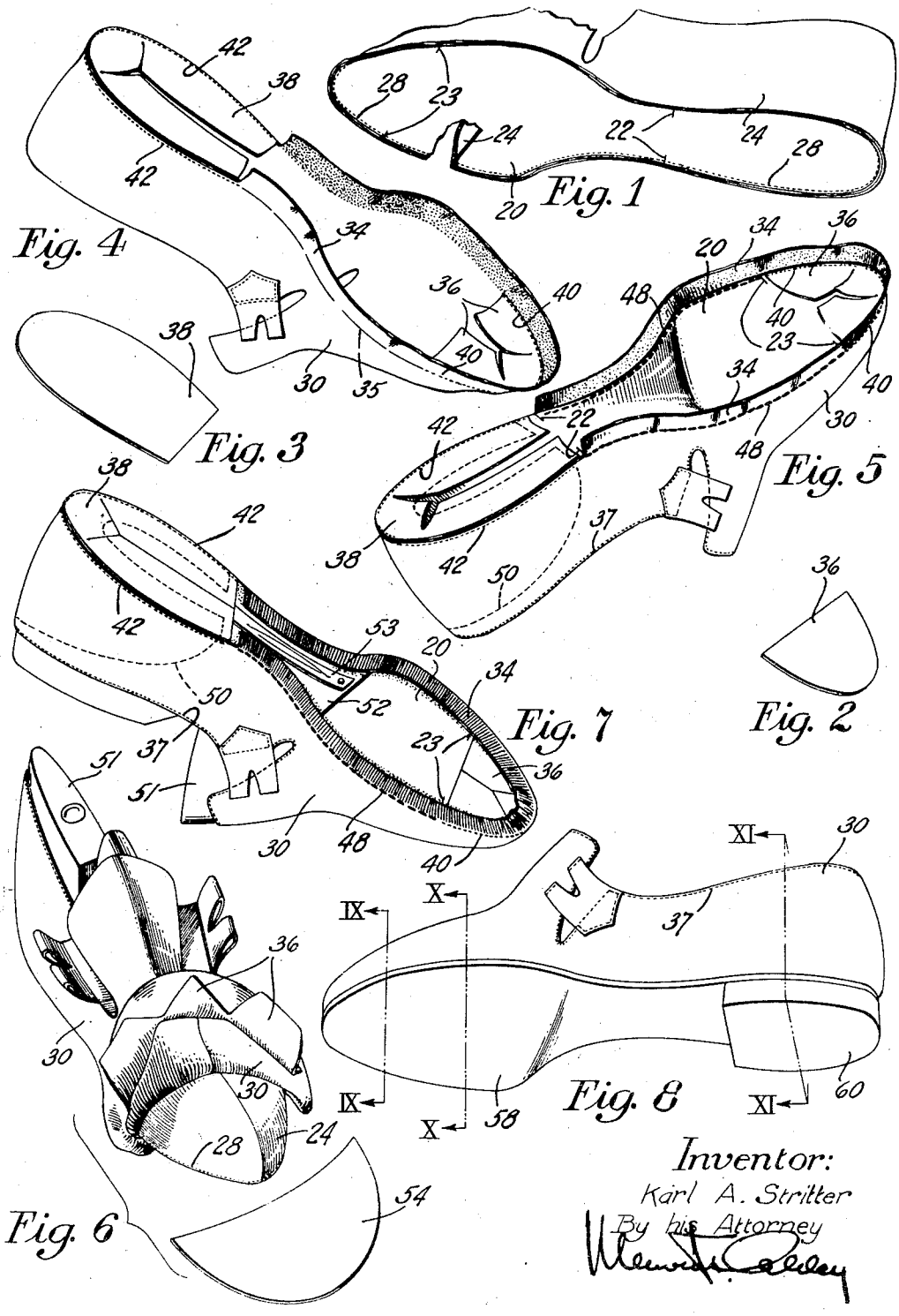
May 22, 1951 K. A. STRITTER 2,554,159

SLIP LASTED SHOE AND PROCESS OF MAKING THE SAME

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SLIP LASTED SHOE AND PROCESS OF MAKING THE SAME

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Fig. 9

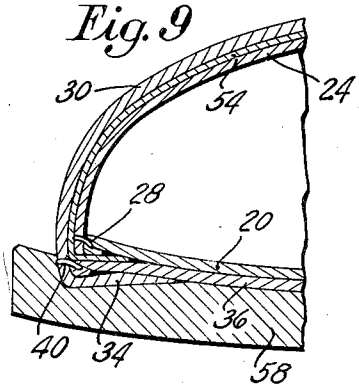


Fig. 10

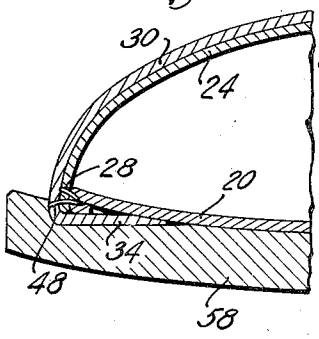


Fig. 11

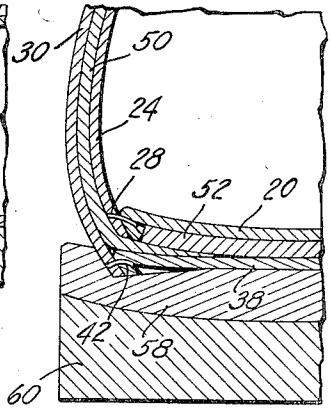


Fig. 12

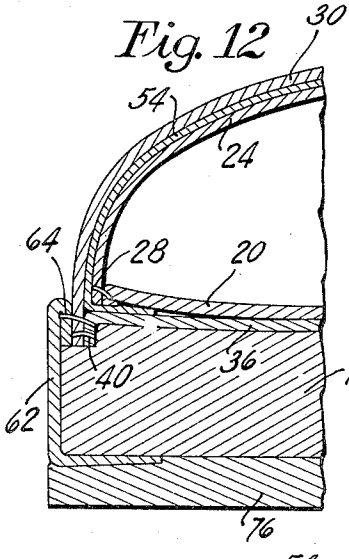


Fig. 13

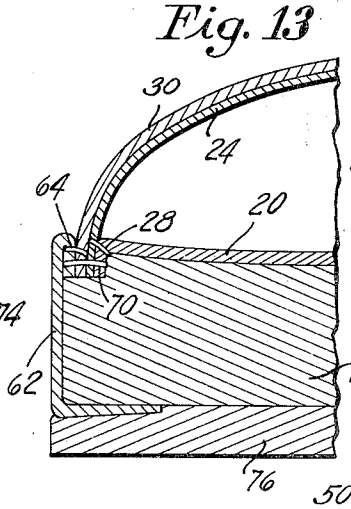


Fig. 14

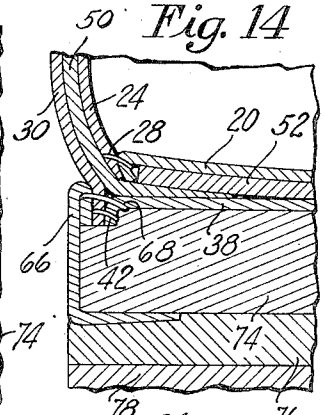


Fig. 15

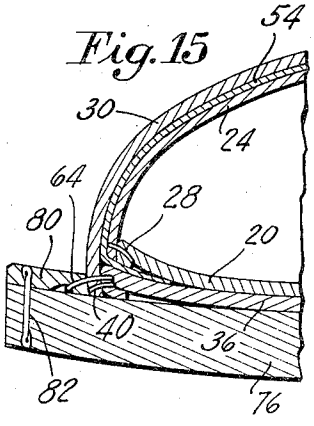


Fig. 16

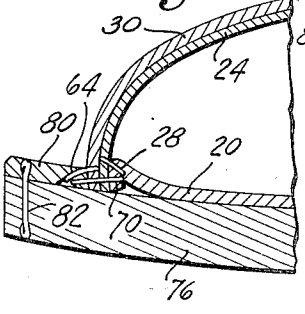
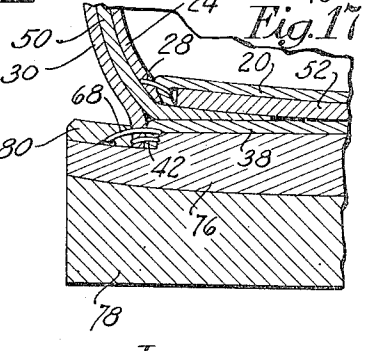


Fig. 17



Inventor:
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By his Attorney

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UNITED STATES PATENT OFFICE

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SLIP LASTED SHOE AND PROCESS OF MAKING THE SAME

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Application November 9, 1948, Serial No. 59,063

12 Claims. (Cl. 36—17)

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This invention relates to slip lasted shoes and to methods of making such shoes, the general object of my invention being to provide a closed toe and/or closed heel slip lasted shoe of sturdy construction having an end stiffening element at one or both ends of the shoe, the shoe being of sturdy construction comfortable to the wearer and relatively inexpensive to manufacture.

