Feb. 26, 1963 F. L. SHEA 3,078,601

BEADED LAMINATED SHOE WELTING

Filed July 28, 1960 2 Sheets-Sheet 1

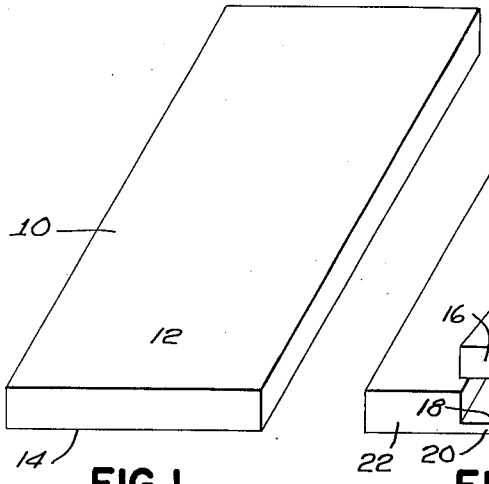


FIG. 1

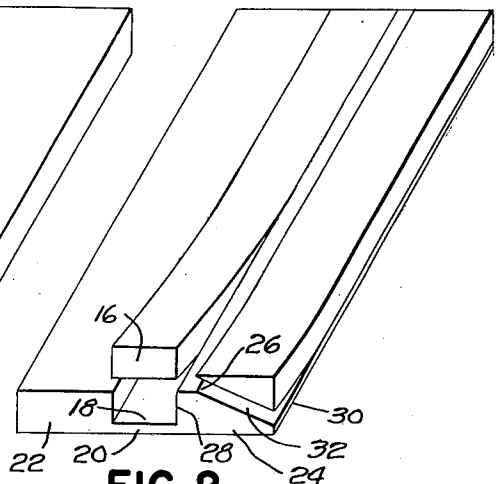


FIG. 2

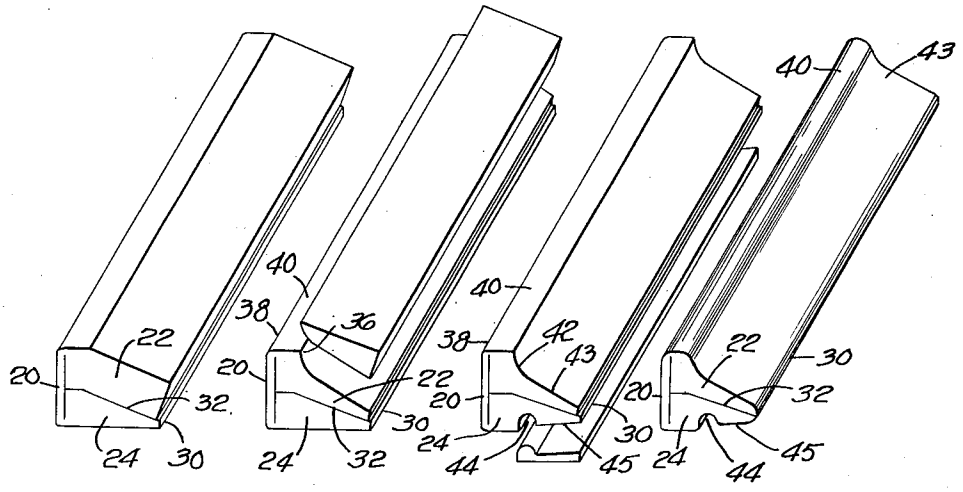


FIG. 3 FIG. 4 FIG. 5 FIG. 6

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BEADED LAMINATED SHOE WELTING

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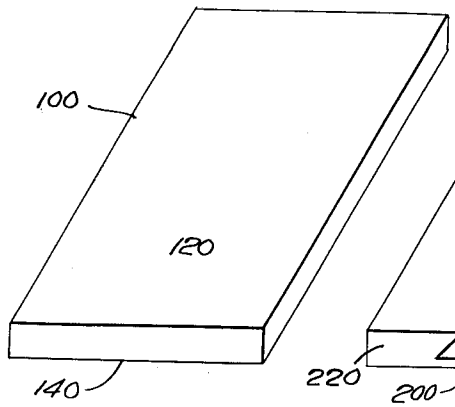


