April 23, 1957 W. C. VIZARD 2,789,376

BEADED ANGLE WELTING

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Fig. 1

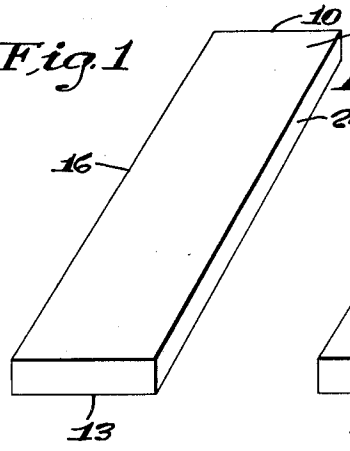


Fig. 2

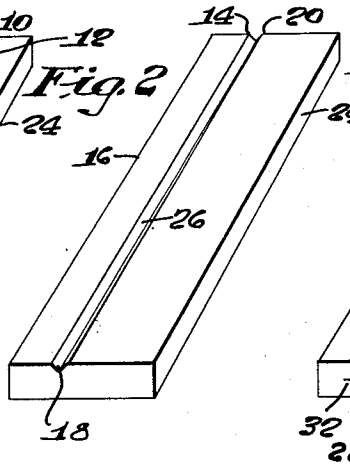


Fig. 3

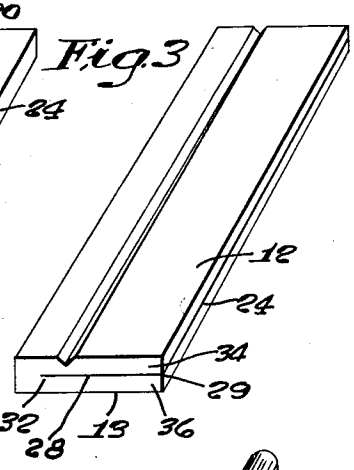


Fig. 4

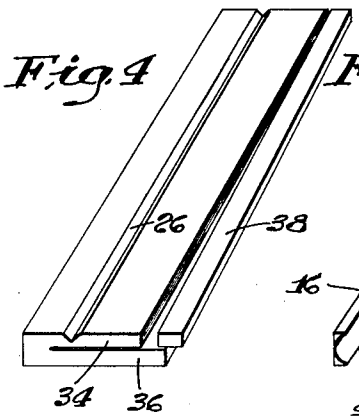


Fig. 5

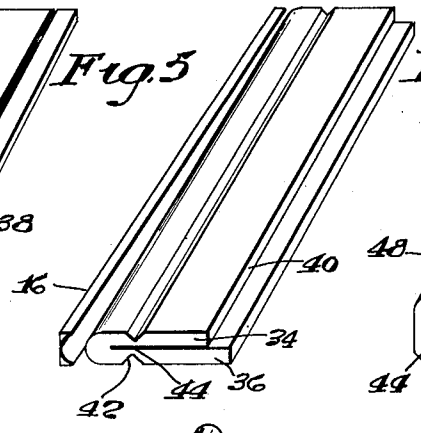


Fig. 6

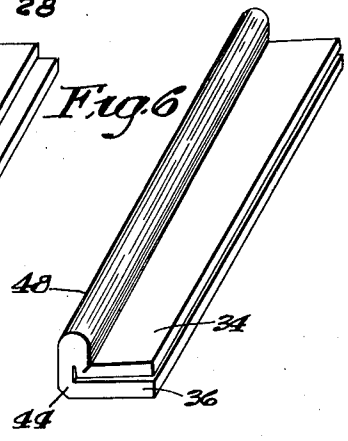


Fig. 7

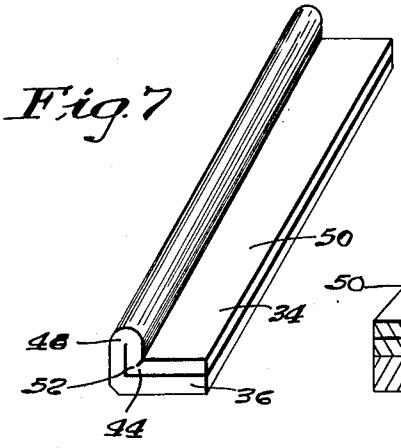
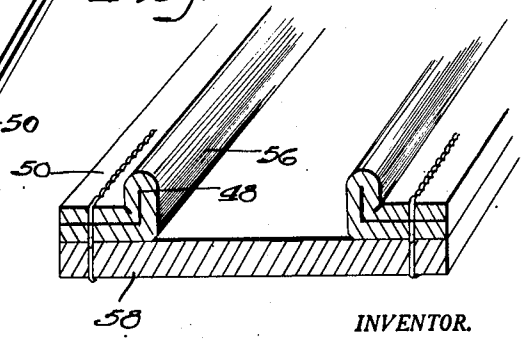


