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J. E. DISCH

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METHOD OF MAKING SHOES

Filed Aug. 5, 1931

FIG. 1.

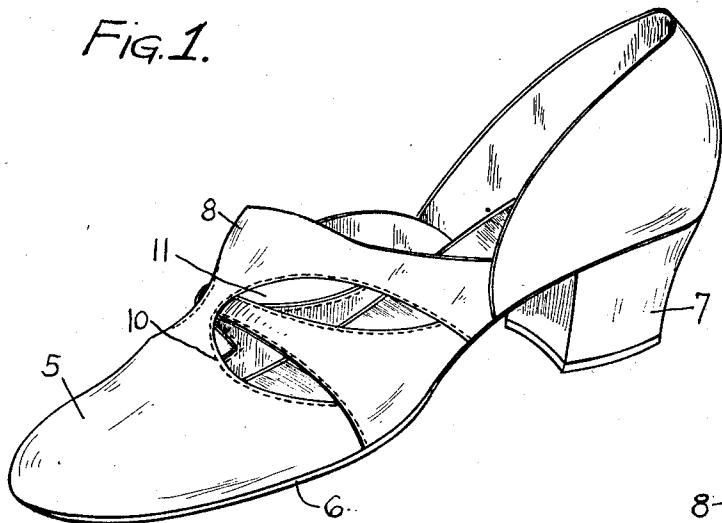


FIG. 2.

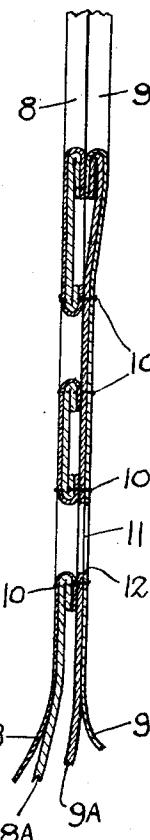
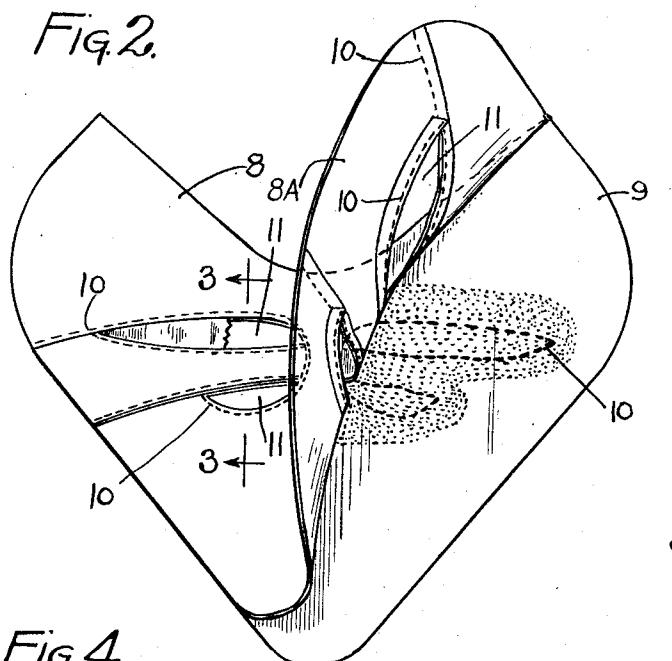


FIG. 3.

FIG. 4.



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METHOD OF MAKING SHOES

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My invention relates more particularly to methods of making shoes or slippers lined with fabric material and known to the trade as "cut-out" shoes, and is especially directed to improved methods for finishing the edges of the fabric linings to render them adaptable for use in conjunction with the "cut-out" uppers embodied in such type of shoes and slippers.

10 The objects of my invention are, among other things, to provide new and improved methods of treating the fabric shoe linings to render it possible to cut out the desired openings in the uppers after the shoe or slipper is lasted and otherwise finished, without obtaining any raw or frayed edges and without diminishing in any way from the strength of the adjacent seams or wearing qualities of such shoe or slipper.

