

Sept. 25, 1945.

G. CODISH

2,385,690

OUTSOLE

Filed March 16, 1943

2 Sheets-Sheet 1

Fig. 1.

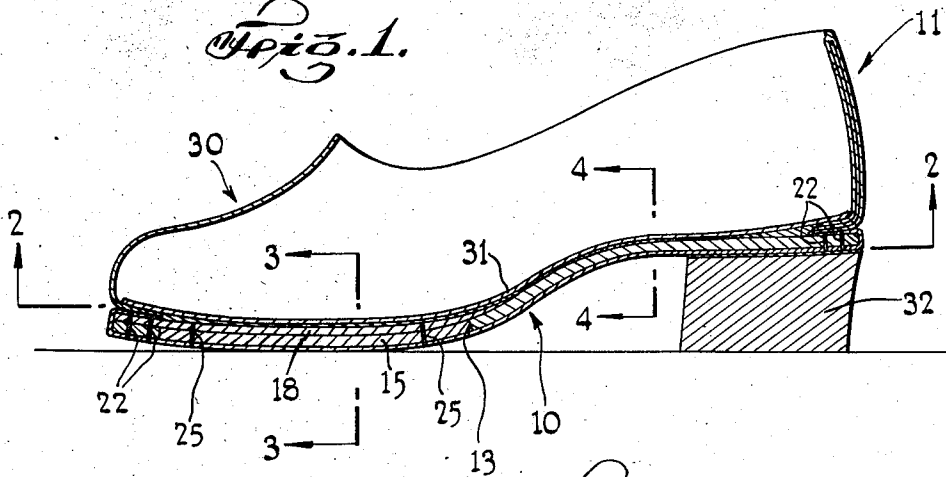


Fig. 2.

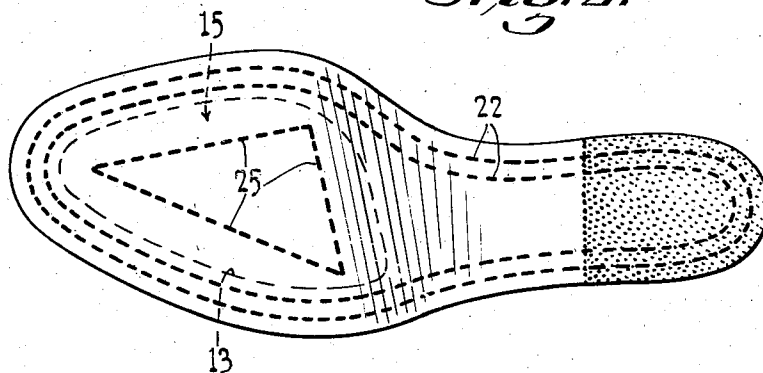


Fig. 3.

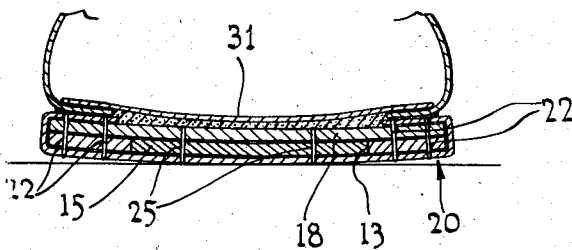
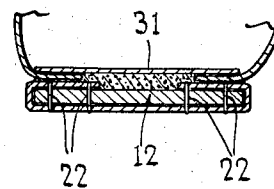


Fig. 4.



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2 Sheets-Sheet 2

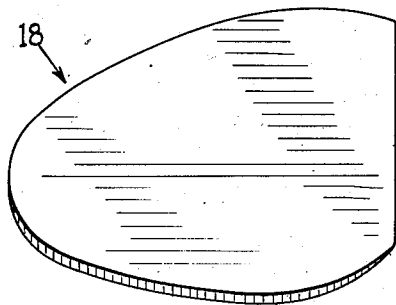


Fig. 5.

Fig. 6.

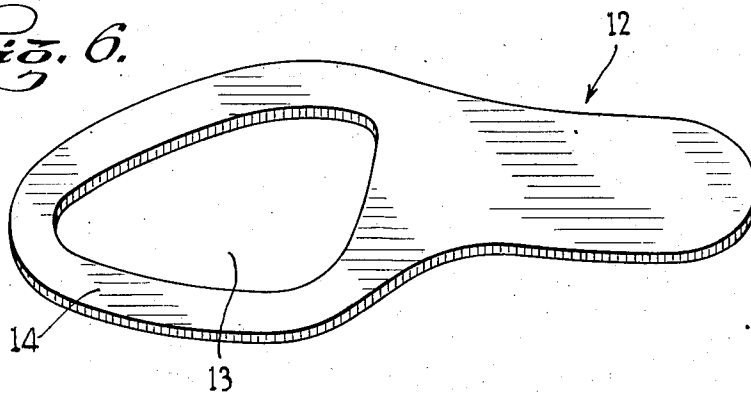


Fig. 7.