Fig. 8



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BEADED ANGLE WELTING

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1 Claims. (Cl. 36—78)

This invention relates to beaded welting for shoes and to the method of making the same and more particularly to an angle welting of the type having an upstanding bead in its top surface along one of its marginal edges which is particularly adapted to lie closely to the upper of a shoe in which it is incorporated.

The principal object of the present invention is to provide a novel and improved angle beaded shoe welting of a construction which resists any tendency of the bead to deflect from its upstanding position.

A further object is to provide a novel angle type shoe welting which is particularly adapted to be incorporated in shoes of the "Littleway" or "Nail" type.

A still further object of the present invention is to provide a novel and superior method of making the novel beaded shoe welting in a simple, economical manner.

With these general objects in view and such others as may hereinafter appear the invention consists in the present novel angle beaded welting and the method of making the same hereinafter described and particularly defined in the claims at the end of this specification.

In the drawings illustrating the present invention:

Figs. 1–5 are perspective views illustrating the successive steps in the cutting of a grain leather welt strip preparatory to the formation of the finished beaded welt illustrated in Fig. 7;

Fig. 6 is a perspective view illustrating the step of folding the welt strip cut in accordance with the steps illuustrated in Figs. 1–5 to form the present beaded welt;

Fig. 7 is a perspective view showing the present beaded welt formed in accordance with the steps illustrated in Figs. 1–6; and

Fig. 8 is a perspective view illustrating the completed welt secured in operative position to the outsole of a shoe.

In general the present invention in its preferred form contemplates a novel and improved method of forming an angle beaded shoe welting from a unitary grain leather fillet which comprises the steps of providing a bead forming portion along one margin of the fillet and a two part welt extension extending laterally from the bead forming portion. The bead forming portion is provided with a solid top portion and a divided bottom portion, one of the divided portions forming an extension of the lower portion of the welt extension and the other divided portion forming an extension of the upper portion of the lower extension. The lower portion of the welt extension is projected beyond the marginal edge of the upper portion. A folding groove is cut along the line of junction between the bottom of the bead forming portion and the upper portion of the welt extension to enable the bead to be folded upwardly to a position substantially at right angles to the welt extension.

In accordance with the present invention the marginal edge of the lower portion of the welt extension is moved inwardly into alignment with the marginal edge of the upper portion, and in this manner the bead forming portion is moved upwardly into the position shown in Figs.

6, 7 and 8. When embodied in a shoe the upper and lower portions of the welt extension are secured together by stitching or by other suitable securing means such that the bead will be maintained in its upstanding position, and any deflection therefrom prevented.

Referring now to the drawings and particularly to Figs. 1–5, 10 represents a substantially rectangular grain leather fillet which is preferably 9/16" in width and 1/8" thick with an upper grain surface 12 and a bottom flesh surface 13. In accordance with the method of making the present welting, which in the trade is often referred to as an angle type welting, an incision is made in top grain surface 12 commencing at point 14 on a line parallel to and spaced inwardly from marginal edge 16 and is extended at a downwardly disposed angle to point 18. A second incision is made in grain surface 12 commencing at point 20 on a line preferably spaced 2/64" from and parallel to point 14 toward marginal edge 24 of the fillet 10, and is extended downwardly at the same angle as the first incision intersecting the same at point 18. In this manner a triangular groove 26 is formed in grain surface 12 adjacent marginal edge 16, as illustrated in Fig. 2.

The next step in the operation comprises making an incision in marginal edge 24, as shown in Fig. 3. This incision in edge 24 commences at point 29 on line 28 spaced midway between grain surface 12 and the flesh surface 13 and is extended inwardly substantially parallel to said surfaces terminating at point 32, preferably 5/32" inwardly from marginal edge 16. This step in the cutting operation divides a portion of the fillet 10 into an upper grain flange 34 and lower base flange 36 integrally attached to one another adjacent marginal edge 16.

