Jan. 16, 1951 K. A. STRITTER 2,538,170

SHOE WITH UPPER HAVING LOCATING AND LASTING TABS.

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Fig. 1

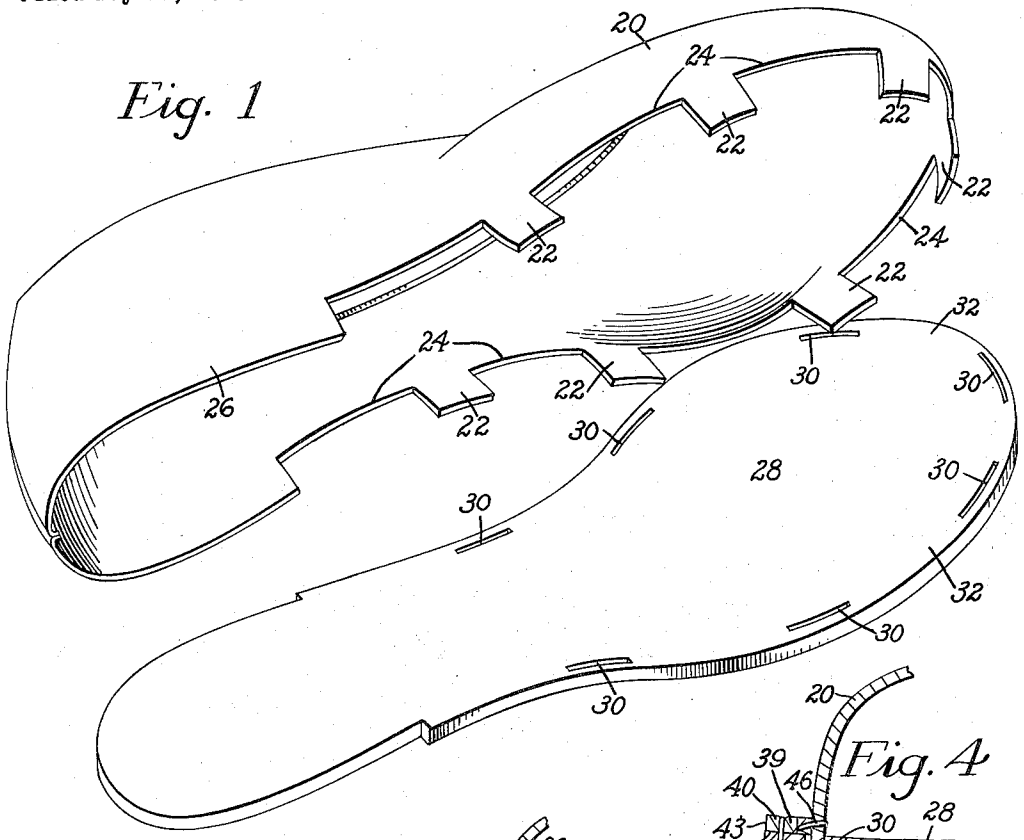


Fig. 2

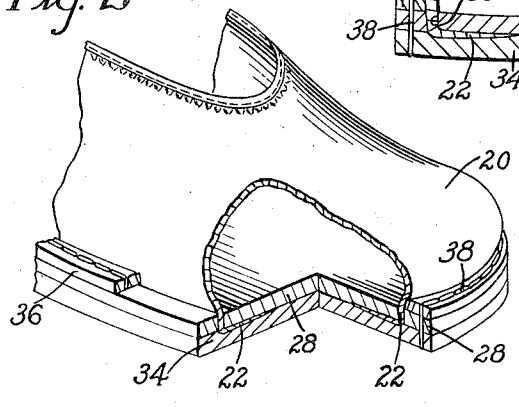


Fig. 3

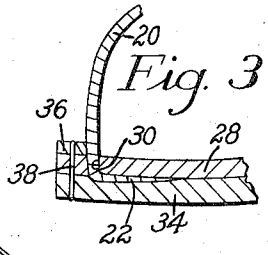
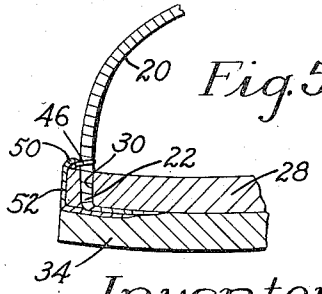


