Aug. 2, 1949. G. A. FABER ET AL 2,477,866

WELT TYPE SHOE WITH A SLIP SOLE

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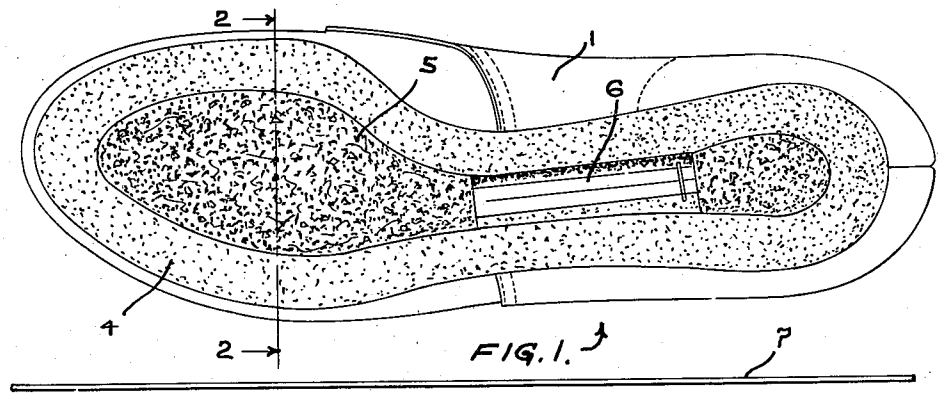


FIG. 1.

FIG. 3.

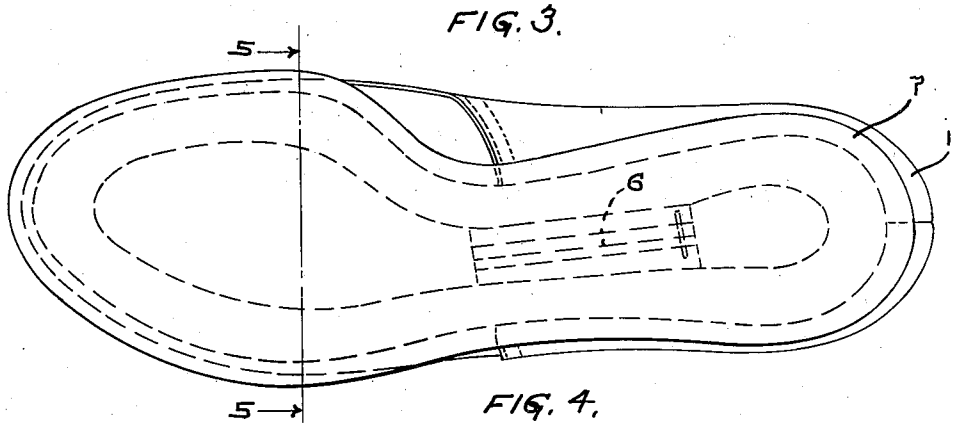


FIG. 4.

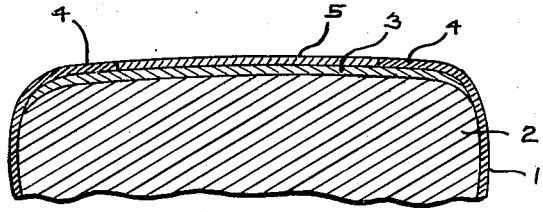


FIG. 2.

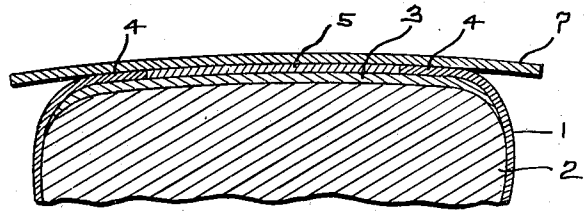


FIG. 5.

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WELT TYPE SHOE WITH A SLIP SOLE

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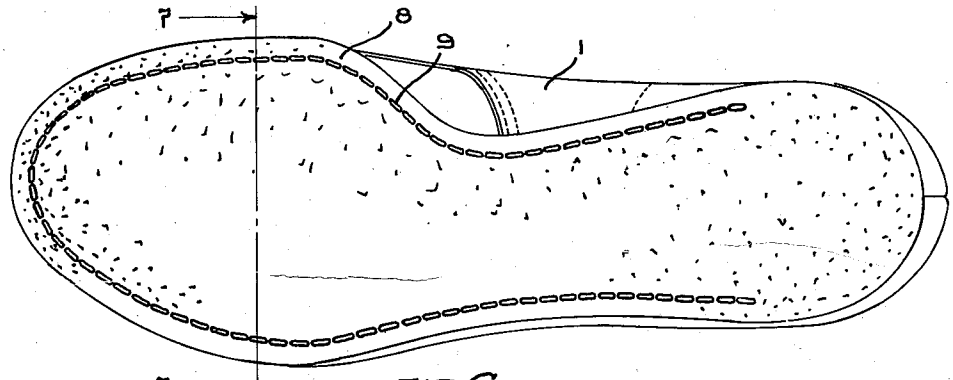


FIG. 6.

