

July 17, 1956

W. C. VIZARD

2,754,600

SHOE WELTING

Filed Aug. 11, 1953

Fig. 1

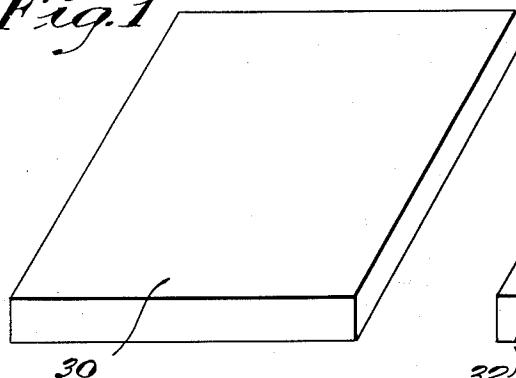


Fig. 2

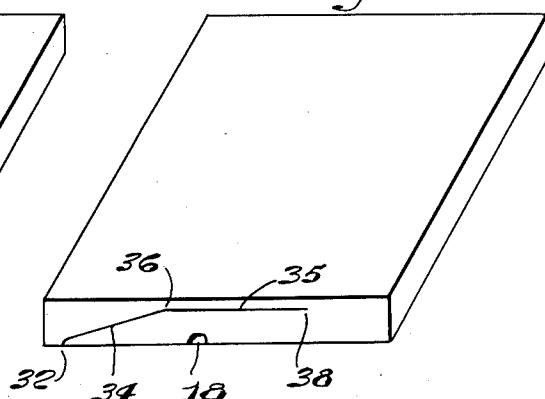


Fig. 3

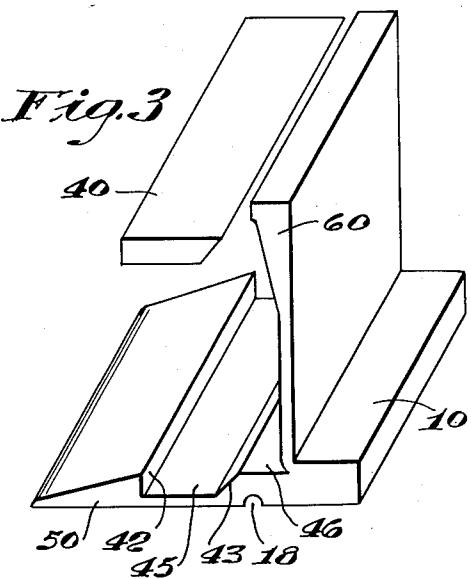


Fig. 4

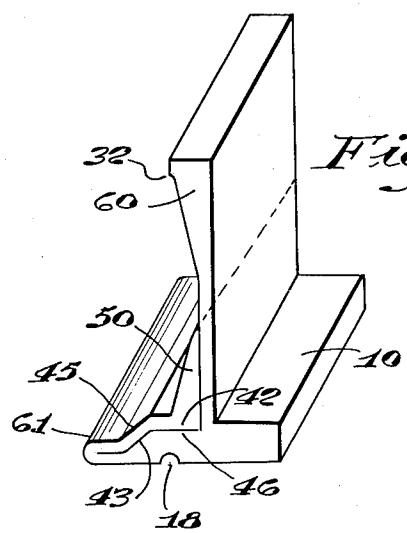


Fig. 5

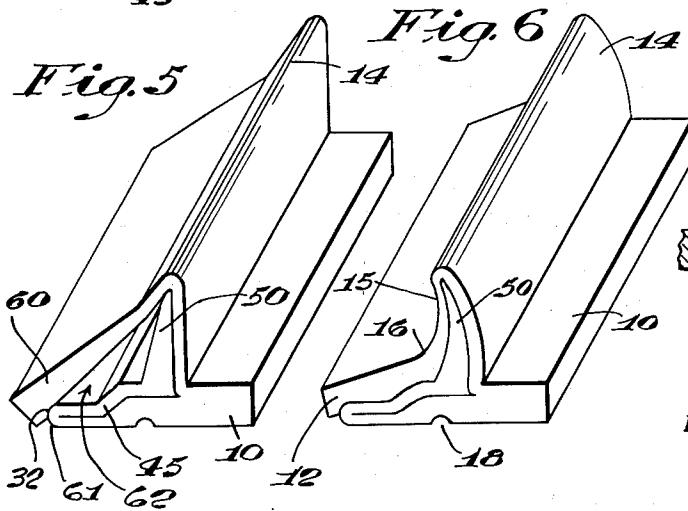
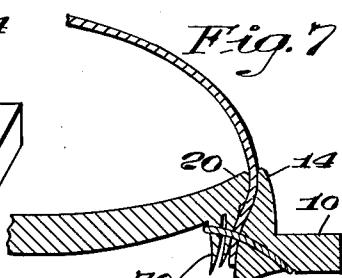


Fig. 6



INVENTOR.
William C. Vizard
BY
J. Stanley Churchill
ATTORNEY

United States Patent Office

2,754,600

Patented July 17, 1956

1

2,754,600

SHOE WELTING

William C. Vizard, Brockton, Mass., assignor to Barbour Welting Company, Brockton, Mass.

