

March 27, 1951

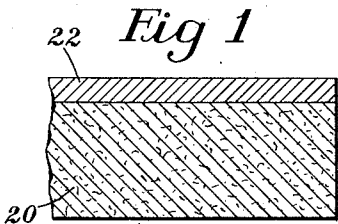
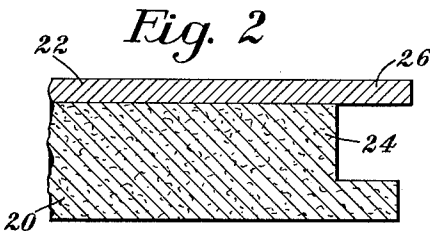
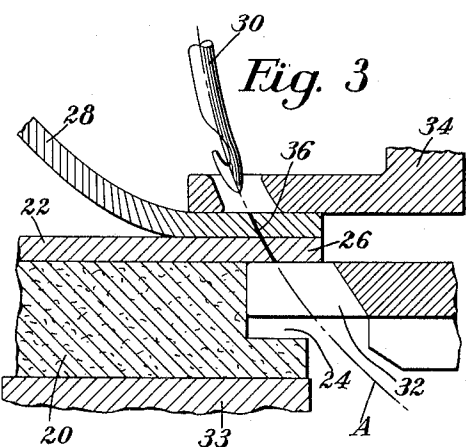
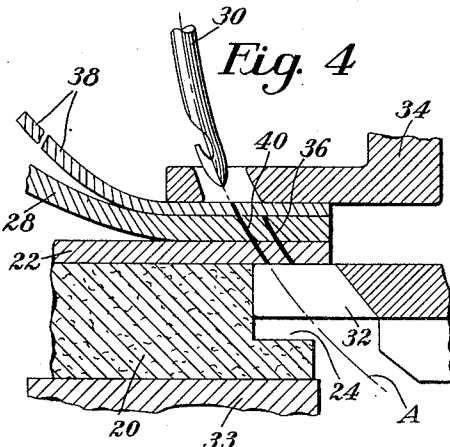
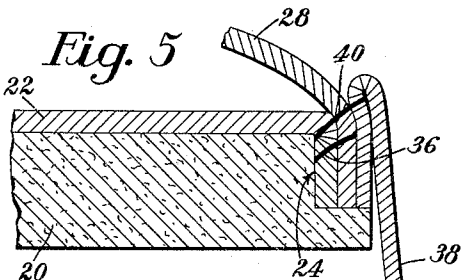
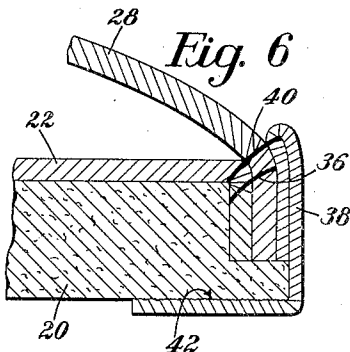
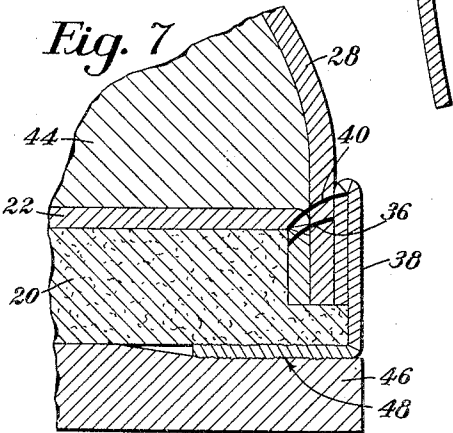
J. D. CHANDLER

