

Oct. 22, 1946.

A. G. TIMSON

2,409,813

REVERSIBLE SHOE

Filed Aug. 5, 1944

4 Sheets-Sheet 1

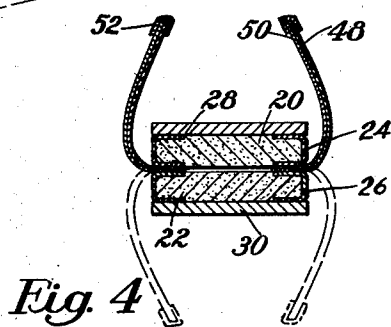
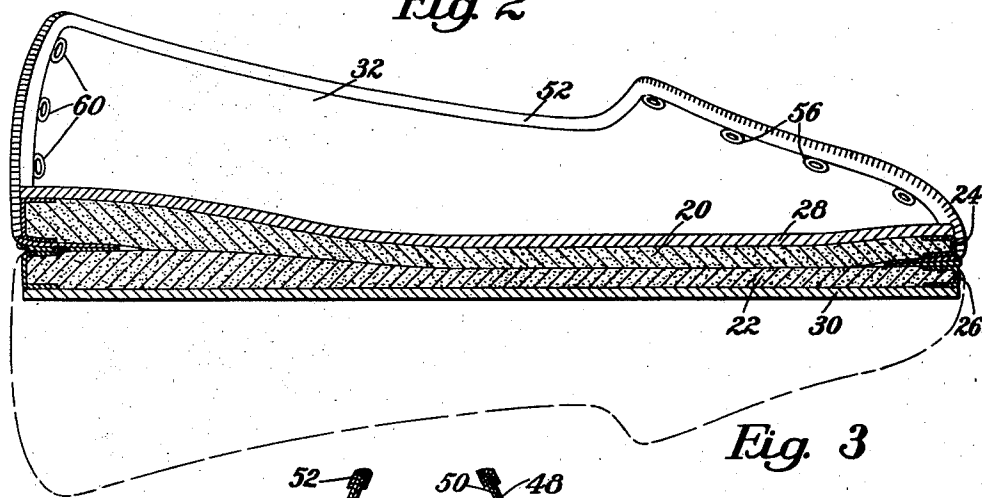
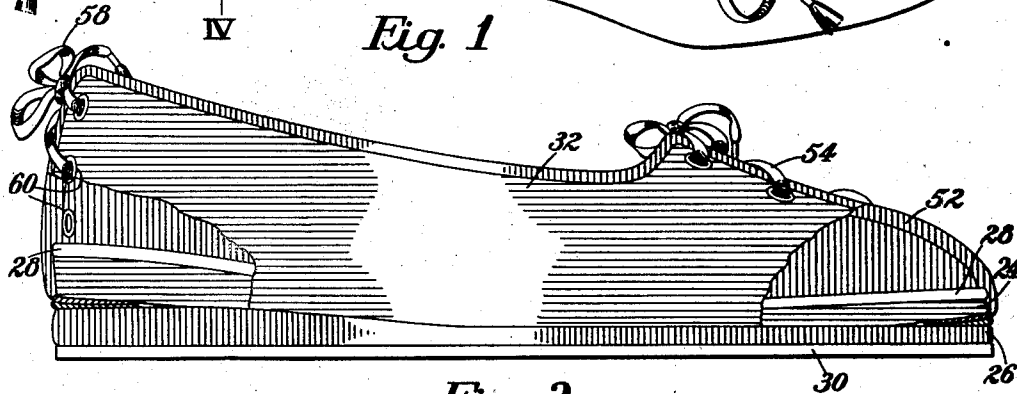
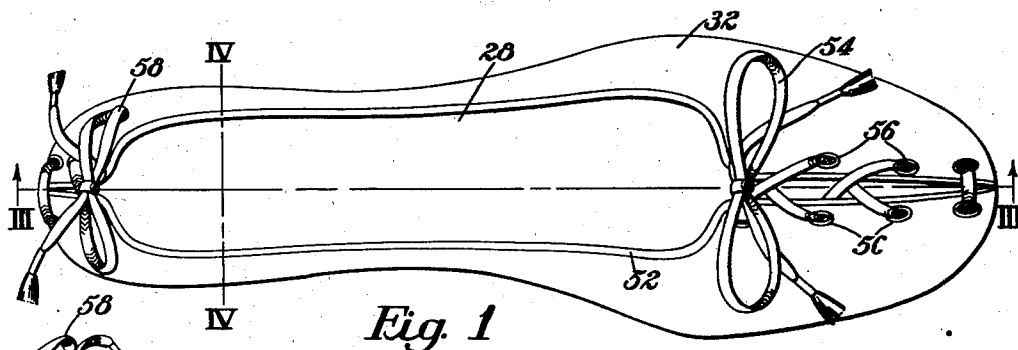


