

Aug. 7, 1945.

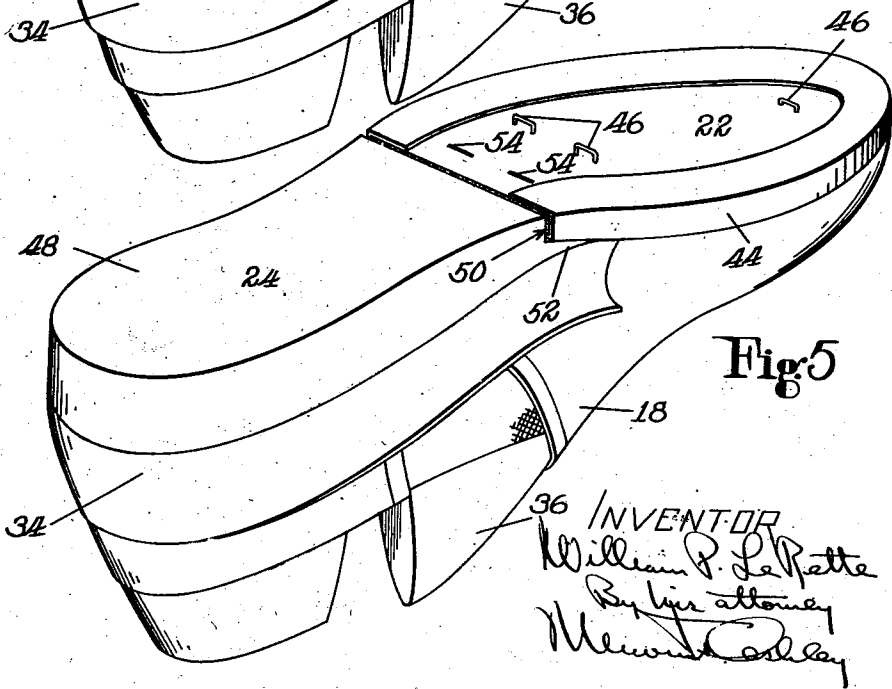
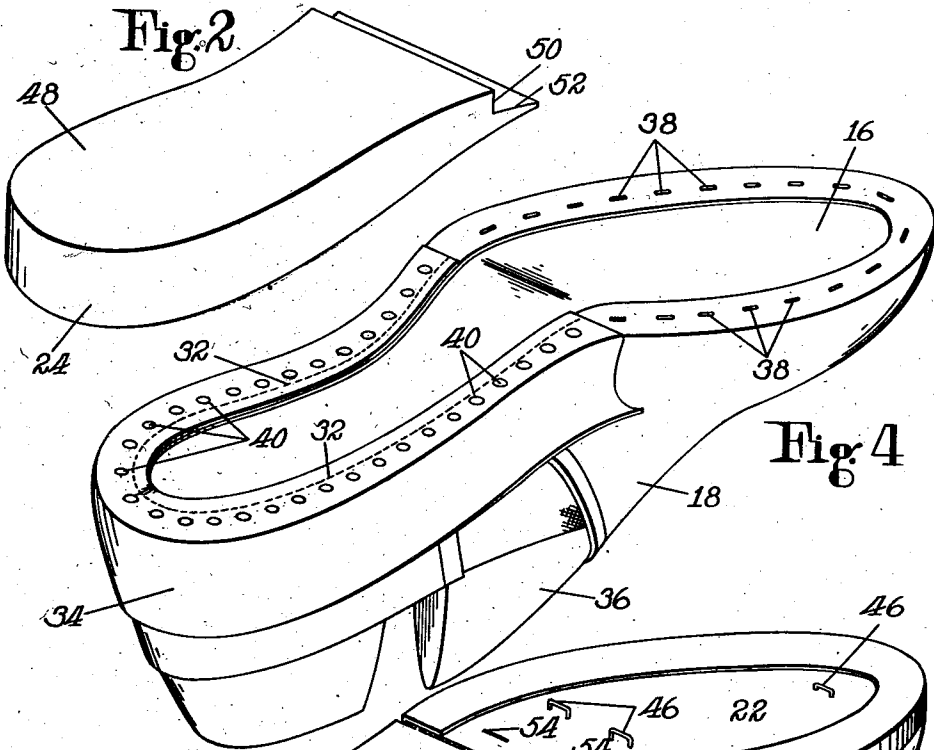
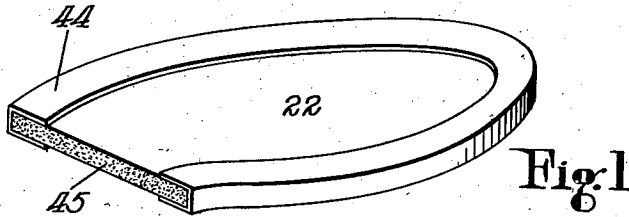
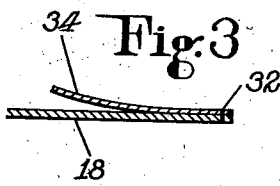
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2,381,503

