Aug. 20, 1935. W. C. VIZARD 2,011,959

METHOD OF MAKING WELTING

Original Filed Aug. 2, 1930

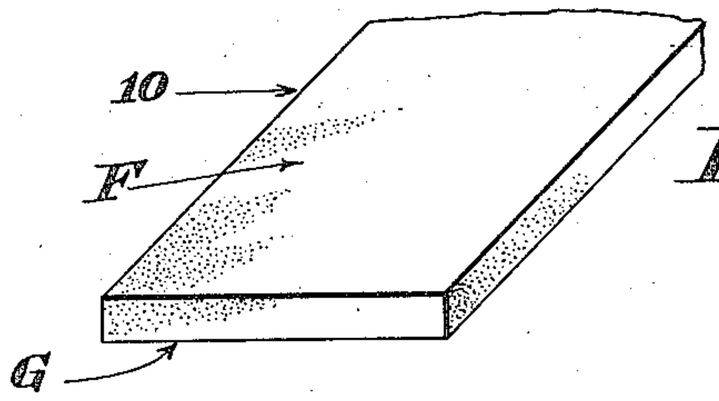

Fig. 1

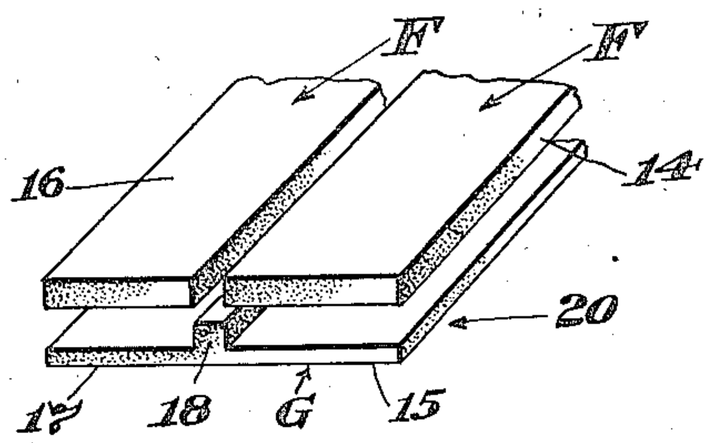

Fig. 2

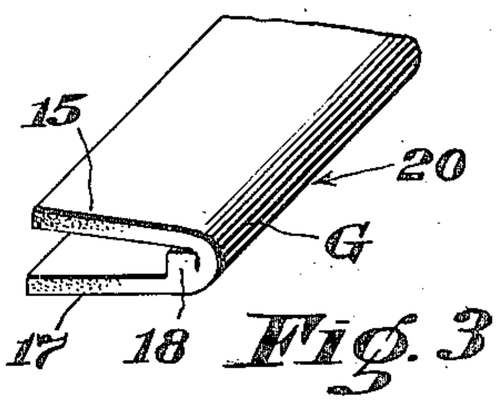

Fig. 3

24

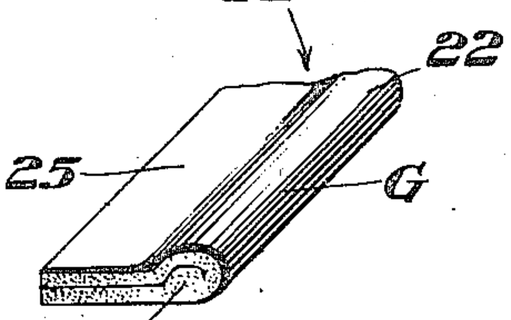

Fig. 4

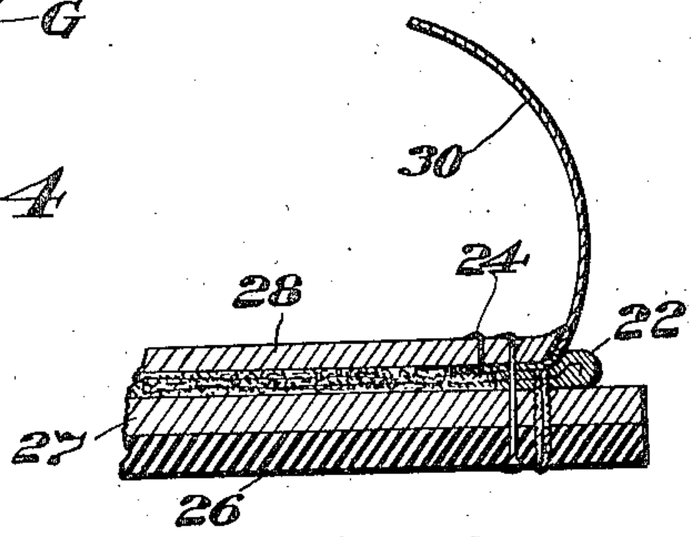

Fig. 6

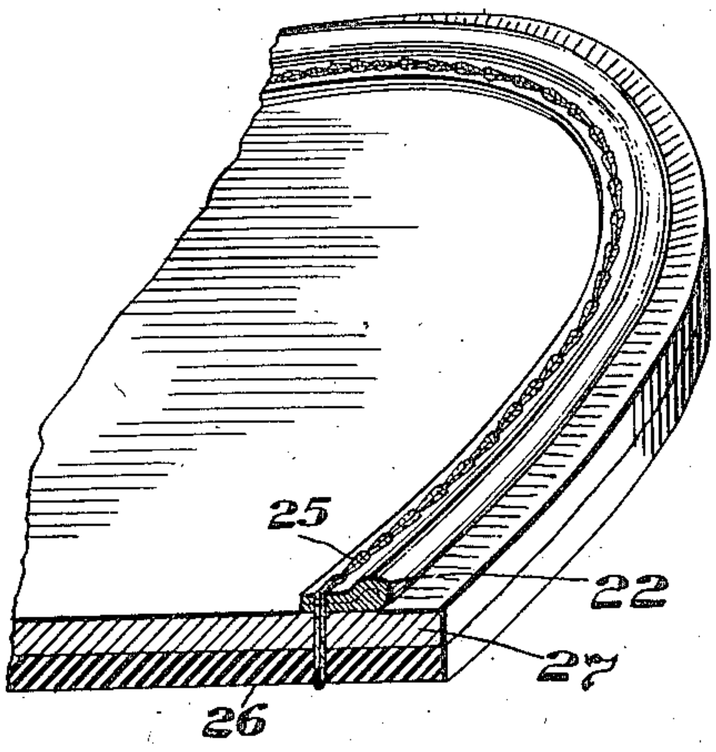

Fig. 5

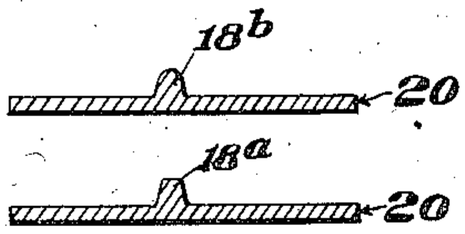

Fig. 7

INVENTOR
William C. Vizard
BY Warren G. Ogden
his ATTORNEY

Patented Aug. 20, 1935 2,011,959

UNITED STATES PATENT OFFICE

2,011,959

METHOD OF MAKING WELTING

William C. Vizard, Brockton, Mass., assignor, by mesne assignments, to Barbour Welting Company, Brockton, Mass., a co-partnership composed of Perley E. Barbour, Walter G. Barbour, and Richard H. Barbour

Application August 2, 1930, Serial No. 472,556
Renewed March 15, 1935

8 Claims. (Cl. 12—146)

This invention relates to welting for boots and shoes and is especially concerned with such welting useful in the manufacture of shoes of the nailed and McKay varieties.

In the manufacture of such shoes the construction may be improved by applying a beaded welt in the welt crease between the outsole and inlasted margin of the upper forming a piping or gasket at this point. Such welting is attached by a separate operation either to the unbottomed lasted shoe or to the margin of the outsole before laying, conveniently by stitching. Because of the type of shoe in which it is most generally used this welting has been designated "nailed welt".

An object of this invention is to produce nailed welting which is stronger than similar welting heretofore available in that it is of an integral or one-piece construction with the consequent advantages of longer wearing quality and simplified and cheaper manufacturing advantages.

To the accomplishment of this object and such others as may appear from the following description, the invention comprises the processes and methods of manufacture hereinafter described and then particularly pointed out in the appended claims.

An understanding of the invention will be aided by an inspection of the accompanying drawing in which:

Figure 1 shows a portion, in perspective, of a leather strip from which the nailed welt is produced;

Fig. 2 illustrates the general method of cutting the strip of Fig. 1 to form a blank from which the nailed welt is constructed, at the same time salvaging two flesh strips useful for stitchdown welting;

Figs. 3 and 4 illustrate the first and final steps of folding and molding a blank similar to that of Fig. 2 to complete the process;

Fig. 5 illustrates one way of applying the nailed welt for visibility at the shoe crease;

Fig. 6 shows a section of a nailed shoe illustrating the position of the nailed welting therein; and

Fig. 7 shows, in cross-section, two modified shapes of the longitudinal rib on the nailed welt blank.