Fig. 3

Fig. 4

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4 Sheets-Sheet 2

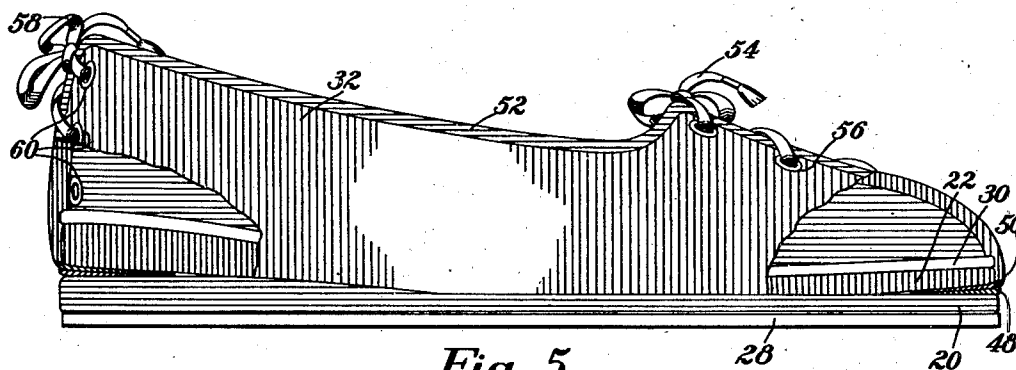


Fig. 5

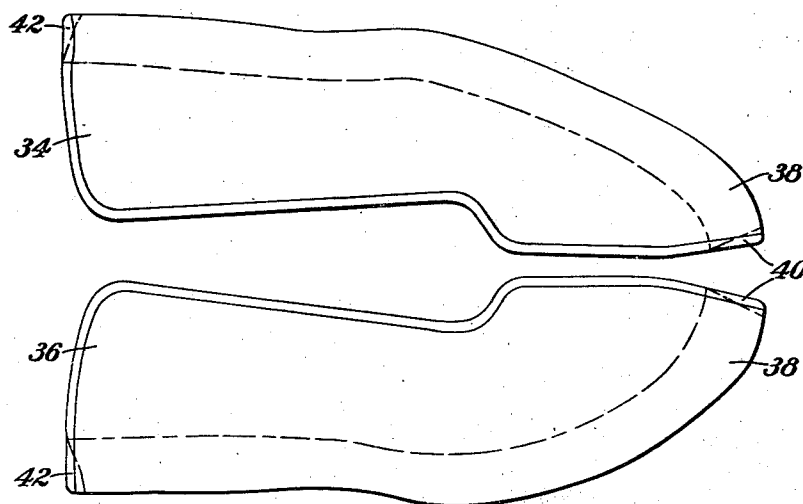


Fig. 6

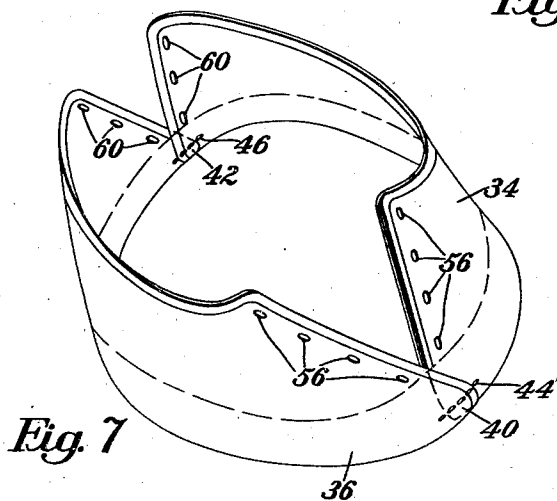


Fig. 7

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4 Sheets-Sheet 3

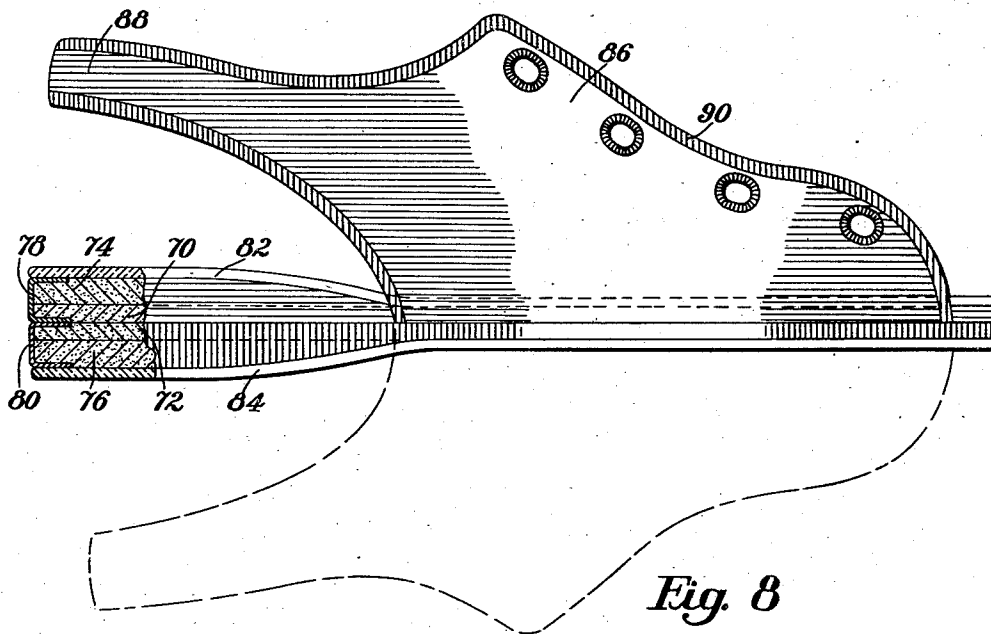


Fig. 8

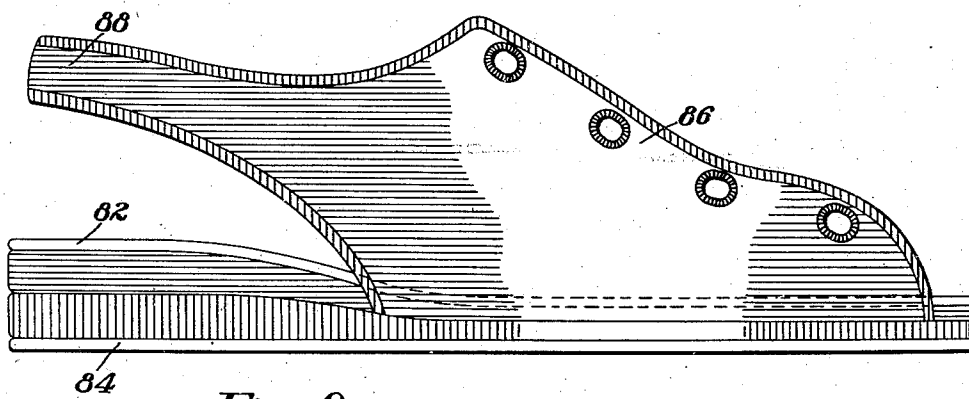


Fig. 9

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4 Sheets-Sheet 4

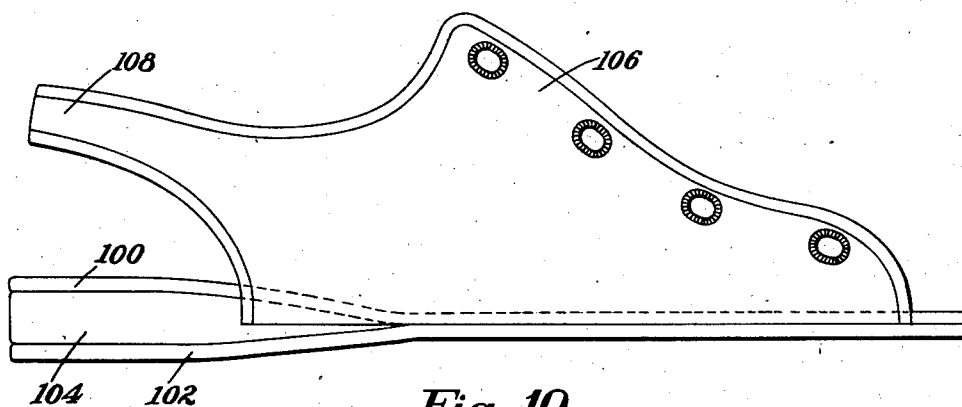


Fig. 10

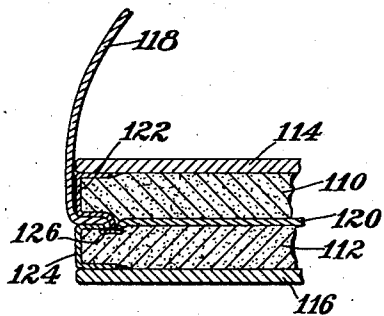


Fig. 11

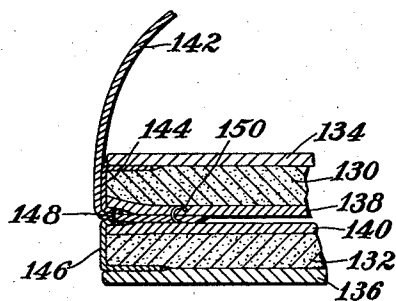


Fig. 12

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## UNITED STATES PATENT OFFICE

2,409,813

## REVERSIBLE SHOE

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Application August 5, 1944, Serial No. 548,197

1 Claim. (Cl. 36—2.5)

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This invention relates to improvements in shoes and in methods of making the same, one of its objects being to provide a shoe of simple and practical construction which is adapted to be readily changed in appearance without the use of detachable and interchangeable parts.