As illustrated in Fig. 4, a relatively narrow ribbon of material 38 is sliced from grain flange 34. In order to remove such ribbon, as illustrated, the grain flange 34 is sliced along a line spaced inwardly 3/32" from and parallel to marginal edge 24, and in this manner base flange 36 is wider than and protrudes laterally 3/32" beyond the marginal edge 40 of said flange 34. It may readily be observed from the description thus far that the width of ribbon 38 is substantially equal to the thickness of fillet 10. The purpose and function of this step in the formation of the present welting strip will become apparent in the description of the steps in the folding operation to be hereinafter described.

Fig. 5 illustrates the next step in the cutting operation which comprises slicing the marginal edge 16 in any suitable manner in order to produce a smooth rounded edge, as shown, and cutting a relatively narrow longitudinal triangular groove 42 in the bottom flesh surface 13 of the fillet 10. Longitudinal groove 42 is disposed in substantial alignment with groove 26 and provides in conjunction with said groove 26 hinged portion 44 upon which the body of fillet 10 adjacent marginal edge 16 may be folded in the manner hereinafter to be described to form the upstanding welt bead.

Referring now to Figs. 6 and 7 in particular for a description of the folding operation essential to the formation of the present novel welting, it may be readily observed that longitudinal triangular grooves 26, 42 cut in the top and bottom surfaces of the welt strip 10 form hinge portion 44 enabling the solid rounded bead portion 48 of the welt strip to be folded upwardly to a position substantially at right angles to flanges 34, 36, as shown, by endwise pressure exerted upon the edge of the lower flange 36. During the folding of bead portion 48 it is seen that the margin of grain flange 34, which has been cut to be preferably 3/32" narrower than base flange 36, is disposed in flush relationship with the marginal edge 24 of said base flange, thereby forming a unitary welt deck 50 integral with an laterally extending from said

bead portion **48**. The bead **48** is supported and maintained in its folded upstanding position with relation to the welt deck by the wedge shaped inner edge **52** of grain flange **34** adjacent hinge **44** and the angular complementary portion of the bead comprising the sides of groove **26**. It will be apparent that the angular disposition of the bead with relation to welt deck **50** may be varied from that of an angle of 90°, either increasing or decreasing the same, by varying the angular sides forming groove **26**.

In order to maintain the elements comprising the completed "Angle Stormwelt" in their folded position, as illustrated in Figs. 7 and 8, cement may be applied between flanges **34**, **36**, and upon the angular sides of groove **26** which will harden and firmly cement such portions together during the molding operation, not shown, for forming the completed welting. Any suitable cement utilized in the trade may be used for this purpose, and any of the usual molding operations practiced in welting manufacture may be used to form the finished welting.

During the molding operation, as above set forth, the solid bead forming portion is folded into its upstanding position by endwise pressure exerted on the edge of the lower flange. Preferably, the lower portion of the bead is divided, and each part forms an extension of one of the flanges **34**, **36** so that when embodied in a shoe and the flanges are secured, as by stitching, to the outsole, any tendency toward deflection or sagging of the upstanding bead will be resisted by the stitching or other securing means.

In practice the present novel angle beaded welting is

particularly adapted to be incorporated in a shoe of the "Littleway" or "Nail" type. Fig. 8 illustrates the present novel welting secured in operative position to the outsole portion **58** of a shoe. The vamp or shoe upper may be disposed in pressed relation against the bead face **56** and secured to the sole portion of the shoe by cement or nailing as practiced in the shoe manufacturing trade.

Having thus described the invention, what is claimed is:

A beaded shoe welting comprising a fillet having a portion providing a bead disposed along one marginal edge thereof and a two-part welt extension extending laterally at approximately right angles from said bead, said welt extension having upper and lower components, said bead comprising a solid upper portion and a two-part lower portion, the mapor portion of the solid upper portion being disposed above the plane of the upper surface of the welt extension, said two-part lower portion comprising extensions of the two components of the welt extension, the outer marginal edges of the two components of the welt extension lying in substantially the same plane.

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