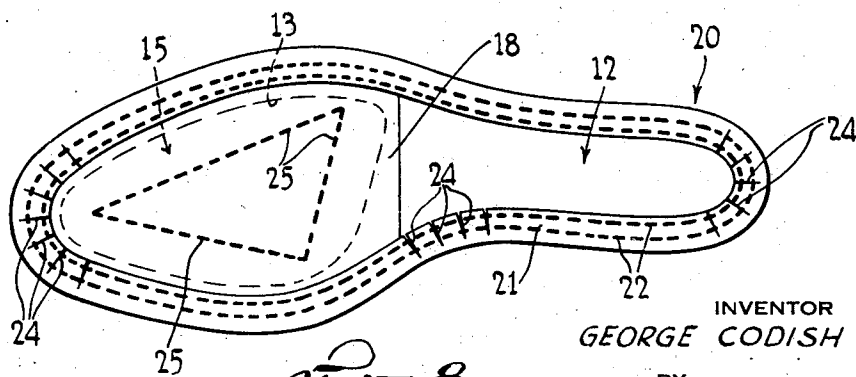
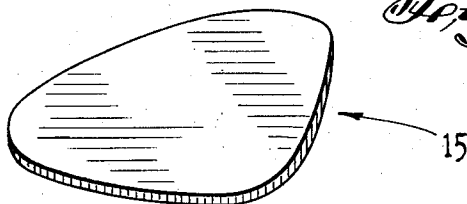


Fig. 8.

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7 Claims. (Cl. 36—30)

This invention relates to outsoles.

In shoes as heretofore made, the outsole usually comprised a single piece of sole leather. Due to the war there is a shortage of sole leather for shoes with such soles.

It is therefore an object of the present invention to provide an outsole which is not made of a single piece of sole leather and in which there is a saving of leather.

The wear on the bottom sole of a shoe occurs mostly in the region of the ball of the foot and there is no wear at the arch or heel portion.

It is therefore another object of the present invention to provide an outsole in which there is provided wear resisting material at the ball of the foot.

Yet another object of the present invention is to provide a strong and durable outsole of the character described which shall be relatively inexpensive to manufacture, easy to assemble and incorporate into a shoe, and which shall yet be practical and long wearing and efficient to a high degree.

Other objects of this invention will in part be obvious and in part hereinafter pointed out.

The invention accordingly consists in the features of construction, combinations of elements, and arrangement of parts which will be exemplified in the construction hereinafter described, and of which the scope of application will be indicated in the following claims.

In the accompanying drawings, in which are shown various possible illustrative embodiments of this invention,

Fig. 1 is an elevational, longitudinal, cross-sectional view of a shoe provided with an outsole embodying the invention;

Fig. 2 is a cross-sectional view taken on line 2—2 of Fig. 1;

Fig. 3 is a cross-sectional view taken on line 3—3 of Fig. 1;

Fig. 4 is a cross-sectional view taken on line 4—4 of Fig. 1;

Fig. 5 is a perspective view of the half sole portion of the improved outsole;

Fig. 6 is a perspective view of another portion of the outsole;

Fig. 7 is a perspective view of the insert for the piece shown in Fig. 6; and

Fig. 8 is a top plan view of the outsole.

Referring now in detail to the drawings, 10 designates an outsole embodying the invention incorporated into a shoe 11. The outsole 10 comprises a member 12 made of fiber cloth, canvas or the like sheet material having the outer con-

tour of a full sole, but formed with a cutout 13 at the ball portion thereof of somewhat triangular shape, leaving a strip 14 at the sides of the cutout of substantially uniform width. The member 12 of uniform thickness as shown in Fig. 6 of the drawings.

Inserted within the cutout 13 is an insert 15 which may be made of leather, canvas, reclaimed rubber, compressed cotton, or the like flexible wear resisting material. The insert 15 has the same shape as the cutout 13. Said insert is of the same thickness as member 12 so that the top and bottom of the insert is flush with the top and bottom of member 12.

Glued to the top of members 12, 15 and superimposed thereon, is a half sole platform member 18 likewise made of fiber cloth, canvas or the like sheet material. The member 18 covers the front half of member 12 and is adhered thereto by any suitable adhesive.

