

June 2, 1925.

1,540,430

W. B. SIMS

INSOLE FOR SHOES

Filed May 25, 1922

2 Sheets-Sheet 1

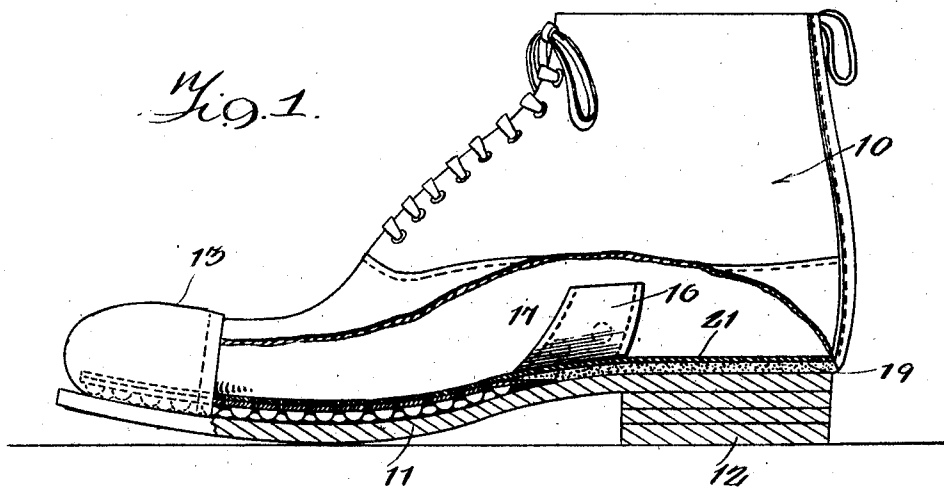


Fig. 2.

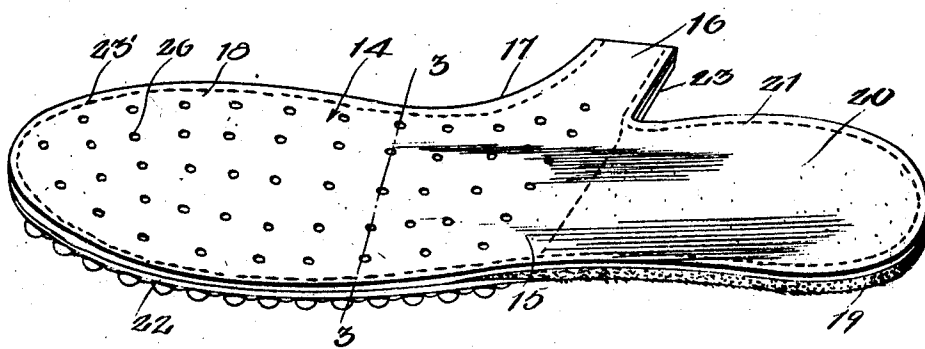
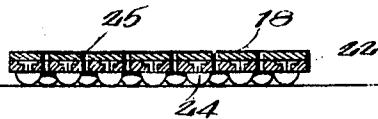


Fig. 3.



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George C. Myers

INVENTOR
W.B. SIMS,

BY *Henry Ho.*
ATTORNEYS

June 2, 1925.

