Aug. 20, 1946. C. W. MATHIESON 2,406,091

SHOE PLATFORM

Filed Nov. 27, 1944

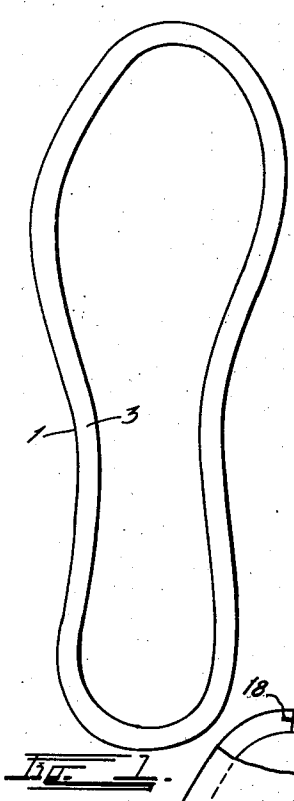


Fig. 1.

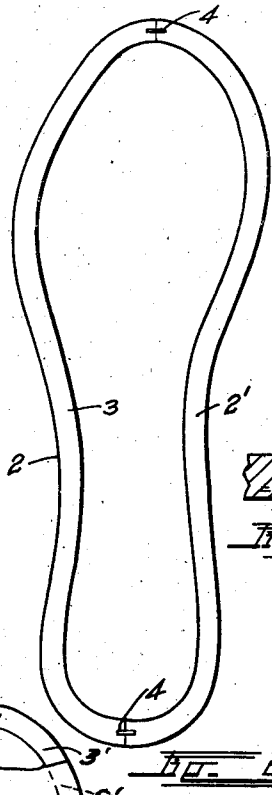


Fig. 2.

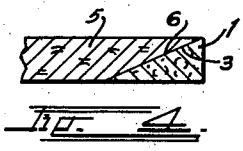


Fig. 4.

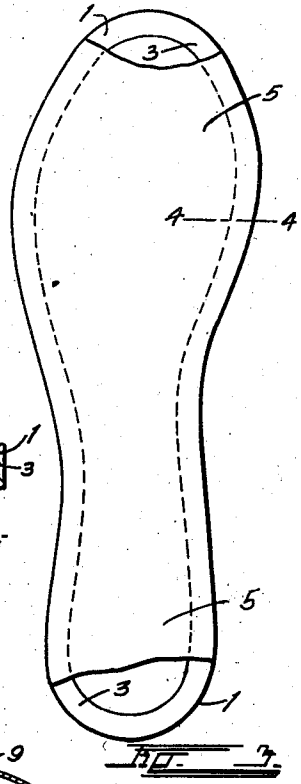


Fig. 3.

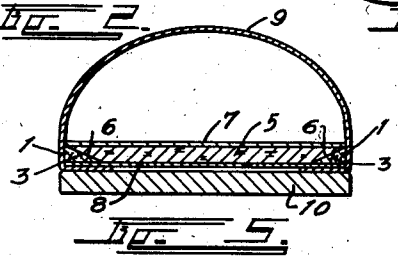


Fig. 5.

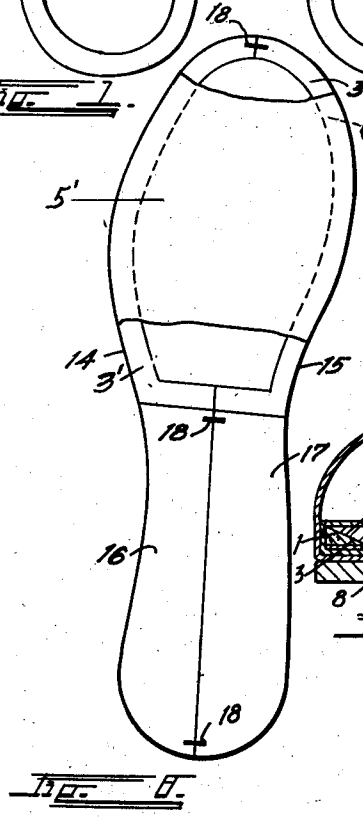


Fig. 8.

