June 24, 1947. D. J. CALDERAZZO 2,422,947

SHOE

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Fig. 1.

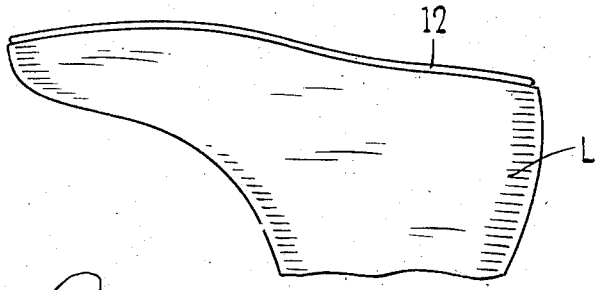


Fig. 2.

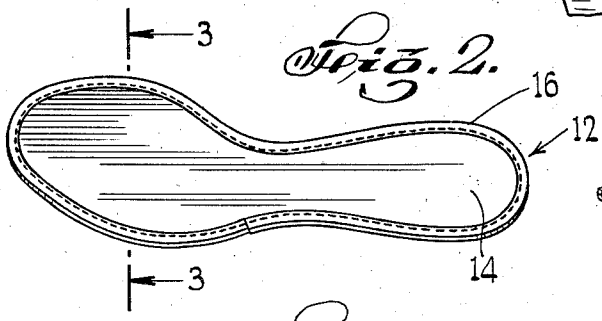


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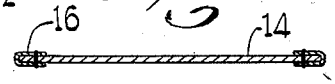


Fig. 4.

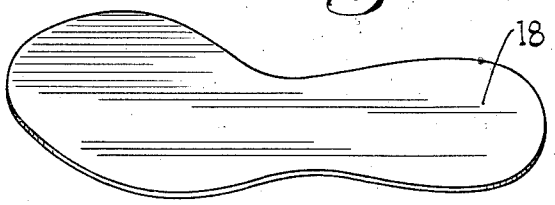


Fig. 8.

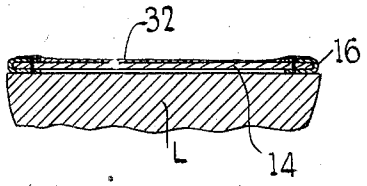


Fig. 5.

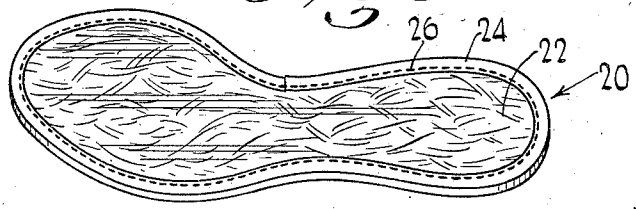


Fig. 7.

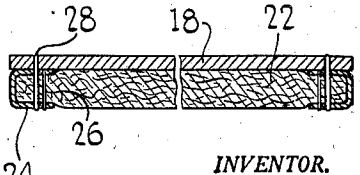
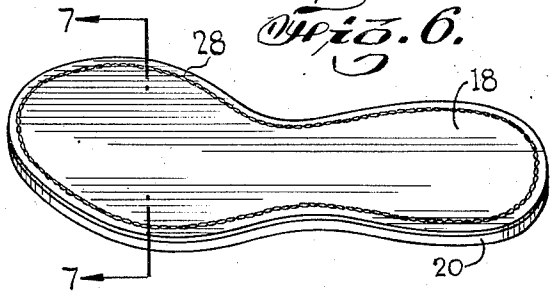


Fig. 6.



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Fig. 9.

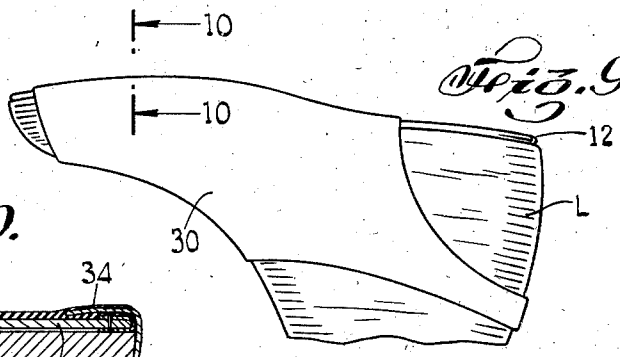


Fig. 10.