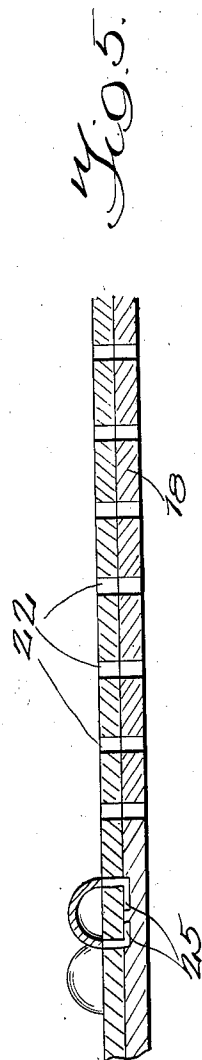
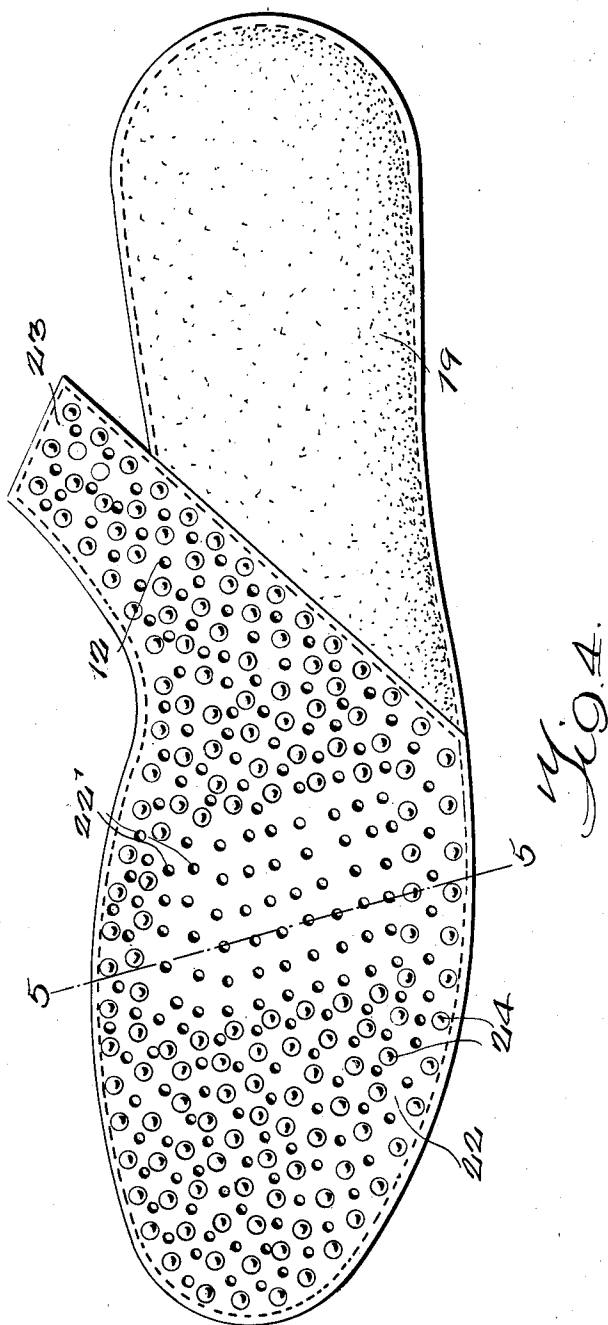
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INSOLE FOR SHOES

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2 Sheets-Sheet 2



Inventor
W. B. SIMS,

By *Mum Co.*

Attorney

Patented June 2, 1925.

1,540,430

UNITED STATES PATENT OFFICE.

WILLIAM BEVERLY SIMS, OF PORTLAND, OREGON.

INSOLE FOR SHOES.

Application filed May 25, 1922. Serial No. 563,508.

To all whom it may concern:

Be it known that I, WILLIAM B. SIMS, a citizen of the United States, and a resident of Portland, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in Insoles for Shoes, of which the following is a specification.

This invention relates to an insole for shoes.

The object of the invention is to provide an insole which is adapted to permit free circulation of air between the front portion of a foot and the sole of the shoe and thereby lessen the sweating tendency of feet and promote a sanitary condition thereof.

Other objects will hereinafter appear in the detailed description to follow.

The invention is illustrated by way of example in the accompanying drawings, in which:—

Figure 1 is a side elevation of the shoe to which my invention has been applied, and with parts broken away to more definitely illustrate the same.

Figure 2 is a detail perspective view of my invention.

Figure 3 is a transverse section taken substantially on the lines 3—3 of Figure 2.

