Jan 6, 1931. A. L. HOWARD 1,787,864

WELTING AND METHOD OF MAKING THE SAME

Filed Oct. 10, 1929

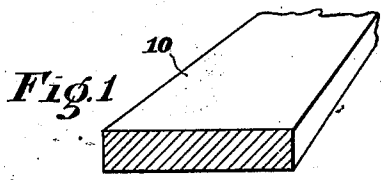


Fig. 1

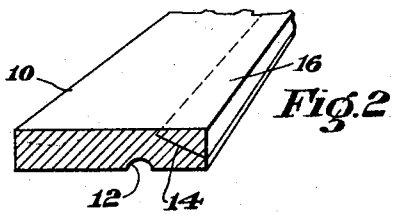


Fig. 2

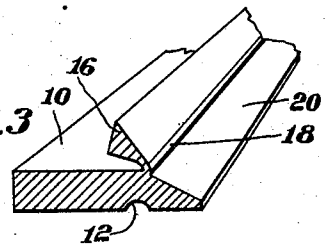


Fig. 3

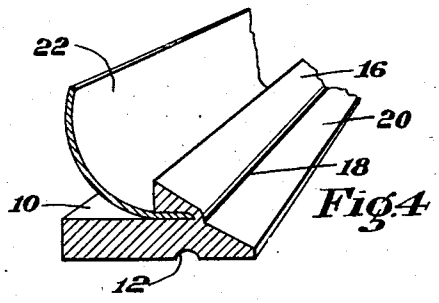


Fig. 4

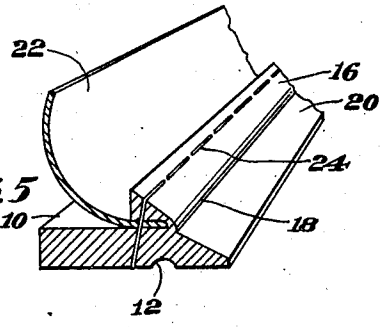


Fig. 5

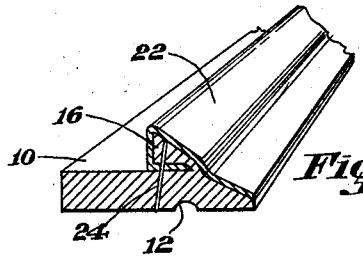


Fig. 6

INVENTOR.

Albert L. Howard.

BY

ATTORNEY.

Patented Jan. 6, 1931 1,787,864

UNITED STATES PATENT OFFICE

ALBERT L. HOWARD, OF BROCKTON, MASSACHUSETTS, ASSIGNOR TO HAMILTON-WADE COMPANY, OF BROCKTON, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS

WELTING AND METHOD OF MAKING THE SAME

Application filed October 10, 1929. Serial No. 398,633.

This invention relates to improvements in that type of welting known as beaded or storm welt, and to a novel method of making the same.

In producing the raised portion or bead of a beaded welt, which is designed to lie in the shoe crease formed between the upper and the welt of the shoe, it has been customary to employ a separate filler strip and to unite this to the body of the welting either by attaching it to the surface of the strip or by inserting it in a longitudinal slit formed in the edge thereof. Frequently, the filler strip is cut from the body of the welt strip and then united to it in forming the beaded welt. In following such procedure, there is always danger of misplacement of the filler strip and inaccuracies in the location thereof are likely to occur which impair the desired uniform character of the welt. Moreover, when the filler strip is attached to the surface of the welting, a seam or other joint between the body of the welt and the filler strip is formed which must be covered to render it waterproof.

In accordance with the present invention, it is proposed to slit the edge of the welting in such a manner that a longitudinally extending portion thereof may be folded back upon its upper surface, maintaining an integral connection therewith through the fold vertex and forming a filler strip accurately located and already partially secured in the required position. By practicing the steps set forth, the employment of a separate filler strip is avoided and an integral two-part structure is substituted for an assembly of separate parts, with the resulting economies in material and labor and improved accuracy of shape and dimensions in the product.

