FORM FOR FILLING AND DISTENDING THE VAMP AND TOE PORTIONS OF A SHOE

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

INVENTOR
Anne Roman

BY William F. Muhlenbeck
Schoenfeld & Adams
ATTORNEYS
This invention relates to shoe forms or trees for distending and stretching the toe and vamp portions of a shoe, slipper or pump when the same is not in use.

It is an object of my invention to provide a shoe form or tree constructed of compressible and highly resilient material for application to the vamp and toe portions of shoes varying considerably in size and having a shape and resilient qualities which enable it to be forced into shoes varying in size to produce outward pressure in accordance with the desire and requirements of the user.

A further object is the provision of a tapering, wedge-like, resilient shoe form or tree which may be used with so-called "heelless" shoe without requirement of a rear abutment against the counter or rear of a shoe.

A more specific object is the provision of a simple but efficient shoe form which is particularly adapted to be commercially constructed in simple manner and at relatively low cost and which is of attractive appearance harmonizing with the furnishing of a lady's dressing room or travel equipment.

These and other objects and advantages of my invention will more fully appear from the following description made in connection with the accompanying drawings wherein like reference characters refer to similar parts throughout the several views and in which:

Fig. 1 is a perspective view showing an embodiment of my invention applied to a popular type of lady's shoe which does not employ a rear or counter;

Fig. 2 is a plan view illustrating a blank of compressible, highly resilient material such as foam or sponge rubber cut to proper shape for fashioning my improved form or tree;

Fig. 3 is a cross section taken on the line 3—3 of Fig. 4 showing the blank of Fig. 2 folded with the curved edges of the folded blank being aligned in proper form to constitute the body of my form;

Fig. 4 is a perspective view showing a portion of the bottom of the form and the rear end thereof in completed condition with some portions broken away; and

Fig. 5 is a plan view showing a fabric blank constituting the bottom or sole piece of the casing for my form.

I prefer to construct the body of my shoe tree or form from an integral pad of compressible, cellular, but highly resilient material such as foam rubber or sponge rubber. Other material such as artificial or synthetic sponge materials if possessed of sufficient resiliency, are suitable. The pad should be at least ¾ inch thick and it is preferable to utilize a thickness somewhat greater than that, say from 1¼ to 1½ inches. From a pad of suitable material, as previously specified, a body blank is cut as shown in Figs. 2, along a major arc which in the form shown, lies in the circumference of a circle circumscribed about the center C. The blank is provided with a substantially straight edge or side S which extends in the manner of a chord relatively to the curved edge E, said chord extending perpendicularly to a fold line F which meets diametrically the major arc. The cellular and resilient body B in forming my improved tree is folded along the diametric line F and then assumes the shape shown in Figs. 3 and 4 then placing substantial tension for outward spreading upon the two segmental folds. The curved edges E of the two folds are brought into registration to form a curved bottom for the body of the form and the body in such folded condition is inserted into a highly flexible casing or cover 5 which is constructed to snugly enlace and fit the shape of the folded body. The this end, the casing 5 may have an upper piece 5a cut circularly in conformance to the area of the blank B with an excess of material left above the straight line S of the body and a bottom or sole piece 5b may be cut as a relatively wide strip, as shown in Fig. 5, having a rounded forward portion covering the toe and sole portion of the body when in wedge-shaped, folded form. The longitudinal edges of the under piece 5b are stitched together with the curved or arcuate edge of the upper piece 5a throughout the margin of the two pieces 5a and 5b and the excess material at the rear of the upper piece 5a is folded along corners (package wrapping style) to provide tabs 5c which are brought together at the rear of the body and secured and stitched to the updrawn part 5d of the lower casing piece 5b. Thus, the body is snugly encased in a highly flexible cover conforming to the wedge-shape and bottom curvature of the folded body and the body within such casing is somewhat compressed and the folds initially tensioned.

An ornamental bow 5d constructed from ribbon is secured by stitching to hide the stitching at the closing of the casing and also forms a handle for the device, to facilitate withdrawal from the vamp of a shoe.

It is quite important that the casing 5 be constructed from thin fabric or cloth which will not be slippery. Rayons and satins should not be
used, but a material which has some degree of friction such as percale is preferred.