METHOD OF MAKING PLATFORM SHOES

Filed Oct. 5, 1942

3 Sheets-Sheet 1



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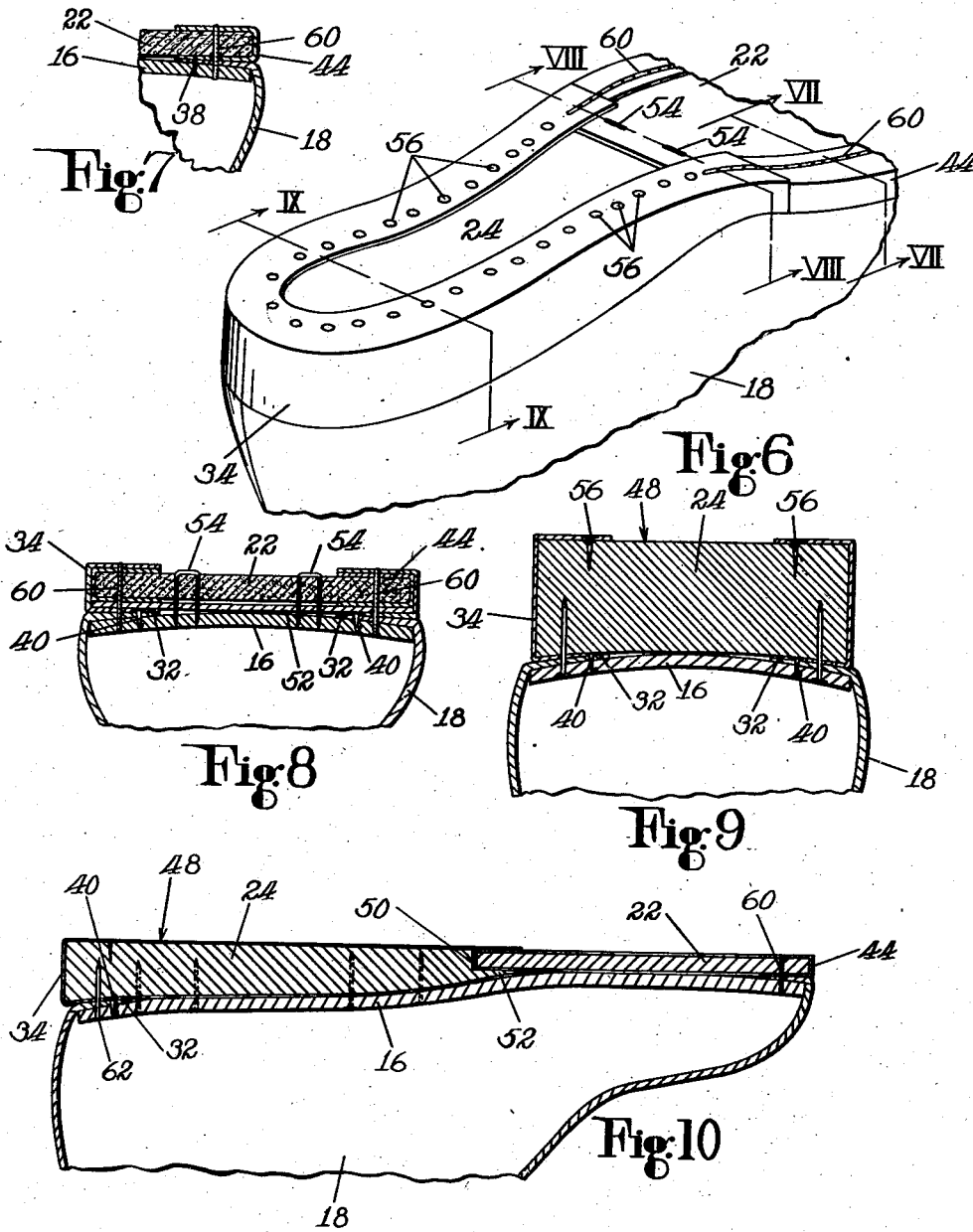
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METHOD OF MAKING PLATFORM SHOES

