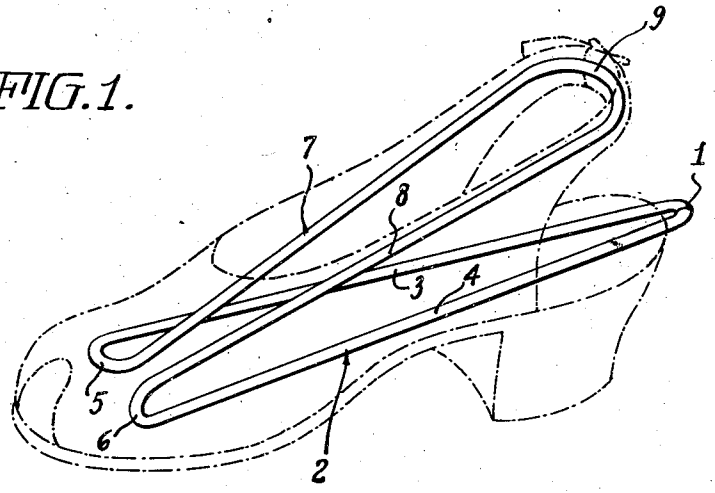
Oct. 1, 1946. K. BARBER 2,408,545

SHOE TREE

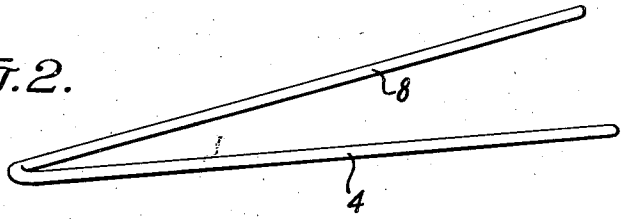
Filed Nov. 26, 1945

FIG. 1.



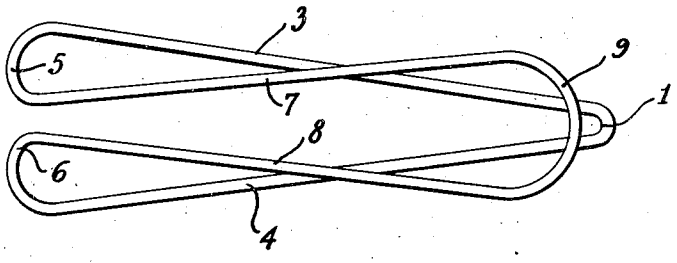
III III

FIG. 2.



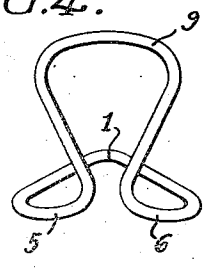
IV

FIG. 3.



IV

FIG. 4.



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SHOE TREE

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7 Claims. (Cl. 12—128.2)

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My invention relates to a shoe tree and has particular reference to a device for holding shoes in a desired shape when not being worn and which finds particular utility when used to hold in shape women's shoes.

It is the common practice to employ shoe trees which are inserted into shoes when they are not being worn for the purpose of holding the shoes in shape and to support the relatively flexible parts of the upper to prevent wrinkling and creasing.

Considerable difficulty has been encountered in applying conventional types of shoe trees to women's shoes and this difficulty has been particularly aggravated by the advent of open-toed and open-heeled women's shoes. The conventional shoe tree includes a heel-engaging portion which is used to fix the shoe tree in the shoe and which engages the counter to thereby hold the base member and the toe-engaging portion fixed firmly against the sole of the shoe and wedged firmly into the toe portion. With open-heeled shoes the counter portion of the shoe is completely omitted and conventional shoe trees will not provide the desired support. Furthermore, the strap portion of open-heeled shoes which passes behind the ankle of a wearer require support in order that the shoes may be kept in shape. Conventional shoe trees likewise fail to provide this support.

It is therefore an object of my invention to provide a shoe tree which overcomes the above noted disadvantages by including features of construction permitting it to be used with women's shoes of the open-toed and open-heeled type.

It is also an object of my invention to provide a shoe tree of the character set forth in the preceding paragraph which includes a means for engaging and holding the strap portion of the shoe which normally passes behind the ankle of a wearer of the shoes.

It is an additional object of my invention to provide a shoe tree of the character set forth in the preceding paragraphs which is formed of a resilient wire or rod bent into the required shape with the ends abutting to define an endless loop.

It is a still further object of my invention to provide a shoe tree of the character set forth in the preceding paragraphs which is susceptible to rapid low cost manufacture in large quantities.

Other objects and advantages of my invention will be apparent from a study of the following specifications, read in connection with the accompanying drawing, wherein:

Fig. 1 is a perspective view of the preferred

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embodiment of my invention and illustrating by means of broken lines the manner in which the shoe tree is used to support a shoe;

Fig. 2 is a side elevational view of the device shown in Fig. 1;

Fig. 3 is a plan view taken as represented by the lines III—III of Fig. 2; and

Fig. 4 is an end view taken as indicated by the line IV—IV in Fig. 3.