FIG. 7

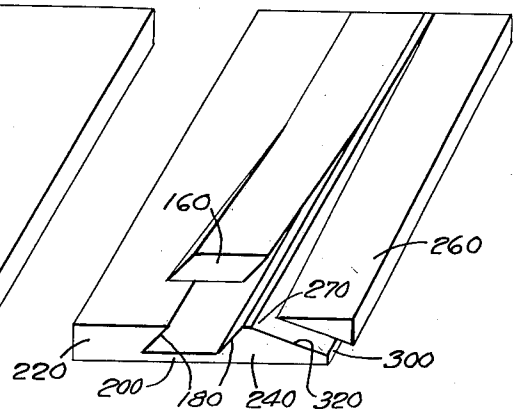


FIG. 8

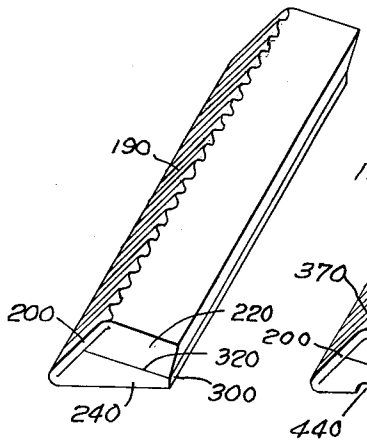


FIG. 9

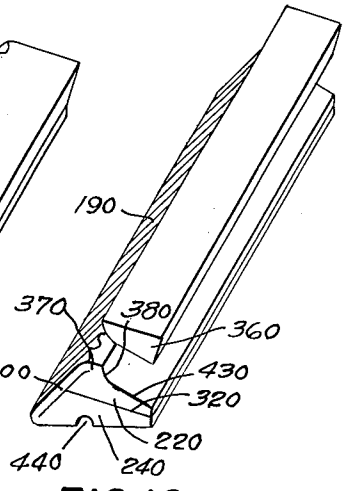


FIG. 10

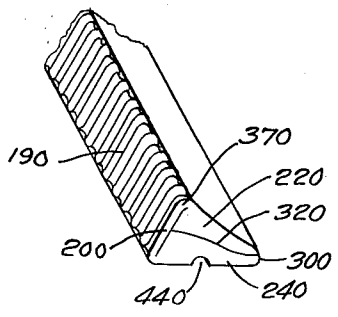


FIG. 11

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BEADED LAMINATED SHOE WELTING

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4 Claims. (Cl. 36—78)

This invention relates to a shoe welting of the type known as a "platform shoe welting" and to the method of making the same.

The invention has for a principal object to provide a novel and improved shoe welting of the platform type which is particularly adapted for use in the construction of cement type shoes which is characterized by novel and improved structure enabling the decked platform or bead to hug the upper closely and to hold the shape of the shoe during long periods of use.

Another object of the invention is to provide a novel and improved method of making platform welting in an efficient and economical manner.

With these general objects in view and such others as may hereinafter appear, the invention consists in the novel and improved platform type shoe welting and method of making the same.

In the drawings illustrating the preferred embodiment of the invention:

FIG. 1 is a perspective view of a grain leather fillet of welt forming material;

FIG. 2 is a perspective view illustrating the steps of cutting the welting preparatory to the formation of the completed welt;

FIG. 3 is a perspective view illustrating the step of folding the welting cut in accordance with FIG. 2;

FIGS. 4 and 5 are perspective views illustrating the formation of the beveled inseam flange and stitching groove, respectively;

FIG. 6 is a perspective view illustrating the finished platform welting; and

FIGS. 7 to 11 are perspective views similar to FIGS. 1 to 6 and illustrating the steps followed in producing a modified form of platform welting embodying the present invention.

In general the present invention contemplates a novel and improved shoe welting of the platform type particularly adapted for use in the manufacture of cement type shoes and the method of making the same. The present welting is characterized by structure which enables the deck or bead to closely hug the upper of the shoe and which is arranged to support and hold the shape of the shoe after considerable wear. The present invention further provides an efficient and highly economical method of making platform type shoe welting.

In the illustrated embodiment of the invention **10** represents a substantially rectangular grain leather fillet about 1" in width and about 5/32" in thickness having a flesh surface **12** and a grain surface **14**. In accordance with the illustrated embodiment of the invention, as shown in FIG. 2, a relatively narrow and deep elongated rectangular strip **16**, approximately ¼" in width is cut out of the flesh surface of the fillet substantially midway between its edges to provide a rectangular groove **18** and a relatively thin hinge portion **20** approximately .035" in thickness at the bottom of the groove. The cutting and removal of the strip **16** provides two relatively thick marginal portions referred to as upper and lower portions **22**, **24** which in the assembly of the welting are folded and shaped as hereinafter described to provide a laminated welt structure. An incision is made in the upper flesh surface of the fillet commencing at a point **26** spaced about 1/16 of an inch from the margin **28** of the groove **18** and is extended downwardly at an angle toward the marginal edge **30**, thus forming a beveled or tapered surface **32**. The unbeveled upper portion **22** of the fillet is then folded upwardly and then downwardly on the hinge portion **20** and is secured by a suitable adhesive to the beveled surface **32** of lower portion **24**. As shown in FIG. 4, after the upper and lower portions **22**, **24** have been folded and connected together an incision is made in the grain surface of the portion **22** commencing at a point **36** spaced inwardly from the marginal edge **38** of the bead or deck **40** a short distance. The incision is extended downwardly in a slight arc and downwardly and outwardly, as shown, extending through the marginal edge **30**, thus forming a deck or bead having a flat top surface, a concave face **42** and a tapered inseam surface **43**. As shown in FIG. 5, a stitching groove **44** is cut in the bottom surface of the portion **24**, and the surface **45** of the portion **24** adjacent the inseam edge of the welt is tapered by making an incision extending upwardly and outwardly from the groove through the marginal edge of the lower portion **24**. As shown, the upper portion **22** of the folded welting provides a platform deck or bead **40** and a tapered inseam surface **43** against which the upper of the shoe is secured. The lower portion **24** has a beveled upper surface **32** and a bottom surface containing the stitching groove **44** and upwardly tapered marginal edge portion **45**. The upper corners of the bead or platform deck may be chamfered to round the same and, as shown, the marginal edge **38** of the two-part bead or deck is flat and extends downwardly substantially at right angles to the surface of the bead.