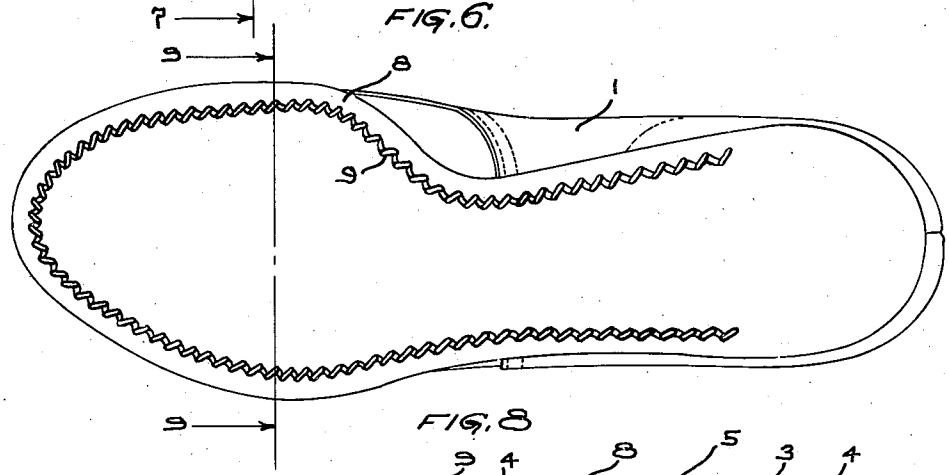


FIG. 8

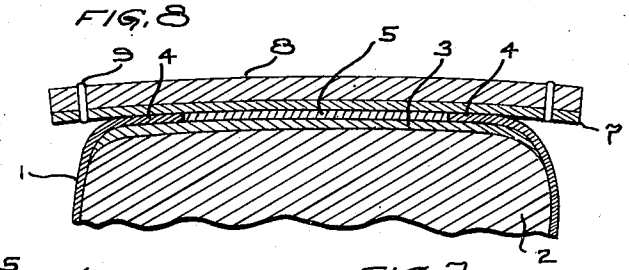


FIG. 7.

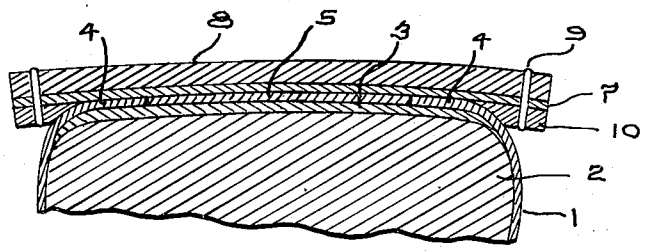


FIG. 9.

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UNITED STATES PATENT OFFICE

2,477,866

WELT TYPE SHOE WITH A SLIP SOLE

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Application November 6, 1946, Serial No. 708,040

1 Claim. (Cl. 36—17)

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This invention relates to a welt shoe of leather or other fibrous non-vulcanizable material.

Shoes when finished are of more pleasing shape and accurate in size when they are completely built on a last, and the last then withdrawn.

There has to date been no method of attaching a sole to a lasted shoe equivalent to the Goodyear welt method so far as the neatness, firmness and solidity of that attachment is concerned.

With the improvement of cements of various kinds many efforts have been made to use cement to attach the outer sole to the shoe upper; some of these efforts have involved placing on the outer sole either a strip or a thin sole before attaching the nearly rigid combination to the upper and usually these supplemental outer soles have been specially treated by cutting off the smooth outer or grain surface of the leather at the critical point of the cement application or by adding stitching or other means to the surfaces to roughen them to assure the adhesion of cement.

Of course it is known that it has been possible to cement a relatively thin sole to a ladies' shoe so long as that sole does not project far from the edges of the upper, because as soon as it is allowed to project far, the cement is broken loose in wear.

The present invention relates to a shoe built on a last and having an intermediate or slip sole which is cemented to the upper after the lasting of the projecting edges of the upper inwardly over an inner sole. In this invention it is preferred that the outside or grain side of the hide be cemented first to the lasted upper. It has been found that a tight adhesion of the slip sole may be obtained upon the upper when it is placed on first. The press or compressor elements which are brought to bear upon the slip sole effectually bring each portion of the thin fibrous sole against the overturned edges of the upper and squeeze out all bubbles of cement so that an actual unity of the two parts is obtained.

After this uniting of the upper with the slip sole an outer sole may be sewed on and it will stay on substantially as effectively as a Goodyear welt sole and the edges need not be trimmed closely as in the former practice with the thin outer soles of ladies' shoes. It is an important feature of this invention that the outer sole be cemented to the slip sole toward the center and possibly toward the outer edge but it is important to leave a margin between the point of attachment either of stitching or cement at the extreme edges of

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the slip sole and the outer sole and the point of attachment of the slip sole to the upper.