In order to accomplish these objects of my invention, I provide a sock lining and an upper lining, each having only a seam allowance, the adjacent margins of which are stitched to one another completely around the shoe, when a full-length upper lining is used, to form a lining assembly. I provide also an upper having end portions with a toe piece and a heel piece attached thereto respectively at the toe and heel end portions of the upper along the lower margin thereof, that is, along the feather line, by which is meant that line on the upper which will lie adjacent to and parallel with the corner of the last bottom. The upper assembly comprising the upper and end pieces is attached along the feather line to the lining assembly from a point adjacent to but forward of the breast line almost to the tip line on both sides of the shoe, leaving the toe and heel end portions of the upper free from the lining assembly, thereby facilitating the introduction of a toe box and counter in the shoe between the upper and the lining, the counter being preferably inserted before and the toe box after the last has been inserted in the shoe.

In order to permit the turning back of the free end portions of the upper, the end pieces are slit and each of the end pieces is peripherally shaped like the corresponding end of the sock lining so that, after insertion of the end stiffening elements, the upper may be brought into proper lasted position by securing each of the end pieces to the bottom of the corresponding end of the shoe, the slits in the end pieces being closed, thus to restore them to their original shapes which, since they correspond to the bottom of the corresponding end of the shoe bottom, will position the attached upper at the feather line to correspond with the periphery of the sock lining. While this application discloses the use of both a heel piece and a toe piece, it is within my invention to use only a heel piece or a toe piece.

As will be disclosed, a shoe embodying my invention may be completed to give a conventionally lasted exterior appearance or it may be completed in the form of a platform or prewelt shoe.

These and other objects and advantages of

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my invention will appear more fully from the following description when read in connection with the accompanying drawings and will be pointed out in the appended claims.

In the drawings,

Fig. 1 is a perspective view of the sock lining and upper lining attached to one another;

Fig. 2 is a perspective view of the toe piece;

Fig. 3 is a perspective view of the heel piece;

Fig. 4 is a perspective view of the upper, toe piece and heel piece united together, the toe piece and heel piece each having a Y-shaped slit therein;

Fig. 5 is a perspective view showing the uniting of the upper assembly of Fig. 4 and the lining assembly of Fig. 1, as well as the counter inserted in the shoe;

Fig. 6 is a perspective view of the shoe showing a last inserted therein and the forepart end of the upper turned back to permit insertion of the toe box;

Fig. 7 is a perspective view of the shoe showing the same after the toe box and counter have been inserted and the end pieces and lasting allowance on the upper have been lasted in over the sock lining;

