

Jan. 18, 1944.

K. A. STRITTER

2,339,726

MANUFACTURE OF PLATFORM SHOES

Filed March 11, 1943

2 Sheets-Sheet 1

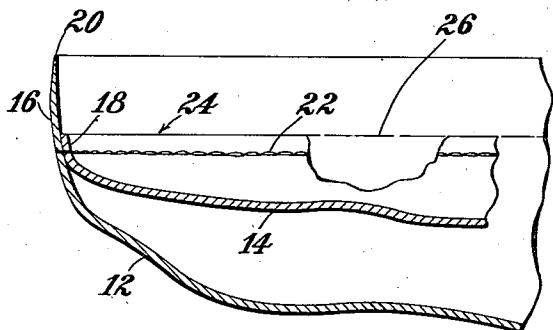


Fig 1

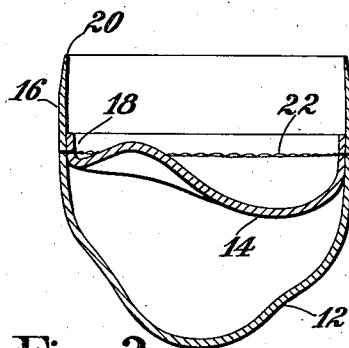


Fig 2

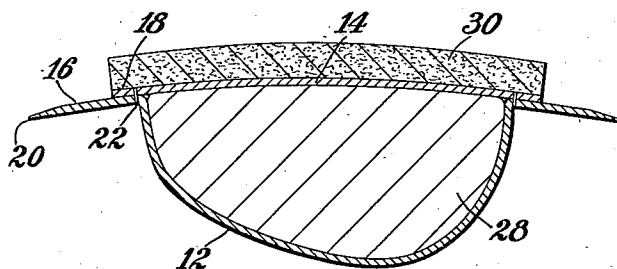


Fig. 3

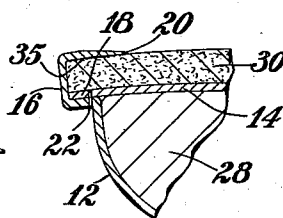


Fig. 4

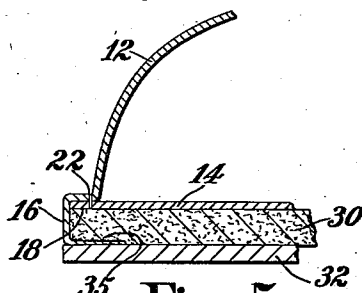


Fig 5

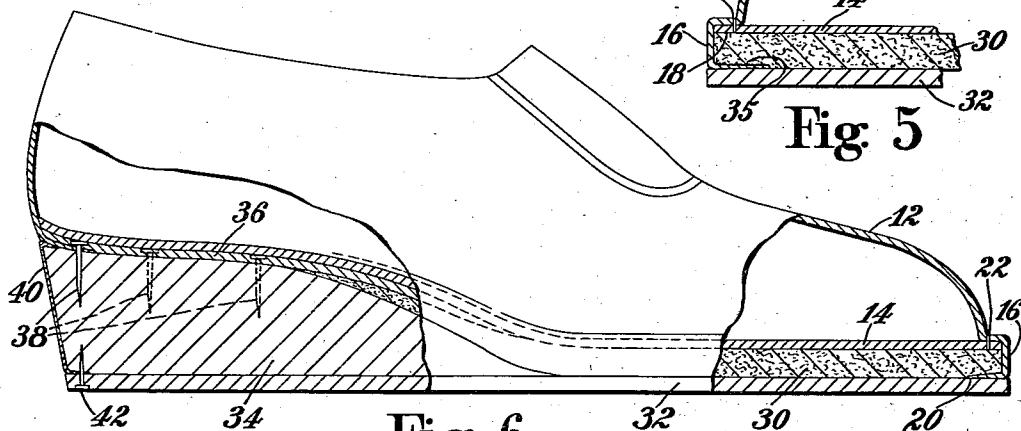


Fig 6

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2 Sheets-Sheet 2

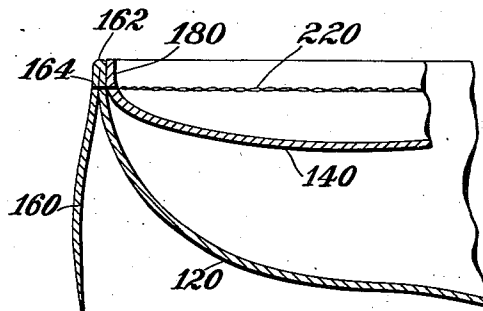


Fig. 7

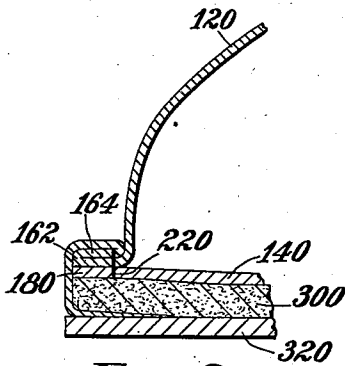


Fig. 8

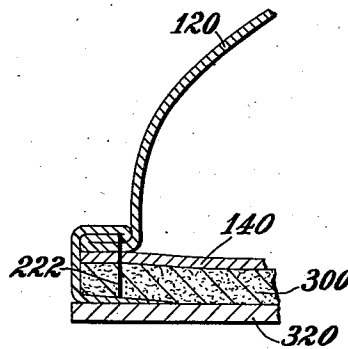


Fig. 9

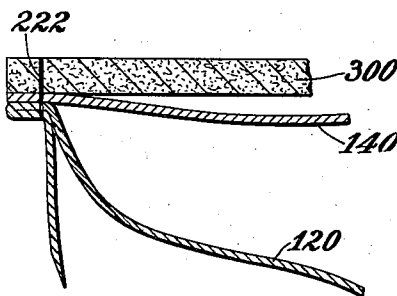


Fig. 10

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UNITED STATES PATENT OFFICE

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MANUFACTURE OF PLATFORM SHOES

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Application March 11, 1943, Serial No. 473,747

9 Claims. (Cl. 12-142)

This invention relates to improvements in shoes and methods of making the same.

The invention is concerned more especially with the manufacture of so-called platform shoes of the type having a middle or "platform" sole provided with an edge covering which is exposed to view in the completed shoe. In accordance with the usual procedure in making such shoes the margin of an upper is secured in overlapped position upon an insole on a last, after which a middle or platform sole having a binding strip covering its edge portion is attached to the overlapped margin of the upper, and finally an outer or tread sole is attached to the platform sole. Each of these sole attaching operations involves the use of a sole attaching press and frequently a third operation analogous to that of sole attaching is necessary for the purpose of incorporating a so-called wedge heel and shank piece in the shoe bottom. These separate attaching operations are time consuming and add considerably to the cost of manufacturing the shoe and, furthermore, unless each operation is carried out with painstaking care the several shoe bottom elements will not be accurately and properly located with respect to each other and to the overlapped portion of the shoe upper to insure that the shoe will present a neat and attractive appearance.

