Oct. 20, 1942. W. C. VIZARD 2,299,516

METHOD OF MAKING SHOE WELTING

Filed May 13, 1942

Fig. 1.

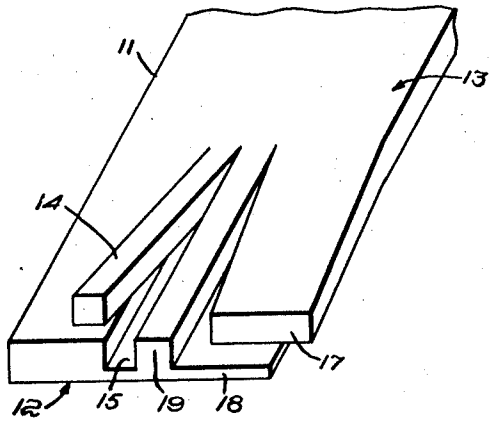



Fig. 2.

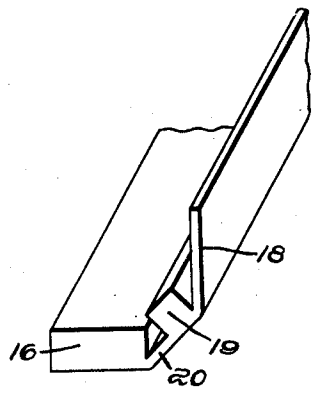



Fig. 3.

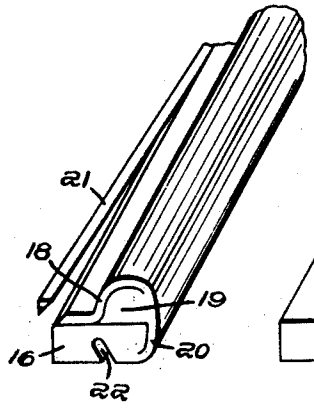



Fig. 4.

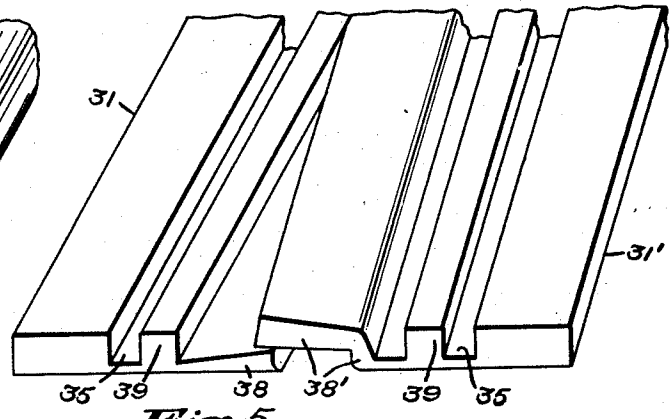



Fig. 5.

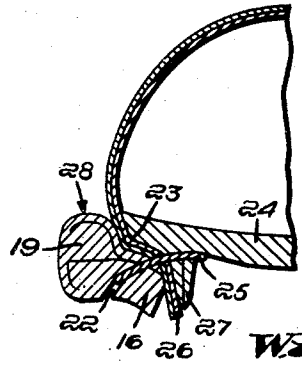
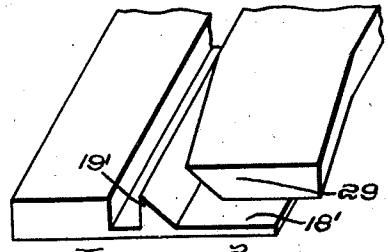



Fig. 6.




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2,299,516

## METHOD OF MAKING SHOE WELTING

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Application May 13, 1942, Serial No. 442,777

4 Claims. (Cl. 12—146)

This invention relates to a method of making shoe welting, and pertains more particularly to improvements in the manufacture of so-called decked platform welts for cement process shoes. Welting of this type is usually sewed to the lasted shoe by the Goodyear method, and the outsole is usually trimmed close to the upper so that the outer edge of the deck or bead of the welt is flush with the edge of the outsole and therefore subject to abrasion and wear.