20 My improved methods involve the stiffening of the cloth backing of the lining fabric by a suitable sizing which prevents the cloth edges of the multi-ply material from fraying, and at the same time cements the weave so that a strong seam is obtained along the lines where the uppers and linings are sewed close to the edges of the shoe material. By using my new methods a clean-cut and well-defined edge is obtained that is equal to, or 30 even better than, the cut-out edges obtained by the use of leather linings which are generally embodied in all cut-out slippers and shoe designs of this character now on the market.

35 Other objects and advantages will appear from the following description when taken with the annexed drawings in which—

Fig. 1 is a perspective view of a shoe or slipper made according to my improved methods;

Fig. 2 is a plan view of the upper partly divided or opened up to show how my methods are practiced;

Fig. 3 is an enlarged section taken on the line 3—3 of Fig. 2; and

Fig. 4 is a detail view showing the cut out edges of the cloth backing and lining fabric.

Similar numerals refer to similar parts throughout the several figures.

Referring to the drawings, the upper 5 in Fig. 1 is fastened in the usual way to the sole 6 to which is affixed the heel 7. The lining material 9 (Fig. 3) and its therewith combined cloth backing 9A are cut to the required shape to be fastened to the sole 6, and then the backing 9A is then treated by any suitable sizing to stiffen same before such lining 9 is stitched to the outer material 8.

Preferably I use a mixture of pyroxylin cement cut with a suitable solvent or thinning agent combined with a dye so that in one operation the cloth backing 9A is stiffened and dyed to match the lining fabric 9 used in making the shoe. This dyed pyroxylin cement is first spread on the lining backing cloth 9A (shown by dotted portions in Figs. 2 and 4) and then the outer material 8 with its backing 8A and lining fabric 9 are laid together in parallelism, and sewed along the edges of the proposed cut out design by the seams of stitching 10, as shown in Figs. 1, 2 and 3.

This cement stiffens the lining backing cloth 9A and, after the stitchings 10 have been made, the shoe is lasted and the openings 11 are made by cutting out the lining 9 by any suitable cutting means just inside the stitchings 10 which pass through both upper 8 and lining 9.

The rubberized cement that unites the lining fabric 9 and its cloth backing 9A prevents the sizing from penetrating through the lining fabric 9, and also overcomes the danger of stains or damage to the lining fabric 9. As shown in Fig. 3 and in the right side of Fig. 4, the edges 12 are clean cut and well defined in contrast to the frayed edges 13 shown in the left of Fig. 4 where the backing 9A has not been treated according to my methods.

The materials I prefer to use are pyroxylin cement in combination with a suitable solvent or thinning agent and dyes. However, other stiffening agents may be used to obtain the desired results and advantages I have described.

I claim as my invention:

1. The method of making cut-out uppers having linings sized in the region of the cut-out portions which comprises cementing to-

gether a plurality of plies of lining material to produce a multi-ply lining, said cement covering at least the entire contacting surfaces of the lining plies at the region of application of the sizing, the lining when incorporated in a shoe having an inner unexposed layer, treating said inner layer with sizing, the cement between the plies of the lining preventing penetration of the sizing through to the exposed layer, then sewing the so treated multi-ply lining to a cut-out upper along the edges of the cut-out portions, and then cutting out the lining material inside the sewed seams to produce an unfrayed edge on the lining.

2. The method of making cut-out uppers having linings sized with pyroxylin in the region of the cut-out portions which comprises cementing together a plurality of plies of lining material to produce a multi-ply lining, said cement covering at least the entire contacting surfaces of the lining plies at the region of application of the pyroxylin, the lining when incorporated in a shoe having an inner unexposed layer, treating said inner layer with thinned pyroxylin to stiffen the inner layer, the cement between the plies of the lining preventing the penetration of the pyroxylin through to the exposed layer, then sewing the so treated multi-ply lining to a cut-out upper along the edges of the cut-out portions, and then cutting out the lining material inside the sewed seams to produce an unfrayed edge on the lining.

3. The method of making cut-out uppers, which comprises providing a multi-ply lining having an outer surface tinted and a second untinted surface, treating the untinted surface of said lining with pyroxylin thinned and dyed to match the color of the tinted surface, then sewing the so treated lining to a cut-out upper at the edges of the cut-out portions with the pyroxylin treated surface disposed next to the upper, and then cutting out the lining material inside the sewed seams whereby to produce an inconspicuous non-fraying edge on the lining.

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