In the manufacture of the nailed welt a strip of leather **10** is taken, having a grain side G and a flesh side F, of such width as to produce a welt of the desired width after folding. This strip is run past knives so shaped or arranged as to cut two strips **14** and **16** from the flesh side F leaving a centrally located longitudinal rib **18** formed of the flesh, and an uncut and unmarred grain side G. It will be observed from Fig. 2 that the rib **18** is not exactly central of the width of the welt blank **20** produced by the cutting operation, i. e. the flesh strip **14** is somewhat wider than the flesh strip **16** thereby leaving a wing **15** at one margin of the blank of greater width than the wing **17** at its other side. Next the blank is cemented on its flesh side and the wider wing **15** is folded about the rib and upon the narrower wing **17** in the manner illustrated by Fig. 3. The wider wing **15** provides for covering the rib and retaining a flush inner edge. The two wings are then pressed together and the ribbed edge **22** is ironed or molded to a rounded form (see Fig. 4) or other shape as may be desired. There results a welt **24** having a flat attaching body or margin **25** and an outer bead **22** cored or filled with an integral portion of the flesh, and provided with a complete grain surface except at its inner edge.

When the flesh stock is comparatively soft the strips **14** and **16** may be of rectangular cross-section, as illustrated in Fig. 2, because the corners on the rib **18** of such soft stock may readily be molded to any desired shape, but if the flesh stock is comparatively firm, then the cuts at the inner edges of the strips **14** and **16** will desirably be such as to reduce the thickness of the upper portion of the rib, as at 18*a* or 18*b* (Fig. 7) so that it may more easily be moldable to a desired shape. Two modified forms of the nailed welt blank **20** are shown in cross-section by Fig. 7.

One advantage of this novel construction is that if by long wear, or for any other reason, the wing **15** covering the core wears through then the exposed rib **18**, being of leather, will present a similar and hardly distinguishable wear surface. Furthermore because the rib is an integral part of the welt it cannot be detached or string out of a hole even though exposed.

Fig. 5 is illustrative of one way in which the welt **24** may be applied for use in a nailed shoe. The welt **24** is stitched about the margin of the forepart of an outsole, which may be composed of a rubber outsole **26** and a wheeled leather middle sole **27**, in such position that the lasted upper and insole will accurately seat within the bead **22**. A portion of a completed nailed shoe is shown in Fig. 6 having its insole **28** and upper **30** located upon the welt with its bead **22** at the welt crease. Those skilled in the art of shoemaking will recognize that even though the welting has been described as particularly useful in the manufacture of nailed shoes its use is not limited thereto and it may be used in connection with other shoemaking processes.

Attention is called to applicant's co-pending application for Calk sole welting and the like, Serial No. 533,993, filed April 30, 1931, in which will be found generic claims covering the welting herein disclosed and its method of manufacture. The claims of this application are confined to the novel method of making one-piece welting as disclosed herein and such equivalents as are permitted by the prior art.

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

1. The method of making welting which comprises severing two marginal strips from the flesh side of a strip of grain surfaced leather the cuts being spaced so as to leave an integral longitudinal flesh rib, then folding one of said margins about said integral flesh rib as a core and securing it against the other margin.

2. The method of making welting according to claim 1 in which the flesh strip taken from one margin is wider than that taken from the other to form a longitudinal flesh rib that is off-center widthwise of the strip.

3. The method of making welting which comprises producing a blank from a strip of grain leather having an uncut grain side, two thinned wings and an intermediate longitudinal flesh rib, then cementing the flesh and folding the strip to completely enclose said rib with grain covered stock.

4. The method of making welting which comprises forming two thinned wings on a strip of grain covered leather by severing a flesh side strip from each margin but leaving a narrow intermediate portion of the strip of the original thickness, then cementing the flesh faces of the two thinned wings together.

5. The method of making welting which comprises producing a blank from a strip of grain leather having an uncut grain side, two thinned wings and an intermediate longitudinal flesh rib one of said wings being wider than the other, then cementing the flesh and folding said wider wing about said intermediate rib and upon the other wing to form a grain covered edge bead.

6. The method of making welting which comprises removing two marginal strips from the same face of a strip of grain covered leather to provide thinned margins and a narrow connecting portion thicker than the margins, and folding and securing the two thinned margins together to leave the thicker connecting portion along one edge of the welting.

7. The method of making welting according to claim 6 in which, after folding, the thicker portion is molded to form a bead at one edge presenting an outwardly-facing shoulder.

8. The method of producing one piece welting having a grain faced beaded edge which comprises removing stock from both margins at one face of a strip of grain leather, leaving an in-between portion of the full thickness of the strip, and then folding said thinned margins together to form a flat body leaving said thick in-between portion at one edge of said body.

WILLIAM C. VIZARD.