The completed article, as shown in Fig. 4 has the general form of a wedge provided with a rounded, upper contour and a longitudinally curved bottom or sole portion and tapering from the forward or toe portion T to a substantially flat rear end which as will be seen in Fig. 3, is of inverted U-shape in cross section. The curved bottom or sole surface nicely conforms to the shape of the sole of a lady's shoe below the vamp and the toe portion of course will conform to and be compressed and tensioned by the toe portion of the shoe.

In use, the resilient form is forced wedge-like into the vamp and toe portion of the shoe, adequate pressure being applied to compress and tension the material to the extent where it fills and distends the toe and vamp of the shoe.

In this connection, the inherent construction of my resilient body folded longitudinally to initially tension the two flaps formed is of material importance. This folded construction of the body provides for outward and lateral spreading when the body is further compressed by forcing it into the shoe. It provides a tensioning and pressure medium of much greater efficiency than the use of an unfolded, previously intensioned, solid core of sponge material. Folding of the body along the central line P because of the thickness and nature of the cellular, resilient material, produces a nicely rounded contour on the exterior of the fold which defines the shape of the upper portion of my form.

The cutting of the simple pattern from a heavy sheet or pad of foam rubber, sponge rubber or the like, inherently produces with the folding of the blank upon a central line, the most advantageous shape of a body for accomplishing the desired purposes. The body initially compressed to some extent within the casing 3, tapers not only in vertical or thickness dimensions from toe to rear but also because of increasingly greater height, is more readily compressible at toe portion than at the rear portion thereof. Thus, my shoe form may be readily forced in the manner of a compressible wedge into the vamp and toe of a shoe causing the body to nicely conform to the particular shape of the interior of the shoe portion and distributing the resiliency and expansive force properly for stretching the vamp and toe of the shoe when the same is not in use.

The structure lends itself well to economical, commercial manufacture. A number of strata of resilient pads may be simultaneously cut by die or other means with little waste to form the bodies of my devices. The pattern and structure of the body also facilitates the pattern and cutting of the encircling and other parts.

The finished article is of pleasing appearance and lends itself well to the surroundings and furnishings of a lady's dressing room.

From the foregoing description it will be seen that I have provided a comparatively inexpensive, highly efficient shoe form which may be applied to the vamp and toe portions of substantially all types of footwear and which do not require, as do most shoe trees, an abutting or anchorage with the heel or counter portion of a shoe. It is retained in proper relation by friction between the casing thereof and the inside of the vamp and toe of a shoe.

It will of course be understood that various changes may be made in the form, details, arrangement and proportions of the parts without departing from the scope of my invention.

What I claim is:
1. A form for filling and distending the vamp and toe portions of a shoe comprising a body constructed from a pad of cellular, resilient, flexible and compressible material, said body being defined at least at one end thereof by a substantially continuous, sharply curved line traversing and extending symmetrically to the longitudinal center line thereof and being defined at the opposite end by a line at least approximating a perpendicular relationship to said longitudinal center line, said body being folded in doubled relation upon said longitudinal center line to then assume a wedge-like shape and producing a rounded contour on the side of the material exteriorly of the fold and a casing for said body tightly encompassing said body in its folded state and retaining the same therein under slight compression.

2. The structure set forth in claim 1 wherein said body is constructed from a substantially semi-circular, integral blank, said blank in the formation of said body being folded along a central line substantially intersecting the curve thereof, the folded, longitudinal edge producing a rounded contour.

ANNE ROMAN.

References Cited

UNITED STATES PATENTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>885,690</td>
<td>Gough</td>
<td>Apr. 21, 1908</td>
</tr>
<tr>
<td>896,536</td>
<td>Hayden</td>
<td>Aug. 18, 1908</td>
</tr>
<tr>
<td>1,725,514</td>
<td>Hirshon</td>
<td>Aug. 20, 1929</td>
</tr>
<tr>
<td>1,883,596</td>
<td>Enrich</td>
<td>Apr. 13, 1932</td>
</tr>
<tr>
<td>2,041,696</td>
<td>Clark et al.</td>
<td>May 26, 1936</td>
</tr>
</tbody>
</table>