One object of the present invention is to improve the appearance and reduce the cost of manufacture of platform shoes. To the accomplishment of this object my invention provides the improvements in platform shoes and methods of making such shoes described and claimed herein, the advantages of which will be appreciated by those skilled in the art of shoemaking.

The invention will now be described with reference to the accompanying drawings, in which

Fig. 1 is a view in longitudinal section of the toe portions of the upper and the innersole of my improved shoe as they appear after having been assembled in inverted positions and stitched together off the last;

Fig. 2 is a cross-sectional view of the toe portions of the upper and insole assembly shown in Fig. 1;

Fig. 3 is a cross-sectional view of the toe portion of the shoe as it appears after a last has been inserted in the upper and innersole assembly and the middle or platform sole has been positioned upon the innersole;

Fig. 4 is a fragmentary cross-sectional view of the parts shown in Fig. 3, illustrating how the marginal extension of the upper is wrapped over

the edges of the inner and platform soles and turned inwardly upon and cemented to the side of the platform sole which is to be lowermost in the completed shoe;

Fig. 5 is a fragmentary cross-sectional view of the forepart of a completed shoe constructed in accordance with my invention;

Fig. 6 is a view, partially in side elevation and partially in longitudinal section, of the completed shoe;

Fig. 7 is a sectional view similar to Fig. 1 but illustrating an alternative method of securing together the upper and the innersole;

Fig. 8 is a view in cross-section of a portion of the forepart of a shoe embodying the upper and innersole assembly of Fig. 7;

Fig. 9 is a view similar to Fig. 8 but illustrating a further modification in the construction of the shoe; and

Fig. 10 is a view in longitudinal section of the toe portion of the shoe shown in Fig. 9, the view illustrating an early stage in the manufacture of the shoe.