Heretofore, decked platform welting has ordinarily been made by folding a thin strip of leather over a loose or floating core, and has been known as two-unit welting. When the thin cover strip of these two-unit welts becomes worn through by the scuffing or abrasion to which it is normally subjected, the deck tends to collapse and thus permit the upper to fall, and the appearance of a hole in the cover strip is unsightly.

It is accordingly the principal purpose of the present invention to provide a decked platform welt which will obviate the objectionable aspects of the two-unit welting by affording a solid core integral with the cover strip at the outer edge of the welt and capable of holding the shape and retaining the character and appearance of the shoe even if the outer face of the platform should become scuffed or worn. The improved welting is preferably made by rabbeting a relatively narrow, longitudinal groove adjacent the center of a leather fillet and forming a relatively wide channel along the margin of the fillet, preferably by cutting the flesh side of grain leather to provide a flap having a longitudinal core of flesh stock between the two channels; then folding the fillet upon itself so that the core rests upon the flesh body and a thin grain lip covers the core and the flesh surface at the inseam edge of the welt; and finally cementing the parts into a unified structure by molding under pressure.

Recommended embodiments of the invention are shown in the accompanying drawing, in which:

Fig. 1 is a perspective view of a leather fillet showing the mode of rabbeting and channeling the flesh side of the fillet;

Fig. 2 is a similar view illustrating the folding of the grain flap and core onto the flesh body of the fillet;

Fig. 3 is a perspective view of the completed welt, with a beveled string being removed from the inseam edge of the folded grain flap;

Fig. 4 illustrates the formation of two welt fillets from a double strand, as an alternative method;

Fig. 5 is a fragmentary transverse section through the toe portion of a lasted shoe equipped with the welting of Fig. 3; and

Fig. 6 is a view similar to Fig. 1 showing an optional step of chamfering the corner of the flesh core.

In the particular embodiment chosen for the purpose of illustration in Figs. 1, 2, 3 and 5, the improved welt is made from a leather fillet **11** slightly over one inch wide and approximately $\frac{5}{32}$ inch thick, having a grain surface **12** and a flesh side **13**. A relatively narrow, rectangular piece **14** of flesh stock is rabbeted lengthwise of the fillet intermediate the sides thereof, to provide a relatively deep longitudinal groove **15** approximately ⅛ inch in width, located at one side of the longitudinal center of the fillet and defining a marginal flesh body **16**. Another relatively wide, rectangular strip **17** of flesh stock is cut along the opposite margin of the fillet, leaving a thin grain flap **18** approximately ⅜ inch wide and defining a longitudinal flesh core **19** slightly over ⅛ inch wide disposed between the channels left by the removal of the strips **14** and **17**.

The thin grain strip **20** at the bottom of groove **15** constitutes a flexible hinge and cover piece on which the flap **18** is then folded over the flesh body **16**, so that the integral core **19** rests edgewise on the top of said flesh body. The thin margin of the grain flap **18** is pressed downwardly over the core **19** and onto the outer margin of the body portion **16**, and the folded parts are preferably cemented together and molded under pressure to the shape shown in Fig. 3.

Either prior or subsequent to the molding operation a triangular string **21** is preferably cut from the extreme longitudinal edge of the flap **18** to provide a thin and flexible sewing edge; and a deep, diagonal sewing groove **22** is cut in the base of the body portion **16**. It will be apparent that the top, bottom and one side of a welt thus formed present grain surfaces and that the remaining side of exposed flesh stock constitutes the sewing edge of the welt.

When the welt is applied to a lasted shoe as shown in Fig. 5, this sewing edge fits well under the feather **23** of the insole **24** where it is retained by the usual inseam stitch **25**. As that stitch is buried deep in the groove **22**, a substantial portion of the welt body **16**, as well as the upper margin **26** and sewing lip **27**, may be trimmed away without stranding the thread, thereby affording a substantially flat base for the laying and cementing of the outsole in the usual way. When thus embodied in a shoe, the

grain surface at the outside of the welt is disposed at right angles to the tread of the shoe; the decked platform or bead 28, formed by the core 19 and its cover flap 18, hugs the crease of the upper in line with the feather 23, thereby supporting the upper and holding the shape of the shoe; and any scuffing or abrasion of the exposed grain surface of the welt will not impair its shape-retaining qualities which are preserved by the integral, non-displaceable core 19.