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3 Sheets-Sheet 2



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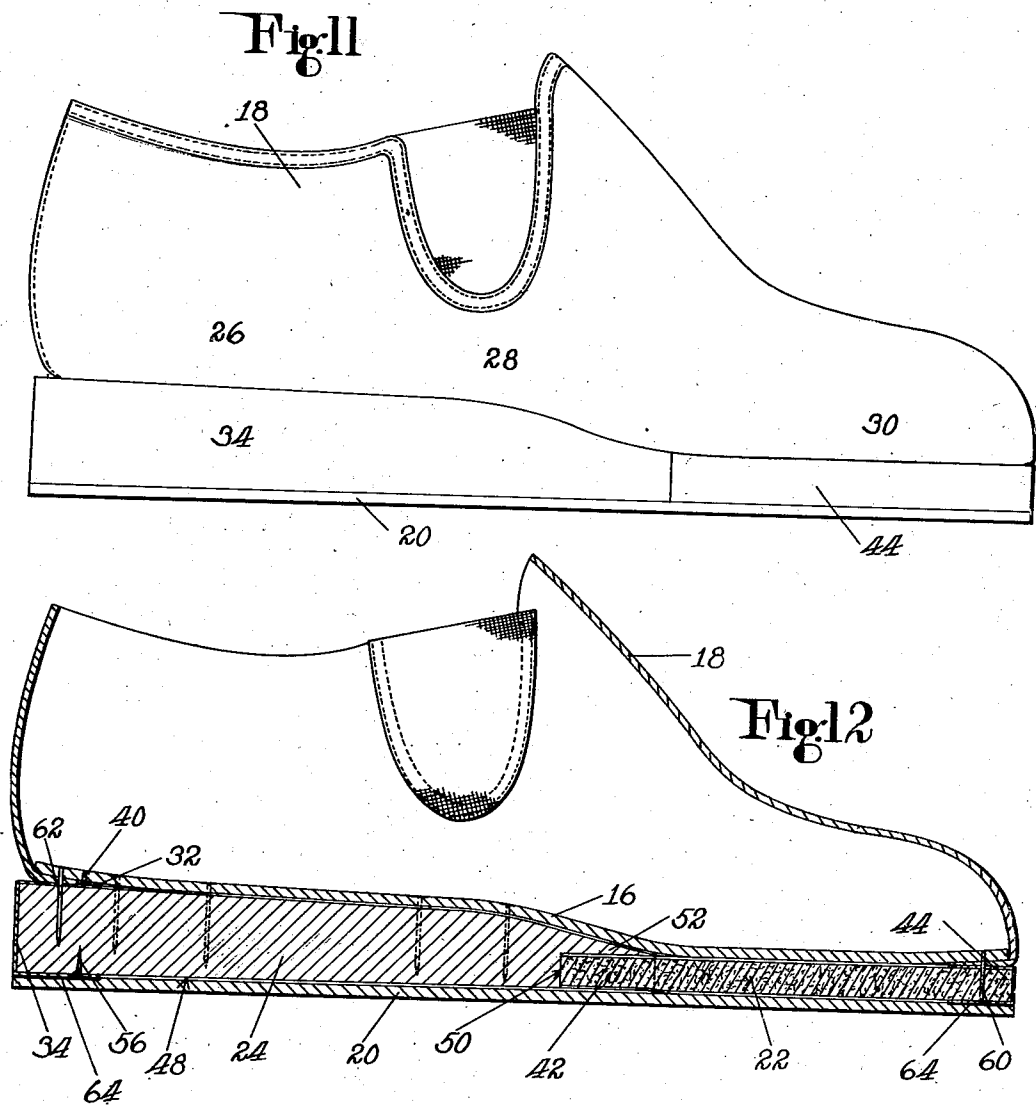
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2,381,503

