED STATES PATENT OFFICE.

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VENTILATING MEANS FOR BOOTS AND SHOES.

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This invention relates to ventilating means for boots and shoes and more particularly to an insole for the same, wherein is incorporated the said ventilating means.

The main object is to provide an insole to be placed in a boot or shoe, whereby the interior of the same will be ventilated, the drawing in and expelling of the air being automatically accomplished by the alternate pressure and release of the foot upon the said insole in the boot or shoe.

Another object is to provide a simple and cheap device such as described, which may be made in various sizes and forms to fit any boot or shoe and which cannot get out of order.

With the foregoing and other objects in view, the invention resides in the peculiar construction and arrangement of the several parts as hereinafter fully set forth and claimed.

In the drawings:

Figure 1 is a plan view of an insole constructed in accordance with my invention, parts thereof being shown broken away and in section.

Figure 2 is an edge view of the same also partly broken away.

Figure 3 is an enlarged transverse sectional view taken along the line 3—3 of Figure 1.

Referring now more particularly to the drawings, the reference numeral 1 indicates the insole proper, formed of the body 2 and the outside covering or casing 3. The body 2, may be of leather or any other suitable material and is formed in two pieces, positioned in spaced relation, providing a longitudinal channel or slot 4 as shown in Figure 1 of the drawing. The casing 3 is made of cloth or the like and is of a shape and size to snugly fit the said body 2. The said body 2 may be secured in its spaced relation within the casing 3 by glue or a similar process. A plurality of small rubber tubes 5 are positioned in the channel or slot 4, and extend out rearwardly through the casing 3 as shown at 6. The said tubes 5 are substantially larger in diameter than the thickness of the body 2 of the insole 1 so that they will project somewhat above the plane of the same as shown in Figure 3. Air vents or ports 7 are formed through the walls of the tubes 4 both in the heel portion 8 and the toe portion 9 to aid in the circulation of the air.

In use and operation the insole is placed in a boot or shoe (not shown) and as the wearer walks pressure is alternately placed upon the heel 8 and toe 9 of the insole 1 as may be readily understood. This action causes the tubes 4 to be alternately compressed and released so that air will be forced in and out of the open ends and the vents 7 thereof. Thus as pressure is placed upon the heel 8 air will be forced out of the tubes into the forward portion of the boot or shoe through the vents 7. As pressure is removed from the heel 8 and placed upon the toe 9, air will be forced into the shoe from the vents 7 in the rear or heel portions of the tube and from the extended ends 6 thereof. The casing 3 being made of cloth allows the air to pass freely therethrough.

It is obvious that any desired number of tubes may be used and also that the device may be built permanently into the boot or shoe in the process of making the same.

While I have herein set forth a preferred embodiment of my invention, it is understood that I may vary from the same in minor details, not departing from the spirit of the invention and within the scope of the appended claim.

I claim:

In a ventilating device for boots or shoes, an insole comprising an inner body, an outside casing therefor, said body being formed of two elongated portions disposed side by side in parallel spaced relation within the said outer casing and thereby forming a longitudinal channel, and a plurality of elongated elastic air tubes positioned within the said channel between the said spaced body portions, the said tubes being of a diameter somewhat greater than the thickness of the body portion so as to slightly elevate the upper side of the said casing along its medial longitudinal portion, while the marginal portions of the said upper side of the casing remain in contact with the said body portion.

In testimony whereof I affix my signature.

MICHAEL A. SHANAHAN.