Feb. 23, 1965 C. R. JOHNSON 3,170,253

SHOE WELT

Filed May 18, 1964

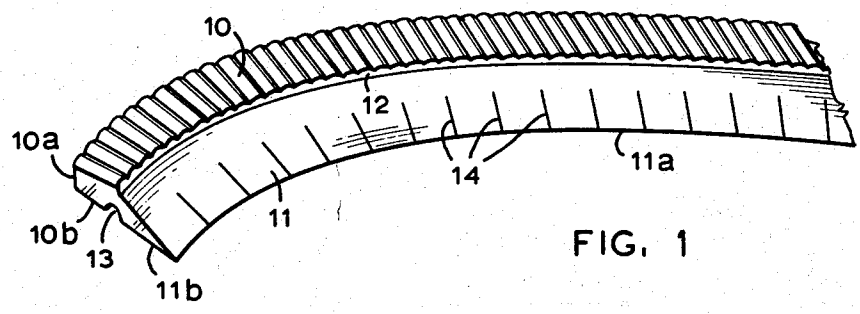


FIG. 1

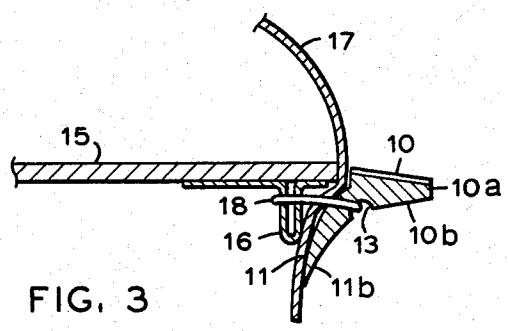


FIG. 3

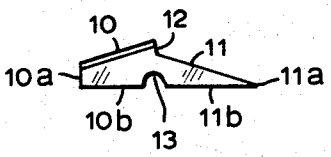


FIG. 2

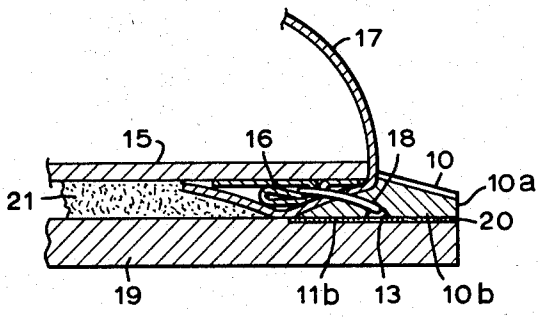


FIG. 4

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SHOE WELT

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This invention relates to a novel welting for use in welted shoes and to improvements in welted shoes realized from this novel welting.

It is an object of this invention to provide a novel welting having characteristics which result in a better welted shoe.

It is also an object of this invention to provide a welted shoe in which better flexibility and a stronger shoe can be obtained.

A further object of the invention is to provide welting that is adapted for flat lasting and presents a greatly extended surface for cementing of the out-sole so as to avoid stitching the out-sole as in a Goodyear welted shoe.

It is also an object of the invention to provide a novel welting which has great flexibility and is especially adapted for cemented shoe constructions.

The welting of this invention can be produced of any of the usual materials, such as leather and plastic. The welting is made in length and to a uniform dimension so that the incorporation thereof into shoes can result in improved construction and quality. An important characteristic of the improved welting is the extremely wide scarfed margin of flexible form so that it will not detract from the flexibleness of the shoe.

A preferred embodiment of this invention is disclosed in the accompanying drawing, wherein:

FIG. 1 is a perspective view of the welting of this invention;

FIG. 2 is an end view of the welting;

FIG. 3 is a fragmentary sectional view of the welting inseamed to an insole and upper; and

FIG. 4 is a fragmentary sectional view of the welting after inseaming and lasting.

Referring to the drawing, the improved welting is illustrated in FIG. 1, and as there shown comprises a strip or length of material of uniform texture, strength and dimensions which may be produced in a continuous process if desired. Specifically, the material may be either leather or plastic, and it is characterized by having a wheeled or pre-fudged edge **10** and a scarf edge **11** separated on one side by a shoulder **12** and separated on the opposite side by a groove **13**. The shoulder **12** and groove **13** are substantially opposite each other and are parallel with the outer margin **10***a* of the wheeled edge and the inner margin **11***a* of the scarf edge. The scarf edge **11** is provided with a plurality of spaced slashes **14** extending inwardly from the inner margin **11***a* so as to render the welting flexible in its horizontal plane as is viewed in FIG. 2 for permitting the welting to be conformed to the curvature of shoes.