Fig. 8 is a perspective view of a completed shoe;

Figs. 9, 10 and 11 are cross sectional views taken along the lines IX—IX, X—X and XI—XI, respectively, of Fig. 8;

Figs. 12, 13 and 14 are cross sectional views of a shoe of the platform type incorporating this invention, taken through a platform shoe on lines corresponding to those on which Figs. 9, 10 and 11, respectively, are taken; and

Figs. 15, 16 and 17 are cross sectional views of a shoe of the prewelt type incorporating the invention of this application, taken through a prewelt shoe on lines corresponding to those on which Figs. 9, 10 and 11, respectively, are taken.

Referring now to the drawings, Fig. 1 discloses a sock lining 20 made of any suitable material which has a shape corresponding to the shape of the bottom of the last upon which the shoe is to be made plus the usual seam allowance. This sock lining has formed therein two pairs of short slits 22 and 23, one pair a short distance forward of the ends of the breast line and the other pair slightly to the rear of the ends of the tip line. The sock lining 20 and the upper lining 24 are joined together, as illustrated, by the seam 28 which extends completely around the shoe.

Fig. 2 shows the toe piece 36 which is preferably composed of relatively thin pliable material and is peripherally shaped like the bottom of the

sock lining forward of the tip line, and Fig. 3 discloses a heel piece 38 which may be made of material similar to the toe piece 36. The heel piece is peripherally shaped like the bottom of the heel end portion of the sock lining.

Fig. 4 discloses the upper 30 which is provided with a lasting allowance 34 in the shank and forepart and with a seam allowance only about the heel portion. The upper 30 and upper lining 24 are accurately precut according to the size and shape of the last to be used, as is the case in making shoes by the slip lasted method.

Referring to Fig. 4, the toe piece 36 is attached by suitable fastening means, illustrated as a seam 40, to the inside of the toe portion of the upper 30, the seam 40 extending along the line 35 which defines the line on the upper which, when the upper is lasted, is to lie along the corner of the last bottom, that is, along the feather line of the last, and the heel piece 38 is attached to the inside of the heel end of the upper by the seam 42 which also extends along the line 35. This line also marks the lower margin of the upper 30 and the upper margin of the lasting allowance 34.

As illustrated, each of the end pieces is provided with a Y-shaped slit, the stems of which extend longitudinally of the shoe bottom.

Having produced two separate assemblies such as shown in Figs. 1 and 4, the assembly of Fig. 1 is placed inside the assembly of Fig. 4, as shown in Fig. 5, and the two assemblies are united on both sides of the shoe from the slits 22 to the slits 23, in the illustrated case by the two seams 48 which pass through the upper along the line 35 and the sock lining 20 and upper lining 24 close to the seam 28 which unites the sock lining and upper lining. Slits 22 and 23 are respectively located in the sock lining 20 just to the rear of the ends of the tip line and a short distance forward of the ends of the breast line and serve to indicate the limits of the attachment of the upper to the sock lining, and to assist the operator in making the attachment. The top stitching 37 may now be done if not done before.

It should be noted that at this point the upper lining 24 and sock lining 20 are joined together by the seam 28 which extends completely around the shoe, and that the upper 30 is attached to the upper lining and sock lining from a point somewhat forward of the breast line to a point just at the rear of the tip line of the shoe. However, the upper 30 and toe piece 36 are not attached to the sock lining or upper lining forward of the tip line and the upper and heel piece 38 are not attached to the upper lining or sock lining rearward of the breast line.

If desired, the top stitching 37 may be accomplished prior to the attachment of the sock lining to the upper lining, and the previously described sequence of operations may be considerably varied in other respects without departing from the substance of the invention. The same is also true of the sequence of operations hereinafter described.

The free heel end of the upper and heel piece 38 may then be pulled away from the upper lining and the counter 50 inserted in the shoe between the lining and upper, after which the heel end of the upper and heel piece 38 may be returned to approximately the positions shown in Fig. 5.