Fig. 4

Fig. 5



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SHOE WITH UPPER HAVING LOCATING AND LASTING TABS

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Fig. 6

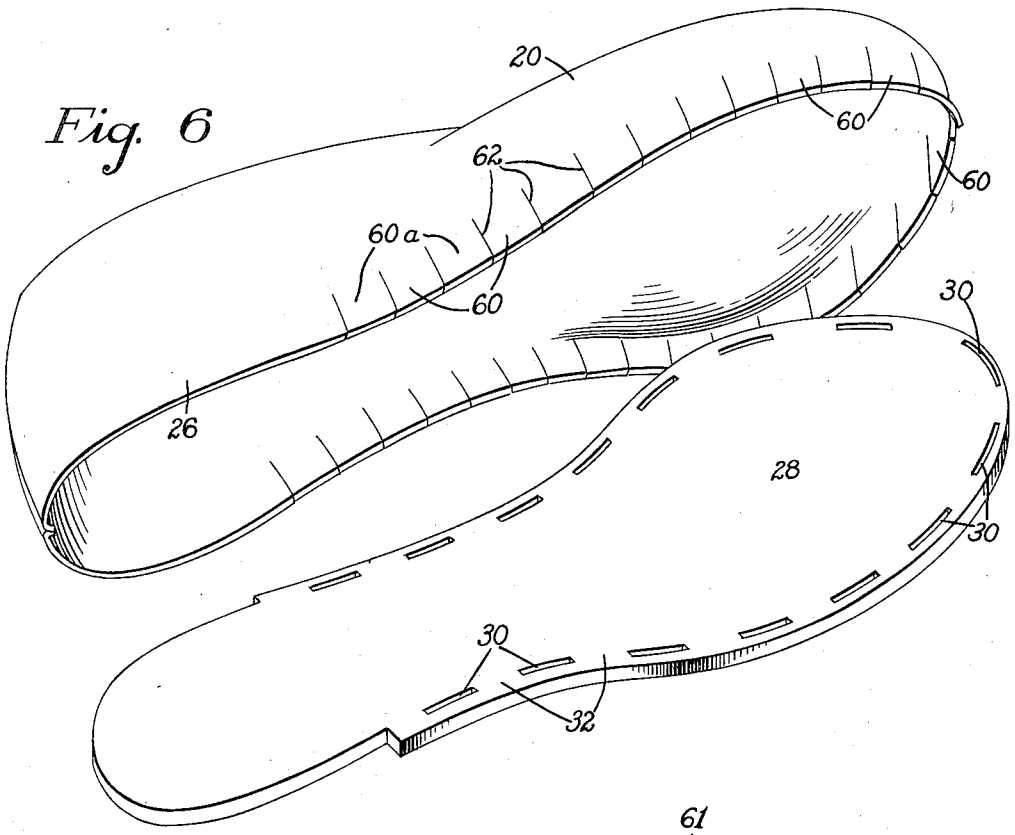
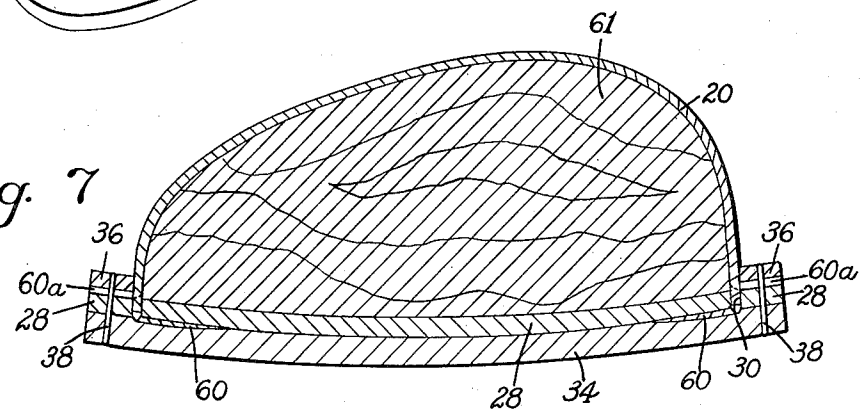


