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SHOE WELTING AND METHOD OF MAKING THE SAME

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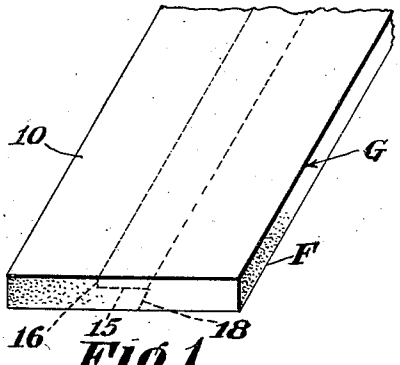



Fig. 1

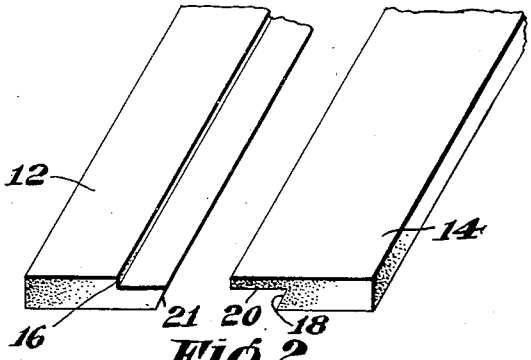



Fig. 2

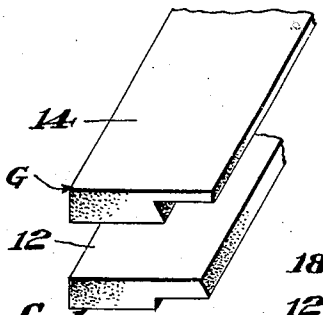



Fig. 3

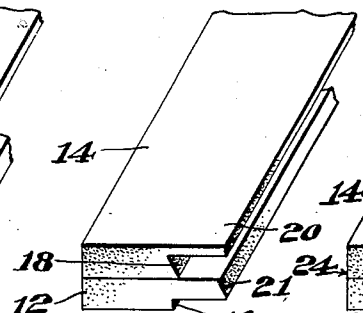



Fig. 4

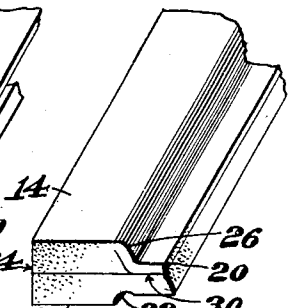



Fig. 5

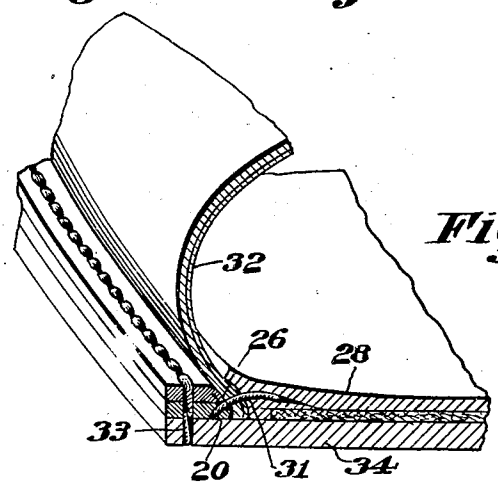



Fig. 6

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# UNITED STATES PATENT OFFICE.

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## SHOE WELTING AND METHOD OF MAKING THE SAME.

Application filed March 29, 1928. Serial No. 265,677.

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

Heretofore it has been the general practice to produce a heavy edge on a shoe by adding an intermediate sole and outseaming both soles to a Goodyear welt. The general object of the present invention is to provide the same heavy edge on the shoe by a specially formed two-unit welt outseamed to the usual outsole only, thereby saving the very considerable expense of the intermediate sole. There is ample wear in a single sole, in fact with the double soled shoe re-soling is demanded by the owner upon wearing through to the intermediate sole, so that this invention gives all the advantages heretofore attained but with much less sole leather and the consequent saving of this expensive stock. Further objects of the invention are to produce heavy edged welting from two units in an economical manner while preserving the extension, retaining the "shape insurance" advantages of certain types of beaded Goodyear welting, providing an inner margin that will not interfere with the sewing of a tight inseam, and insuring that the preferred two-unit construction will have its units permanently secured after embodiment in the shoe.

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

The preferred form of the invention is illustrated in the accompanying drawing, all the views being in perspective, and in which Figure 1 is a view of the fillet before severing; Fig. 2 is a view of the fillet after severing; Fig. 3 is a view of the two units prepared for assembly; Fig. 4 is a view of the two units assembled but before molding; Fig. 5 is a view of the welting molded to shape and ready for sewing to a shoe; and Fig. 6 is a view of a portion of a Goodyear shoe having a single outsole and the welt of this invention embodied therein.

In the embodiment of the invention illustrated in the drawing the heavy welting is obtained by severing into two parts a fillet 10 that is somewhat narrower than twice the overall width of the finished welting. For example, for half-inch welting the fillet need be but thirteen-sixteenths of an inch wide and the process of the present invention effects a proportionate saving for other widths. The fillet 10 is severed into two parts, to produce a bottom unit 12 and a top unit 14, by a central longitudinal cut 15 (dotted lines Fig. 1) of double-angle form or substantially Z-shaped. The two units are shown separated in Fig. 2, the bottom unit having a shoulder 16 at its grain side G and the top unit having a shoulder 18 at its flesh side F. The central portion of the cut 15 is in a plane parallel to the grain side of the fillet and is nearer to the grain side producing a relatively thin grain flap 20 at the inner edge of the top unit. Also the shoulder 18 on the top unit is formed by an end cut that is oblique to the plane of the flesh side of the fillet so as to produce a bevel 21 at the inner edge of the scarf on the bottom unit. The shoulder cut 18 is so positioned widthwise of the fillet that the overall width of the bottom unit is exactly the width desired for the finished welting and the shoulder cut 16 is preferably positioned to produce a top unit of equal overall width. The stitch-receiving groove 22 (Fig. 5) in the grain side of the bottom unit 12 may be cut at any time but preferably is cut after the fillet has been stripped.