2,546,152

PLATFORM SHOE AND METHOD OF MAKING THE SAME

Filed April 28, 1948

2 Sheets-Sheet 1



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2,546,152

PLATFORM SHOE AND METHOD OF MAKING THE SAME

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2 Sheets-Sheet 2

Fig. 8

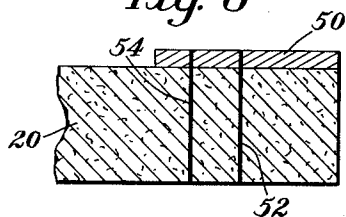


Fig. 9

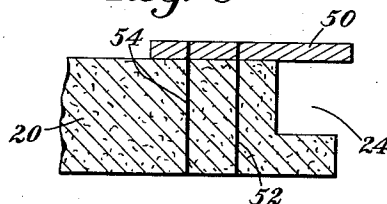


Fig. 10

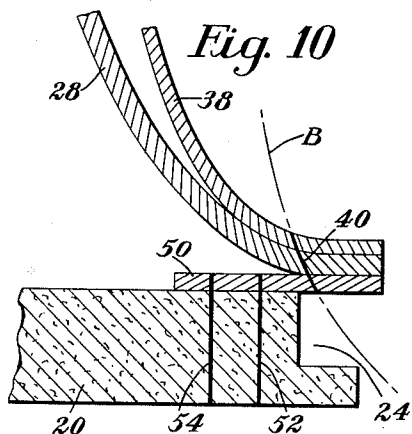


Fig. 11

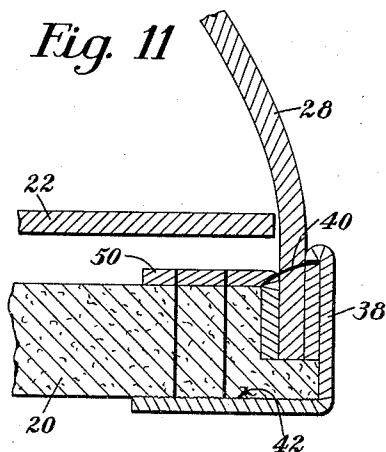
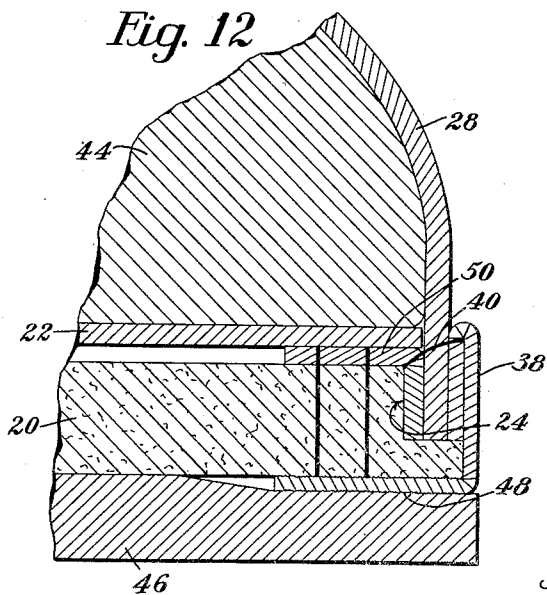


Fig. 12



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UNITED STATES PATENT OFFICE

2,546,152

PLATFORM SHOE AND METHOD OF
MAKING THE SAME

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Application April 28, 1948, Serial No. 23,688

8 Claims. (Cl. 12—142)

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This invention relates to shoes and the manu-
facture thereof and is illustrated herein with
particular reference to so-called "slip-lasted"
shoes having platform soles and to methods of
making such shoes.

In the manufacture of slip-lasted shoes of the
type referred to it is the usual practice at the
present time to stitch the margins of a flexible
insole or sock lining, a prefitted upper and a
platform cover or wrapper strip together while
the parts are unsupported by a last by a seam
located adjacent to the edges of the shoe parts.
A last is then inserted into the upper to slip last
the shoe and shape the upper to the outer surface
of the last. By this procedure it is sometimes
difficult to obtain an accurately constructed and
well formed shoe because the seam referred to,
having been inserted while the parts were still off
a last, may not always lie in a uniform position
relatively to the feather line of the last around
the entire shoe bottom after the last has been
inserted. In other words, the yield or stretch
of the parts due to slip lasting, particularly the
flexible insole or sock lining, is not always uni-
form at all portions when the last is inserted and,
accordingly, this seam, which is the main seam
of the finished shoe, may vary heightwise rela-
tively to the edge faces of the sole members and
the adjoining upper at different points around
the periphery of the shoe bottom.