Fig. 7



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SHOE WITH UPPER HAVING LOCATING AND LASTING TABS

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Fig. 11

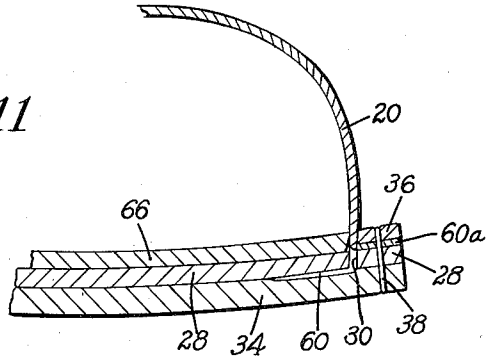


Fig. 10

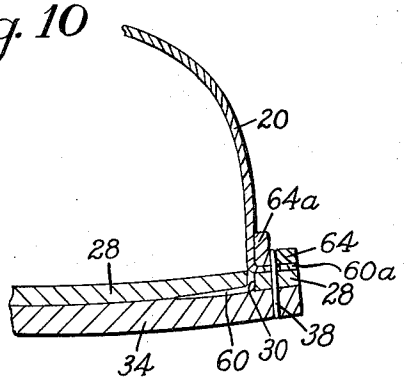


Fig. 12

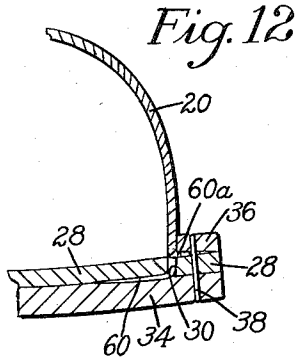


Fig. 8

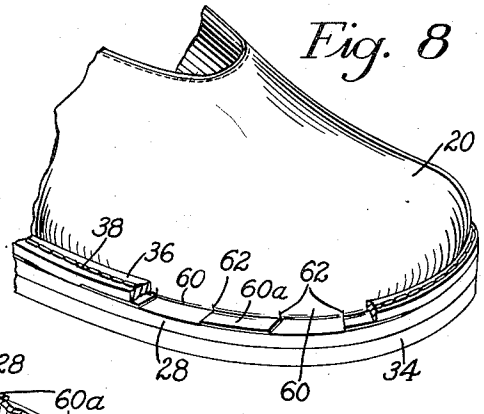
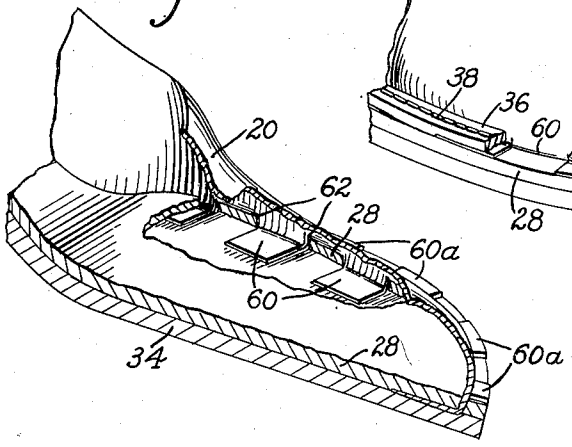


Fig. 9



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2,538,170

SHOE WITH UPPER HAVING LOCATING AND LASTING TABS

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Application May 19, 1948, Serial No. 27,867

5 Claims. (Cl. 36—12)

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This invention relates to improvements in the manufacture and construction of shoes, and more particularly to a shoe construction to facilitate the proper positioning of the upper of a shoe relative to the bottom thereof and at the same time provide an arrangement whereby the upper may be securely fastened to the bottom of the shoe.