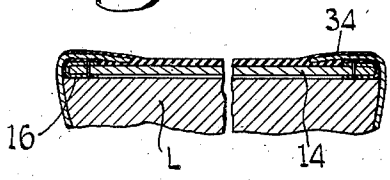
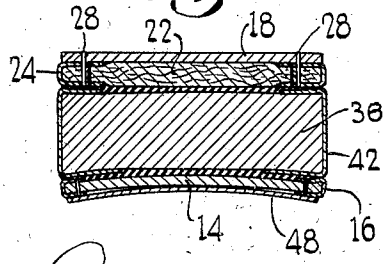


Fig. 14.



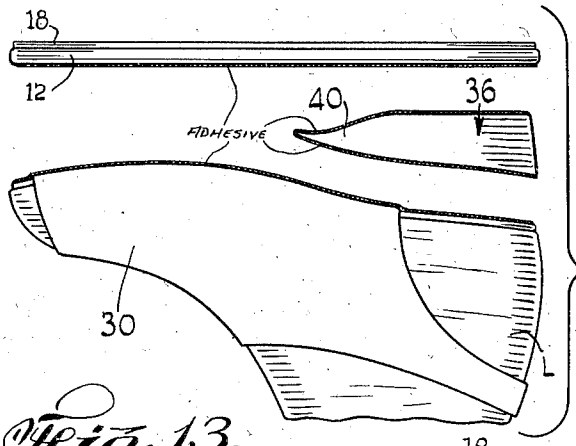
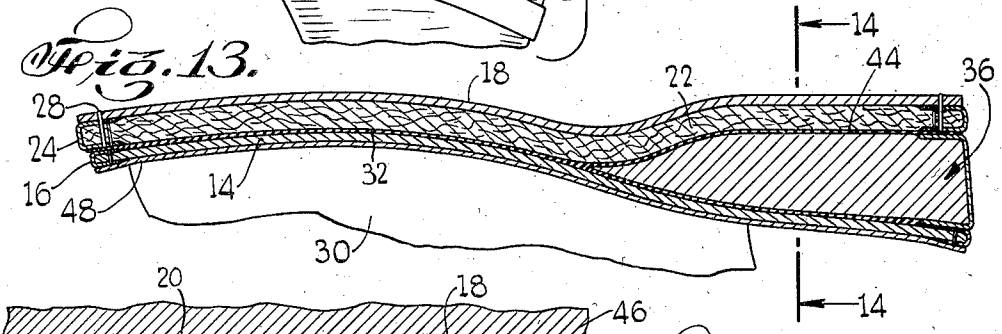


Fig. 11.

Fig. 13.



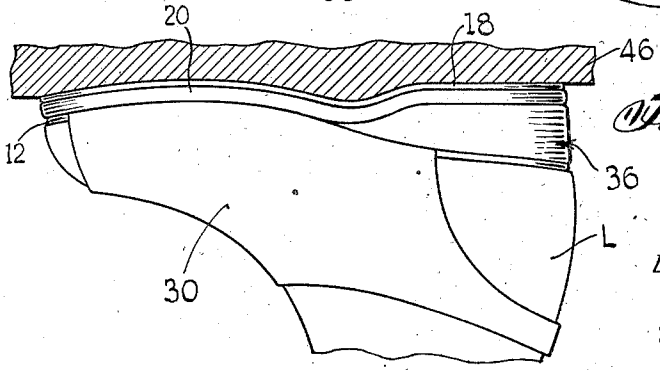


Fig. 12.

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UNITED STATES PATENT OFFICE

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SHOE

Dominick J. Calderazzo, South Orange, N. J.

Application July 31, 1944, Serial No. 547,386

3 Claims. (Cl. 12—142)

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This invention relates to shoes. More particularly, the invention pertains to an improved platform shoe and method for making the same.

In general, it is an object of the invention to provide a platform shoe of such improved construction that the same may be fabricated in a more inexpensive manner than present-day shoes of the same type.