The present welting, produced in the manner hereintofore described, provides a grain surfaced marginal edge **38** approximately twice as thick as the thickness of the original fillet **10** and a relatively thick two-part gradually tapered inseam flange against which the shoe upper is supported. The welting may be secured to the upper of the shoe such that the upper fits firmly and closely against the surfaces **42**, **43** of the welt and is secured in this position by inseam stitching, not shown, extending upwardly through the stitching groove, the thick portion of the two-part inseam flange and thence through the upper. In this manner the bead or deck is urged firmly against the upper and retained in this position even after long periods of use of the shoe. The outsole of the shoe, not shown, may then be cemented to the bottom surface of the welting strip to complete the shoe.

Referring now to FIGS. 7 to 11 illustrating a modified form of the present platform type shoe welting, **100** represents a grain leather fillet of rectangular shape which may be about 1" in width and .130" in thickness and having a flesh surface **120** and a grain surface **140**. In accordance with the modified embodiment of the invention, as shown in FIG. 8, an elongated strip **160** cut out of the flesh surface of the fillet substantially midway between its edges is parallelogram shaped in cross section to provide a groove having side walls **180** arranged at an angle of about 45° to the bottom surface and providing a relatively thin grain surfaced hinged portion **200**. The cutting and removal of the strip **160** provides two relatively thick marginal portions referred to as upper and lower portions **220**, **240** to be folded and shaped as hereinafter described to provide a laminated welt structure. A triangular strip **260** is cut from the flesh surface of the portion **240**, the incision being made from a point **270** and extending downwardly and outwardly to the marginal edge **300**, to provide a beveled surface **320**. The upper portion **220** is then folded upwardly and then downwardly by virtue of the hinge portion **200** and is secured by a suitable adhesive to the beveled surface **320** of the lower portion **240**.

It will be observed that the outer or thicker marginal edge covered by the hinge **200** of the platform welting thus assembled presents an angular surface arranged at

about 45° relative to the bottom surface of the assembled welting. While in this condition the outer edge may be provided with serrations **190** by means of a wheeling tool, and thereafter a strip **360** may be removed from the grain surfaced upper portion **220** to provide a bead **370**, a concave portion **380** and a tapered inseam surface **430**. A stitching groove **440** may be provided in the bottom surface of the welting. The final step in the production of the present platform welting is to mold the elongated welting strip to assume the shape shown in FIG. 11.

While the present shoe welting has been illustrated and described as being produced from a grain leather fillet other forms of welt forming material may be used, and the completed welting illustrated in FIGS. 6 and 11 may be formed by extruding the same from a suitable plastic material if desired.

Having thus described the invention, what is claimed is:

1. A beaded laminated shoe welting comprising a fillet cut and folded to provide a relatively thin elongated hinge portion along one marginal edge and providing a two-part tapered inseam flange extending to the other marginal edge, said two-part flange comprising upper and lower components connected by said hinge portion, the adjacent edges of said components being folded within and secured to the inner face of said hinge portion and providing an outer marginal edge twice the thickness of said fillet, said upper component being flat for a short distance and then provided with a concave portion forming an upstanding bead, and a downwardly beveled portion coextensive with said concave portion, said lower component having a downwardly beveled top surface and secured to said upper component to provide said two-part tapered inseam flange, said relatively thin hinge portion extending parallel to said outer marginal edge and terminating a relatively short distance from the outer surfaces of said upper and lower components respectively.

2. A shoe welting as defined in claim 1 wherein the bottom surface of said lower component is flat for a short distance and is then beveled upwardly.

3. A shoe welting as defined in claim 1 wherein the outer marginal edge is aranged at right angles to the bottom surface of the welting.

4. A shoe welting as defined in claim 1 wherein the outer marginal edge is aranged at an angle of less than ninety degrees to the bottom surface of the welting.

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