Dec. 18, 1945. D. J. CALDERAZZO 2,391,083

SHOE

Original Filed July 25, 1942

Fig. 1.

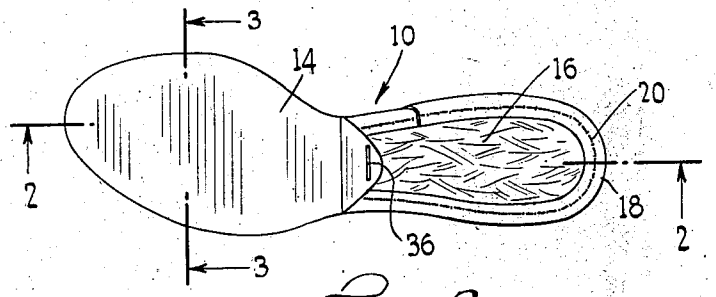


Fig. 2.

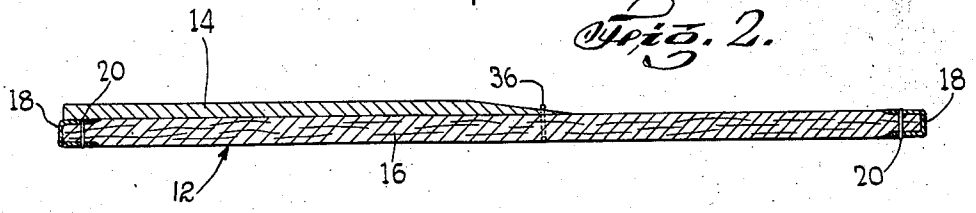


Fig. 3.

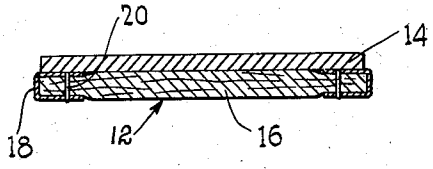


Fig. 5.

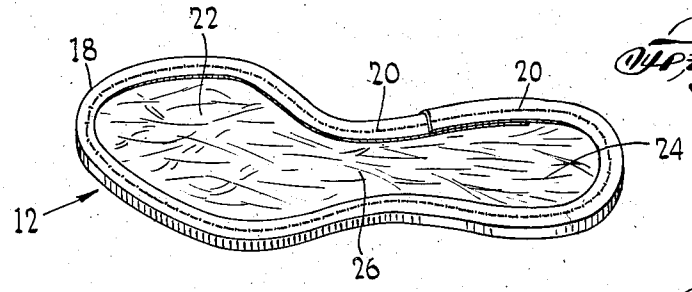


Fig. 4.

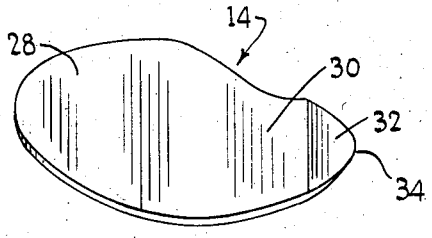
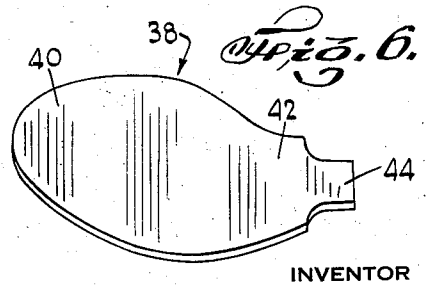


Fig. 6.



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Patented Dec. 18, 1945 2,391,083

UNITED STATES PATENT OFFICE

2,391,083

SHOE

Dominick J. Calderazzo, Dolgeville, N. Y.

Original application July 25, 1942, Serial No. 452,312. Divided and this application April 30, 1943, Serial No. 485,110

6 Claims. (Cl. 36—30)

This invention relates to shoes. More particularly, the invention pertains to outsoles and to outsole-midsole combinations which are adapted to be used in playshoes such as shown and described in my copending application, Serial No. 452,312, filed July 25, 1942, of which the present application is a division.