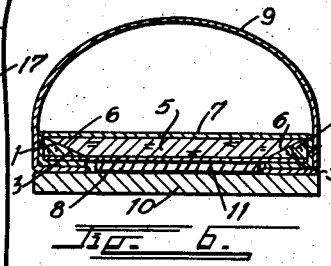


Fig. 6.

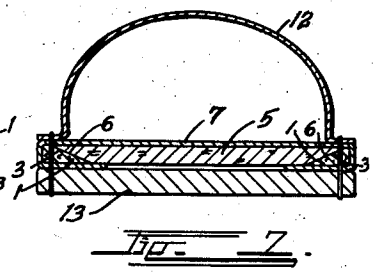


Fig. 7.

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SHOE PLATFORM

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Application November 27, 1944, Serial No. 565,212

6 Claims. (Cl. 36—30)

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This invention relates to a shoe construction, and more particularly to a foundation or platform construction for embodying in a shoe.

An object of the invention is to provide an improved foundation or platform construction for association with the upper and the outsole of a shoe.

Another object is to produce an improved cushioned platform construction wherein yieldable means is so embodied therein that when the platform is associated with a shoe upper and outsole the entire width of the foot will be cushioned.

A further object is to so construct a shoe platform that the entire width of the foot will be cushioned by resilient or yieldable material and there will also be provided retaining or shoulder means of relatively firm and non-resilient material which will prevent spreading of the resilient material and also provide suitable means to which the upper and outsole can be attached.

Other objects of the invention will become apparent from the following description taken in connection with the accompanying drawing in which:

Figure 1 is a view showing a one piece construction of the shoulder means for the platform;

Figure 2 is a view showing a two piece construction of the shoulder means for the platform;

Figure 3 is a view showing the shoulder means and the resilient material in assembled relation;

Figure 4 is a sectional view taken on the line 4—4 of Figure 3 showing the beveled relation between the shoulder means and the resilient material;

Figure 5 is a section view of a shoe showing a platform in its finished construction and embodied in the shoe as an inside platform;

Figure 6 is a sectional view of a shoe showing a differently constructed platform embodied in the shoe as an inside platform;

Figure 7 is a sectional view of another shoe construction wherein the platform is interposed between the upper and insole so as to be visible from the exterior; and

Figure 8 is a view of a platform construction in which the resilient material is provided only for the fore part of the platform.

Referring to the drawing in detail, and first to Figure 1, the improved platform may have a retaining or shoulder means comprising a single piece which is died out from a single flat sheet to give the proper outline and opening, both of which follow the general outline of the foot. The shoulder piece 1 is provided on its inner side with a beveled surface 3 formed by skiving or by sanding on a sander or a rougher. As shown in Figure 2 the retaining or shoulder means may comprise two pieces 2 and 2'. These pieces are cut to such form that when they are associated in end to end relation they will have a proper foot outline and there will be an opening of smaller size, yet of the same contour as the outline. The shoulder pieces are provided on their inner sides with a beveled surface 3 produced by skiving or by sanding. By employing two pieces to make the shoulder means, it is possible to lower the cost of material as there would not be the waste present in dieing out the one piece shoulder means shown in Figure 1. The two pieces are connected together at adjacent ends by any means such as the staples 4. It is also obvious that in place of the two pieces, more than two pieces could be employed.

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The shoulder means, as formed from either a single piece or a plurality of pieces, should be of a material which has a relatively firm and non-resilient body, but yet not too flexible, suitable material being leather, pressed paper, cardboard, prepared material commonly used for insoles, or like material.

