Dec. 15, 1959 F. L. SHEA 2,916,834

TWO-PART SHOE WELTING AND METHOD OF MAKING THE SAME

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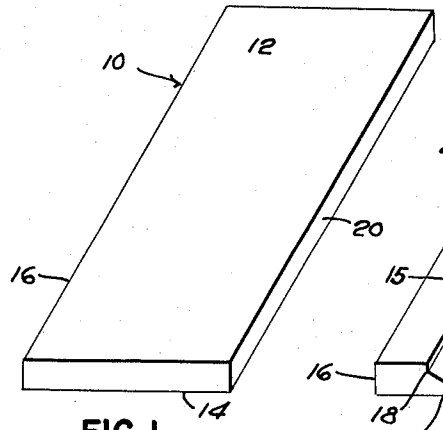


FIG. 1

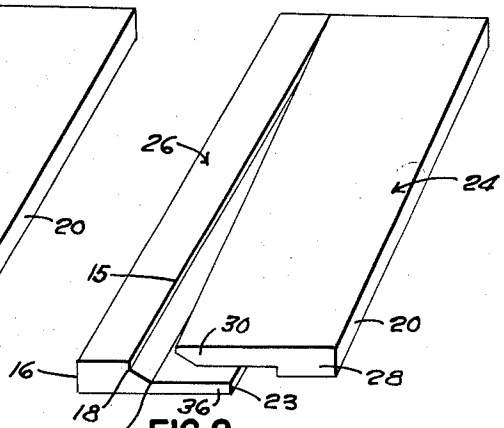


FIG. 2

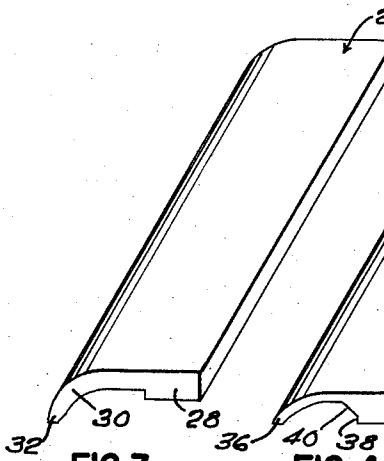


FIG. 3

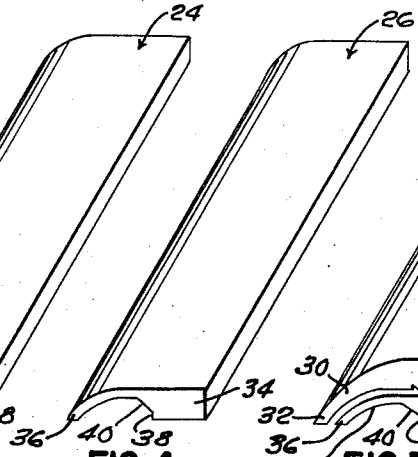


FIG. 4

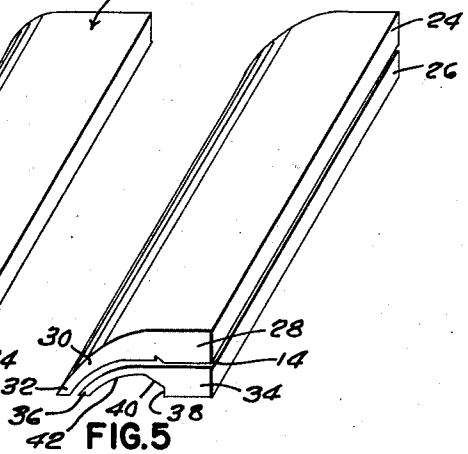


FIG. 5

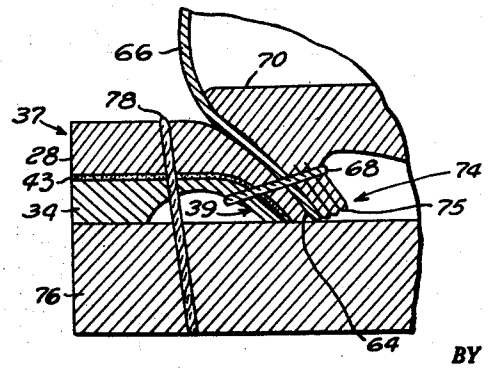


FIG. 6

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TWO-PART SHOE WELTING AND METHOD OF MAKING THE SAME

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1 Claim. (Cl. 36—78)

This invention relates to a shoe welting and method of making the same.