This is accomplished by providing an upper the opposite sides of which are distinguished from each other in color, decorative scheme or other characteristic of appearance and by so arranging the upper and bottom parts of the shoe that the color, decorative scheme or other characteristic of appearance of the shoe may be changed by merely reversing the position of the upper with respect to the shoe bottom, i. e., by turning the shoe inside out or vice versa. In this manner a lady's shoe, for example, having an exterior of a color or combination of colors suitable to be worn with a particular dress or costume may, by the simple process of reversing or turning the upper, be converted into a shoe having an exterior of a different color or combination of colors suitable for wear with a different dress or costume.

As herein illustrated, the upper of my improved shoe may be made of two layers or plies each of a different color or combination of colors or each differing from the other as to features of style, ornamentation or design. The upper is preferably adapted to be held closed on the foot by means of reversible fastenings such, for example, as laces, and it is further so cut as to pattern that upon the removal of such fastenings it may be easily reversed or turned from one side of the shoe bottom to the other without being stretched or distorted in the process. The bottom of each shoe herein illustrated is provided with two soles which are identical in shape and size and are arranged one above the other with their edges in registration and the upper is formed with a marginal portion which is secured in inturned position between these soles. Thus, when the upper is in one position relatively to the soles that sole which is then outermost constitutes the tread sole of the shoe while the other sole serves as the insole of the shoe. When the upper has been turned the sole which formerly functioned as a tread sole will serve as an insole while the other sole will then constitute the tread sole. Thus, in the use of these shoes the wear upon the shoe bottom is distributed between the two soles and accordingly the life of the shoe is very substantially lengthened.