Application August 11, 1953, Serial No. 373,520

3 Claims. (Cl. 36—78)

This invention relates to shoe welting and particularly to a platform type of welting having an upstanding platform bead and to a method of welting a shoe.

The invention has for an object to provide a novel platform welt which may be incorporated in a Goodyear welt shoe and which is of a novel structure such that when the welt is properly stitched to the usual inseam lips, as will be described, the bead or platform is caused to hug tightly against the surfaces of the vamp to cause the vamp to be pressed tightly against the margin of the insole, thus preventing spreading of the platform away from the vamp when the shoe is flexed during use. In this manner gaps or gutters between the platform welt or bead and the shoe upper during the wear of the shoe are eliminated, improving the appearance of the shoe and reducing to a minimum the seepage of moisture into the welt seam.

A further object of the invention is to provide a novel method of welting a shoe having an insole involving the stitching of the novel platform welt to the usual lips of the insole in a manner such that the stitching tension tends to rock inwardly the platform or bead of the welt adjacent the vamp and margin of the insole and assists in avoiding the production of gaps or gutters between the platform or bead and the shoe upper as the shoe is worn.

With these objects in view and such others as may hereinafter appear, the invention consists in the platform welt hereinabove described and particularly defined in the claims at the end of the specification.

In the drawings I have illustrated the successive steps in the formation of the present welt as well as the welt itself and the embodiment of the welt in a shoe wherein:

Fig. 1 is a perspective view of a grain leather fillet from which the present welt is preferably constructed;

Figs. 2 through 5 illustrate in perspective the various cuts and folding operations which are preferably used in producing the preferred form of platform welt from the fillet shown in Fig. 1;

Fig. 6 is a perspective of the preferred form of welt embodying the invention; and

Fig. 7 is a sectional detail illustrating the relative positions occupied by the welt, insole and inseam stitches when the shoe is welted using the present improved platform welt in accordance with the present invention.

In general the invention contemplates a welt of the platform or beaded type comprising a welt strip having a welt extension 10 along one margin thereof and an inseam flange 12 along the other margin of the strip and having a longitudinally extended platform bead 14 upstanding from the upper surface of the welt strip intermediate the welt extension and inseam flange. The juncture between the inseam flange 12 and the inner or inseam surface 15 of the platform or bead forms a stitch receiving line 16 through which the inseam stitches are extended from the usual inseam groove 18 formed in the undersurface of the welt. In accordance with the present invention the inseam stitch receiving line 16 is disposed a substantial distance above the upper surface of the welt extension 10, and in practice it is preferred that the line 16 should be disposed

2

about $\frac{5}{32}$ inch above the upper surface of the welt extension 10. The height of the bead 14 is preferably such as to approximate and preferably be slightly above the marginal portion of the upper surface of the insole 20 of a shoe to be welted so that when the welt is stitched by the inseam stitching extending through the welt from the inseam groove 18 and emerging at approximately the line 16, the tension in the inseam stitches exerts an inwardly rocking action so that the inseam surface of the bead 15 is drawn tightly against the portions of the vamp between the upper portion of the inseam face of the bead and the adjacent marginal portion of the insole 20.

A relatively thick or heavy insole is preferably used in making the shoe, and the insole is preferably applied to a rocker bottom last. When a lighter insole is employed a leather wedge or split (not shown) may be inserted between the marginal lip of the insole and the inseam flange of the welt to raise the top of the curved marginal lip with relation to the top of the welt bead when the parts are assembled. The high insole lip and the slightly higher welt bead on opposite sides of the vamp are pressed tightly toward each other when the thick welt flange is inseamed to the depending lips of the insole.

Referring now to the drawings, I have illustrated in perspective the various cuts and folding operations which are preferably performed in producing a platform or beaded welt embodying the invention and of the structure illustrated in Fig. 6. The welt is preferably formed from a grain leather fillet 30 about $1\frac{1}{16}$ inches in width by $\frac{5}{32}$ inch thick. The first operation comprises the cutting of the fillet starting at a point 32 about $\frac{1}{16}$ of an inch from the left hand marginal edge of the fillet and at the flesh surface of the fillet. A cut is made along the line 34 to a point 36 spaced about $\frac{3}{8}$ of an inch from the starting point and measured in a direction parallel to the upper surface of the fillet. This point 36 is about .040 inch below the grain surface of the fillet, and the cut is continued along the line 35 in a direction parallel to the grain surface for a distance of about $1\frac{1}{32}$ inch terminating at a point 38. The usual inseam groove 18 is cut in the undersurface of the fillet as illustrated in Fig. 2.