In this invention it is preferred that the slip sole be made of thin leather, although other thin fibrous material would serve. This thin fibrous material then remains flexible at this margin of freedom from cement or other method of attachment so that should the protruding heavy and rather unbending thick outer sole be struck against an object the thin cemented slip sole will not be pulled free from the upper but on the other hand it will yield resiliently along this line of relative freedom of movement between its lines of attachment to the upper and the relatively stiff outer sole.

The slip sole of this invention, being initially permanently united with the outer edges of the upper, permanently holds those edges together, taking the place of the necessity of sewing the upper edges to the inner sole, as is usual in the Goodyear welt process. Of course, in this invention these edges are also cemented to the inner sole, but the upper is over, or outside, the shoe lining.

The slip sole being made of relatively thin flexible leather may be finished with a decorative welt being sewed around its top as the slip sole and the outer sole are sewed together.

Another object of the invention is to provide a cemented shoe having both the appearance and durability and wearing qualities of a Goodyear welt shoe and in which the outer sole may be either of rubber or composition material or leather. A further object of the invention is to produce such a shoe at an extremely low cost and which will avoid many of the steps heretofore required in the production either of a Goodyear welt shoe or of a cemented shoe.

Other objects and advantages of the invention will be apparent from the following description and the accompanying drawings forming a part hereof and in which:

Figure 1 is an inverted plan view of a shoe prepared for the reception of the slip sole.

Figure 2 is a sectional view on line 2—2 of Figure 1.

Figure 3 is a side view of the slip sole.

Figure 4 is an inverted plan view of the shoe with the slip sole cemented in place.

Figure 5 is a cross-sectional view on line 5—5 of Figure 4.

Figure 6 is an inverted plan view of a shoe with the outer sole stitched in place.

Figure 7 is a sectional view on line 7—7 of Figure 6.

Figure 8 is an inverted plan view of a shoe with the outer sole stitched on embodying an additional decorative welt.

Figure 9 is a sectional view on line 9—9 of Figure 8.

In the drawings similar numerals refer to similar parts throughout the several views:

The upper 1 after pulling over last 2 has inserted between the edges, the inner sole 3 and then the margins 4 of the upper are turned in, and between these margins are placed the usual filler 5 and the shank piece 6.

The complete bottom surface of the shoe and filler with the exception of the shank piece is then covered with cement as shown in Figure 1 and the thin leather slip sole 7 is carefully put in place and pressed down evenly over the whole surface with the outer or hair or grain side of the leather being next to the upper, this being the stronger side of the leather. The slip sole projects outwardly beyond its point of cementing to the upper for a reasonable distance as shown in Figure 5.

The outer sole 8 is then stitched on as at 9 to this projecting edge of the slip sole, leaving a line or zone of relative freedom between the ending of the cement between the upper and the slip sole and the point of stitching 9. It is preferable also that cement be placed over the center surface of the slip sole and of the outer sole and it may likewise be placed at the extreme edge of the slip sole before affixing the outer sole.

If desired a decorative welt 10 may be placed between the slip sole and the upper as shown best in Figure 9 before stitching the slip sole to the outer sole. This structure will of course leave the same zone of freedom between the point of attachment of the slip sole to the upper and the stitching as was present without the addition of this decorative welt 10.

From the above description it will be apparent that the slip sole and the outer sole do not form a unitary structure as has been proposed in many prior constructions where the two amalgamated soles are cemented to the upper. Rather the outer is quite separate and distinct from the slip sole and even after its attachment, there is the measure of resilience present between that outer sole and the upper that is likewise present in the stitching of a Goodyear welt but which is so much more important in a cemented sole, so that the resilient slip sole can absorb the shocks imparted between the upper and the outer sole when the outer sole strikes an obstruction. The outer sole of this invention, upon wear may be removed for replacement exactly as in the Goodyear welt constructions.

It will be apparent that many modifications may be made in the construction shown without departing from the invention.

What is claimed as new and is desired to be secured by Letters Patent is:

A cemented shoe comprising an upper of fibrous non-vulcanizable material, an inner sole, the bottom edges of the upper being lasted inwardly over the margin of the inner sole, a thin fibrous slip sole attached by cement only to the bottom edges of the upper and extending outwardly beyond the sides of the upper and an outer sole cemented centrally thereof to the bottom of the slip sole, and attached to the outer edges of the slip sole beyond the sides of the upper said outer sole being free from the slip sole inwardly from its attached edge therewith to the margin of the attachement of the slip sole to the upper.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
406,379	Willey	July 2, 1889
2,339,525	Stritter	Jan. 18, 1944

FOREIGN PATENTS

Number	Country	Date
26,783	Great Britain	Oct. 12, 1905