Referring to the drawings, my improved shoe comprises an upper 12 which may be made of leather or other suitable upper material and a thin innersole or sock lining 14 which is preferably made of soft upper leather or fabric, the upper 12 having been cut to size plus a marginal allowance providing an integral extension 16 of substantial width adapted to serve as a platform edge covering, and the innersole or sock lining 14 having been cut slightly larger than last bottom size to provide an extension edge or seam allowance 18. As indicated at 20, the outer marginal portion of the extension 16 of the upper is skived to a feather edge. The upper 12, with or without a lining, and the oversized or extension edge innersole 14 are assembled without the support of a last and secured together by means of a line of stitching 22, as indicated in Fig. 1, the stitching extending through the upper approximately at the junction of its marginal extension 16 with its body portion and through the innersole along the inner extremity of its extension edge portion 18. The seam formed by the stitches 22 may be sewn by an ordinary straight needle sewing machine. Advantageously the upper and the innersole may be assembled with the edge 24 of the innersole in registration with a line or series of marks 26 previously made upon the upper in such a location that by employing a gage suitably positioned relatively to the needle for locating the work by engagement with the edge of the innersole the seam can be

readily located in the desired position. To impart the desired shape to the shoe a last 28 is now inserted in the shoe, as illustrated in Fig. 3.

The illustrated shoe comprises also a middle or platform sole 30, an outer or tread sole 32, and a so-called wedge heel 34 (Fig. 6). The platform sole 30 and the outer sole 32 are each cut with an extension edge so that each will correspond in size and edge contour with the innersole in the forepart and shank portions at least of the shoe. The platform sole 30 is preferably made of felt or other soft cushioning material and it may be cut to extend through the full length of the shoe, or, as shown, to terminate rearwardly between the heel and shank portions of the shoe. If such a short platform sole is to be used, the upper and the innersole will not be stitched together at the heel portion of the shoe and a heel and shank reinforcing piece 36 composed of heavy fiberboard or the like may be laid upon the outer side of the innersole after the last has been inserted in the shoe. The extension 16 of the upper may be overlaid upon the heel-seat portion of the heel and shank piece and secured to the latter by means of tacks or other lasting fastenings (not shown).

The shoe is now ready to receive the platform sole 30 which is laid in place upon the insole with the rear portion of the platform sole overlapping the forward portion of the heel and shank piece. The laying of the platform sole will cause the extension edge portions of the upper forwardly of the heel portion of the shoe to assume approximately the positions indicated in Fig. 3 so that the margin of the insole will lie in the same plane as the body portion thereof and the inner surface of the platform sole will lie flat against the innersole. Preferably, but not necessarily, cement will be employed between the innersole and platform sole to hold the latter in place. The extension 16 of the upper in the shank and forepart of the shoe is folded or wrapped over the edges of the inner and platform soles and folded inwardly over and secured by cement to the outer marginal surface of the platform sole, as indicated at 35 in Fig. 4. The wedge heel 34 is now positioned upon the shoe bottom and, as shown, it may be secured in place by nails 38 driven through the heel and shank piece 36 from the inside of the shoe, the heel portion of the innerhole 14 which was left unsecured to the upper having been raised to enable the nails to be driven without passing through the innersole. Thereafter the heel-seat portion of the innersole may be laid upon and cemented to the upper side of the heel and shank piece 36 to cover the heads of the nails 38. The wedge heel 34 may advantageously be composed of wood and, as shown, its sides may be covered by a covering 40 of leather, celluloid or other suitable material. The outsole 32 is now laid and cement attached to the shoe by the use of a cement sole attaching press. The outsole will be secured by the cement to the infolded lower marginal portion of the upper extension 16 in the forepart of the shoe, the skived surface of this infolded portion being well adapted to receive the cement and the feather edge 20, allowing the outsole to lie in intimate contact with the lower surface of the platform sole. In the heel and shank portion of the shoe the outsole may be attached to the wedge heel 34 by means of slugs or nails 42.