The invention has for an object to provide a novel and improved construction of shoe welting of the type having a thick welt extension and a relatively thin inseam flange.

A further object of the invention is to provide a novel and improved shoe welting of a construction such that when incorporated in a shoe, the welt is disposed in an inseaming position low enough to allow the inseam lip to be trimmed much lower than usual, and which also carries the inseam stitch under the shoe so that it is almost impossible to cut the inseam stitch when the sole is Goodyear stitched to the shoe.

A still further object of the invention is to provide a novel method of making the same in an economical and efficient manner.

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

In the drawings illustrating the preferred embodiment of the present invention:

Figs. 1 through 5 are perspective views illustrating the steps of cutting and forming the present two-part welting; and

Fig. 6 is a perspective view partially in section illustrating the welting formed in accordance with the steps illustrated in Figs. 1 through 5 secured to the upper of a shoe.

In general the present invention contemplates a novel and improved shoe welting and method of making the same preferably from a unitary grain leather fillet. Preferably the invention contemplates a two-part shoe welting, with the parts superimposed one on the other and secured together, and each part of a construction such as to impart to the finished welting a so-called "heavy edge" appearance. The present welting is characterized by structure which enables the inseam lip to be trimmed much lower and the welting to be secured to the shoe so that the inseam stitch is positioned under the shoe upper and cannot be severed when the outsole is Goodyear stitched to the shoe and results in a structure wherein the welt is caused to hug the upper in a tight and firm manner. The invention enables a shoe welting to be manufactured in a manner which results in a substantial saving in leather over the amount required to construct prior similar welting of which I am aware.

Referring now to the drawings illustrating the present invention, **10** represents a grain leather fillet having a grain surface **12** and a flesh surface **14**. The first step in the formation of the present novel shoe welting consists in making an incision **15** in the grain surface **12** along a line parallel to and spaced inwardly a short distance from the marginal edge **16** as shown in Fig. 2. The incision is extended downwardly a short distance parallel

to said edge **16** to a point **18** and then is extended downwardly at an inclined angle toward the flesh surface **14** and the marginal edge **20** to a point **22** and then outwardly parallel to the flesh surface **14** to a point **23** spaced inwardly a short distance from the marginal edge **20**. The incision is then turned at an angle of 90° and extended downwardly parallel to the marginal edge **20** to and through the flesh surface **14** as shown. As illustrated in Fig. 2, this step in the present method results in the formation of upper and lower parts **24**, **26**. Upper part **24** is provided with a relatively thick welt extension portion **28** and a relatively thin laterally extending inseam flange portion **30**. The free end **32** of flange **30** is preferably squared as shown. The lower part **26** is provided with a relatively thick welt extension portion **34** and a thin lip portion **36**. As illustrated, lip portion **36** is preferably thinner and shorter than flange portion **30**, thereby enabling the upper and lower portions to be molded into the shape shown in Fig. 5. As shown in Fig. 4, the lower part **26** is provided with a sharply defined shoulder **38** and an inclined or tapered shoulder **40** intermediate the welt extension portion **34** and the lip portion **36**.

The next step in the formation of the present welting consists in placing the lower part **26** in an inverted position such that the flesh surface **14** is on top and the grain surface **12** forms the bottom surface. The uppermost flesh surface of the lower part **26** may and preferably will be coated with a suitable adhesive or cement of any usual or preferred composition, preferably the type now utilized in the production of shoe welting, in order to bond the upper and lower parts together, as will be hereinafter more fully described.