In the manufacture of shoes the pre-cut upper of the shoe must be located very exactly relative to the bottom members of the shoe—otherwise a defective article results. In the manufacture of shoes, it is desirable to eliminate the use of a last or to render the lasting process less exacting, and to assist the operator in the assembling of shoes the prior art has suggested the arrangement wherein the lasting allowance of the upper is in the form of a plurality of tabs or tongue-like portions extending beyond the lower margin of the upper and a sole member is provided with a plurality of slots therethrough for the reception of the tabs, the tabs on the upper and slots in the sole member being selectively positioned so that when the various tabs on the upper are pulled through the corresponding slots in the sole, the upper is properly located relative to the sole, and the parts are ready for the next step in the manufacturing process.

However, such shoe constructions have been limited to the manufacture of various types of inexpensive shoes for the reason that when the tabs on the upper are spaced from one another, and the tabs are pulled through the slots until the lower edge of the upper engages the upper surface of the sole, the lower margin of the upper between the tabs is visible from the outside of the shoe, and the said lower margin being unsupported is free to move relative to the slotted sole member. When the tabs are formed continuously along the lower margin of the upper, the upper ends of the tabs and the upper ends of the cuts between the tabs are visible from the outside of the shoe.

Another disadvantage of such shoe constructions is that in view of the limited area of the tabs and their spaced locations, it has been difficult to fasten the tabs to the sole of the shoe so as to retain the upper in the proper position relative to the sole throughout the life of the shoe.

The objects of this invention are two-fold in nature: first, in conjunction with shoes of the type mentioned to provide means whereby the lower margin of the upper and the upper ends of the tabs may be covered, at the same time giving to the shoe a conventional appearance, and second, to arrange and attach the tabs as well as the covering means relative to the upper and sole members so that the lower margin of the upper will be held against movement and the upper will be securely fastened to the sole members in the normal course of completing the manufacture of the shoe, whereby a strong construction may be economically produced.

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One of the objects of this invention is accomplished by providing a strip attached to at least one of the other shoe elements and extending along the outer lower margin of the upper to cover the same. This strip may take the form of a welt of the usual type, or it may be of the prewelt form. When applied to a shoe of the platform type, the strip is in the form of a platform cover.

The invention also contemplates, in part, the turning outwardly of some of the tabs on the upper, in which case stitching may be passed through the welt, outturned tabs and outer margins of the inner and outer sole members to obtain a strong attachment of the upper to the bottom shoe parts.

A slip sole may be inserted inside the shoe to give the interior thereof a usual appearance, and the upper may be attached to the slotted sole member with or without the aid of a last.

Other features of this invention will be disclosed in the ensuing description of the constructions shown in the various drawings, in which,

Fig. 1 is an exploded perspective view of an upper with a lasting allowance in the form of a plurality of spaced tabs, together with an inner sole member having a plurality of slots passing therethrough near the edge of the member for the reception of the tabs;

Fig. 2 is a perspective view of a portion of a shoe embodying the construction of Fig. 1, certain parts thereof being broken away to disclose the position of the tabs relative to the inner and outer sole members of the shoe, together with a conventional welt placed around the outer lower margin of the upper.

Fig. 3 is a fragmentary cross-sectional view of the structure shown in Fig. 2;

Fig. 4 shows the tab and slot arrangement of Fig. 3 combined with a prewelt construction;

Fig. 5 shows the tab and slot arrangement of Fig. 3 as applied to a shoe having a strip covering the edge of the slotted inner sole member.

Fig. 6 is an exploded perspective view of an upper having a lasting allowance in the form of a continuous row of tabs, together with an inner sole member having slots therethrough near the

edge thereof for the reception of selected ones of the tabs on the upper;

Fig. 7 is a cross-sectional view of one construction of a shoe embodying the construction shown in Fig. 6;

Figs. 8 and 9 are perspective views of the outside and inside, respectively, of a shoe embodying the construction of Fig. 7, certain parts being broken away for the purpose of illustration;

Fig. 10 is a fragmentary cross-sectional view of a shoe embodying the tab arrangement shown in Fig. 7, employed in conjunction with a shoe having a welt with an upstanding flange;

Fig. 11 shows the same construction as Fig. 7 with the addition of a slip sole inside the upper; and

Fig. 12 shows an arrangement like Fig. 7 except the outturned tabs extend only part way to the outer edge of the inner sole member, the under side of the welt being tapered in cross section.