More specifically, it is an object of the invention to provide an improved platform shoe in which certain of the shoe elements are joined as sub-assemblies prior to being incorporated in the shoe, and in which the heel wedge is disposed above the midsole so that the wear surfaces of the heel and sole may be covered by a single piece of inexpensive wearing material which can be secured around substantially its entire periphery to the midsole before incorporation in the shoe.

A further object of the invention is to provide a method of the character described which may be carried out with great rapidity and is economical to practice.

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 claims.

In the accompanying drawings, in which is shown one of the various possible embodiments of this invention,

Fig. 1 is a side view of a last with an insole disposed thereon during an initial stage in the construction of a platform shoe embodying my invention;

Fig. 2 is a bottom perspective view of an insole used in said shoe;

Fig. 3 is a sectional view through said insole taken substantially along the line 3—3 of Fig. 2;

Fig. 4 is a bottom perspective view of an outsole used in said shoe;

Fig. 5 is a bottom perspective view of a midsole used in said shoe;

Fig. 6 is a bottom perspective view of an outsole-midsole combination;

Fig. 7 is a sectional view taken substantially along the line 7—7 of Fig. 6;

Fig. 8 is a sectional view through the insole and the last during a subsequent stage in the construction of my improved shoe.

Fig. 9 is a view similar to Fig. 1 of the shoe after the upper has been mounted on the last;

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Fig. 10 is a sectional view taken substantially along the line 10—10 of Fig. 9;

Fig. 11 is an exploded view of the elements of a lasted complete shoe;

Fig. 12 is a side view of the shoe during a levelling operation;

Fig. 13 is a fragmentary longitudinal central section through the completed shoe; and

Fig. 14 is a sectional view taken substantially along the line 14—14 of Fig. 13.

Referring now to the drawings, L denotes a last of standard construction on which the various component elements of the shoe are assembled. Initially, I mount the insole 12 on the last, temporarily securing the same thereto in conventional fashion by tasks (not shown). Said insole may be of any suitable construction comprising, by way of example, a double thickness of paper 14 of proper contour having its edges covered by an ornamental binding 16 stitched thereto.

The outsole 18 may be made from any conventional wearing material. The proper configuration is imparted to the outsole in any manner well known to the art.

The midsole 20 comprises a thick layer 22 of a cushioning substance, such as felt, whose edges are covered by an ornamental binding 24 secured to the midsole by a line of stitching 26.

Before assembly in the shoe proper, the outsole is placed on the midsole and its edges registered with the underlying edges of the midsole. Thereupon the outsole and midsole are permanently secured together by a line of through-and-through stitching 28 extending around their peripheries to form a midsole-outsole combination which is handled and assembled in the shoe as a unit at a subsequent stage. This use of stitching rather than adhesive prevents the outsole from working loose readily.

The upper 30, which may be of any conventional construction, is attached to the insole 12 while the latter is mounted on the last. This is accomplished by applying a layer 32 (Fig. 8) of adhesive over the exposed undersurface of the insole and forcing the edges of the upper against said layer in a manner well known to the art. The tacks which secure the insole to the last may be removed after the upper is firmly attached and other tacks (not shown) driven through the turned in edges of the upper and the insole. The exposed inturned edges of the upper are now coated also with a layer 34 of adhesive (Fig. 10).

I next dispose a heel wedge 36 on the heel of the insole with its edges in registration with the insole edges. Said heel wedge comprises a block

38 of rigid material, such as wood, whose peripheral contour corresponds to that of the heel and shank sections of the shoe. The wedge tapers in thickness from rear to front to provide the usual inclination to the heel and shank portions of the shoe after the shoe is completed. This inclination is rather slight in the embodiment of the invention herein shown. However, it will be understood that the same may be changed to conform to any style.

Likewise, the configuration of the shank portion 40 of the heel wedge may be varied at will depending upon the desired elevational contour of the completed shoe. In the illustrated embodiment of the invention, both faces of the shank are inclined. This provides the necessary inclination beneath the instep of the foot and also imparts a concave or arched external outline to the shoe at the shank. It will be appreciated, however, that the bottom surface of the shank portion 40 may also be a plane continuation of the bottom surface of the heel portion 36, and in this case the outsole will have no arch in the vicinity of the instep of the shoe.