METHOD OF MAKING PLATFORM SHOES

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3 Sheets-Sheet 3



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UNITED STATES PATENT OFFICE

2,381,503

METHOD OF MAKING PLATFORM SHOES

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Application October 5, 1942, Serial No. 460,732

4 Claims. (Cl. 12-142)

This invention relates to methods of making shoes of the type known as platform shoes, i. e., shoes having a middle sole or "platform" between the outer sole and the upper.

Objects of the invention are to improve the construction and reduce the cost of manufacture of platform shoes and to provide a method by which both ends of the platform or middle sole shall be accurately located lengthwise with respect to the shoe.

To the accomplishment of these objects I employ between the upper and the outsole of my improved platform shoe a two-part platform member comprising a forepart and a rear part and after securing an upper and an insole together in assembled relation upon a last I assemble the two platform parts upon the bottom of a shoe so that these parts then constitute a full length platform or middle sole. As herein illustrated the forepart platform member is made of flexible material and its edge is bound with a covering strip before the member is applied to the shoe. As shown, also, the rear platform part is of rigid construction, being preferably made of wood, and it is shaped like a so-called wedge heel, its rear portion taking the place of an ordinary heel and its forepart being of tapering or wedge formation so as to fill the space beneath the arched shank portion of the shoe. Advantageously, the forepart platform member is located lengthwise of the shoe by gaging from the toe end of the shoe, after which it is temporarily secured in place by means of staples or the like while the rear part is located lengthwise by gaging from the rear end of the shoe. The illustrated rear platform part is rabbeted at its lower side to receive the rear portion of the platform forepart and to form upon the rear part a forwardly extending lip which is overlapped upon the forepart member and is secured to the latter after the rear part has been properly located on the shoe. This construction makes it practicable for platform parts of a given size to be used not only with shoes of a corresponding size but also with larger shoes within the range of the next two or three sizes, the amount of overlap of the rear part lip upon the forepart member varying according to the size of the shoe. The edge of the rear part is herein shown as being covered by a covering strip which is preattached to the upper and is secured, together with the upper, to the insole in the last-
ing of the shoe. Prior to the assembly of the platform parts with the shoe, as herein illustrated, the covering strip for the rear platform part extends upwardly from its attached edge and closely

embraces the upper. Thereafter, the covering strip is inverted, layed over the edge of the rear platform part and turned inwardly over the margin of the lower face of the latter and over the edge and the lower face of the rear extremity of the previously covered forepart platform member. In the illustrated shoe the forepart platform member is secured by through-and-through stitching to the upper and the insole while the rear platform member is secured to the shoe by nails driven through the insole from the inside of the shoe, after which an outsole is attached by means of cement to the intumed margins of the covering strips on the lower sides of the platform members.