Having produced and located the filler strip as above explained, it may be permanently secured in place by any suitable fastening means, such as stitching or cement, and may be used in this condition in certain types of boots and shoes. I prefer, however, to cover the outer face of the welting with sheet material, such as upper leather. The welt structure formed as explained is particularly well adapted to be covered. One edge of the cover strip may be secured in place and concealed by being inserted beneath the folded-back filler strip and preferably the edge may be located by engagement with the inner or concave face of the fold vertex. In this way the desired parallel relation of the welting and cover strip is insured and the edge of the cover strip located where it may be securely and conveniently fastened between the superposed surfaces of the folded parts.

Having fastened the concealed edge of the cover strip beneath the filler strip, I propose to wrap the cover about the filler strip, preferably in the same operation covering the outer or convex face of the fold vertex as well as the outer inclined face of the welting. In case stitching or other through-and-through fastening has been employed to secure the filler strip in its folded-back position, this will be concealed by the cover strip and a smooth, unbroken and attractive surface is provided for the welting.

These and other features of the invention will be best understood and appreciated from the following description of a preferred embodiment thereof and of the novel method of making it, selected for purposes of illustration and shown in the accompanying drawings, in which

Fig. 1 is a view in perspective of the strip used in producing the beaded welt;

Fig. 2 is a similar view illustrating the step of slitting the strip;

Fig. 3 is a similar view showing the strip defined by the slitting operation turned back;

Fig. 4 is a similar view showing the cover strip with one edge in position in the welting;

Fig. 5 is a similar view illustrating the step of securing the filler strip in folded-back condition; and

Fig. 6 is a view in perspective of the finished product.

The strip or blank 10 from which the welting is formed, as shown in Fig. 1, is substantially rectangular in cross section, its opposite faces being parallel or substantially so, and its dimensions being suitable for the type of work for which the welting is intended.

The strip 10 may be provided with a groove

12 in its lower face, as is usual to adapt the welt more readily to receive the stitches of the inseam. Simultaneously with the grooving operation, or separately if preferred, a longitudinally extending slit 14 is formed in one edge of the strip 10. The slit 14 extends obliquely and upwardly from the edge of the strip toward the upper surface thereof and is terminated at a uniform distance beneath the surface. Preferably, and as herein shown, the entering line of the slit 14 is slightly above the lower corner of the strip 10. The effect of the slit is to define or mark off in the strip a secondary strip or portion 16 which is substantially triangular in cross section, as shown in Fig. 2.

Having continued the slit 14 for a sufficient distance in the strip 10, the secondary strip 16, which will now be referred to as a filler strip, is folded or doubled back toward the upper surface of the strip 10. In this operation the material remaining between the end of the slit 14 and the surface of the strip 10 constitutes a hinge, and in this is formed a fold vertex 18 by which a continuous and sealed integral connection between the two strips is maintained. Turning back of the filler strip 16 exposes a beveled face 20 at the outer edge of the welting, and the tapering or beveled shape resulting is advantageous in the welting in that it increases the flexibility of its outer edge and so improves its fit about the contour of the shoe. A covering strip 22, usually of upper leather, is employed for covering the filler strip and the outer face of the welting. As shown in Fig. 4, one edge of the cover strip 22 is tucked under the filler strip 16 and engaged between it and the upper face of the strip 10. In this operation the cover strip may be accurately positioned in position for assembling by having its edge butted uniformly against the inner or concave face of the fold vertex 18.

The edge of the cover strip 22 concealed beneath the filler strip 16 may be secured in place by any preferred fastening means. As shown in Fig. 5, a stitch line 24 is employed for this purpose. This constitutes a through-and-through fastening extending through the filler strip 16, the concealed edge of the cover strip 22, and the body of the strip 10. The stitch line 24 extending parallel to the fold vertex 18 supplements the latter in permanently and securely fastening the filler strip in place, as well as anchoring the edge of the cover strip.