In FIG. 2 there is shown a sectional view of the welting and it is pointed out that the edge **11** is wider than the edge **10**. In the manufacture of the welting it is preferred that the under surfaces **10***b* and **11***b* of the edges **10** and **11** be substantially flat and in the same plane. The outer margin **10***a* of edge **10** is relatively thin compared to sections thereof inwardly toward the shoulder **12**. This is to provide for a thinner appearance in the welting once it has been lasted into a shoe. The scarfed edge **11** is also tapered so as to reduce the thickness or bulk in those portions of the shoe construction which lie inwardly of the pre-fudged edge **10** as will be apparent upon inspection of FIG. 4.

Turning now to FIG. 3 a typical welted shoe construction is illustrated and includes an insole **15** to which is secured a flexible rib member **16** as in the usual shoe construction. The shoe upper **17** is lasted over the insole and the rib member **16** in the usual way, and the welting is then positioned over the upper **17** and is stitched in place by a line of stitching **18** which is located in the welting groove **13** and extends through the upper and the rib member **16**. During the stitching operation the scarf edge **11** of the welting is bent at an angle to the pre-fudged edge **10** so that the Goodyear stitching machine may be utilized in the customary way to join the several parts. Upon completion of the stitching operation the rib member **16**, the upper **17** and the scarf edge **11** of the welting are then flat lasted to the insole **15**. In this step of the shoe construction the surface **11***b* of the scarf edge **11** extends inwardly from the line of the stitching **18** so that there is a wide strip of material inwardly of the stitching line to receive suitable cement or adhesive by which the out-sole **19** may be secured to complete the shoe construction. The final assembly is shown in fragmentary sectional view in FIG. 4 in which a suitable adhesive or cement **20** has been applied to the surfaces **10***b* and **11***b* of the welting so that the out-sole **19** has a considerable cemented connection inwardly of the pre-fudged edge **10**. Before the out-sole **19** is placed, filler material **21** is disposed in the more central area of the insole in order to compensate for the slight thickness of the several layers of material comprised by the rib **16**, the upper **17** and the scarf edge **11** of the welting.

The improved construction allows for a considerably flatter final contsruction of the several parts, and avoids the usual inseam trim step which is required of the orthodox welted shoe having a rib member which is very stiff since it is not capable of being flat lasted. There is considerable economy possible in the improved shoe construction and an important improvement in the security of attachment of the out-sole **19** is a cemented construction.

In the presently disclosed improved shoe construction, in which the novel welting is incorporated, it is appreciated that the flexibility of the shoe is greatly increased due to the flat lasting of the rib member and the welting so that there is no rigid beam member which would reduce the normal flexibility. In one shoe construction the improved welting was made from a continuous length of high grade leather having uniform texture and strength and substantially constant dimensional characteristics. For example, the pre-fudged edge **10** was approximately eight-thirty-seconds of an inch wide, the scarf edge was approximately ten-thirty-seconds of an inch wide. The shoulder **12** was made approximately one-sixteenth of an inch high and the overall thickness of the strip of material substantially at the shoulder **12** was approximately six-thirty-seconds of an inch. It is, of course, recognized that the welting may be useful in narrower or wider strips, and in which case the foregoing dimensions would be proportionately reduced or increased, It is also possible to utilize the improved welting material in the usual brogue type shoe by having the outer margin **10***a* of the pre-fudged edge **10** as thick or nearly as thick as the more central section of the welting.

While the foregoing description refers to a preferred form of the improved welting and has described a welted shoe construction utilizing the same, it is understood that variations may come to mind after appreciating the advantages hereof, and it is the aim and object to include changes and variations within the appended claim.

What is claimed is:

As a new article of manufacture, a welt for use in the manufacture of flat lasted shoes, said welt being formed

of flexible material having an outer edge tapering from a relatively thin outer margin inwardly, a longitudinal shoulder spaced inwardly from said outer margin and being parallel to said outer margin, said welt having a scarf edge extending from said shoulder to an inner margin and the portion of said welt between said inner margin and shoulder convergently tapering toward said inner margin, and said welt having a flat bottom surface opposite said scarfed edge and between said outer and inner margins, and a stitch receiving groove in said bottom surface located below said shoulder and extending parallel with said shoulder, said groove reducing the thickness of the welt to increase the flexibility thereof in bending transverse to said longitudinal shoulder.

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