

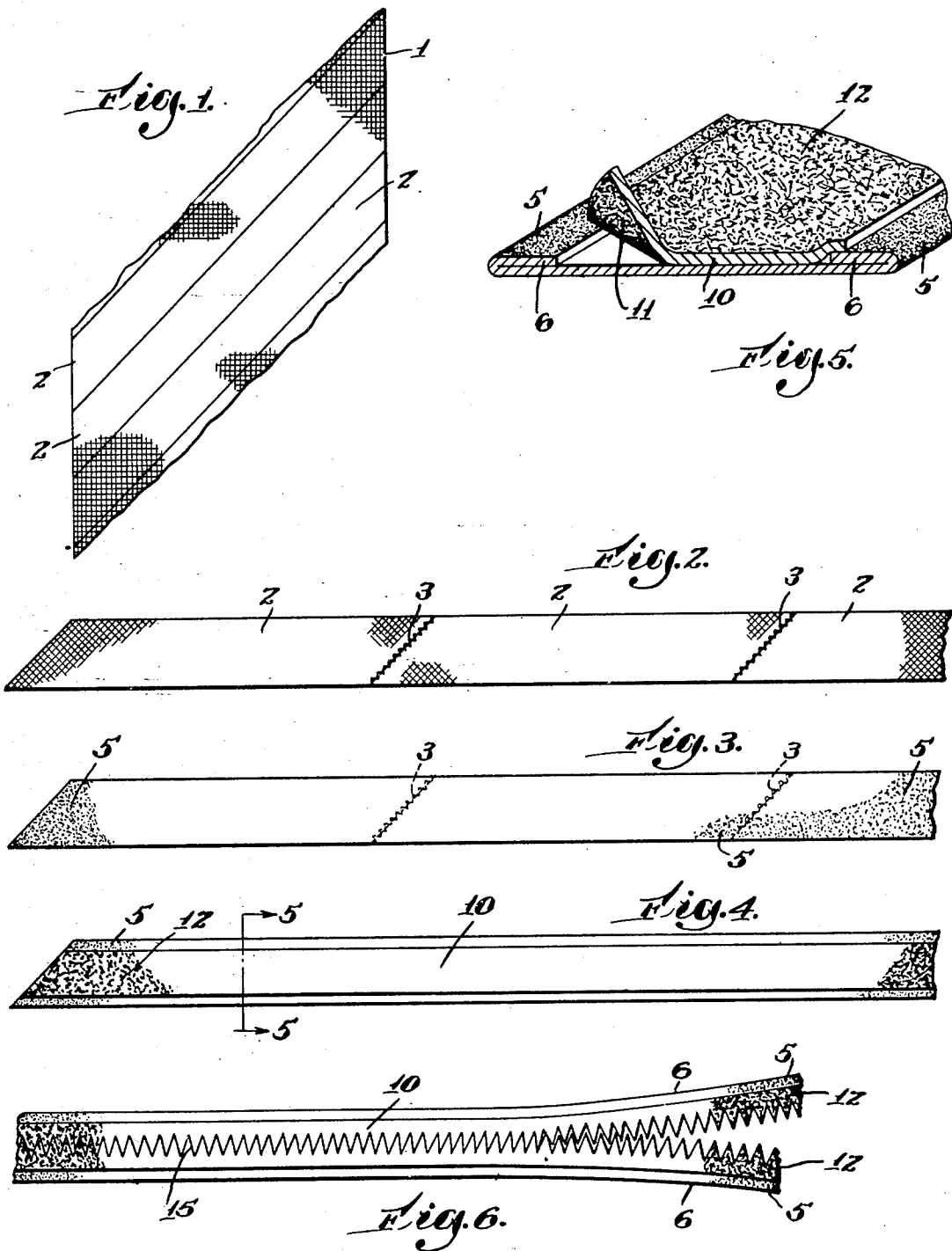
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PIPING, WELTING, OR THE LIKE

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PIPING, WELTING, OR THE LIKE

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1 Claim. (Cl. 36—57)

My present invention is a novel and improved piping, welting, or finishing strip, and includes the novel method of manufacturing same.

In the manufacture of piping, welting and finishing strips, or the like, for use in boot and shoe manufacture, upholstering, automobile trimmings, and similar uses, it has been customary and necessary to form such an article with a folded edge to impart a finished appearance. It has also been customary heretofore to form such articles from strips of leather, reinforced by similar strips of tape, which tape is usually coated with adhesive and formed of textile material in long lengths.

Many difficulties have been found with such a piping, since, in use, the piping strip thus folded at the edge and reinforced with a textile strip will not fold readily around sharp corners. Although the leather will stretch and yield somewhat, yet the textile reinforcing strip attached thereto has not the same qualities of yielding and working which is present in leather. Hence in making such piping conform to relatively sharp curves, as is frequently necessary, the textile backing will not lie smoothly around such curves, folding and puckering on the convex side, and, being attached to the welting, also thus folds and puckers the leather which would ordinarily be capable of working smoothly around the curve. Frequently also such piping is made of textile material wherein the main strip for the piping with folded edge is of textile, canvas, linen or other textile finish either with or without a reinforcing coating.