Before placing the heel wedge on the heel of the insole, the same may be covered with an ornamental material 42 secured thereto in a suitable manner as, for example, with adhesive. Also, the upper surface of the heel wedge, including the inturned edges of the ornamental covering 42, may have adhesive applied thereto so as to better secure the heel wedge to the insole.

Next, the bottom surface of the heel wedge and ornamental covering have a layer of adhesive 44 applied thereto. Adhesive is likewise applied to the exposed surface of the midsole in the midsole-outsole combination, and this sub-assembly is placed over the partially fabricated shoe on the last with its peripheral edges in registry with the elements of the shoe already assembled.

Pressure may be manually applied to the midsole-outsole combination to temporarily retain the same in place, and the last is then transferred to a levelling machine whose pressure platen 46 has a contour negatively matching the desired contour of the bottom surface of the shoe. This forces the shoe to assume the ultimate desired elevational configuration and firmly presses the midsole-outsole combination against the heel, insole and upper, thus allowing the adhesive to effect a secure junction between the elements of the shoe.

The shoe is now stripped from the last and the points of the tacks which were driven through in the upper are turned. The shoe is finished by glueing a sock lining 48 over the exposed surface of the insole.

Attention is directed to the ease with which the shoe can be assembled in accordance with the foregoing process, and particularly to the fact that the midsole and outsole are stitched together around their entire peripheral contour, the heel wedge being disposed between the midsole and upper or insole so as not to interfere with the attachment of the midsole to the outsole.

It will also be appreciated that the foregoing construction enables the midsole to be of a minimum length and thus aids in the conservation of shoe material and further reduces the cost of the shoe.

It will thus be seen that there is provided a shoe and method for making the same 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 embodiment 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. A process of fabricating a platform shoe comprising temporarily attaching an insole to a last, placing an upper on said last, overlying the edges of said upper over edge portions of said insole and adhesively securing the same thereto, adhesively securing the upper surface of a heel wedge having heel and shank portions to the heel and shank portions of said upper and insole, arranging a midsole having heel, shank and foreportions directly upon an outsole having heel, shank and foreportions and sewing said midsole and outsole together around their entire peripheries with through-and-through stitching, adhesively securing the foreportions of said midsole to the foreportion of said upper and insole, adhesively securing the heel and shank portions of said midsole to the heel and shank portions of said heel wedge, levelling said shoe, and stripping the same from the last.

2. A process of fabricating a platform shoe comprising the steps of making an upper-insole combination on a last, including attaching to the last an insole having heel, shank and foreportions, placing an upper on said last, overlying the edges of said upper over edge portions of said insole and adhesively securing said upper edge portions to said insole edge portion, adhesively securing the upper surface of a heel wedge having heel and shank portions to the heel and shank portions of said upper-insole combination, preparing a midsole-outsole combination by directly superimposing on an outsole having heel, shank and foreportions, a midsole having heel, shank and foreportions and securing said midsole to said outsole by sewing a line of through-and-through stitching around the entire peripheries of said midsole and outsole, securing said midsole-outsole combination to said heel wedge and said upper-insole combination by adhesively attaching the heel and shank portions of said midsole-outsole combination to the bottom surface of said heel wedge and adhesively attaching the foreportion of said midsole-outsole combination to the foreportion of said upper-insole combination.

3. A process of fabricating a platform shoe comprising placing on a last an insole having heel, shank and foreportions, placing an upper on said last, overlaying the edges of said upper over edge portions of said insole, securing said upper edge portions to said insole edge portions, securing a heel wedge, including heel and shank portions, to the heel and shank portions of said upper and insole, providing a midsole-outsole combination with an outsole having heel, shank and foreportions and a midsole having heel, shank and foreportions secured together around their peripheries, securing the heel and shank portions of said midsole-outsole combination to said heel wedge, securing the foreportion of said midsole-outsole combination to the foreportion of said upper and insole, and then stripping the shoe from said last.

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