While not limited thereto, the present invention is particularly useful in its application to platform shoes, i. e., to shoes wherein a platform or middle sole is employed between the upper and

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the tread sole. In such shoes, as constructed in accordance with my invention, two platform soles are employed, these soles being identical in size and shape and being disposed one above the other with their edges in alinement and a sole shaped stay piece is arranged between the platform soles and secured thereto. The upper, a wrapper strip covering the margin of one of the platform soles and another wrapper strip covering the margin of the other platform sole are secured to the margin of the stay piece, the margins of the upper and the wrapper strips extending between the two platform soles.

These and other features of the invention will be described in detail in the following specification with reference to the appended drawings and will be pointed out in the claims.

In the drawings,

Fig. 1 is a plan view of a reversible shoe constructed in accordance with my invention;

Fig. 2 is a side elevation of the shoe shown in Fig. 1, the shoe being broken at the toe and heel ends, and its upper having contrasting colors at opposite sides thereof;

Fig. 3 is a longitudinal section along the line III—III of Fig. 1;

Fig. 4 is a cross section along the line IV—IV of Fig. 1;

Fig. 5 is a view similar to Fig. 2, the shoe being shown reversed;

Fig. 6 is a plan view of the parts of which the shoe upper is composed;

Fig. 7 is an angular view of the assembled shoe upper;

Fig. 8 is a side elevation of a modified form of a shoe constructed in accordance with my invention;

Fig. 9 is another side elevation of the shoe shown in Fig. 8, illustrating the shape of the shoe when on the wearer's foot;

Fig. 10 is a side elevation of a still further form of a shoe constructed in accordance with my invention;

Fig. 11 is a section through part of a shoe constructed in accordance with my invention, illustrating another method of constructing the shoe; and

Fig. 12 is a view similar to Fig. 11 illustrating still another method of constructing the shoe.

Considering first the shoe illustrated in Figs. 1 through 7, it will be noted that it is composed of two platform soles 20 and 22 which correspond to each other in size, edge contour and structural characteristics and which are made of any suitable yieldable material such as felt well known

in the construction of soles of that type. As illustrated, the platform soles are provided with binding strips 24, 26 covering the edge faces and margins of the platform soles. The two binding strips 24, 26 are distinguished from each other by contrasting colors or other contrasting decorative schemes, this being illustrated in Fig. 2 by vertical and horizontal cross hatchings, the horizontal cross hatching indicating blue and the vertical cross hatching indicating red. Secured to the outer faces of both platform soles 20 and 22, for example by a suitable cement are sole members 28, 30 which are of the same shape and size and are made of a wear resisting material such as leather or a leather substitute. In the shoe illustrated in Fig. 2, the sole member 28 is the inside sole and the sole member 30 is the outside sole. When the shoe is reversed the sole 30 becomes the inside sole and the sole 28 becomes the outside sole, as illustrated in Fig. 5 of the drawings.

The shoe is provided with a full-length upper 32 which, as illustrated in Figs. 6 and 7, is composed of two parts, namely a left hand part 34 and a right hand part 36. In Fig. 6 the lasting allowance is indicated on both shoe upper parts at 38. In their assembled condition, as illustrated in Fig. 7, the upper parts 34, 36 slightly overlap each other at their toe ends, as illustrated at 40, and also at their heel ends, as illustrated at 42. The two upper parts are secured together at the two overlapping portions 40 and 42 by a row of stitches 44 at the toe end and a row of stitches 46 at the heel end. Each upper part 34 or 36 is characterized by the fact that its opposite sides differ by their decorative scheme, for example, they differ in color, and as illustrated, this effect is obtained by making each upper part 34 or 36 of two layers or plies 48, 50 (Fig. 4) of conventional upper material such as leather or fabric. The outer layer 48, visible in Fig. 2, is blue, as illustrated by the horizontal cross hatching, and the inner layer 50, which is visible and is the outer layer in Fig. 5, is red, as indicated by the vertical cross hatching. The visible edges of the upper parts are finished by an edge binding strip 52 which is red. The bottom margin or lasting allowance 38 of the shoe upper is intumed and is held in position between the margins of the platform soles 20 and 22 by suitable means, for example, cement.