An object of the invention is to reduce the cost of manufacturing playshoes by providing outsoles which extend predominantly over only the fore portions of shoes as contrasted with outsoles heretofore used in playshoes which covered either the entire bottom surfaces of the shoes, including not only the fore portions but the shanks and heels as well, or covered the bottom surfaces of the shoes including the entire shanks and extended up to the heels.

Another object of the invention is to provide a playshoe in which a preset and pretrimmed outsole is used with resulting increase in speed of production and saving of material.

An additional object of the invention is to provide an outsole-midsole combination and method of making the same which facilitates subassembly of the shoe and thus simplifies the manufacture.

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, combination of elements, and arrangement of parts which will be exemplified in the constructions hereinafter described, and of which the scope of application will be indicated in the claims.

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

Fig. 1 is a bottom view of a midsole-outsole combination embodying my invention and ready to be assembled on a playshoe,

Figs. 2 and 3 are enlarged longitudinal and transverse sections therethrough taken substantially along the lines 2—2 and 3—3 of Fig. 1,

Fig. 4 is a perspective view of the outsole,

Fig. 5 is a perspective view of the midsole, and

Fig. 6 is a perspective view of a modified form of outsole.

Referring now to the drawing and more particularly to Figs. 1 through 5, I have there shown a midsole-outsole combination 10 embodying my invention and adapted to be used in the construction of a playshoe such as is shown and described in my aforesaid copending application. Said combination 10 consists of a midsole 12 and an outsole 14.

The midsole 12 is a thick layer 16 of a felted substance whose edges are covered by an ornamental binding 18 attached to the midsole by a line of stitching 20. The peripheral contour of the midsole generally approximates a bottom plan of the shoe, so that the midsole may be said to consist of a midsole fore portion 22, a midsole heel portion 24, and a midsole shank portion 26 between the midsole fore and heel portions.

The outsole 14 comprises in the main a wearing or fore portion 28 of the same peripheral contour as the midsole fore portion 22. Extending rearwardly from said outsole wearing portion 28 is a stub shank portion 30 of full width, i. e. conforming in outline to that part of the midsole shank portion 26 immediately behind the midsole fore portion 22. As its name implies, said stub shank terminates short of the heel portion of the midsole. A short extension 32, skived to a thin rear edge 34, extends from the back of the stub shank 30 stopping short of the heel of the midsole, said extension being of reduced width, i. e. narrower than the corresponding part of the midsole shank portion 26.

The outsole 14 is pretrimmed to the foregoing final shape and dimensions and the extension 32 precut before the outsole is attached to any other element of a shoe. Thereby, I am able to expedite and cheapen the manufacture of the outsole and avoid either pretrimming or precutting near the ornamental binding 18 of the midsole where greater care must be exercised.

I also preset the rim of the outsole. This may be done by disposing the outsole transversely of a horizontal inking roll which is freely rotatably mounted on supports and is partially immersed in an inking bath. A portion of the outsole rim is contacted with the exposed surface of the roll and the outsole revolved while contact with the roll is maintained whereby to color the entire rim. The frictional engagement between the outsole and roll turns the roll and causes a freshly inked surface to be constantly presented to the outsole. The colored rim is then set by shining, and, if desired, may be glazed and buffed.

The outsole, after pretrimming, precutting, and presetting, is placed on the midsole with its rim in registry with the rim of the corresponding midsole parts, to wit, the midsole fore portion and adjacent part of the midsole shank portion. The outsole is then attached to the midsole by a metallic fastener, such as a staple 36, whose points are clenched in the midsole.

The outsole-midsole combination is now fully prepared as a finished subassembly and may be

laid aside until such time as it is necessary to employ the same in the fabrication of a complete shoe. It may be mentioned that said outsole-midsole combination can now be attached, as by stitching, to an insole-upper combination and to a heel having a long cantilever shank, as more fully explained in my said copending application.