Another difficulty which sometimes arises in
making slip-lasted shoes by conventional meth-
ods is that the stitches securing the shoe parts
together must usually be located relatively close
to the edges of these parts in order to prevent the
formation of an excess amount of marginal ma-
terial outwardly of the stitches and thereby avoid
creating a lump or bulge around the marginal
portion of the inner or foot-engaging surface of
the finished shoe. By locating the stitches so
close to the edges of the shoe parts, however,
there is danger, particularly when some or all
of the parts are composed of thin textile ma-
terials such as canvas, cloth or other fabrics, of
the shoe parts pulling or tearing away from the
stitches at some portions of the shoe bottom dur-
ing the constant strains to which the shoe is sub-
jected during wear.

An object of the present invention is to provide
an improved method of making slip-lasted shoes
of the platform type referred to in which the dif-
ficulties enumerated above are eliminated or sub-
stantially reduced.

To this end, the invention provides, in accord-
ance with one aspect, an improved method of

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making platform shoes in the practice of which
the stitches securing the shoe parts together are
located in an accurately predetermined relation
to the shoe bottom or sole member, illustrated
herein as a platform sole, said stitches being also
located a sufficient distance from the edges of
the shoe parts to eliminate the danger of any of
the parts pulling away from the stitches during
the wearing of the shoe. As herein illustrated, a
sock lining is first secured in proper position on
the inner surface of the platform sole, thereby
definitely establishing the relative positions of
these parts in the finished shoe. The platform
sole is then rabbeted around the inner portion of
its margin below the sock lining, thereby caus-
ing the margin of the sock lining to project be-
yond the edge of the inner surface of the plat-
form sole and overlies the rabbet.

The upper and a platform cover or wrapper
strip are next stitched to the projecting portion
of the sock lining overlying the rabbet by stitches
passing through the wrapper strip, upper and
sock lining only, the stitches being located sub-
stantially at the inner edge or corner of the
platform sole without penetrating the platform
sole, itself. In this way, the stitches forming the
main seam in the shoe are accurately located in
a fixed predetermined relation to the platform
sole and they are also inserted far enough away
from the edges of the stitched parts to eliminate
any danger of the parts tearing away from the
stitches during the wearing of the shoe, even
though some or all of the parts may be composed
of relatively thin weak material such as cotton
cloth or other fabric. Since the platform sole
has a rabbet formed therein, the stitched mar-
gins, in accordance with the present method, are
caused, when the wrapper strip is turned, to en-
ter the rabbet and substantially fill the same,
thereby preventing the formation of a bulge or
ridge around the margin of the inner or foot-en-
gaging surface of the finished shoe. The accu-
racy of the location of the stitches, relatively to
the edge face of the sole portion of the shoe, en-
hances the appearance of the shoe and increases
its value and popular appeal as compared with
other shoes of this general type. Finally, since
the stitches which secure the shoe parts together
do not penetrate or pass through any portion of
the platform sole, they are cheaper to make and
easier to insert than stitches which do pass
through the platform sole. Moreover, they re-
quire less skill on the part of the operator and
thereby further reduce the expense of making the
shoe.

In accordance with a modification of the invention, the present method also provides for securing a strip or tape around the marginal portion only of the platform sole, instead of covering its entire inner surface with a flexible insole or sock lining as described above, the method then being carried out by rabbeting the margin of the platform sole below the strip or tape, as previously explained, and sewing the upper and a wrapper strip to the projecting portion of the tape overlying the rabbet by stitches located substantially at the inner edge or corner of the platform sole and passing through the wrapper strip, upper and tape without penetrating the platform sole, thereby producing a shoe having the same features and advantages as the first shoe but being less expensive to make owing to the substitution of the relatively narrow strip of tape for the full size sock lining which is usually composed of fairly thick canvas but is often composed of even more expensive material such as upper leather.

With the above and other objects and aspects in view, the invention will now be described in detail in connection with the accompanying drawings and will thereafter be pointed out in the claims.

In the drawings:

Fig. 1 is an enlarged sectional view of a portion of a platform sole having a sock lining secured to its inner surface with the edges of the members in substantial alinement;

Fig. 2 is a sectional view, similar to Fig. 1, after the margin of the platform sole has been rabbeted below the sock lining;

Fig. 3 is a sectional view showing an upper being stitched off a last to the margin of the sock lining;

Fig. 4 is a similar view showing a wrapper strip being stitched to the upper and sock lining;

Fig. 5 illustrates the shoe after the wrapper strip has been turned downwardly and the united margins of the sock lining, upper and wrapper strip have been bent into the rabbet;