The shoe is held on the wearer's foot by forepart lacings 54 extending through eyelets 56 and heel end lacings 58 extending through eyelets 60. If it is desired to reverse the shoe so as to present a different color scheme, only the lacings 54 and, if necessary, the lacings 58 need be removed and the upper turned inside out, whereupon the lacings are reinserted in the reversed shoe. As illustrated in Figs. 2, 3 and 5, the two platform soles 20 and 22 are thicker at their heel portion than at their forepart so as to give a wedge heel effect.

In comparing Figs. 2 and 5, illustrating the same shoe in its non-reversed and reversed condition, it will be noted that the two illustrations are substantially alike, with the only exception that in Fig. 2 the outside of the shoe is blue and in Fig. 5 the outside of the shoe is red. In reversing the shoe upper the edge face of one platform sole becomes covered by the shoe upper and the edge face of the other platform sole is uncovered. As previously mentioned, the binding strips 24 and 26 for the platform soles 20 and 22 may be so selected that the color or decorative scheme of

each harmonizes with that side of the shoe upper which is visible with it at the same time.

Since the outside sole or tread sole of the shoe after having been reversed has become the inside sole and the wearer's foot is now in contact with the sole formerly in contact with the floor or ground, it may be desirable to provide a removable slip sole or sock lining (not shown) which, after the shoe has been reversed, is slipped inside the shoe to cover the then inside sole.

In the manufacture of the above-described shoe illustrated in Figs. 1-7 of the drawings, a platform sole 20 provided with an edge binding strip 24 and to which a sole 28 has been secured, for example by a suitable cement, is placed on the bottom of a last with the sole 28 in contact with the last. Thereupon the upper 32 is assembled on the last and lasted over the platform sole 20, the lasting allowance 38, after having been lasted in or turned in over the platform 20, being secured in lasted position by a suitable cement previously applied to the exposed margin of the platform sole 20 or to the inner face of the lasting allowance 38 of the upper or to both. Then a platform sole 22, provided with an edge binding strip 26 and to which a sole 30 has been secured, is laid upon the shoe bottom and secured thereto by cement applied to the exposed face of the overlapped margin 38 of the upper or to the margin at the inner side of the platform sole 22 or to both. After the cement has set, the shoe is ready for wear and may be worn, as explained, either side out.

The shoe illustrated in Figs. 8 and 9 is similar in construction and purpose to the above-described shoe illustrated in Figs. 1-7. It has two platform soles 70, 72 to which, however, have been secured wedge portions 74, 76 at the heel ends thereof. The wedge portions are preferably made of the same yieldable material as the platform soles. The inside sole 82 is made of suitable wear resisting material, such as leather or a leather substitute, and is secured to the platform sole 70 and the wedge portion 74 preferably by cement. Both platform soles 70 and 72 are provided with edge binding strips 78 and 80 in the customary manner. An outside sole 84, corresponding in size, shape and substance to the sole 82, is secured, preferably by cement, to the platform sole 72 and the wedge portion 76. A reversible upper 86 is secured, preferably by cement, at its bottom margin between the platform soles. As in the previously described shoe, the opposite sides of the upper are distinguished by different color schemes or decorative schemes to enable the shoe to present different appearances by a reversal of the upper and without making any other changes in the shoe. The upper is a full-size upper, open at the toe and heel ends, and provided with a heel strap 88. The visible edges of the upper are finished by an edge binding strip 90. The shoe of Fig. 8 when being worn presents an appearance illustrated in Fig. 9 in that the tread sole 84 is substantially flat and the inner sole 82 is elevated at the heel end by reason of the provision of the wedge portions 74 and 76.