As illustrated in Fig. 5, the upper part **24** is superimposed upon the cement coated surface **14** of the lower part **26** in a position in which the welt extension portion **28** overlies and is in alignment with the welt extension portion **34**. The inseam flange **30** overlies and is in alignment with the lip portion **36**. In this manner the present welting is formed providing a thick two-part welt extension **37** and a relatively thinner inseam flange **39**. As shown in Fig. 5, the inseam flange forms with the welt extension a relatively high arched portion **42** intermediate flange **39** and extension **37**. The upper grain surface of the inseam flange is gradually tapered in an arc from the welt extension downwardly as shown. In practice the present cemented two-part welt may and preferably will be subjected to the usual molding operations to thereby shape and securely bond the upper and lower parts **24**, **26** into a unitary welt structure of the form shown in Fig. 5.

After the upper and lower components **24**, **26** of the present welt have been individually formed in accordance with the procedures above described they are individually molded into the general shapes shown in Figs. 3 and 4 ready to be assembled and subjected to the final molding and cementing operation, producing a structure such as is illustrated in Fig. 5 wherein the upper surface of the welt extension is substantially flat and wherein the inseam flange is curved downwardly in an arc from the adjacent margin of the flat surface of the welt extension terminating substantially in the plane of the bottom surface of the extension. The bottom surface of the inseam flange **39** is arched upwardly as at **42**. The cement bonding the upper and lower components of the welt together is indicated at **43** in Fig. 6.

It may be observed that upper inseam flange **30** is of substantially greater thickness and rigidity than lower inseam flange **36**. This feature enables the molded inseam flange **39** to maintain its molded shape and to cause said flange to be urged against the upper of the shoe

when the welting is secured thereto as illustrated in Fig. 6.

In practice the present two-part welting structure formed in accordance with the present invention is particularly adapted to be incorporated in a shoe so that the inseam lips of the welting, upper and insole may be trimmed much closer than heretofore found possible, providing a tight seam between the welting and upper of the shoe. The inseam stitching is carried under the shoe so that when the outsole is Goodyear stitched to the shoe such stitching will not sever the inseam stitching. This difficulty has been found to be prevalent in prior similar welts of which I am aware, and in some instances has resulted in the detachment of the outsole from the shoe.

Referring to Fig. 6, the construction and shape of the present welting enables it to be secured to the marginal edge **64** of the upper **66** of the shoe by the inseam stitching **68** in a position to dispose the upper grain surface **12** of the welt extension **37** further under the curve of the upper than is the case with ordinary welting of this type and slightly below the general plane of the upper surface of the insole **70** of the shoe. The inseam flange **39** is firmly compressed against the marginal edge **64** of the upper **66** and is disposed under the margin of the insole **70** as shown. The welting is secured in such position by inseam stitching **68** extending through the upper **66** and insole feather **74**. The marginal portion of the inseam flange **39**, upper **66** and insole lips **75** is then trimmed as low as possible. This particular structure of shoe welting eliminates the necessity of providing a thick filler between the insole and outsole of the shoe. The outsole **76** is thereafter secured to the shoe by Goodyear stitching **78**, and it will be observed that the Goodyear stitching passes at a slight angle through the welt extension outside of the inseam stitching, thus clearing the inseam stitching so that liability of severing the same, as has frequently occurred with prior weltings, may be avoided. As shown, the outsole stitching **78** draws the inseam flange **39** and welt extension **37** toward one another, thereby substantially filling arched portion **42** and causing the inseam flange **39** to be urged firmly against the marginal edge of the upper of the shoe.

It may be observed that the present construction enables the welt to be inseamed at a lower position and results in a construction of shoe in which the joint between the welt and upper is extremely tight. In addition, the present invention enables savings to be effected in the width of leather fillets required to be used in producing the present welting.

While it is preferred to produce the present welting from a leather fillet, as described, it will be understood that other materials may be used, and the finished welting may be extruded or otherwise formed of plastics.

Having thus described the invention, what is claimed is:

A two-part shoe welting comprising upper and lower components, said components each comprising a relatively thick welt extension portion and a relatively thin inseam lip extending laterally from said welt extension, the upper component having a grain leather surface, the lip portion of the lower component being integral with and extending laterally from only the upper portion of the lower welt extension portion, said upper and lower portions superimposed upon and secured together to form a relatively thick welt extension and a relatively thin inseam flange, and the upper grain surface of the welt downwardly curved from one marginal edge of the welt extension, and the marginal edges of the upper and lower inseam flanges terminating in the plane of the bottom surface of the welt extension.

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