Fig. 6 shows the shoe with the wrapper strip turned inwardly and secured to the bottom surface of the platform sole;

Fig. 7 is a sectional view of the shoe after a last has been inserted and an outsole attached;

Fig. 8 is a sectional view, similar to Fig. 1, illustrating a modification of the invention in which a strip or tape, instead of a sock lining, is secured to the marginal portion only of the inner surface of the platform sole;

Fig. 9 shows the platform sole of Fig. 8 after it has been rabbeted below the tape;

Fig. 10 shows an upper and a wrapper strip being secured to the outer margin of the tape;

Fig. 11 illustrates the shoe with the wrapper strip turned and secured to the bottom surface of the platform sole; and

Fig. 12 is a sectional view of the shoe after a last has been inserted and an outsole attached.

In practicing the method of making platform shoes in accordance with the present invention a conventional platform sole 20 is provided preferably composed of thick yielding material, such as felt, cork, or similar material, the platform sole having a sock lining 22 of thin flexible material, such as upper leather, canvas or the like, secured to its entire inner surface, preferably by cement, with the edges of the sock lining and platform sole located in substantial alinement or flush with each other, as shown in Fig. 1. The platform sole is preferably died out or cut to shape

from a single laminated layer of material although the parts could of course, if desired, be died out separately and then secured together in a second operation.

The platform sole 20 is next rabbeted around its marginal or edge portion to remove a substantially rectangular section from said edge portion and leave a rabbet 24 extending around the inner portion of the sole margin below the sock lining 22, thereby causing the marginal portion of the sock lining, indicated at 26, to extend beyond the edge of the inner surface of the platform sole and overlie the rabbet 24. The platform sole may be rabbeted with the aid of any conventional rabbeting or sole channeling machine which is adapted to remove a rectangular section from the inner margin of the sole, as illustrated in Fig. 2, the removed section preferably being of substantial width and approximately two-thirds as high as the thickness of the sole.

After the platform sole has been rabbeted, an upper 28 is assembled on the sock lining 22 with the lower edge of the upper in substantial alinement with the edge of the sock lining, as illustrated in Fig. 3. The upper is stitched to the portion of the sock lining which overlies the rabbet 24 while the parts are still unsupported by a last and are maintained in this registered position. In stitching the parts together off a last in this manner, it is desirable to insert the stitches fairly close to the inner or rabbeted edge of the platform sole in order that they will not be located too near the edges of the sock lining and upper and thus weaken the shoe and also, as will presently appear, in order to permit other stitches to be inserted, located even closer to the edge of the inner surface of the platform sole. While the stitching operation may be performed by any conventional sewing machine adapted to stitch flat parts together in face-to-face relation, a machine particularly adapted for performing this operation in the practice of the present method is disclosed in an application for United States Letters Patent Serial No. 23,841 filed concurrently with the present application in the name of A. S. Clark which has matured into a patent having Patent No. 2,542,993 granted Feb. 27, 1951. As illustrated in Fig. 3, the machine of the co-pending application is provided with a curved needle 30 and the usual cooperating stitch-forming instrumentalities, including a curved awl (not shown), a looper, a thread hook and so forth. It is also provided with a rabbet gage 32, a work support 33, and a presser foot 34 which acts to clamp the work against the support and release it during each sewing cycle of the machine. As illustrated in Fig. 3 by a broken line A, the curved path of the needle 30 passes through a cutout portion of the rabbet gage 32, the upper surface of which is set to engage and support the under-surface of the sock lining 22, as shown in Fig. 3, thereby leaving the small space below the gage. The arrangement is such that the gage 32 enters into engagement with the inner or setback surface of the rabbet at either side of the curved path of the needle, thereby insuring that the edge of the platform sole, including the portion below the rabbet, will be held out of the path of the needle. The gage thus prevents stitches from being inserted in the yielding or compressible material of the platform sole. The upper 28 is secured to the extending margin 26 of the sock lining 22 by stitches 36, as shown in Fig. 3.