The shoe illustrated in Fig. 10 resembles that of Fig. 8, except that it is not provided with platform soles but merely with an inside sole 100 and an outside sole 102 of suitable wear resisting material which are secured together with the upper between them. Between the heel portions of the soles 100, 102 is interposed a single wedge member 104. The shoe has a reversible upper 106 the opposite sides of which may present different

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color schemes or other decorative schemes. The bottom margin of the upper 106 is secured between the soles 100 and 102 by a suitable cement. As in the shoe of Fig. 8 the upper 106 has a heel strap 108.

The shoes illustrated in Figs. 8 and 10 are processed in a manner corresponding to that described in connection with the shoe illustrated in Figs. 1-7.

Other methods may be used in the manufacture of reversible shoes. Thus Fig. 11 illustrates a different method of shoe construction, the shoe itself being a reversible shoe having platform soles 110, 112, soles 114 and 116, and an upper 118. There is provided a sole-shaped stay piece 120 arranged between the platform soles 110 and 112 and secured to the upper 118, as will be described. Moreover, there are provided two wrapper strips 122 and 124 serving to cover respectively the edge faces and margins of the platform sole 110, 112. In the manufacture of this shoe the bottom margins of the upper 118, one margin of both wrapper strips 122 and 124 and the margin of the stay piece 120 are secured together off the last by stitches indicated at 126. The arrangement is such that one wrapper strip, as illustrated the wrapper strip 122, is interposed between the stay piece 120 and one side of the upper 118 and the other wrapper strip 124 is arranged at the opposite side of the upper 118. The upper 118 again may present different color schemes or decorative schemes at opposite sides thereof. After these portions have been secured together by stitches 126, the stay piece 120 is placed upon the bottom of a last in such a position that the bottom margin of the upper is inturned over the sole and the platform sole 112 is secured to the stay piece by cement or the like. Thereupon the wrapper strip 124 is wrapped around the edge face of the platform sole 112 and secured thereto by cement. The sole 116 is then laid on the platform sole 112 and secured by cement. The last is removed from the shoe and the upper 118 is reversed so that the platform sole 110 may be laid upon the then exposed face of the stay piece 120 and the wrapper strip 122 may be applied to the platform sole 110. Thereafter the sole 114 is placed on the platform sole 110 and secured thereto by cement.

Another method is illustrated in Fig. 12 in con-

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nection with another reversible shoe having two platform soles 130, 132, soles 134 and 136 and, furthermore, provided with two between soles 138, 140 arranged between the platform soles. A reversible upper 142, the opposite sides of which may present different color schemes or decorative schemes, has secured to the opposite sides of its bottom margin, by means of a seam 148, two wrapper strips 144, 146. The bottom margin of the upper 142 extends between the sole members 138 and 140 and is secured to one of them, as shown, to the sole 138, for example by means of curved staples 150. In the manufacture of the shoe illustrated in Fig. 12 the wrapper strips 144, 146 are secured at one margin thereof to the opposite sides of the bottom margin of the upper 142. The sole 134 is placed loosely upon the last bottom and one platform sole, for example the sole 130 to which has been previously attached by cement the between sole 138, is placed upon the bottom of a last, the upper 142 is then assembled on the last, lasted over the between sole 138 and is secured in lasted position by curved staples 150. Then the platform sole 132, with the other between sole 140 secured to one face thereof, is laid upon the shoe bottom and the wrapper strip 146 is applied to the platform sole 132 to which finally the tread sole 136 is attached. After removal of the last and reversal of the upper the wrapper strip 144 is applied to the platform sole 130 and the inner sole 134 which is now outside is cement attached to the platform sole 130.

Having described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

A platform shoe comprising two platform soles corresponding to each other in size, shape and structural characteristics, the soles being in superimposed relation with their edges in alignment, a sole-shaped stay piece secured between the platform soles, an upper having its bottom margin secured to the margin of the stay piece, a wrapper strip covering the margin of one of the platform soles and having one of its margins secured to the margin of the stay piece, and a second wrapper strip covering the other platform sole and having one of its margins secured to the margin of the stay piece.

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