In such construction the difficulty of folding same around a sharp curve was still greater as both layers could not be laid smoothly and uniformly but would be folded wrinkled and puckered, giving an unsatisfactory finish.

In my present invention I have discovered that I could make such piping either entirely of textile material, or when utilized as a reinforcing layer or backing for leather piping, with the capacity and flexibility for following a convex and concave curve substantially equivalent to that which is characteristic with leather, and hence, which would result in a piping whether reinforced with textile or entirely of textile material, and of several layers, which would be capable of following a curve either convex or concave with a resulting smooth surface.

I carry out my invention, first, by cutting from a sheet of the desired textile material from which the piping or reinforcing backing, or both, are to be formed, strips of desired width, an-

gularly or "on the bias" of the weave of the material from which the strips are made. I then stitch the successive lengths thus cut end to end to form a strip of desired length. If the piping is to be entirely of textile material, one of such strips will be of suitable width to permit the edge portion to be folded inwardly, and a second reinforcing strip, if desired, coated with adhesive and applied thereto, as will be further explained. The piping thus formed can be laid quickly, readily, smoothly and evenly around relatively sharp corners, the cloth or strip opening up or closing in sufficiently around the edges which are under tension or compression.

Similarly, if such a backing strip thus cut "on the bias" from textile material is applied to a leather piping, it will enable the leather to follow its natural tendency to be worked around curves and also permits the backing to be similarly laid smoothly around curved portions of the work or article to which it is applied.

Fig. 1 is a diagrammatic view showing the method of cutting strips from a sheet of textile material;

Fig. 2 is a fragmentary view illustrating the joining and abutting of a plurality of strips cut on the bias, as shown in Fig. 1, to form a long piping strip;

Fig. 3 illustrates the same covered with a suitable finish material such as silver, gold leaf, or the like;

Fig. 4 illustrates a pair of layers in the piping strip;

Fig. 5 is a fragmentary perspective view, partly in cross-section, on an enlarged scale on the line 5—5 of Fig. 4, illustrating the completed piping strip ready to be cut into individual piping lengths, and

Fig. 6 illustrates the method of cutting and the completed piping.

Referring to the drawing, as shown in Fig. 1, a sheet of textile material 1, having the usual warp and woof weave, and of any suitable length and width, is cut into narrow strips 2, 2, preferably at an angle of 45° to give the side edges of each strip an angular or bias cut across the material. As such strips would be relatively short in length, it is necessary to join same and, accordingly, in Fig. 2, I illustrate a plurality of such strips 2, 2, joined together by lines of stitching 3, 3, which preferably cross-stitches or butt-stitches the edges so that it will lay relatively smoothly. As there is little or no strain on such stitching, the short lengths 2 can thus be readily secured. Thereafter the entire strip is coated,

with any finishing desired, such for example as silver shown at 5 in Fig. 3. This silver, gold leaf, or the like, covering over the butt-stitching 3 and giving a uniform finish at such sections. A strip thus formed can thus have its edge portions coated with adhesive and each edge portion folded over, as shown at 6, 6, in Fig. 5, giving the exposed curved edge with the silver 5, or other finish as in 4, the exposed piping in the completed article. Such strip is preferably formed of twice the width of the completed piping desired, as the same is then cut in zig-zag form, as shown in Fig. 6, along the middle portion thereof.

Usually it is advisable and desirable to add a reinforcing and backing strip 10 also of textile material, which strip 10 is coated with adhesive on the lower surface, as illustrated at 11 in Fig. 5, to hold the same firmly on the piping and preferably over a part of the folded edge portion 6 and with a similar or suitable coating of adhesive 12 on the exposed surface which may be used to unite the completed piping to the article to which it is to be attached.

The duplex or double-width strip may then be cut along the zig-zag line shown at 15, Fig. 6, giving two strips of finished piping, each with a curved edge 6, silvered or finished surface 5, and reinforcing strip with the adhesive coating 12 thereon, completing the article.

I believe that my invention of a piping thus formed, cut angularly of textile material, permitting a large range in curving the completed folded and reinforced piping around curves, while permitting same to lay flat, is a distinct novelty in this art, and also that the process of making same as above described is novel and I wish to claim both these features herein broadly.

I claim:

As an improved article of manufacture, a coated finishing strip, piping, or the like for use on straight or curved surfaces of boots and shoes, and adapted to lie flat around relatively sharp curves, with an outer finished folded edge portion and an inner portion on a zig-zag line, comprising a plurality of strips of non-rectangular parallelograms, each consisting of a textile fabric with the warp and woof arranged angularly with relation to the length of said strip and with the abutting edges slanting relatively to the length, each strip being joined on the slanting edge with its adjacent strip, one surface carrying the coated finish and being folded over upon itself with the coated surface outside producing a selvage-like edge at the fold providing additional wear resistance and appearance.

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