While the upper may be stitched separately to the sock lining in the manner just described by a row of stitches 36, it is sometimes more convenient in the manufacture of slip-lasted platform shoes to stitch the upper and a platform wrapper strip 38 (Fig. 4) to the sock lining in a single operation, thus omitting the stitches 36. Whether the upper is first attached to the sock lining by stitches 36 or not, the wrapper strip 38 may be assembled with the upper and platform sole with the lower edge of the wrapper strip in substantial alignment with the edges of the upper and sock lining, as illustrated in Fig. 4, and the parts stitched together off a last by stitches 40 located substantially at the edge of the inner surface of the platform sole and passing through the margins of the wrapper strip, upper and sock lining, inwardly of the stitches 36 if used, without penetrating the platform sole itself, that is, without passing through the material of the platform sole adjacent to or underlying the rabbet 24. In other words, in accordance with the present method, the wrapper, upper and sock lining are stitched together off a last by stitches inserted substantially at the corner located at the inner surface of the sole formed by the rabbet 24, the stitches being inserted, however, in such a manner that they do not penetrate any part of the platform sole, itself, including the laterally extending portion underlying the rabbet 24. Since the stitches 40 securing the wrapper strip, upper and sock lining together are inserted in a predetermined position relatively to the sock lining by reason of the rabbet gage 32, and also since the position of the sock lining relatively to the platform sole has already been definitely established because the sock lining is permanently secured to the inner surface of the platform sole, it will be clear, as indicated above, that the seam which extends around the periphery of the platform sole in the finished shoe and over which the wrapper strip is subsequently turned in completing the shoe, namely, the seam 40, will be accurately located in a predetermined uniform position relatively to the edge face of the platform sole around the entire shoe bottom in the finished shoe. In other words, there will be no variation in the heightwise position of this seam relatively to the edge face of the platform sole, as sometimes occurs in other types of platform shoes, due to the fact that the seam securing the shoe parts together was not definitely established relatively to the platform sole before the last was inserted. Accordingly, in the present shoe the sole portion of the shoe opposite the edge face of the platform sole will be uniform in width or height completely around the shoe bottom.

After the upper and wrapper strips have been secured to the sock lining in the manner described, the wrapper strip, in accordance with the present method, is turned downwardly around the seam 40, preferably while the shoe is still off a last, as illustrated in Fig. 5, thereby covering the stitches 40 and bending the margins of the sock lining, upper and wrapper strip which extend beyond the stitches into the space provided by the rabbet 24, thus preparing the shoe for the final operations of securing the wrapper strip in lasted position, inserting a last and attaching an outsole. Fig. 6 illustrates the shoe after the downwardly extending portion of the wrapper strip 38 has been wiped inwardly beneath the bottom surface of the platform sole and secured in such position, preferably by ce-

ment 42, although other fastening means such as staples or tacks could be used if desired. After the wrapper has been lasted, a last 44 is inserted into the shoe, as illustrated in Fig. 7, thereby slip lasting the shoe in accordance with the usual practice of making platform shoes. An outsole 46 is attached to the intumed portion of the wrapper strip 38 to complete the construction of the shoe, the outsole preferably being attached to the shoe bottom by cement 48.

It might be desirable in some cases, particularly in the cheaper grades of shoes in which economy is an important factor, to make a slip lasted platform shoe in accordance with the present method and thus obtain the advantages in strength and accuracy above referred to, but to economize in materials and thereby render the shoe cheaper to manufacture. To meet such a contingency, the present invention provides a modification of the method illustrated in Figs. 1 to 7, inclusive, the modification being shown in Figs. 8 to 12, inclusive. In accordance with this aspect of the method, a conventional platform sole 20 is provided of thick flexible material cut to proper shape, as described above. Instead of covering the entire inner surface of the platform sole with a layer of thin flexible material such as a sock lining of upper leather, canvas or other fabric material, which in some cases involves considerable expense, a relatively narrow strip of tape 50 is attached to the marginal portion only of the inner surface of the platform sole, as illustrated in Fig. 8, the tape 50 being composed of thin leather or canvas or, if desired, of cheaper fabric material such as cotton. The tape 50 is preferably secured to the marginal portion of the inner surface of the platform sole by two rows of through-and-through stitches 52, 54, although it could, if desired, be secured by a single row of stitches reinforced by cement or by a single row of stitches alone. As illustrated in Fig. 8, the outer margin of the tape 50 is coextensive with the marginal portion of the platform sole so that the edges of the tape and sole are in substantial alignment.