Having stripped the fillet 10 as described, the bottom unit 12 may be prepared for the preferred method of assembly with the top unit by coating the entire flesh side, which now becomes the upper face of the bottom unit, with a tacky cement. The top unit 14 is then laid above the bottom unit 12 (Fig. 3), and its flesh side is placed in contact with said cemented flesh side of the bottom unit, care being taken to maintain the outer edges 24 flush with each other. This manner of superposing the two strips brings the two shoulders 16 and 18 into vertical alignment and leaves the two inner margins, thinned by the strip-

ping cut, separated. The two separated portions at the inner margin are then joined by pressing the flap 20 downward and inward against the shoulder 16 and into the angle below it until it contacts with the bottom unit thus producing a unitary thinned inner margin. This operation is preferably accomplished by rollers, or other suitably shaped molds, that form up the assembled units while maintaining their uncut edges 24 flush, or in the same vertical plane. This step produces the substantial inwardly facing shoulders 26 on the top unit 14 above the stitch-receiving groove 22 which, when the welting is incorporated in a shoe, lies opposite the edge of the insole and, by its support of this portion of the upper, serves to prevent "running over". The width of the top unit is important in this respect since its securement by the outseam stitching prevents any detachment from the upper. The grain flap 20 insures the desired finished appearance over the upper corner of the shoulder 26.

The novel heavy welt is handled in one piece by the welt sewing machine operator just as simply as Goodyear welting is handled. The bevel 21 enables the inner margin to be bent and fitted snugly into the angle beneath the feather of the insole 28 (Fig. 6) and the thinned inner margin 30 (Fig. 5) enables the operator to sew a tight inseam. It will be observed that the inseam stitches 31 pass through both units of the welting, including the flap 20, thus anchoring the top unit to the bottom unit and drawing the shoe-shape-holding shoulder 26 snugly against the upper 32. The two units are further secured by the outseam 33 through the welt and the outsole 34.

Those skilled in the art may readily vary the cutting to produce the two units or the shape of the units but all variations within the skill of the artisan are intentionally included within the scope of the appended claims.

The nature and scope of the invention having been indicated, and its preferred embodiment and the method of its manufacture having been specifically described, what is claimed as new, is:—

1. Two unit welting in which each unit has an outer margin of regular welt thickness and a thinned inner margin, the outer edges of said outer margins being flush and the inner margins being joined and presenting a substantial inwardly facing shoulder.

2. Shoe welting comprising a bottom unit having a thinned inner margin and a top unit having a thinned inner margin presenting an inwardly facing shoulder between it and the inner margin of the bottom unit, and said two margins being joined to form a unitary inner margin while preserving said shoulder formation.

3. Shoe welting comprising top and bottom units each of the same overall width assembled with their outer edges flush, said bottom unit having a stitch-receiving groove and said top unit having a portion of its inner margin removed to present an inwardly facing shoulder above said groove.

4. Leather shoe welting comprising top and bottom units, said bottom unit having the complete overall width of the welting and being provided with a stitch-receiving groove, and said top unit presenting its grain side with an inner margin comprising a grain flap providing an inwardly facing shoulder above said groove, said flap being laid against said shoulder and the inner margin of said bottom unit.

5. Two unit shoe welting comprising a bottom unit having an outer margin of full thickness, a top unit having a like outer margin and an inner margin undercut to form a flap at its inner edge, said flap being secured to the inner margin of the bottom unit.

6. Two unit shoe welting comprising a bottom unit having a stitch-receiving groove, a top unit flush at its outer edge with said bottom unit having an inwardly facing shoulder above said groove and a thinned margin overlying the margin of said bottom unit inward of said shoulder.

7. The method of making two unit leather welting which comprises stripping a fillet longitudinally with a central double angle cut to produce a top unit strip having a grain flap at its inner edge terminating in a flesh side shoulder and a bottom unit strip having a grain side shoulder at its inner margin, assembling said strips with the flesh of said top unit against the flesh of said bottom unit, and pressing said flap into the angle spaced at the inner margin formed by thus assembling said units.

8. The method of making two unit leather welting which comprises forming a bottom unit strip having a stitch-receiving groove in its inner margin at its under side, forming a top unit strip having the flesh at its inner margin removed leaving a grain flap and a flesh shoulder, superposing said strips with their outer edges flush and with the flesh shoulder of the top unit above said groove in the bottom unit, and securing said flap to the inner margin of the bottom unit.

9. The method of making two unit welting which comprises stripping a fillet longitudinally with a central double angle cut, the central portion thereof being parallel to the faces of said fillet and the two end portions emerging at the opposite faces, respectively, thereof to form two shoulders and two thinned margins, superposing said strips with said two shoulders vertically aligned, and forming together the portions inward of said shoulder to produce a thinned inner margin.

10. The method of making two unit leather

welting which comprises stripping a fillet longitudinally with a central Z-shaped cut the bar of which is parallel to the grain side of the fillet and the ends of which emerge from the grain and flesh sides thereof, the end cut emerging from the flesh side being oblique to the plane of said side, superposing the two strips thus produced with their uncut edges flush and the thinned margins formed by said stripping cut separated, and finally forming a single unitary margin from said two thinned margins.

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