Reference is now made to Fig. 1, which discloses the first form of my invention wherein the lasting allowance of the upper **20** is in the form of a plurality of spaced tabs **22**, the lower edge of the upper between the tabs **22** being numbered **24**.

The outer margin of the inner sole member **28** is provided with a plurality of slots **30** separated by surfaces **32**, the slots **30** being of a length corresponding to the width of the tabs **22** and of a width corresponding to the thickness of the tabs **22**. The tabs **22**, in the case illustrated, all line forward of the breast of the heel, and the upper to the rear of the breast of the heel is provided with the usual lasting allowance **26**. However, if desired, the upper to the rear of the breast of the heel may be provided with tabs like the tabs **22**, and the corresponding part of the member **28** may be provided with slots like the slots **30** to receive such tabs. More generally, the tab and slot arrangement disclosed herein can be employed on any portion of the shoe, the remaining portion of the upper being fastened to the bottom of the shoe by any conventional method.

By properly precutting the upper **20** and tabs **22** and positioning the slots **30** in the inner sole member **28**, it will be appreciated that the upper **20** may be correctly positioned relative to the member **28** by inserting each of the tabs **22** in its corresponding slot **30**, and drawing the tabs through the slots until the edge **24** of the upper engages the surfaces **32** on the upper side of the inner sole member which lie between the slots **30**.

In Figs. 2 and 3 it will be seen that the tabs **22** pass through the slots **30** in the member **28**, the tabs being pulled through the slots so that the edges **24** of the upper **20** intermediate the tabs bear against the surfaces **32** on the upper side of the inner sole member **28** intermediate the slots **30** in the same. The lower ends of the tabs **22** are turned inwardly to lie against the bottom surface of the member **28** and are suitably attached thereto, as by an adhesive. The outer sole member **34** underlies the inner sole member **28** and covers the lower inturned ends of the tabs **22**, and a strip of covering material in the form of the welt **36** which is of a width equal to the width of the marginal portion of the inner sole member **28** lying outside the lower edge **24** of the upper **20** overlies the upper surface of the inner sole member outside the edge **24**, the inner surface of the welt abutting against the outside lower portion of the upper **20** above inner sole member **28** and covering the said edge **24** and

the outside lower portion of the upper above the edge. The welt **36**, inner sole member **28** and outer sole member **34** are held together, as by stitching **38**.

Fig. 4 is a fragmentary cross-sectional view of a shoe of the prewelt type incorporating the first form of my invention, the construction of which is like that shown in Figs. 1, 2 and 3 with the exception that in the manufacture of such a shoe the surface **39** of welt **40** is laid against the outer surface of the upper **20** with the lower edge **42** of the welt along the edge **24** of the upper and the other edge **43** of the welt along the upper above the edge **24**. The welt and upper are then stitched together by stitches **46**, and the tabs **22** pulled through the slots **30** in the inner sole member **28** until the lower edge **24** of the upper and lower edge **42** of the welt respectively engage the surfaces **32** between slots **30** of the member **28** and the outer margin of the upper surface of the inner sole member. The tabs are then turned inwardly under the inner sole member and secured thereto, as previously explained, and the outer sole member **34** is applied to the bottom of the inner sole member **28**. The portion of welt **40** above the stitching **46** is then turned away from the upper to place the surface **48** thereof against the upper surface of the outer margin of the inner sole member **28**, and the welt, innersole and outer sole member secured together by stitching **38**.

Fig. 5 is a fragmentary cross-sectional view of a shoe incorporating the first form of my invention and which is like the arrangement described in connection with Fig. 4 except that the cover **50** is employed in place of the welt, the cover being stitched to the upper **20** by stitches **46**. After the cover **50** is so stitched to the upper and the tabs **22** passed through the slots **30** in the inner sole member **28** and bent inwardly thereunder and secured to the bottom of the same, the free portion **52** of the cover is wrapped around the peripheral edge of the member **28** and turned in under the bottom surface thereof covering the lower in-turned ends of the tabs **22**. The inner surface of the cover **52** is suitably attached to the contacted surfaces of the inner sole member **28** and tabs **22**, as by an adhesive. The outer sole member **34** is then applied to the bottom of the shoe by adhesive or any other desired fastening means.