In accordance with a modified method of making my improved shoe, as illustrated by Figs. 7

and 8, an upper 120 is provided which has been cut to size plus a marginal allowance or extension 160 that is somewhat larger than the extension 16 already described, and an innersole 140 is provided having an extension edge portion 180 as in the case of the innersole 14. The extension 160 of the upper 120 is turned outwardly and folded backwardly against itself, as indicated in Fig. 7. The upper thus folded is then assembled off the last with the innersole 140, the fold 162 in the upper being disposed in alignment with the edge of the innersole and the parts are secured together by stitches 220 located approximately at the junction between the body and the extension edge portion of the innersole and through both plies of the folded portion 164 of the upper extension, the upper and insole assembly then appearing as shown in Fig. 7. Inasmuch as the stitches extend through two thicknesses of the upper material, an exceptionally strong attachment of the upper to the insole is provided. A last is now inserted in the shoe and an extension edge platform sole 300 (Fig. 8) is laid against the innersole, thus causing the innersole extension 180 and the folded portion 164 of the upper extension to bend outwardly and assume the positions relatively to the body portions of those parts which are indicated in Fig. 8. The free portion of the upper extension 160 is then turned outwardly over the previously folded portion 164 and downwardly to cover the fold 162 and the edges of the inner and platform soles and inwardly against the lower side of the platform sole, the portion of the upper extension which is thus brought against the lower side of the platform sole being secured by means of cement to the latter. Because of the double thickness of upper material between the insole and exposed portion of the upper extension a heavier platform effect is produced. An outsole 320 is then attached to the shoe by cementing it to the turned portion of the upper extension which underlies the platform sole. It is to be understood that the upper may be folded and disposed with respect to the other parts of the shoe as just described throughout the full length of the shoe, or in the forepart or forepart and shank portions only and that in the heel portion, or in the heel and shank portion of the shoe, the upper extension may be overlaid upon a heel reinforcing piece or a heel and shank reinforcing piece applied beneath the inner sole as described in connection with the making of the shoe shown in Fig. 6.

Alternatively, the upper may be cut and folded in the last-described manner and assembled off the last with both an innersole and a platform sole, such as the innersole 140 and platform sole 300, and the parts secured together by stitches 222 which extend through both plies of the folded portion of the upper extension and through both the innersole and the platform sole, as shown in Figs. 9 and 10. Thereafter the shoe may be finished by folding or wrapping the free portion of the upper extension over the folded portion thereof and over the edges of the inner and platform soles and turning it inwardly against the lower side of the platform sole as in the manufacture of the shoe shown in Fig. 8, and by the attachment of an outsole to the shoe in the manner already described. A shoe thus made will appear as shown in cross-section in Fig. 10. In this shoe, as in that shown in Fig. 8, an exceptionally heavy platform effect is produced because of the presence of two thicknesses of upper material between

the extension edge of the innersole and the exposed portion of the upper extension. Moreover, the strength of attachment of the upper to the shoe bottom is materially increased due to the fact that the stitches 222 extend through two plies of upper material and through the middle or platform sole 300 as well as through the innersole 140.

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

1. That improvement in the manufacture of platform shoes which consists in providing an upper having a marginal extension adapted to serve as a platform edge covering, providing an innersole cut to the size of the bottom of a last plus a marginal extension, assembling said parts without the support of the last and securing them together at the inner portions of said marginal extensions, inserting the last in the shoe, laying a platform sole of greater than last bottom size upon the insole with the upper marginal surface of the platform sole lying against the marginal extension of the innersole and positioning the latter substantially in a plane parallel to that of the last bottom, wrapping the marginal extension of the upper over the edges of the innersole and the platform sole, turning said extension inwardly over and securing it to the lower marginal surface of the platform sole, and securing an outsole to said intumed portion of the upper extension.