The next step in the operation is to swing into a vertical position the flap formed by the cuts along the lines 34, 35 about a fold line through the point 38, and then a strip 40 is cut from the underlying flesh portion of the fillet, as illustrated in Fig. 3, leaving a substantially rectangular shoulder 42 and an inclined shoulder 43, as illustrated, and forming between a thin flesh folding section 45 and a flat base portion 46. The wedge shaped section indicated at 50 is then folded to form the core of the bead or platform, and by folding the portion 50 from the position shown in Fig. 3 to that shown in Fig. 4 the shoulder 42 is disposed upon the base 46 with the triangular shaped core 50 upstanding and in a position engaging the upstanding flap which has previously been swung into position shown in Fig. 3. The remaining portion of the folding section 45 is then folded into the position shown in Fig. 4 conforming to the inclined shoulder 43 and portion of the base 46 as shown.

60 The next step in the operation involves the folding of the upstanding flap, indicated generally at 60 in Fig. 4, down into the position illustrated in Fig. 5 where the curved shoulder formed at the point 32 is brought into contact with the inner edge 61 of the folded section 45 of Fig. 4 and forms an open pocket 62. By proportioning the cuts and the folds, as illustrated in Figs. 2 to 5, it will be apparent that when the core forming portion 50 and associated portions are then pressed down into the position shown in Fig. 6, the platform or bead will be caused 65 to assume a concave shape, as illustrated in Figs. 6 and 7. It will be understood that all of contacting surfaces will have been properly coated with the usual cement em-

ployed in the welting art so that during the forming or molding operation the cover flaps will be firmly united to both faces of the core 50 and the remaining folded portions secured to the surfaces against which they are pressed in the molding operation.

By reference to Fig. 7 it will be observed that utilizing the platform or beaded welt of the shape and preferably of the construction thus far described, and with the inseam stitches emerging at substantially the stitch line 16 during the stitching of the welt to the usual lips 70 depending from the insole, the top of the platform or bead 14 is disposed slightly above the marginal edge of the insole, and the stitching tension tends to rock the platform or bead inwardly to thereby cause it to firmly clamp the vamp between it and the marginal edge of the insole. This disposes the welt extension in a position substantially below the margin of the insole. This method of welting contributes to the appearance and durability of the shoe and avoids the formation of gutters and gaps between the welt and the shoe upper when the shoe is worn.

While it is preferred to construct the present welt from a grain leather fillet, nevertheless it will be understood that the invention in its broader aspects contemplates the formation of the present welt from materials other than leather, including laminated and extruded, and other plastic structures.

Having thus described the invention, what is claimed is:

1. A shoe welting comprising a laterally extending welt extension portion, an inseam flange portion and an upstanding bead portion disposed intermediate said extension and inseam flange, the surface of said inseam flange being gradually tapered downwardly from a point in a plane above the surface of said welt extension and below the top of said bead to its marginal edge, the upper surface of the bead adjacent said inseam flange from said point being sharply concave, the top portion of said bead being sharply turned toward the marginal edge of said inseam flange, the inseam flange being laminated, and the top surface portion thereof being of a thickness at least equal to the thickness of the welt extension.

2. A shoe welting of the character described in claim 1 wherein the upper surface of said laminated inseam flange

is extended beyond the marginal edge of the underlying laminations of said inseam flange.

3. A shoe welting comprising a laterally extending welt extension portion, an inseam flange portion and an upstanding bead portion disposed intermediate said extension and inseam flange, said inseam flange being laminated and comprising top, intermediate and bottom portions, the surface of said top portion of the inseam flange being gradually tapered downwardly from a point in a plane above the surface of the welt extension and below the top of said bead to its marginal edge, the upper surface of the bead adjacent said point being sharply concave, the top portion of said bead being sharply turned toward the marginal edge of said inseam flange, the intermediate portion of said inseam flange being integral with the bottom portion thereof and forming a core for the upstanding bead portion, and the top portion of the inseam flange being of a thickness at least equal to the thickness of the welt extension.

20

References Cited in the file of this patent

UNITED STATES PATENTS

1,664,891	Lyon	-----	Apr. 3, 1928
1,666,444	Fallon	-----	Apr. 17, 1928
1,706,624	Lyon	-----	Mar. 26, 1929
1,809,555	Howard	-----	June 9, 1931
1,828,728	Arnold et al.	-----	Oct. 27, 1931
1,864,311	Lyon	-----	June 21, 1932
1,974,502	Merritt	-----	Sept. 25, 1934
1,996,844	Vizard	-----	Apr. 9, 1935
2,153,321	Vizard	-----	Apr. 4, 1939
2,201,382	Vizard	-----	May 21, 1940
2,299,263	Vizard	-----	Oct. 20, 1942
2,328,937	White	-----	Sept. 7, 1943
2,403,750	Quimet	-----	July 9, 1946
2,517,347	Quimet	-----	Aug. 1, 1950
2,593,871	Gemme	-----	Apr. 22, 1952

30

OTHER REFERENCES

American Shoemaking, page 36, April 21, 1948.

40