The platform sole is rabbeted around the inner portion of its margin below the tape 50 to produce a rabbet 24 in the manner described above, the outer portion of the tape then projecting beyond the inner corner of the platform sole and overlying the rabbet 24. The upper 28 and wrapper strip 38 are then assembled and positioned against the outer margin of the strip or tape 50 with the lower edges of the parts in substantial alignment, as illustrated in Fig. 10, and the upper and wrapper strip are secured to the tape by stitches 40, as described above, preferably with the aid of the sewing machine referred to as illustrated in Figs. 3 and 4. As shown in Fig. 10, the stitches 40 are located substantially at the inner edge or corner of the platform sole 20 and pass through the wrapper strip, upper and tape 50 without penetrating the platform sole, the stitches being inserted by the curved needle which travels in an arc indicated in Fig. 10 by the broken line B and which permits the needle to clear the laterally extending lower portion of the platform sole below the rabbet 24 without penetrating such portion, thereby causing the stitches to be inserted without passing through any portion of the platform sole. The wrapper strip 38 is then turned while the shoe is still unsupported by a last and is wiped inwardly under the bottom surface of the platform sole and secured thereto by cement 42.

Since the inner surface of the platform sole 20, in accordance with the present aspect of the method, is not covered with a sock lining over its entire area, as in the first-mentioned procedure, but is covered only at its marginal portion by the narrow strip or tape 50, it might be desirable at this point in the present modification to cover the entire inner surface of the platform sole with a thin layer of flexible material similar to a sock lining but composed of cheaper material, such as fabric or thin canvas, in order to conceal the inner portion of the strip 50, which would otherwise show inside the shoe, and thus produce a finished appearance in the completed shoe. The layer 22 illustrated in Fig. 11 can, therefore, be provided, composed of relatively cheap textile material and being inserted into the shoe while the shoe is still off a last, the layer 22 being secured to the inner surface of the platform sole by cement, thereby covering the portion of the tape 50 which extends inwardly from the upper 28 and would show in the finished shoe. The last 44 is now inserted into the shoe to slip last the shoe and shape the upper to the contour of the last in accordance with the usual practice of making slip lasted shoes. The outsole 46 is attached to the intumed portion of the wrapper strip in the usual manner, preferably by cement 48, thereby completing the construction of the shoe. As illustrated in Fig. 12, the outsole 46 is made of such size that its edge face is substantially flush with the outer or exposed surface of the wrapper strip 38.

It will be seen from Figs. 11 and 12, that the combined marginal portions of the tape, upper and wrapper strip are of such width that they substantially fill the rabbet 24 and their lower edges, which are in substantial alinement with each other, engage the upwardly facing surface of the rabbet. Since the stitches 40 are positioned uniformly with respect to the edge of the platform sole 20 around the entire shoe bottom, the exposed portion of the wrapper strip 38 extending between the outsole and the upper will be of uniform width or height completely around the shoe bottom, thereby enhancing the appearance of the shoe. As indicated above, since the stitches 40 are spaced a substantial distance from the edges of the stitching tape 50, upper and wrapper strip, and also since the marginal portions of these parts outwardly of the stitches do not need to be trimmed as in some platform shoes because they fit into the rabbet 24, it follows that there is no danger in the present shoe of the stitches, which form the main seam and secure the shoe parts together, pulling out of the materials because inserted too close to the edges thereof or because the shoe has been trimmed too close to the stitches after the latter have been inserted. Consequently, the present platform shoe will not only present a pleasing appearance because of the accuracy of its construction, but will also be stronger than many shoes of this type due to the location and arrangement of the stitches.

Having thus described my invention, 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 securing a layer of thin flexible material to the inner surface of a platform sole with the marginal portions of said layer and sole substantially coextensive, rabbeting the marginal portion of the platform sole below said flexible layer thereby causing said

layer to overlie the rabbet, and securing an upper and a wrapper strip to the portion of said flexible layer overlying the rabbet by stitches located substantially at the edge of the platform sole and passing through said wrapper strip, upper and flexible layer without penetrating the platform sole.

2. That improvement in methods of making platform shoes which consists in securing a layer of thin flexible material to the inner surface of a platform sole with the margin of said layer overlying the margin of the platform sole, rabbeting the margin of the inner portion of the platform sole below the layer of flexible material, thereby causing said layer to project beyond the platform sole and overlie the rabbet, and securing an upper and a platform wrapper strip off a last to the portion of the flexible layer overlying the rabbet without securing said upper and wrapper strip to the platform sole.