The last 51 is then inserted in the shoe, and the tuck 52 and shank 53 laid in position with the tuck against the sock lining and under the counter flange, as shown in Fig. 7. The heel seat is next lasted, and this may be performed by applying an adhesive to the adjacent surfaces of the counter flange, tuck 52 and heel piece 38, and the various sections of the heel piece 38 formed by the Y-shaped slit are lasted into the position shown in Fig. 7 on the bottom of the shoe by bringing the edges of the slits together until they form a composite whole of the same shape as shown in Fig. 3 with the curved periphery of the heel piece parallel with the corresponding periphery of the heel end of the sock lining. The adhesive permanently retains the heel piece 38 and consequently the heel end of the shoe in proper lasted position. The heel piece 38 can also be lasted in position by other selected means, such as tacks clenched on the heel plate of the last.

The free toe end of the upper 30 and toe piece 36 are turned back over the vamp (Fig. 6) and the toe box 54 is placed in position over the toe end of the upper lining 24. The toe box 54 may be of any selected type, but preferably is soft or pliable when inserted in the shoe when a solid box is used, but the invention also includes coating the upper toe lining with an appropriate stiffening agent in liquid form. The underside of the toe piece 36 is preferably coated with a suitable adhesive, as is the corresponding area of the sock lining 20, and the turned back toe end of the upper and toe piece are then pulled over the toe end of the last and the various sections of the toe piece 36 formed by the Y-shaped slit are lasted flat against the bottom of the toe end of the sock lining 20 (Fig. 7) so that the various sections of the toe piece 36 are positioned by bringing the edges of the slits together to give the toe piece the same shape as shown in Fig. 2 with the curved periphery of the toe piece parallel to the periphery of the toe end of the sock lining. The toe piece 36 is permanently held in position by the applied adhesive.

In order to bring the edges of the slits in the toe and heel pieces together when lasting, each of the pieces is preferably slightly larger than the corresponding end of the sock lining, but, alternatively, the toe piece or heel piece can be attached to the upper somewhat below the line 35.

It will be appreciated that by providing an end piece 36 or 38, of the described size and shape relative to the ends of the sock lining and attached to the upper as explained, when the end of the upper is pulled over the last after the insertion of the end stiffening element and the various sections of the toe piece or heel piece are positioned relative to one another as explained, the free end of the upper has been brought into proper lasted position and may be secured therein by the adhesive applied to the end piece and the elements engaged thereby. The use of an end piece such as described is particularly advantageous in that the upper is brought into proper lasted position completely around the end of the last.

Having lasted the end pieces 36 and 38 into position as shown in Fig. 7, the lasting allowance 34 at the forward end of the shoe is lasted in over the bottom of the shoe and secured in lasted position by any suitable means such as an adhesive.

The shoe may then be completed in any conventional manner. For example, referring to Figs. 8 to 11, the bottom and outsole 58 may be cemented, the outsole laid, and the heel 60 attached. The outsole 58 may be of the gouged

type, as shown in the drawings, having a gouge therein shaped according to the lower periphery of the shoe so that the seams 40, 42 and 48 will not be visible from the exterior of the shoe.

It will be noted that the completed shoe shown in Fig. 8 has an exterior appearance similar to a conventionally lasted shoe and has no visible features which would suggested that the shoe is of slip lasted construction. The upper lining of the shoe is attached to the sock lining completely around the shoe, and the upper is lasted to the bottom of the shoe throughout the periphery of the shoe. Consequently, the shoe is of a sturdy construction comfortable to the wearer. The method of construction of the shoe makes it possible to provide an end stiffening element in either or both ends of the shoe and the method of construction including the use of the toe piece and/or heel piece makes it possible to readily and accurately last the end or ends of the upper. No relasting operating is necessary in the construction of the shoe.

