Oct. 22, 1929. L. H. GILSON 1,732,807

HEAVY EDGE WELTING

Filed April 19, 1928

Fig. 1

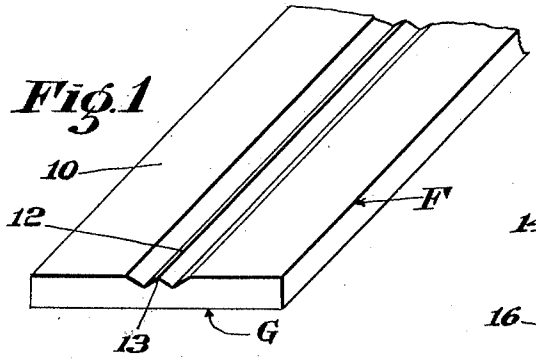


Fig. 2

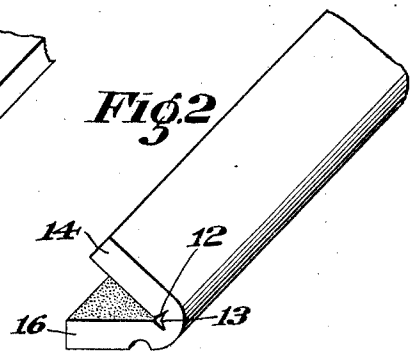


Fig. 3

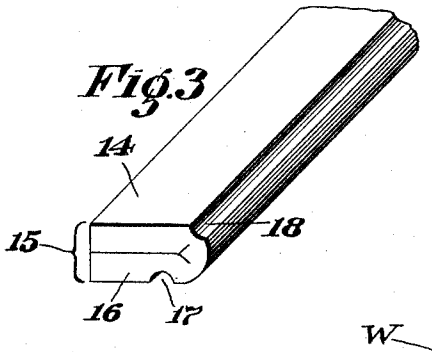


Fig. 4

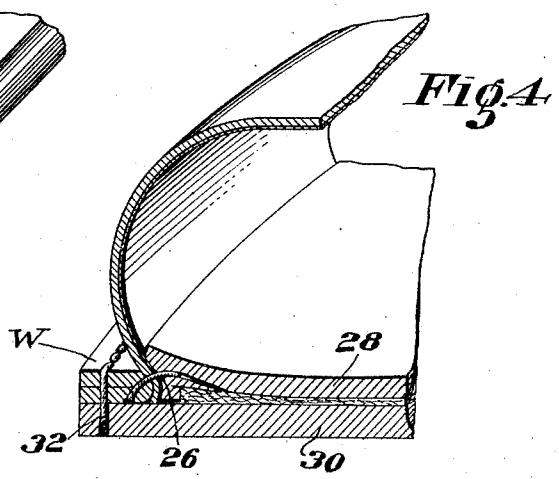


Fig. 5

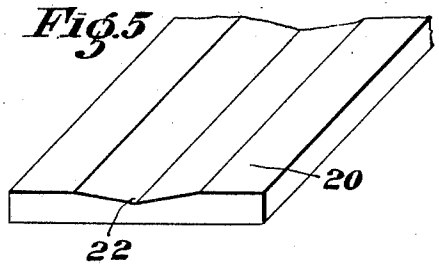
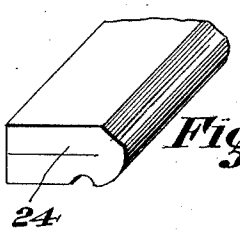


Fig. 6



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UNITED STATES PATENT OFFICE

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HEAVY-EDGE WELTING

Application filed April 13, 1928. Serial No. 271,175.

This invention relates to the manufacture of shoe welting and more particularly to welting of the kind for giving a "heavy edge" effect to the shoe in which it is used.

I am aware that welting of the kind referred to has been manufactured in two units, providing a laminated structure, and one unit being narrower than the other to provide a thinned inner margin through which a tight inseam can be sewed. The object of this invention is to provide welting which will give the desired heavy edge to a shoe having but a single sole but which can be produced from a single unit, or welt strip, with an inner margin suitable for sewing a tight inseam.

To the accomplishment of these objects and such others as may hereinafter appear, the invention comprises welting having the features of construction, combinations of parts hereinafter described and then particularly pointed out in the appended claims.