It will be understood that the form of my invention shown in Figs. 1–5 including spaced tabs formed with the upper and the provision of slots in the inner sole member for the passing through of the tabs permits the proper positioning of the upper relative to the inner sole member without the necessity of performing the conventional lasting operations, and that the attaching of the in-turned ends of the tabs to the bottom of the inner sole member holds the upper in proper position relative to the sole member, while the combined provision of a cover strip covering the outer lower margin of the upper gives to the shoe a conventional exterior appearance. In the arrangement of Figs. 4 and 5 where the cover strip takes the form of a prewelt or cover attached to the upper, the upper is additionally attached to the sole members by the prewelt or cover strip and stitching or adhesive, respectively, thereby securing a sturdy construction. If desired, as will be explained, a slip sole or the like may be added to the inside of the shoe to give the same a conventional interior appearance.

Reference is now made to Fig. 6 which is a perspective view of an upper and inner sole member made in accordance with the second form of my invention. The lasting allowance of the upper 20 is in the form of a plurality of tabs comprising two alternating sets 60 and 60a, formed by making a plurality of vertical parallel cuts 62 in the lasting allowance of the upper, the cuts 62 being spaced according to the desired width of the tabs formed thereby. The cuts 62 extend from the breast of the heel to the forward end of the upper, the usual lasting allowance 26 being left at the heel. The inner sole member 28 is formed as previously described in conjunction with Fig. 1, each of the slots 30 being of a length equal to the width of its corresponding tab 60 and of a width equal to the thickness of the tab. The spaces 32 between the adjacent ends of any selected pair of the slots 30 are equal in length to the width of the tab 60a lying between the two tabs 60 which pass through the selected slots.

Referring now to Figs. 7, 8 and 9, it will be seen that the selected spaced tabs 60 formed on upper 20 are pulled through the slots 30 in the inner sole member 28 and the inner ends thereof are turned inwardly under the same and are attached thereto as previously explained. The other tabs 60a are turned outwardly and laid along the upper marginal portion of the inner sole member. It will be understood that selected tabs 60 are drawn through the slots 30 until the upper ends of the cuts 62 are just above the top surface of the inner sole member. The outer sole member 34 is then applied to the bottom of inner sole member 28, covering the inturned ends of tabs 60, and the welt 36 is then placed on top of the outer margin of the inner sole member and out-turned ends of tabs 60a, and the welt, out-turned ends of tabs 60a, the outer margin of member 28 and outer margin of outer sole member 34 are fastened together by stitching 38. If necessary, the ends of tabs 60a projecting beyond the periphery of welt 36 and member 28 are trimmed off. The welt 36 is of sufficient thickness so that its upper inner edge lies along the outer surface of upper 20 above the upper ends of cuts 62 and conceals them. The tabs of this and the first form of the invention may be skived, if desired.

In Fig. 7 the reference character 61 designates a last which may be slipped inside the shoe at any desired stage in the process of manufacture, e. g., preparatory to putting on the outer sole member 34, or even before the tabs on the upper are inserted in the slots of the inner sole member, should circumstances render the same advisable. The optional use of the last 61 also applies to the other illustrations contained herein.

Fig. 10 shows the same structure as Figs. 6, 7, 8 and 9 with the exception that welt 64 has an upstanding flange 64a which bears against the outer surface of upper 20 immediately above the upper surface of the inner sole member 28. The upstanding flange 64a is of sufficient height so that its upper inner edge lies along the outer surface of upper 20 above the ends of cuts 62 to conceal them. Fig. 11 illustrates the same arrangement of my invention as Figs. 6–9 with the addition of a slip sole 66 placed inside upper 20 and overlying the inner sole member 28, the edge face of the slip sole 66 bearing against the inside surface of upper 20 and being of sufficient thickness so that its upper corner lies along the inner surface of upper 20 above the upper ends of cuts 62 to conceal them. This arrangement may also be applied to any of the other constructions disclosed herein.