The shoulder means receives a resilient sheet or member 5 which is also shaped to have a foot outline. The material of this sheet may be rubber, cork, felt, combinations thereof, or any material giving the cushioning function desired for the foot. The edge of this resilient sheet is provided with a beveled surface 6 having the same angular relation to the surface of the member as the beveled surface 3 has to the surface of the piece 1 or the pieces 2 and 2'. The beveling may be accomplished by skiving, sanding or roughing. The size and contour of the resilient sheet, after being provided with the beveled surface, is such that, when placed within the shoulder means with its beveled surface presented for cooperation with the beveled surface of the shoulder means, there will be provided a flat surfaced assembly of considerable thickness which is suitable for a shoe platform, said assembly being shown in Figure 3. Suitable adhesive may be used at the engaging beveled surfaces. The overlapping relation at the beveled surfaces results in a top surface which is resilient substantially completely across the assembly.

Referring now to Figure 5, the top surface of the resilient sheet has associated therewith an overlying sheet 7 of non-stretchable material and the under surface of the assembly, including the under surface of the shoulder means and the under surface of the resilient sheet, has secured

thereto a sheet 8 also of non-stretchable material. The non-stretchable material may be cloth, leather or like material and both the sheets 7 and 8 are secured to the engaged surfaces by cement or any suitable adhesive. These sheets 7 and 8 hold the entire platform assembly firmly together and the sheets, together with the shoulder means, insure that there will be no spreading of the resilient sheet.

The platform assembly, as constructed, may be employed either as an inside platform for a shoe or an outside platform. It is shown as being used as an inside platform in Figure 5. In such a use the upper 9 of the shoe will have its lower marginal portion turned under the bottom of the platform and secured in overlying relation to the sheet 8. This securing may be by any suitable means such as cement. The outsole 10 is then secured in position as shown, the securing means also being of cement if desired. When the platform assembly is embodied in a shoe as an inside platform, as shown in Figure 5, a full cushioned shoe will result. All of the bottom of the foot will be cushioned because of the platform construction whereby the resilient sheet or member is caused to present a resilient top surface extending completely across the platform. At the same time there is a firm shoulder means to give body and substance to the shoe with a good durability. The top sheet 7 of the platform becomes the sock lining of the shoe. The bottom sheet 8 resists side pull of the upper and prevents the platform from being stretched out of shape.

In Figure 6 the inside platform is shown as constructed with the top non-stretchable sheet 7 turned under the outer edge of the shoulder means and secured to the outer surface of the bottom non-stretchable sheet 8. If the turned over marginal portion of the top sheet 7 and the upper 9 produces too great a thickness, there may be provided a filler piece 11 as shown. This will prevent the resilient sheet of the platform from becoming concave.

In Figure 7 the platform assembly is embodied in a shoe as an outside platform. Here the upper 12 is secured thereto by a stitch down construction, its lower marginal edge being turned outwardly in overlying relation to the marginal portion of the platform. The same stitching for the upper may be employed to secure the outsole 13 to the platform. Other securing means may be used in the place of stitching. The firm shoulder means of the platform gives good material to which the upper and outsole are secured to produce a sturdy and durable shoe. The top sheet 7 of the platform is shown as turned under the edge of the shoulder means and secured to the bottom surface. The top surface serves as the sock lining of the shoe. The covering of the edge of the platform by sheet 7 gives a neat appearance in this type of shoe construction and also permits embracing color schemes to be attained, particularly where there is an open toe and heel. The bottom sheet may, if desired, be eliminated as in this construction there is no side pull from the upper.

In Figure 8 the platform is constructed so that a cushion is present only for the fore part of the foot. The shoulder pieces 14 and 15 have integral heel portions 16 and 17 to present a flat firm heel seat when the shoulder pieces are secured together as by the staples 18. The resilient sheet 5' is received between the shoulder pieces and the sheet and shoulder pieces have beveled

surfaces 6' and 3' in order that there will be a resilient top surface extending completely across the top of the assembly. The construction shown in Figure 8 will have associated therewith the non-stretchable covering sheet 7 which may or may not be turned over and secured to the bottom of the shoulder pieces and the heel portions. There will also be a bottom sheet of non-stretchable material if the platform is to be used as an inside platform. The platform of Figure 8 is useful when a firm material is desired for fastening the heel of the shoe to the platform. If desired, the shoulder means and the heel part may be died out from a single sheet of material.