3. That improvement in methods of making platform shoes which consists in securing a sock lining to the inner surface of a platform sole with the edges of said members in substantial alinement, rabbeting the margin of the platform sole below the sock lining thereby causing the sock lining to overlie the rabbet, and securing an upper and a wrapper strip to the portion of the sock lining which overlies the rabbet by fastening means located substantially at the adjacent edge of the rabbet and passing through the wrapper strip, upper and sock lining without penetrating the platform sole.

4. That improvement in methods of making platform shoes which consists in securing a sock lining to the inner surface of a platform sole with the margin of the sock lining projecting beyond the adjacent edge of the platform sole, assembling an upper and a wrapper strip on the platform sole with the edges of the upper, wrapper strip and sock lining in substantial alinement, and sewing the upper and wrapper strip off a last to the projecting portion of the sock lining along a line located substantially at the adjacent edge of the platform sole, the stitches passing through the wrapper strip, upper and sock lining but not penetrating the platform sole, thereby locating the upper and wrapper strip permanently in predetermined relation to the platform sole without securing them to said sole.

5. That improvement in methods of making platform shoes which consists in cementing a sock lining of thin flexible material to the inner surface of a platform sole with the marginal portions of said members substantially coextensive, rabbeting the margin of the inner portion of the platform sole below the sock lining, thereby causing the sock lining to project beyond the edge of the sole and overlie the rabbet, and stitching an upper and a wrapper strip off a last to the projecting portion of the sock lining with the edges of said upper and wrapper strip in substantial alinement with the edge of the sock lining, the stitches being located substantially at the inner edge of the rabbet and passing through the wrapper strip, upper and sock lining without penetrating the portion of the platform sole which underlies the rabbet.

6. That improvement in methods of making platform shoes which consists in securing a sock lining to the inner surface of a platform sole with the edges of said members in substantial alinement, rabbeting the margin of the platform sole below the sock lining, thereby causing the latter to project beyond the edge of the platform

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sole and overlies the rabbet, stitching an upper off a last to the portion of the sock lining which overlies the rabbet with the edges of the sock lining and upper in substantial alinement, the stitches being located adjacent to the edge of the platform sole and passing through the upper and sock lining without penetrating the platform sole, and stitching a wrapper strip to the upper and sock lining with the edge of the wrapper strip in substantial alinement with the edges of the upper and sock lining, the stitches being located inwardly of the first-named stitches substantially at the inner edge of the rabbet and passing through the wrapper strip, upper and sock lining without penetrating the platform sole, thereby locating said stitches a substantial distance inwardly of the edge face of the platform sole without passing through said sole.

7. That improvement in methods of making platform shoes which consists in permanently securing a strip of thin flexible material to the marginal portion only of a platform sole with the edges of the strip and sole in substantial alinement, rabbeting the margin of the platform sole below the flexible strip thereby causing said strip to project beyond the edge of the sole and overlies the rabbet, and stitching an upper and a wrapper strip to the portion of said flexible strip which overlies the rabbet with the edges of said upper and wrapper strip in substantial alinement with the edge of the flexible strip, the stitches being located substantially at the inner edge of the rabbet in the platform sole and passing through the wrapper strip, upper and flexible strip without penetrating the platform sole.

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8. The method of making platform shoes which comprises securing a sock lining to the inner surface of a platform sole with the edges of said parts in substantial alinement, rabbeting the margin of the platform sole below the sock lining thereby causing the sock lining to extend beyond the edge of the platform sole and overlies the rabbet, stitching an upper and a wrapper strip off a last to the portion of the sock lining overlying the rabbet with the edges of the upper and wrapper strip in substantial alinement with the edge of the sock lining, the stitches passing through the wrapper strip, upper and sock lining substantially at the inner edge of the rabbet in the platform sole without passing through the material of said sole adjacent to said rabbet, turning the wrapper strip downwardly over the edge of the platform sole thereby bending the stitched margins of the sock lining, upper and wrapper strip into said rabbet, wiping the wrapper strip inwardly beneath the bottom surface of the platform sole and securing it to said surface, inserting a last into the shoe, and attaching an outsole to the inwardly extending portion of the wrapper strip.

JAMES D. CHANDLER.

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