2. That improvement in the manufacture of platform shoes which consists in providing an upper cut to size plus a substantial marginal allowance, providing an innersole cut to the size of the bottom of a last plus a marginal seam allowance, folding the marginal allowance of the upper backwardly toward the body of the upper along a line located near the junction of said upper allowance and the body of the upper, assembling said parts without the support of the last and securing them together by a seam sewn through the marginal allowance of the innersole and through both plies of the folded portion of the upper near the line of fold, inserting the last in the shoe, laying a platform sole of greater than last bottom size upon the insole with the upper marginal surface of the platform sole lying against the marginal allowance of the innersole and positioning the latter substantially in a plane parallel to that of the last bottom, wrapping the marginal allowance of the upper over the edges of the innersole and the platform sole, turning said allowance inwardly upon and securing it to the lower marginal surface of the platform sole, and securing an outsole to said intumed portion of the upper.

3. That improvement in the manufacture of platform shoes which consists in providing an upper cut to size plus a substantial marginal allowance, providing an extension edge innersole and an extension edge middle sole, assembling said parts without the support of a last by inserting fastenings through said upper and through said innersole and wrapping the marginal allowance of the upper over the edge and the lower side of the middle sole and securing it to the middle sole, and securing an outsole to the marginal allowance of the upper.

4. That improvement in the manufacture of platform shoes which consists in providing an upper having a marginal extension for covering the edge of a middle sole, providing an extension edge innersole and an extension edge middle sole, assembling said parts and securing them to-

gether by stitches extending through the upper and through said inner and middle soles inwardly of the extension edge portions of said parts, wrapping the extension of the upper over the edge and the lower side of said middle sole, and securing an outsole to the extension of the upper.

5. A platform shoe comprising an extension edge innersole, an upper secured to said innersole by means of stitches located at the inner extremity of the extension edge portion of the innersole, said stitches extending only through said parts, said upper having an integral marginal allowance extending outwardly beyond said stitches and covering the extension edge portion of the innersole, a platform sole having its edge and its lower marginal surface covered by the marginal allowance of the upper, and an outsole secured to said marginal allowance.

6. A platform shoe comprising an extension edge innersole, an extension edge middle sole, an upper secured to said innersole at the inner extremity of its extension edge portion, said upper having a marginal extension covering the upper side of the extension edge portion of said innersole and the edge faces of said innersole and said middle sole and having an intumed portion underlying said middle sole, and an outsole secured to said intumed portion of said upper extension.

7. A platform shoe comprising an innersole having an extension edge portion disposed in the same plane as its body portion, an extension edge middle sole disposed with its upper side engaging and supporting said innersole including the extension edge portion of the latter, an upper secured to said innersole by fastenings located at the inner extremity of the extension edge portion of the innersole, said upper having a marginal portion extending outwardly from said fastenings over the extension edge portion of the innersole and downwardly over the edge face of the middle sole and inwardly beneath said middle sole, and an extension edge outsole secured to the inwardly extending portion of said upper margin.

8. A platform shoe comprising an innersole having an extension edge portion disposed in the same plane as its body portion, an extension edge middle sole disposed in all-over face-to-face relation to said innersole, an upper having a marginal extension forming a folded two-ply sole attaching flange and a platform edge covering, said flange consisting of a lower ply extending outwardly from the lower extremity of the body of the upper and lying upon the extension edge portion of said innersole and an upper ply extending inwardly from the outer extremity of said lower ply and said covering extending outwardly from the inner extremity of said upper ply and downwardly over the outer edge of said flange and over the edges of said innersole and said middle sole and inwardly beneath the margin of said middle sole, fastenings extending through both plies of said flange close to the body of the upper and securing said flange to said innersole, and an extension edge outsole having its margin secured to said inwardly extending portion of said covering.

9. A platform shoe comprising an innersole having an extension edge portion disposed in the same plane as its body portion, an extension edge middle sole disposed in all-over face-to-face relation to said innersole, an upper having a marginal extension forming a folded two-ply sole attaching flange and a platform edge covering,

said flange consisting of a lower ply extending outwardly from the lower extremity of the body of the upper and lying upon the extension edge portion of said innersole and an upper ply extending inwardly from the outer extremity of said lower ply and said covering extending outwardly from the inner extremity of said upper ply and downwardly over the outer edge of said flange and over the edges of said innersole and

said middle sole and inwardly beneath the margin of said middle sole, fastenings extending through both plies of said flange close to the body of the upper and securing said flange to said innersole and to said middle sole, and an extension edge outsole having its margin secured to said inwardly extending portion of said covering.

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