Having secured the inner or concealed edge of the cover strip 22 by stitching or otherwise, the cover strip is next wrapped about the filler strip 16, being carried upwardly and then forwardly over the inclined face of the filler strip, across the outer face of the fold vertex 18 and across the beveled face 20 of the strip 10. The cover strip 22 is preferably of such width as to register with the outer edge of the beveled face 20, and the welting is completed by securing the cover by cement in such position as shown in Fig. 6. Additional operations, such as a final trimming of the edge of the cover strip 22 or a molding of the completed welting by rollers or otherwise, may be carried out if desired. The complete welt, however, is shown in Fig. 6.

In selecting the cover strip any desired material may be employed as, for example, upper leather matching in color the upper leather of the shoe upper with which the welting is to be used or, if preferred, an imitation leather or rubberized fabric.

By the foregoing method I have produced a welt of attractive appearance and unusual strength, with marked economy in material and in such manner as to require little skill on the part of the operator, inasmuch as the position of the filler strip is gauged by its integral fold vertex connection with the body of the strip and the position of the cover strip may also be gauged with reference to the fold vertex.

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

1. A welt comprising a body portion and a filler strip integrally joined along one edge and folded into superposed relation, and a cover strip engaged between the two with its concealed edge in substantial contact with the vertex of the fold thus formed.

2. A welt comprising a body portion and a filler strip integrally joined along one edge and folded into superposed relation, a cover strip extending between the two with its inner edge substantially parallel to the fold vertex, and a seam uniting the body portion and filler strip and extending through the concealed edge of the cover strip.

3. A welt comprising a body portion and a filler strip integrally joined by a fold vertex and disposed in superposed relation, and a cover strip caught at one edge between the two and extending smoothly over the convex side of the fold vertex.

4. A welt comprising a body portion and a filler strip integrally joined by a 180° fold vertex and disposed in superposed off-set relation, and a cover strip retained at one edge between the two, extending first away from the fold vertex, then upwardly about the filler strip and then forwardly and downwardly covering the fold vertex.

5. A welt comprising a two-part strip including a longitudinally extending fold vertex, and a cover strip laid smoothly over the fold vertex and extending transversely in both directions therefrom to the adjacent longitudinal edges of the strip.

6. A welt comprising a body portion having a beveled edge, a filler strip of substantially triangular cross section integrally connected to the body portion along the upper

side of its beveled edge and folded back toward the upper surface of the body portion, and a cover strip tucked at one edge between the filler strip and the body portion and extending continuously over the filler strip and the beveled edge of the body portion.

7. The method of making a beaded welt for boots and shoes, which consists in obliquely slitting one edge of strip of substantially rectangular cross section, folding the portion above the slit back upon the upper surface thereof while preserving an integral connection, and then covering the surfaces of the strip adjacent to the fold.

8. The method of making a beaded welt for boots and shoes, which consists in slitting one edge of a parallel-faced strip on an oblique plane extending inwardly and upwardly and terminating below the upper face thereof, doubling back upon the upper face of the strip the portion defined by such slitting by bending the unsevered portion of the material at the upper edge of said oblique plane, and stitching the doubled strip.

9. The method of making a beaded welt for boots and shoes, which consists in obliquely slitting the edge of the welting, folding back upon the upper face thereof the strip defined by such slitting, concealing the edge of a cover strip beneath the folded-back strip, fastening in place said concealed edge and folded-back strip, and then concealing the stitching by wrapping the cover strip about the surface of the folded-back strip.

10. The method of making a beaded welt which consists in obliquely slitting the edge of the welting to define a tapering strip, folding back the strip thus defined in position gauged by the fold vertex of its connection, positioning a cover strip by gauging it with reference to the fold vertex, and cementing the positioned cover strip to the outer face of the beaded welt thus formed.

ALBERT L. HOWARD.