In Fig. 6 I have shown an alternative form of outsole **38** which may be employed in place of the outsole **14**. Said outsole **38** comprises a wearing portion **40** and stub shank portion **42** similar to the wearing and stub shank portions **28**, **30** heretofore described. The extension **44**, however, comprises a narrow tab, of lesser width than the corresponding part of the midsole shank portion **26**, which projects from the rear of the stub shank **42**.

It will thus be seen that there is provided an article and method for making and using 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 embodiments above set forth, it is to be understood that all matter herein set forth or shown in the accompanying drawing 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. In a shoe having a midsole with heel, shank, and fore portions, a precut outsole predominantly comprising a wear portion beneath the fore portion of the midsole, said outsole having a stub shank portion extending from the rear edge of said wear portion and lying beneath the front of the shank portion of the midsole, said outsole stub shank portion being as wide as the portion of the shank of the midsole which it underlies, and a short extension integral with and projecting rearwardly from the back of said stub portion, said extension terminating short of the heel portion of the midsole and lying beneath a more rearwardly disposed part of the shank portion of the midsole, said extension being narrower than the part of the shank of the midsole which it underlies.

2. In a shoe having a midsole with heel, shank, and fore portions, a precut outsole predominantly comprising a wear portion beneath the fore portion of the midsole, said outsole having a stub shank portion extending from the rear edge of said wear portion and lying beneath the front of the shank portion of the midsole, said outsole stub shank portion being as wide as the portion of the shank of the midsole which it underlies, and a short precut, tapered extension integral with and projecting rearwardly from the back of said stub portion, said extension terminating short of the heel portion of the midsole and lying beneath a more rearwardly disposed part of the shank portion of the midsole, said extension being narrower than the part of the shank of the midsole which it underlies.

3. For use in fabricating a shoe, an outsole-midsole combination comprising a midsole having heel, shank and fore portions and a precut outsole, predominantly comprising a wear portion having a contour similar to the contour of said midsole fore portion, said outsole having an integral rearwardly extending stub shank portion and an extension projecting rearwardly from the back of said stub portion; the edges of said outsole wear portion and stub portion being disposed beneath and registered with the edges of said midsole fore portion and shank portion, and means for positively attaching said extension to the overlying portion of said midsole shank portion.

4. For use in fabricating a shoe, an outsole-midsole combination comprising a midsole having heel, shank and fore portions and a precut outsole, predominantly comprising a wear portion having a contour similar to the contour of said midsole fore portion, said outsole having an integral rearwardly extending stub shank portion and a short extension of reduced width projecting rearwardly from the back of said stub portion; the edges of said outsole wear portion and stub portion being disposed beneath and registered with the edges of said midsole fore portion and shank portion, and means for positively attaching said extension to the overlying portion of said midsole shank portion.

5. For use in fabricating a shoe, an outsole-midsole combination comprising a midsole having heel, shank and fore portions and a precut outsole, predominantly comprising a wear portion having a contour similar to the contour of said midsole fore portion, said outsole having an integral rearwardly extending stub shank portion and a short, precut, tapered extension of reduced width projecting rearwardly from the back of said stub portion; the edges of said outsole wear portion and stub portion being disposed beneath and registered with the edges of said midsole fore portion and shank portion, and means for positively attaching said extension to the overlying portion of said midsole shank portion.

6. In combination, in a shoe, a precut outsole and a midsole, said midsole having heel, shank and fore portions, said outsole predominantly comprising a wear portion having a contour similar to the contour of the midsole fore portion, said outsole further comprising a full width stub shank portion extending from the rear edge of said wear portion and a short extension of reduced width projecting rearwardly from the back of said stub shank portion, said stub shank portion having a contour similar to the contour of the corresponding part of said midsole shank portion, the edges of said outsole wear portion and stub shank portion being disposed beneath and registered with the edges of said midsole fore portion and the mentioned part of said midsole shank portion, and means for attaching said outsole to said midsole.

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