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G. M. SMITH

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MAKING DECORATIVELY COVERED HEELS

Filed Oct. 17, 1930

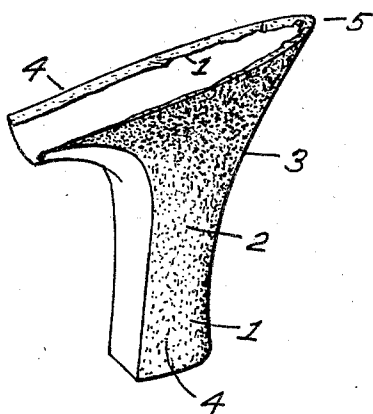


Fig. 1.

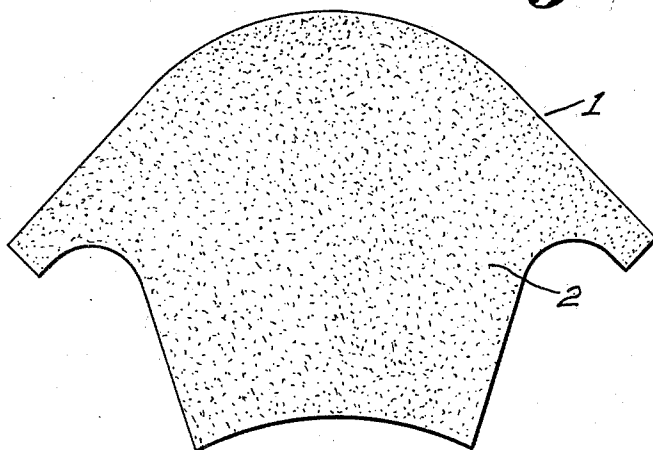


Fig. 2.



Fig. 3.

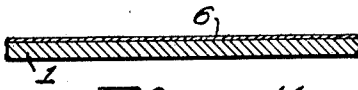


Fig. 4.

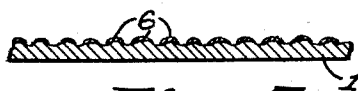


Fig. 5.



Fig. 6.

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MAKING DECORATIVELY COVERED HEELS

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This invention has as its primary object the provision of a novel method of making decoratively covered heels, including impressing the cover with a decorative design and applying the cover to the heel. Other objects, advantages, and desirable features of the invention will appear in the course of the following description of illustrative embodiments of the spirit of the invention.

It is quite common to cover the high wooden heels of women's shoes with a covering cut out from elastic sheet celluloid colored and lacquered to resemble the material of the shoe upper. However, the smooth, hard, cold, textureless appearance and "feel" of the covering forms an undesirable contrast to the soft textured appearance and "feel" of the leather or fabric that forms the shoe upper. By the present process, there can be produced a celluloid covering which resembles leather or fabric sufficiently closely to make its use highly desirable.

In the accompanying drawing forming part of this specification, in which like numbers of reference denote like parts wherever they occur,

Figure 1 is a perspective view of a wooden heel having attached thereto a cover made in accordance with the present invention;

Figure 2 is a view of the prepared cover blank as it appears before it is attached to the heel;

Figure 3 is an enlarged transverse section of an uncoated covering as it appears after texture has been imparted thereto;

Figure 4 is an enlarged transverse section of a covering coated with a layer of pigment or lacquer;

Figure 5 is an enlarged transverse section showing the coated covering as it appears after a texture has been imparted thereto by one form of process of this invention; and

Figure 6 is a similar view showing the coated covering as it appears after a different texture has been imparted thereto by another form of process of this invention.

The cover blanks 1 are cut or dried-out from a plain sheet of elastic celluloid, preferably about twelve and one-half or fifteen one-thousandths of an inch thick, to the usual

shape and size to fit the heel and to allow sufficient margin for trimming the edges after they have been attached to the heel. The celluloid may, if desired, be colored throughout its body or mass so as to resemble as closely as possible the desired color of the finished covering.

The blanks are next softened sufficiently to render them easily embossed and to yield to fit intimately the contour of the heel when applied thereto. Divers methods of temporarily softening the celluloid are known in the art, one method being to use a softening solution. The blanks 1 are preferably immersed in the softening solution for about twenty to thirty minutes and are then impressed while soft with a suitable embossing element or die to impart thereto the imitative texture and appearance of leather or fabric or other desired effect, as shown in Figures 2 and 3. Then, while still soft, the embossed blank 1 is applied to the curved back 3 and sides 4 of the heel 5 and is manipulated to fit the same intimately, a suitable celluloid cement having been previously applied to the heel 5 to securely hold the cover 1 thereon. After being allowed several hours to dry and to recover its original condition of comparative hardness, the attached covering 1 can, if desired, be sprayed with a suitable pigmented lacquer for imparting thereto a finished appearance of the desired color.

The following formula for a softening solution may be cited as an example: denatured alcohol No. 5, 2 parts by volume; acetone or ansol, 1 part by volume; water, 1 part by volume; gum camphor, 1 cubic inch to a gallon of solution.

The camphor neutralizes the tendency of the solution to extract the camphor constituent from celluloid. The alcohol and the acetone each dissolve celluloid.

Lacquer may be applied to the covering either before or after softening, if desired. However, if the lacquer coat 6 is applied before softening, as shown in Figure 4, a two-tone or two-color stipple or fine pebble grain effect may be produced if the lacquer is pigmented or has a different color than the in-

herent color of the sheet of celluloid. This effect is produced by embossing the celluloid 1 while soft to a depth sufficient to pierce through and open the coat of pigment 6 to
5 expose the inherent color of the underlying sheet 1 of celluloid. Otherwise stated, the parts in relief will have the color or tone of the pigment or lacquer, while the parts depressed or in intaglio will present the inherent color or tone of the celluloid, as best
10 shown in Figure 5.

It is also possible to emboss the celluloid without softening it. In this case, however, the impress of the embossing element will be
15 much more shallow and perhaps less permanent than if the material had been softened. The comparative faintness of the imitative texture, however, may be somewhat remedied by spraying lacquer on the side of
20 the celluloid that is to be embossed and allowing it to dry before embossing it, the lacquer accentuating and enhancing the imitative texture. When the embossing is done without softening the celluloid, it is preferably
25 done on a whole sheet at one time, and the blanks are cut out after the embossing has been done. Of course, the embossed blanks are softened sufficiently when they are attached to the heel.

30 Having thus fully described this invention I hereby reserve the benefit of all changes in form, arrangement, order, or use of parts, as it is evident that many minor changes may be made therein without departing from
35 the spirit of this invention or the scope of the following claims.

I claim:

1. The method of making a decoratively covered heel which method comprises, providing a heel form to be covered, and a cellu-
40 losic plastic cover, softening the cover, impressing a decorative design on the cover while said cover is soft, and applying the cover to the heel while still soft.

45 2. The method of making a decoratively covered heel which method comprises, providing a heel form to be covered, and a cellulosic plastic cover, softening the cover to a degree sufficient to render it easily embossed,
50 impressing a decorative design on the cover while said cover is soft, and cementing the cover to the heel while still soft.

In testimony whereof I hereunto affix my
55 signature.

GARDNER M. SMITH.