Being aware of the possibility of modification in the constructions shown without departing from the fundamental principles of my invention, I do not intend that the scope thereof be limited except as defined by the appended claims.

What is claimed is:

1. In a sole construction, a unitary assembly for use as a resilient foundation means to which can be attached an upper and an outsole, said assembly comprising a sheet of resilient material, shoulder means of relatively firm material surrounding said resilient sheet, said shoulder means and the resilient sheet having overlapping portions and the outer marginal edge of the sheet extending to adjacent the outer marginal edge of the shoulder means on the top side thereof to thus present a top resilient surface extending the entire width of the assembly, and a sheet of non-stretchable material overlying the said top surface of the sheet of resilient material and secured thereto.

2. In a sole construction, a unitary assembly for use as a resilient foundation means to which can be attached an upper and an outsole, said assembly comprising a sheet of resilient material, shoulder means of relatively firm material surrounding said resilient sheet, said shoulder means and the resilient sheet having overlapping portions and the outer marginal edge of the sheet extending to adjacent the outer marginal edge of the shoulder means on the top side thereof to thus present a top resilient surface extending the entire width of the assembly, and a sheet of non-stretchable material overlying the said top surface of the sheet of resilient material and being turned over and secured to the bottom of the shoulder means.

3. In a sole construction, a unitary assembly for use as a resilient foundation means to which can be attached an upper and an outsole, said assembly comprising a sheet of resilient material, shoulder means of relatively firm material surrounding said resilient sheet, said shoulder means and the resilient sheet having cooperating beveled surfaces with the outer marginal edge of the sheet extending to adjacent the outer marginal edge of the shoulder means on the top side thereof to thus present a top resilient surface extending the entire width of the assembly, a sheet of non-stretchable material overlying the said top surface of the sheet of resilient material and secured thereto, and a sheet of non-stretchable material covering the bottom surface of the resilient sheet and secured to the bottom surface of the shoulder means.

4. In a sole construction, a unitary assembly for use as a resilient foundation means to which can be attached an upper and an outsole, said assembly comprising shoulder pieces of relatively non-resilient material and having beveled surfaces on the top side extending from substan-

tially the outer marginal edge to the inner marginal edge, a sheet of resilient material having a marginal beveled surface on its under side for overlapping the beveled surfaces on the shoulder pieces to thus present a top resilient surface for the assembly that extends across the width thereof, and a sheet of non-stretchable material overlying the top surface of the resilient sheet and secured to the shoulder pieces.

5. In a sole construction, a unitary assembly for use as a resilient foundation means to which can be attached an upper and an outsole, said assembly comprising shoulder pieces of relatively non-resilient material and having beveled surfaces on the top side extending from substantially the outer marginal edge to the inner marginal edge, a sheet of resilient material having a marginal beveled surface on its under side for overlapping the beveled surfaces on the shoulder pieces to thus present a top resilient surface for the assembly that extends across the width thereof, and a sheet of non-stretchable material overlying the top surface of the resilient sheet and being turned over the edge of the shoulder pieces and secured to the bottom sides thereof.

6. In a sole construction, a unitary assembly for use as a resilient foundation means to which can be attached an upper and an outsole, said assembly comprising a sheet of resilient material for the fore part of the foot, shoulder pieces of relatively non-resilient material surrounding the sheet of resilient material and having integral juxtapositioned portions extending rearwardly to form a relatively non-resilient heel part, said shoulder pieces and the resilient sheet having cooperating beveled surfaces which are so arranged that there will be a resilient surface extending to the outer edges of the shoulder pieces, and a sheet of non-stretchable material overlying the resilient sheet and being turned over the edges of the pieces and secured to the under side thereof.

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