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

Fig. 1 is a perspective view of the flexible sole member which constitutes the forward portion of the two-part platform of my improved shoe;

Fig. 2 is a perspective view of the rigid heel and shank piece which constitutes the rear portion of the two-part platform;

Fig. 3 is a fragmentary sectional view of the upper of the shoe showing the covering strip which is preattached to the upper and is utilized to cover the edge of the heel and shank piece;

Fig. 4 is a perspective view of a lasted shoe ready for the application thereto of the platform members, the shoe being shown in inverted position;

Fig. 5 is a perspective view of the shoe as it appears after the members of the two-part platform have been assembled therewith;

Fig. 6 is a fragmentary perspective view of the shoe as it appears when ready for the reception of the outsole;

Figs. 7, 8 and 9 are fragmentary cross-sectional views taken substantially along the lines VII-VII, VIII-VIII and IX-IX, respectively, of Fig. 6;

Fig. 10 is a longitudinal sectional view of the shoe in the condition in which it appears in Fig. 6;

Fig. 11 is a view in side elevation of the completed shoe; and

Fig. 12 is a longitudinal sectional view of the completed shoe.

Referring to the drawings, my improved shoe comprises an insole 16 (Fig. 12), an upper 18 the lower margin of which is overlapped upon the insole, an outer or tread sole 20, and a two-part platform which is interposed between the outer sole and the overlapped margins of the upper and which consists of a flexible forepart platform

member 22 and a rigid heel and shank piece or rear part platform member 24.

The upper 18 which comprises heel and shank portions 26 and 28, respectively (Fig. 11), and a forepart 30 is cut to provide a lower or lasting margin of the usual width and to this margin in the heel and shank portions of the upper there is preattached, as by means of stitches 32 (Figs. 3 and 4), a covering strip 34 which is to be employed to cover the edge, and overlap the upper and lower sides, of the rear platform member or heel and shank piece 24. The covering strip 34 is disposed, as shown, with the side that is to be outermost in the finished shoe facing the upper and with one edge of the strip alined with the lower edge of the upper and the stitches 32 are sewn close to the alined edges of the parts.

In making the shoe the upper 18 with the covering strip 34 attached thereto is assembled with the insole 16 on a last 36, the shoe is pulled over and lasted in the usual way and the margin of the upper together with the marginal portion of the covering strip 34 which is stitched to the upper are secured in overlapped position upon the insole as by means of staples 38 in the forepart and tacks 40 in the heel and shank portions of the shoe, the points of the staples and tacks being clenched over the inner side of the insole by means of a metallic plate upon the last bottom.

The forepart platform member 22 consists of a piece of flexible material, such as felt, cork composition, rubber or the like, and it is shaped in edge contour to correspond to that of the forepart of the outsole and to extend rearwardly a short distance only into the shank portion of the shoe bottom, as indicated at 42 in Fig. 12. Before this platform member 22 is applied to the shoe an edge binding or covering strip 44 is applied so as to cover all portions of the edge of the member, except its rear edge face 45 (Fig. 1) and to overlap the adjacent margins of its upper and lower sides, as best shown in Fig. 1, the covering strip being advantageously secured in place by means of cement. This forepart platform member 22, with the edge binding or covering 44 thereon, is then laid upon the forepart of the shoe bottom, as shown in Fig. 5, its position lengthwise of the shoe being accurately gaged from the toe end of the shoe, and it is temporarily secured in place by means of staples 46 which are driven into the insole and are left upstanding, as shown, so that later they may be easily removed.

The rear platform member or heel and shank piece 24 is preferably made of wood and is shaped to correspond in marginal contour to that of the heel and shank portion of the outsole of the shoe. The member 24 has a flat bottom face 48 and it is made of substantial thickness to take the place of a heel. The front portion of the member 24 is tapered at its upper side, thus providing a wedge formation for filling the arched portion of the shoe bottom. The forward extremity of the member 24 is notched or rabbeted at its lower side to receive the rear portion of the forepart platform member 22, the rabbeting operation forming a vertical shoulder 50 of a height equal to the thickness of the forepart member 22 and a lip 52 which extends forwardly from the shoulder 50 to overlie and be secured to the forepart member. After the forepart platform member 22 has been temporarily secured to the shoe as described, the rear member or heel-and-shank piece 24 is laid on the shoe bottom with