Figure 4 is a bottom plan view of the insole.

Figure 5 is a section taken on the line 5—5 of Figure 4.

Referring to the drawings more particularly, 10 indicates generally the upper of the shoe, 11 the sole thereof, 12 the heel, and 13 the toe-cap. In carrying out my invention, I provide an insole 14 adapted to fit within the shoe, as shown in Figure 1. The insole is preferably of leather and upon the inner edge of its instep portion 15, there is formed a lateral tongue 16, the forward edge of which is curved as at 17, and coalescing with the similar edge of the forward portion 18 of the insole. A covering or layer of felt 19 is provided for the undersurface of the heel portion 20 of the insole, said felt covering or layer being preferably sewed thereto as indicated by the dotted lines 21. A leather covering or layer 22 is provided for the bottom surface of the forward portion 18 and instep portion 15 of the insole, said covering being formed with a lateral extension or tongue 23 for covering the underside of the tongue 16. The layer 22 is likewise sewed to the forward and in-

step portions of the insole as indicated by the dotted lines 23'. Also the rear end of the bottom covering 22 is chamfered to a thin edge which slightly overlaps the felting 19, as shown in Figure 2.

The bottom surface of covering 22 with exception of the area indicated at 22' is studded with round headed studs or rivets 24, said rivets having their prongs extending through the leather covering 22 and clinched upon the upper surface thereof, as indicated at 25, Figure 3. The studs or rivets also cover the bottom surface of the tongue covering 23 as shown in Figure 1. The heads of the rivets 24 are preferably of hard rubber or nickel either serving the purpose desired. Also between the studs or rivets perforations 26 are formed, which extend through both the insole 14 and the leather covering 22 of the forward portion 18 thereof and instep portion 15, and lateral tongues 16 and 23.

In the use of my invention, the same is fitted into the shoe as shown in Figure 1, the tongue 16 due to its shape being adapted to fit the inner side of the shoe at the instep portion thereof. As is obvious the studs or rivets 22 hold the instep portion and forward portion of the insole in spaced relation with the sole 11 of the shoe, and also these rivets hold the tongues 16 and 23 spaced from the side of the shoe, and thereby permit the free circulation of air to pass between the side of the shoe and the tongue, the air entering beneath the insole 14 and passing upwardly through the registering perforations 26. The purpose of the felting 19 as is obvious is to support the heel portion 20 of the insole in a plane similar to that in which the forward portion 18 is disposed and also to form a soft and springy seat for the heel. The purpose of the unstudded portion 22' is to furnish or provide a yieldable support for the ball of the foot to rest upon, and thus materially increase the comfort of the foot.

I claim:—

1. A ventilating insole consisting of a strip of leather comprising a heel and forward half portions, adapted to be removably fitted within a shoe and rest upon the sole thereof, said insole having a multiplicity of perforations through the forward half only, a multiplicity of studs projecting from the lower face of said forward half, said studs being so positioned with relation to

each other as to define an unstudded perforated area at that portion of the said forward half that will normally lie under the ball of the foot of the wearer whereby to
 5 provide a yieldable support for that part of the foot.

2. A ventilating sole, comprising a sheet of perforated flexible material adapted to be positioned within a shoe and upon
 10 the sole thereof, a second strip of flexible material upon the bottom of the first named strip and covering the same rearward to the heel portion thereof, a multiplicity of studs carried by the second named strip and extending
 15 from the lower face thereof, said second named strip being also perforated,

and a pad covering the bottom surface of the heel portion of the first named strip and said pad being substantially of the same thickness as the second named strip. 20

3. A ventilating insole consisting of a sheet of perforated flexible material and comprising a heel and a forward half portion, and a lateral tongue projecting from the inner edge of the sheet at the instep portion, said forward half and tongue having
 25 a multiplicity of perforations therethrough, and a multiplicity of studs carried by and extending from the lower face of the forward half and tongue only.

WILLIAM BEVERLY SIMS.