The use of the toe piece and/or heel piece disclosed hereinbefore may also be employed in conjunction with a shoe of the platform type having a platform cover. Referring to Figs. 12, 13 and 14, in the manufacture of such a shoe the upper lining 24 and sock lining 20 may be provided and assembled to produce the assembly shown in Fig. 1, and an upper assembly including the upper 30 attached to the toe piece 36 by stitches 40 and attached to the heel piece 38 by stitches 42 may also be provided. At this point the upper assembly will be like that shown in Fig. 4 with the exception that the forepart of the upper is not provided with the lasting allowance 34, although such a lasting allowance could be employed, if desired. The forepart platform cover 62 is then fastened to the upper by any suitable means, in the illustrated case by the seam 64 which passes through the cover, upper and toe piece along the lower margin of the upper. Also, the upper assembly is provided with a heel cover 66 which is attached to the rear end of the upper by any suitable means, in the illustrated case by the seam 68, this seam passing through the upper 30, heel piece 38 and cover 66. It will be appreciated that, if desired, the platform covers 62 and 66 and the toe piece 36 and heel piece 38 may be attached to the upper 30 by a single seam.

Having provided the described assemblies, the lining assembly is inserted in the upper assembly and the two assemblies are suitably joined on both sides of the shoe from points a short distance forward of the breast line almost to the tip line, as shown in Fig. 13, in the illustrated case the joining seams 70 passing through the margins of the platform cover 62, upper 30, upper lining 24 and sock lining 20. The counter 50 is inserted, the last is then placed in the shoe, the ends of the upper assembly turned back, the toe box 54, tuck 52, and shank 53 inserted, and the end pieces 36 and 38 are lasted, all as previously described. The bottom of the shoe is then completed in the conventional manner, as by laying the platform 74, lasting in the covers 62 and 66, and applying the outsole 76 and heel 78.

Reference is now made to Figs. 15, 16 and 17 which disclose this invention as it may be incorporated in a shoe of the prewelt type. The shoe disclosed in these figures is like that of Figs. 12, 13 and 14, with the exception that the welt 80 is employed in the place of the platform covers, and the outsole is attached to the upper by the seam 82 passing through the welt 80 and margin of the outsole 76. The process of manufacture of the shoe of Figs. 15 to 17 may be the same as described in conjunction with Figs. 12 to 14, except that the welt is substituted for the platform covers and the attaching of the bottom of the shoe is completed by well-known methods of prewelt construction.

The platform and prewelt constructions have the same advantages as outlined above in connection with the first embodiment of the invention.

It should be understood that although this application discloses the use of a toe piece and heel piece to assist in the lasting of the shoe, it is not a departure from my invention to employ such a piece at only one end of the shoe, in which case the construction at the other end of the shoe may be of any selected type. Furthermore, certain variations may be made in the construction of the shoe as well as in the process of construction thereof without departing from the substance of the invention, this being particularly true in the case where only one end of the shoe is constructed according to my invention. It is also possible to vary the described sequence of operations without departing from the substance of my invention.

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 closed end slip lasted shoes which includes the steps of providing a sock lining and an upper lining united at one end to one another, providing an upper portion, uniting an end piece to the end portion of the upper along a line near the lower margin thereof, uniting the sock lining and upper between said end piece and their other ends, inserting an end stiffening element between the upper and lining, and securing the end piece to the shoe bottom.

2. That improvement in methods of making closed end slip lasted shoes which includes the steps of providing a sock lining and an upper lining united at one end to one another, providing an upper having an end portion, uniting an end piece shaped like the said end of the sock lining to the end of the upper along a line near the lower margin thereof, uniting the sock lining and upper between the end piece and their other ends, inserting an end stiffening element between the upper and lining, and securing the end piece to the shoe bottom.

3. That improvement in methods of making closed end slip lasted shoes which includes the steps of providing a sock lining and an upper lining united at one end to one another, providing an upper having an end portion, uniting an end piece to the end of the upper along a line near the lower margin thereof, uniting the sock lining and upper between the end piece and their other ends, inserting a last in the shoe, inserting an end stiffening element between the upper and lining, and lasting the end of the upper by securing the end piece to the shoe bottom.