The welting in its preferred forms is illustrated in the accompanying drawing, all of the views being in perspective, and in which Figure 1 is a view of a welt strip, substantially twice the width of the finished welting, channeled for folding; Fig. 2 is a view of the prepared welt strip of Fig. 1 partially folded; Fig. 3 illustrates a further step in the manufacture of welting, namely, the provision of a thinned inner margin on the completely folded and cemented welt strip; Fig. 4 illustrates a portion of a welt shoe, in cross-section, with the novel welting sewed to the insole; and Figs. 5 and 6 show the welting channeled in another manner and then folded.

In the embodiment of the invention illustrated in the drawing the strip 10 is preferably of welting leather having a grain side G and a flesh side F. The strip 10 is substantially twice the width of the finished welting, that is, a strip slightly more than one inch wide will produce a practical one-half inch welt after folding. The thickness centrally of the width on the flesh side is reduced, to make a hinge to facilitate folding, by channeling longitudinally with a knife having a blade shaped to make a relatively narrow double-V or W-shaped cut 12, the peak 13 between the two channels being on the longitudinal medial line of the strip and in a plane below that of the flesh side F. This double channel provides a sufficiently flexible or weakened central portion to readily permit folding exteriorly about the channel as illustrated by Fig. 2. The entire flesh side is cemented before folding. After folding, which superposes the marginal portion 14 on the marginal portion 16, a welt is produced having an outer edge 15 of twice the thickness of the strip 10. In order to bind the margins firmly together the folded or turned strip is pressed between rolls suitably shaped to mould the inner edge to some extent. Having produced a unitary strip of welting of the desired double thickness the next step prepares the inner edge for receiving the inseam stitches. A stitch-receiving groove 17 is cut in the exposed face of the portion 16 and the inner edge of the portion 14 is beveled or shouldered, as at 18 (Fig. 3), to reduce the bulk of the stock through which the stitches are to be formed. This step may be performed on the strip 10, all the required cuts being made at one operation, but it has been found in practice that if this is done there is a liabiliy of the strip breaking at the wrong place when folded. By grooving and beveling after folding this difficulty is overcome. The welting may be completed by buffing the grain from the exposed face of the grooved portion 16 to provide a surface for strong attachment to the outsole by cement.

A welt strip having a modified form of central channel is shown in Figs. 5 and 6. In this case the welt strip 20 is fitted with a flattened V-shaped cut 22 which adequately provides for folding as illustrated by the welting 24 of Fig. 6. The channel 22 requires that more stock be removed widthwise of the welt strip than is removed by the double channel and requires greater pressure to firmly unite the upper and lower marginal portions of the welt strip, hence the W-shaped channel 12 is preferred.

The finished welting W is sewed to the shoe in the same manner as ordinary Goodyear welting after the welt guide has been arranged to receive the double thickness. The inseam stitches 26 (Fig. 4) are anchored in

the groove 17 and behind the sewing rib of the insole 28, passing through the bevel or shoulder 18 and drawing the welt snugly into the angle below the insole feather. The outsole 30 is secured to the welt by an outseam 32 in the usual manner, after the outsole cementing and laying operations have been performed. It will be observed, and this is considered an important feature of this novel welting, that the inseam stitches pass through both folds 14 and 16 of the doubled welt strip thus securely locking the entire welt W to the insole.

It will be understood from the foregoing description that the heavy edge effect is obtained without the necessity of using extra heavy weight sole leather or of using an intermediate sole with an outsole of the usual weight. But substantially the same amount of wear is obtained, before the necessity for repair, and yet a shoe can be offered that has the heavy edge effect desired by the trade.

The nature and scope of the invention having been indicated, and the welting in its preferred embodiments having been specifically described, what is claimed as new, is:—

1. Heavy edge welting composed of a single strip of material having one side channeled longitudinally and centrally and folded exteriorly about the channel to make contact between the two margins.

2. Heavy edge welting composed of a single strip of material having its two margins doubled about a central longitudinal channel and secured together with the two longitudinal edge faces in the same plane.

3. Heavy edge welting composed of two layers having their edge faces at the outer margin in the same plane and having their inner edges integral, said inner edge of the welting comprising a fold about a longitudinal channel in the welt material.

4. Heavy edge welting composed of two layers having their edge faces at the outer margin in the same plane and having their inner edges integral, said inner edge of the welting comprising a fold about a longitudinal channel in the welt material and having a stitch-receiving groove in the exposed face of the lower fold and a bevel at the inner edge of the upper fold.

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