The bottom of members 12, 15 is covered by a cover member 20 which may be made of split leather, cloth, canvas or the like flexible sheet material. Member 20 is folded over the side edges of members 12, 18 and inwardly over the top of said members as at 21. The inwardly turned portion 21 is stitched to members 12, 18 by one or more lines of stitching 22 extending all around the sole. The bottom surfaces of members 12 and 15 are furthermore glued or otherwise adhered to the upper surface of member 20.

The outer edges of member 20 may be slit or formed with darts at the rear, front and at the inner arch portion as designated by numeral 24 to facilitate folding and flattening of the inwardly folded portion 21.

A triangular line of stitching 25 may be provided as shown in Fig. 7 of the drawings, passing through the filler or insert 15, half sole 18, and bottom portion 20. If desired the triangular line of stitching 25 may extend only through the filler 15 and half sole 18. This triangular line of stitching prevents shifting of the insert and reinforces the outsole as the place of greatest wear and to hold the covering layer 20 to the insert.

It will now be understood that the outsole is more wear resisting at the ball of the foot where wear occurs. It will be noted that leather is eliminated from the shank or heel portion of the outsole where there is no wear. Small pieces of leather for the insert 15 are easily obtainable from scrap leather. The split leather 20 is also obtainable, but other flexible material may also be used.

The shoe upper 30, inner sole 31, and heel 32

may be attached to the outsole in the usual manner by cementing or by stitching.

It will be noted that the outsole comprises three layers so that the outsole is not worn through until all three layers are worn through. The bottom layer is, of course, the covering 20, the next layer is the leather insert, and the top layer is the half sole. Of course after one or more layers are worn through the outsole may be repaired by attachment thereto of a half sole of leather or other material. The whole sole member 12, as well as the half sole member 18 may be made of canvas, composition or plastic material instead of fiber. The insert 15 may also be made of plastic material, if desired.

It will be noted that the upper surface of the sole presents exposed stitching 22 and 25 which serves the additional purpose of enabling the upper to be cemented to the sole. The stitching will not absorb the cement and will facilitate the cementing operation.

It will thus be seen that there is provided a device in which the several objects of this invention are achieved, and which is well adapted to meet the conditions of practical use.

As various possible embodiments might be made of the above invention, and as various changes might be made in the embodiments above set forth, it is to be understood that all matter herein set forth or shown in the accompanying drawings is to be interpreted as illustrative and not in a limiting sense.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. An outsole comprising a sole member formed with an opening at the ball of the foot, an insert within said opening, a member adhered to the top of said first member and insert, and a member covering the bottom of said first member and insert, and means to attach said insert to said second mentioned member.

2. An outsole comprising a member having the shape of a whole sole and formed with a cutout at the ball of the foot, a filler insert within said cutout, a half sole on top of the whole sole member and insert, said half sole being made of the same material as said whole sole member, said filler being made of a material more wear resisting than the material of which the whole sole and half sole members are made, and a member of flexible sheet material thinner than the whole sole member contacting the bottom surface of

said whole sole member and insert, and folded over the side edges of said whole sole and half sole member, and stitched thereto.

3. An outsole comprising a member formed with an opening at the ball portion thereof, a filler insert within said opening, said filler insert being of the same thickness as said member, and a second member stitched to the upper surfaces of said first member and insert.

4. An outsole comprising a fiber member of the shape of a whole sole, formed with a cutout at the ball portion thereof, a filler insert within said cutout, made of leather, said filler insert being of the same thickness as said fiber member, a half sole of fiber adhered to the upper surfaces of said whole sole member and insert, and a member made of split leather contacting the bottom surfaces of said whole sole member and insert, and adhered thereto by an adhesive, and folded over the side edges of said whole sole member and half sole member, said inwardly folded edges being stitched to said whole sole and half sole members.

5. An outsole comprising a member formed with an opening at the ball portion thereof, a filler insert within said opening, made of leather, said filler insert being substantially of the same thickness as said member, a member stitched to the upper surface of said first member, and stitching passing through the second member and insert.

6. An outsole comprising a sole member formed with an opening at the ball of the foot, an insert within said opening, and a platform member at the top of said first member and insert, a binding for the edge of the platform member, and stitching to attach the sole member to the platform member, and means to attach said insert to said platform member.

7. A sole comprising an outsole member formed with an opening at the ball portion thereof, a filler insert within said opening, said filler insert being substantially of the same thickness as said outsole member, a platform member covering the upper surfaces of said outsole member and insert, and stitching passing through the outsole member and platform member, and a flexible member covering the edge of said platform member and attached thereto by said stitching, and means to attach said insert to said platform member.

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