Fig. 12 illustrates the construction shown in Fig. 7 with the exception that the out-turned tabs 60a do not extend all the way to the outer periphery of the inner sole member 28 and the welt 36 is somewhat tapered in cross-section on its under side to accommodate the out-turned tabs and allow the outer lower edge of the welt to be drawn into continuous contact with the upper surface of member 28.

It will be understood that the form of my invention shown in Figs. 6 to 12 including tabs formed with the upper and the provision of slots in the inner sole member for the passing through of the selected tabs formed with the upper permits the proper positioning of the upper relative to the inner sole member without the necessity of performing the usual lasting operations, while the combined provision of other tabs formed with the upper turned outwardly to overlie the upper surface of the inner sole member with a welt overlying the out-turned tabs and having its inner edge abutting the lower outside margin of the upper is highly advantageous in that the welt, out-turned tabs, outer margin of the inner sole member and outer margin of the outer sole member may all be fastened together by usual means such as stitching, thereby securely fastening together the various parts of the shoe. By virtue of the disclosed arrangement, the stitching is conventional in appearance and is located outside the upper 20 and the welt conceals the exterior upper ends of the cuts and tabs, thereby rendering the shoe conventional in exterior appearance. By passing the selected tabs through the slots in the inner sole member and securing the ends thereof to the bottom of the inner sole member, the upper is doubly fastened to the inner sole member to produce a sturdy construction. If desired, a slip sole or the like may be added to the interior of the shoe, as disclosed, thereby concealing the interior upper ends of the cuts and tabs, thus enhancing the appearance of the interior of the shoe.

In view of the preceding disclosure it will be appreciated that this invention discloses a shoe construction having an upper with tabs along the marginal edge thereof arranged to be inserted in slots in an inner sole member to permit accurate and quick locating of the upper relative to the inner sole member, together with covering means for rendering the shoe conventional in appearance, both interiorly and exteriorly, at the same time the covering means and tabs are arranged and attached relative to the other shoe parts so that by means of the tabs and other well-known fastening means the upper may be securely attached to the inner sole member and other parts of the shoe.

It will be appreciated by those skilled in the art that certain changes may be made in the constructions disclosed without departing from the substance thereof as covered by the following claims.

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

1. A shoe construction comprising an upper having a plurality of tabs along the lower marginal edge of the upper, an inner sole member having a plurality of slots passing through the marginal portion thereof, selected spaced ones

of said tabs each passing through a different one of the slots in said inner sole member and having their lower ends turned inwardly against the lower surface of said inner sole member and attached thereto, the other ones of said tabs being turned outwardly overlying the upper surface of the marginal edge of said inner sole member outside said upper, an outer sole member underlying the inner sole member and inturned ends of said selected tabs and attached to said inner sole member, a strip extending along the outer lower margin of said upper to cover the lower marginal edge of said upper and the upper ends of said tabs, and stitching fastening said strip and the out-turned tabs and outer margin of said inner sole member together.

2. The construction set forth in claim 1 in which the strip extending along the outer lower margin of the upper is in the form of a welt, the inner edge of which bears against the lower outer margin of the upper and the lower surface of which overlies the outturned tabs and marginal edge of the inner sole member.

3. The construction set forth in claim 1 in which the strip extending along the outer lower margin of the upper is in the form of a welt having an upstanding flange the inner face of which bears against the lower outer margin of the upper.

4. The construction set forth in claim 1 in which the outturned tabs extend only part way to the peripheral edge of the inner sole member and the strip extending along the outer lower margin of the upper is in the form of a welt, the inner edge of which bears against the lower outer margin of the upper and the lower surface of which overlies the outturned tabs and marginal edge of the inner sole member.

5. The construction set forth in claim 1 in which a member of substantial thickness and having a peripheral edge covering the inner lower margin of the upper and upper ends of the tabs overlies the upper surface of said inner sole member.

KARL A. STRITTER.

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