its lip 52 extending between the rear of the forepart member 22 and the insole, the position of the heel and shank piece 24 lengthwise of the shoe being accurately gaged from the rear or heel end of the shoe. The rear part member having been located lengthwise of the shoe and the opposite edges of the lip 52 having been alined with the corresponding edges of the rear extremity of the forepart member 24, staples 54 are driven through the latter and through the lip 52 and into the insole to secure the forward portion of the heel and shank piece to the shoe. The covering strip 34, which at this time extends from its area of attachment to the shoe bottom upwardly in embracing engagement with the upper, as shown in Figs. 4 and 5, is inverted, i. e., it is turned away from the upper and toward the edge of the heel and shank piece 24 to cover the latter, and the free marginal portion of the covering strip is folded inwardly upon the flat bottom face 48 of the piece 24 and secured to the latter as by means of tacks 56 (Fig. 6). Inasmuch as the covering strip 34 extends forwardly a short distance beyond the rear extremity of the forepart platform member 22, the forward portion of the covering strip overlaps the rear portion of the edge binding or covering 44 on the forepart member, as clearly shown in Figs. 6 and 8, so that a neat joint is formed between the two covering strips 34 and 44.

At this stage of operations, the last 36 is withdrawn from the shoe. The forepart platform member 22 is then permanently and securely attached to the insole by means of through-and-through stitches 60 which are sewn so as to extend through the inturned margins of the edge binding 44 and through the member 22 and the insole 16 and the staples 46 which served as means for temporarily securing the member 22 to the shoe are removed. As shown in Figs. 6 and 8, the stitches 60 at the rear extremity of the forepart member 22 extend also through the lip 52 of the heel and shank piece 24 and through the inturned margins of the heel-and-shank-piece covering 34, thereby securing together the overlapping portions of the covering strips 34 and 44 and supplementing the action of the staples 54 in joining together the members 22 and 24 of the two-part platform soles. While the last is out of the shoe the rear platform member 24 is firmly secured to the shoe by means of nails 62 which are driven through the insole from the inside of the shoe, the shoe is then relasted and the outsole 20 is attached by cement to the platform, the cement bond, as indicated at 64, being between the outsole and the inturned lower margins of the platform edge coverings 34 and 44.

In the manufacture of platform shoes it has been customary heretofore to employ a one-piece platform sole of full shoe length and to determine its location lengthwise of the shoe by gaging the position of the toe end of the sole with reference to the toe end of the shoe. The practice of such a method of locating platform soles requires that the soles be cut in a complete run of sizes corresponding to the size of a complete run of shoes to be made and it is evident that the heel ends of the platform soles will be properly located lengthwise of the shoes only if the size of the sole is the same as that of the shoe with which it is to be used.

In preparing the parts of my improved two-part platform, however, it is unnecessary to furnish platform parts in a complete run of sizes since, by assembling the two parts of a platform

so that the lip 52 of the rear part member overlaps the forepart member more or less according to the size or length of the shoe, platform parts of one size may be used upon shoes within a range of several sizes. Thus, for a shoe of the smallest size with which platform parts of a given size may be used the rear edge of the platform will be disposed close to, or substantially in abutting relation to, the shoulder 50 of the rear part, and the lip 52 of the rear part will overlap the forepart throughout substantially the full width of the lip as shown in Figs. 5, 7 and 10. Platform parts of the particular size above mentioned may be used with larger shoes within the range of the next two or three sizes, however, in which cases there will be spaces of different width between the rear part shoulder 50 and the rear edge of the forepart, these spaces and the amount of overlap of the rear part lip upon the forepart platform member varying according to the particular size of the shoe. This practice of using one size of platform parts for several sizes of shoes results in a substantial saving of time and expense in making the platform since only one-third or one-quarter as many sizes need be provided as would be necessary if one-piece platforms were employed. There are various other advantages incident to the construction and method of making my improved platform shoe. For example, by providing separate coverings on the forepart and rear part of the platform, the platform covering operations are simplified, it being unnecessary to pattern the covering strips so that they will have relatively narrow portions for covering the relatively thin forepart and wider portions for covering the relatively thick rear part of the platform and there being no difficulties such as those involved in the application of a covering strip of non-uniform width to a platform of non-uniform thickness. Also, by employing for the heel and shank portion of the platform a covering strip which has been pre-attached to the upper, the covering operation will result in drawing the rear portion of the platform close to the bottom of the shoe and there will be no gap between the covered upper margin of the platform and the upper of the shoe.

