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J. J. CLIFFORD
INSOLE FOR SHOES
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2,090,410

Fig.1.

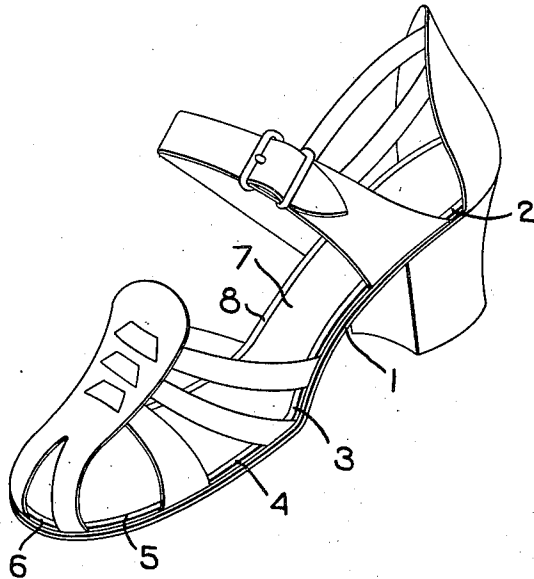


Fig.2.

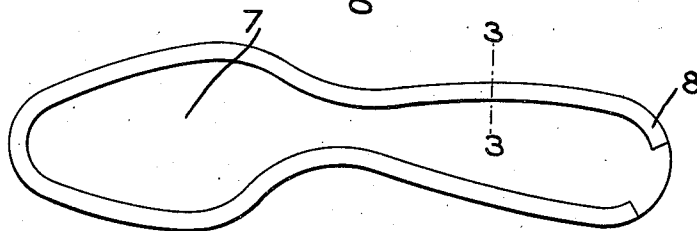
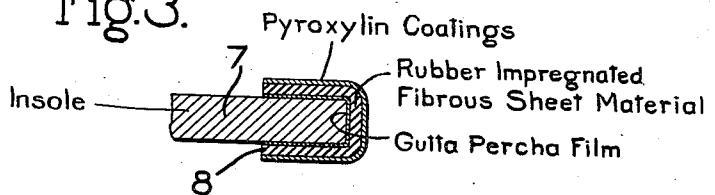


Fig.3.



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UNITED STATES PATENT OFFICE

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INSOLE FOR SHOES

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1 Claim. (Cl. 36—43)

This invention has for its object to provide an insole for that type of women's shoes wherein the edge of the insole is exposed to view and which are generally known as open shank shoes.

Women's shoes have for many years been very largely made in a form in which substantial or major portions of the upper are cut away or omitted, leaving the shank of the shoe and other portions of the sole exposed to view. This leaves the insole which forms a structural part of the shoe with its edges at the open portions of the upper at the shank and elsewhere exposed to view. But the edges of an insole, particularly when made of fibrous compositions, now extensively employed for that purpose, are not of a character to present a pleasing and desirable appearance and in the ordinary type of shoes where the upper is complete are concealed from view.

It has been a difficult problem to provide an insole for these open shank shoes, the edges of which shall present a finished, durable and pleasing appearance and this is all the more important because the very nature of open shank or women's cut-out shoes is such as to attract attention.

The present invention presents an insole in which the edge is protected against wear, which would tend further to render the edge unsightly, and which presents an exposed pyroxylin surface of any desired color and, further, an insole which may be economically manufactured.

The nature and objects of the invention will appear more fully from the accompanying description and drawing and will be particularly pointed out in the claim.

In the drawing:

Fig. 1 illustrates in perspective a typical example of a woman's cut-out or open shank shoe, together with an insole therein embodying the present invention.

Fig. 2 is a plan view of the insole.

Fig. 3 is an enlarged and distorted illustrative cross section of the edge portion of the insole taken on the line 3—3 of Fig. 2.

It will be seen from Fig. 1 that with an open shank or cut-out shoe, the edge of the insole is distinctly visible at the shank 1 and at various points such as 2, 3, 4, 5, and 6, where the upper is cut away.

The body 7 of the insole may be of any suitable shape and formed of any suitable material, including the sheet materials of fibrous composition so largely employed in insole manufacture. The peripheral edge of these insoles is unsuitable for outside exposure in a finished shoe. This edge is more or less rough and fibrous by nature and

does not readily take a finish such as is given to the exposed surface of the upper. Furthermore, it is readily roughened by wear or abrasion and more or less readily absorbent to foreign matter, and thus readily soiled.

In the present invention a binding tape 8 of suitable fibrous sheet material is provided. This tape may be made of materials such as employed in unwoven fibrous sheets, of cotton fibres or fibres employed in paper manufacture. The fibrous sheet material of this tape is impregnated with a rubber solution which may be either a natural or an artificial aqueous solution or an organic solution of rubber. After the fibrous sheet material has been thus impregnated and dried, that surface which is to form the exposed or outer surface is then coated by any of the usual coating processes with several coats of pyroxylin of the desired color to harmonize with the shoe. The other or inner surface of the sheet material is then coated with a gutta percha compound which has the inherent characteristic of being rendered adherent by heat.

The binding tape when completed is of a width required to bind the edge of the insole and presents throughout its exterior or exposed surface the pyroxylin coating properly colored and throughout its inner surface a film of the gutta percha compound.

This tape is then applied to the insole by any suitable means and as it is being applied, or just previously thereto, it is subjected to heat, which brings out the inherent characteristic of the gutta percha film and renders it adherent to the material of the insole as well as to the binding tape itself. The binding tape is pressed against the peripheral edge of the insole and overlies both surfaces of the insole adjacent said edge and thus surrounds and fits against the edge of the insole, as shown in the drawing, being readily conformed to the contour of the insole in a smooth and unwrinkled condition.

The tape need only extend around that portion of the edge of the insole exposed to view but will preferably extend substantially throughout the entire edge of the insole except the heel portion, as shown in Fig. 2.

When the insole is completed, as illustrated in Fig. 3 which is distorted for illustrative purposes, it will be seen that the rubber-impregnated fibrous sheet material of the binding tape with its exterior pyroxylin coating surrounds and fits against the edge of the insole and overlies the surfaces of the insole adjacent the edge and that the film of gutta percha compound adher-

ently engages and secures together the tape and the edge and surfaces of the insole, thus causing the edge of the insole wherever exposed to view in the finished shoe to present a finished, durable edge of pleasing appearance and harmonizing with the shoe.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent, is:

10 An insole for open shank shoes comprising a sheet of fibrous material of the required shape, size and thickness having an edge unsuitable for outside exposure in the finished shoe and a bind-

ing tape of rubber impregnated fibrous material having an exterior pyroxylin coating, the said binding tape surrounding and fitting said edge, overlying the surfaces of the insole adjacent said edge, and a film of gutta percha compound which is characteristically rendered adherent by heat adherently engaging and securing together the tape and said edge and surfaces and causing the insole where exposed in the finished shoe to present a finished, durable edge of pleasing appearance.

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