In the modification illustrated in Fig. 6, a corner of the core strip 19' is chamfered by removing a flesh strip 29 having a diagonal inner edge; and this practice is preferred when the full width or thickness of the bead 28 of Fig. 5 is not an essential feature of the shoe; for in such case the flap 18' need not be as wide as the flap 18 of Fig. 1 and a saving of material may thus be effected while preserving the main advantages of the integral core. It will be understood that the cutaway strips or strings 14, 17, 21 and 29 may be removed in any desired order and may be employed either as stitchdown welting or as filler pieces in other types of beaded welting, so that this stock is not wasted by practicing the methods of this invention.

A further saving of leather may be afforded by cutting a pair of fillets from a double strand slightly less than twice the width of the fillet 11, as shown in Fig. 4. In this optional method, the double width strand is divided longitudinally by a Z-shaped cut which forms the flaps 38 and 38' and defines one side of the respective core pieces 39. Grooves 35, corresponding to the groove 15 of Fig. 1, are rabbeted in the flesh side of each of the divided fillets; and the resulting fillets 31 and 31' are folded, pressed and molded as previously described. It will be noted that the margin of flap 38' is composed of flesh stock, but it will be appreciated that this flesh margin will be located along the inseam edge of the finished welt and consequently will not impair the desired grain effect of the exposed area of the welt deck or platform when the welting is built into a shoe as in Fig. 5.

One corner of each of the core strips 39 may be chamfered, if desired, according to the optional method of Fig. 6.

The cuts above described may be made by knives operating along a continuous strip of leather stock, and the folding, cementing and molding operations may be automatically performed by suitable machines, as is well understood.

I claim:

1. The method of making platform welting of the character described, which consists in forming a relatively narrow and deep, longitudinal groove in the flesh part of a fillet of grain leather, adjacent the center thereof, forming a relatively wide and deep channel in said flesh part along one longitudinal margin of the fillet, thereby to provide a thin central hinge portion and a thin marginal flap of grain stock, a longitudinal core of flesh stock between said groove and said channel and a thick body portion along the opposite margin of the fillet, folding the fillet on said hinge portion so that the core rests edgewise on top of the body, and pressing and cementing said marginal flap onto said body along the sewing edge of the welt.

2. The method of making platform welting of the character described, which consists in removing a relatively narrow, longitudinal strip from the flesh side of a fillet of grain leather, intermediate the sides thereof, removing a relatively wide strip of flesh stock from one longitudinal margin of said fillet to provide a grain flap having an integral longitudinal core piece between the channels formed by the removed strips, folding the grain flap over the flesh body on the opposite margin of the fillet so that the core piece rests on said body, and securing the margin of said grain flap to the top of said flesh body along the sewing edge of the welt.

3. The method of making platform welting of the character described, which consists in removing a relatively narrow, longitudinal strip from the flesh side of a fillet of grain leather, intermediate the sides thereof, removing a relatively wide strip of flesh stock from one longitudinal margin of said fillet to provide a grain flap having an integral longitudinal core piece between the channels formed by the removed strips, folding the grain flap over the flesh body on the opposite margin of the fillet so that the core piece rests edgewise on said body, cementing the margin of said grain flap to the top of said flesh body along the sewing edge of the welt, skiving the edge of said grain flap margin, and forming a deep diagonal inseam groove in the bottom of said body portion.

4. The method of making platform welting of the character described, which consists in removing a relatively narrow, longitudinal strip from the flesh side of a fillet of grain leather, remote from the sides thereof, removing a relatively wide strip of flesh stock from one longitudinal margin of said fillet to provide a grain flap having an integral longitudinal core piece between the channels formed by the removed strips, chamfering a longitudinal corner of said core piece so that said core is substantially triangular in cross section, folding the grain flap over the flesh body on the opposite margin of the fillet so that the core piece rests edgewise on said body, and cementing the margin of said grain flap to the top of said flesh body along the sewing edge of the welt.

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