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

1. That improvement in methods of making platform shoes which consists in providing an upper having heel and waist portions and a forepart, attaching a covering strip to the lower margins of the heel and waist portions only of the upper, assembling the upper and the attached covering strip with an insole on a last, lasting the shoe and securing the margin of the upper together with the attached portions of the covering strip to the insole, laying upon the bottom of the shoe a forepart platform member having an edge binding thereon and gaging the location of said member lengthwise of the shoe from the toe end of the shoe, laying an unbound rear part platform member upon the bottom of the shoe and gaging the location of said member lengthwise of the shoe from the heel end of the shoe, laying said covering strip over the edge and securing it to the lower side of said rear part there- by securing said member to the shoe, securing said forepart platform member to the upper and to said rear part platform member, and securing an outsole to said platform members.

2. That improvement in method of making

platform shoes which consists in lasting a shoe consisting of an insole and an upper and securing said parts together, laying a bound edge platform forepart and an unbound platform rear part upon the bottom of the shoe with the front end of said rear part and the rear end of said forepart in overlapping relation, determining the longitudinal positions of said parts on the shoe bottom by gaging that of the forepart from the toe end of the shoe and that of the rear part from the heel end of the shoe, thereafter applying a covering strip to said platform parts to cover the edge of said rear part and overlap the bound edge of said forepart, inserting fastenings through said parts to secure them to the shoe, and securing an outsole to said platform parts.

3. That improvement in methods of making platform shoes which consists in providing an upper having a covering strip attached to the lower margins of its heel and shank portions only, assembling the upper with the covering strip attached thereto and an insole on the last, lasting the shoe and securing the marginal portion of the upper together with the attached portions of the covering strip to the insole, laying a platform forepart having an edge binding thereon upon the bottom of the shoe, gaging the position of said platform forepart lengthwise of the shoe by reference to the toe end of the shoe, driving a fastening through said forepart platform and the insole, laying an independent platform rear part upon the bottom of the shoe with its front end overlapping the rear end of said forepart platform, locating the rear portion of said platform lengthwise of the shoe with reference to the heel end of the shoe, securing said overlapping portions together, wrapping said covering strip over the edge and over the bottom of said platform rear part and over the edges of the overlapping portions of said platform parts and over the bottom of the rear portion of the platform forepart, removing the last, stitching through the platform forepart of the shoe, securing said platform rear part to the insole, and attaching an outsole to the shoe.

4. That improvement in methods of making platform shoes which consists in providing an upper having heel and shank portions and a forepart, attaching a covering strip to the lower margin of the heel and shank portions of the upper, assembling the upper and the attached covering strip with an insole on a last, lasting the shoe and securing the margin of the upper together with the attached portion of the covering strip to the insole, securing to the shoe a forepart platform sole member located relatively to the toe end and extending a short distance only into the shank portion of the shoe bottom, positioning a heel-and-shank platform member upon the heel-and-shank portion of the shoe bottom with its rear end located with respect to the heel end and with the forward portion of said member overlapping said forepart member, securing the overlapping portions of said members together, laying said covering strip over the edge of said heel-and-shank platform member and over the edge of the shank extension of said forepart platform member and securing said strip to the lower sides of said members, securing said heel-and-shank platform member to the insole by fastening inserted from the inside of the shoe, and attaching an outsole to said members.

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