4. That improvement in methods of making closed end slip lasted shoes which includes the steps of providing a sock lining and an upper lining united at one end to one another, providing an upper having an end portion, uniting an end piece to the end of the upper along a line near the lower margin thereof, uniting the sock lining and upper between the end piece and their other ends, inserting an end stiffening element between the upper and lining, inserting a last in

the shoe, and lasting the end of the upper by securing the end piece to the shoe bottom.

5. That improvement in methods of making closed end slip lasted shoes which includes the steps of providing a sock lining and an upper lining united at one end to one another, providing an upper having an end portion and a slit end piece shaped like the said end of the sock lining united to the end of the upper along a line near the lower margin thereof, uniting the sock lining and upper between the end piece and their other ends, inserting an end stiffening element between the upper and lining, and securing the end piece to the shoe bottom with the slit closed.

6. That improvement in methods of making closed toe slip lasted shoes which includes the steps of providing a sock lining and a forepart upper lining united thereto forward of the tip line, providing an upper having a forepart and a slit toe piece shaped like the toe end of the sock lining attached to the forepart of the upper along a line near the lower margin thereof, uniting the sock lining and upper between the toe piece and the other end of the shoe, inserting an end stiffening element between the upper and lining, and securing the toe piece to the shoe bottom with the slit closed.

7. That improvement in methods of making closed heel slip lasted shoes which includes the steps of providing a sock lining and an upper lining united thereto at their heel ends, providing an upper having a closed heel portion and a slit heel piece shaped like the heel end of the sock lining united to the heel end of the upper along a line near the lower margin thereof, uniting the sock lining and upper forwardly of the heel piece, inserting a counter between the upper and its lining, and securing the heel piece to the heel end of the shoe bottom with the slit closed.

8. That improvement in methods of making closed toe slip lasted shoes which includes the steps of providing a sock lining and a forepart upper lining united thereto forward of the tip line, providing an upper having a forepart and a toe piece shaped like the toe end of the sock lining united to the upper along a line near the lower margin thereof and forward of the tip line, uniting the sock lining and upper rearward of the tip line, inserting a last in the shoe, applying toe stiffening means on the lining forward of the tip line, and lasting the upper forward of the tip line by securing the toe piece to the bottom of the toe end of the sock lining.

9. That improvement in methods of making closed heel slip lasted shoes which includes the steps of providing a sock lining and an upper lining united thereto at their heel ends, providing an upper having a closed heel portion and a heel piece shaped like the heel end of the sock lining united to the upper along a line near the lower margin thereof at the heel end of the same, uniting the sock lining and upper forwardly of the heel piece, inserting a counter in the shoe between the upper and its lining, and securing the heel piece to the heel end of the shoe bottom.

10. A shoe comprising a sock lining and an upper lining attached thereto at one end portion of the sock lining, an upper, an end piece attached to the end portion of the upper along the lower margin thereof, end stiffening means between the lining and upper, fastening means uniting the upper and sock lining between the end piece and the other end portion of the shoe, and means securing said end piece to the under side of the shoe bottom for holding the end of the upper in lasted position.

11. A shoe comprising a sock lining and an upper lining attached thereto forward of the tip line, an upper attached to the sock lining rearward of the tip line, toe stiffening means between the lining and upper forward of the tip line, and a toe piece attached to the upper along the lower margin thereof and to the shoe bottom for holding the upper in lasted position forward of the tip line.

12. A shoe comprising a sock lining and an upper lining attached thereto at the heel end of the sock lining, an upper, a heel piece attached to the heel end of the upper along the lower margin thereof, heel stiffening means between the lining and upper, fastening means uniting the upper and sock lining between the heel piece and toe portion of the shoe, and means securing said heel piece to the shoe bottom for holding the heel end of the upper in lasted position.

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No references cited.