Referring to the drawing, the shoe tree comprising the preferred embodiment of my invention is formed of a resilient wire or rod which is bent into the configuration shown with the ends of the rod brought into abutting relation as shown at 1 and preferably bonded together as by means of soldering or brazing so that the shoe tree is formed of an endless loop of such wire or rod.

As is shown in the drawing, the shape to which the wire or rod is bent includes a sole-engaging portion indicated generally at 2 and comprising portions 3 and 4 extending forwardly from the joining 1 to define substantially a V-shape as is clearly seen in Fig. 3. The two members 3 and 4 lie in a single plane adapted to lie along the sole of the shoe. The apex 1 of the V-shaped sole-engaging portion is intended to be placed at the heel of the shoe as is shown in Fig. 1, the forwardmost portions of the arms 3 and 4 being inserted into the toe of the shoe.

At the forward ends of the V-shaped base members 3 and 4 the wire or rod is bent inwardly and upwardly to define vamp or toe-engaging loops 5 and 6 from which the rods are extended upwardly and rerwardly at a slight angle as portions 7 and 8. The portions 7 and 8 are likewise disposed in a single plane as may be seen in Fig. 2, it being understood, however, that the plane of the members 7 and 8 is inclined at an acute angle to the planes of the members 3 and 4. The members 7 and 8 diverge from each other as they extend rearwardly and are joined at their outer ends by a semi-circular loop portion 9.

As may be seen in Fig. 1, the curved portions 5 and 6 and the forward portions of the arms 7 and 8 serve to engage the toe and vamp of the shoe and hold the same in the desired shape. The rearwardly extending arms 7 and 8 serve to extend the sides of the upper of the shoe and to position the curved terminus 9 within the heel-engaging strap portion of the shoe as is shown in Fig. 1. In so doing, the shoe tree is prevented from moving rearwardly and so holds the toe and vamp supporting portions in their proper relationship to the shoe and at the same time

provides a support for the heel-engaging strap and holds that strap up in proper spaced relation to the heel proper and provides a curved form around which the strap is smoothly drawn.

Preferably the arms 3 and 4 are made with a length sufficient to dispose the joining one thereof aft of the heel strap engaging portion 9 as may be seen in Figs. 1 and 3 to thereby extend the loop formed by the joining one beyond the limits of the heel of the shoe to provide an eye by means of which a shoe with the shoe tree installed may be suspended from a suitable hook.

Attention is directed particularly to the fact that the device described may be used on shoes having a complete heel counter as well as shoes of the open-heeled type.

It will be noted that with either type of shoe, an ample support is given for the rear and side portions of the shoe upper while at the same time the toe and particularly the vamp portion of the shoe is held against collapse and subsequent wrinkling.

Attention is also directed to the fact that the form of construction shown is particularly susceptible to rapid manufacture at low cost, thus permitting a manufacturer to market shoe trees of the character described at a reasonable price.

While I have shown and described the preferred embodiment of my invention, I do not desire to be limited to any of the details of construction shown or described herein, except as defined in the appended claims.

I claim:

1. In a shoe tree, the combination of: a sole-engaging member comprising a pair of arms disposed to define a V-shape; a vamp-engaging member comprising a pair of arms disposed to define another V-shape, the apex of said latter V-shape being disposed between the arms of said first-named V-shape, and the planes of said V-shapes being disposed at an acute angle relative to each other; a toe-engaging member comprising curved portions joining the apex of said latter V-shape with the upper ends of the arms of said first-named V-shape; and a heel strap engaging member comprising a semi-circular portion joining the upper ends of the arms of said latter V-shape.

2. In a shoe tree, the combination of: a sole-engaging member comprising a pair of arms disposed to define a V-shape; a vamp-engaging member comprising a pair of arms disposed to define another V-shape, the apex of said latter V-shape being disposed between the arms of said first-named V-shape, and the planes of said V-shapes being disposed at an acute angle relative to each other; a toe-engaging member comprising curved portions joining the apex of said latter V-shape with the upper ends of the arms of said first-named V-shape; and a heel strap engaging member comprising a semi-circular portion joining the upper ends of the arms of said latter V-shape, said members all being formed integrally with each other.

3. In a shoe tree, the combination of: a sole-engaging member comprising a pair of arms disposed to define a V-shape; a vamp-engaging member comprising a pair of arms disposed to define another V-shape, the apex of said latter V-shape being disposed between the arms of said first-named V-shape, and the planes of said V-shapes being disposed at an acute angle relative to each other; a toe-engaging member comprising curved portions joining the apex of said latter V-shape with the upper ends of the arms of said first-named V-shape; and a heel strap engaging member comprising a semi-circular portion joining the upper ends of the arms of said latter V-shape, said members all being formed integrally with each other from a single length of resilient rod.

4. A shoe tree comprising a single length of resilient rod formed to define a semi-circular heel strap engaging portion having a pair of arms extending forwardly and downwardly therefrom to be received within the toe of a shoe, each of said arms being turned outwardly back upon themselves and extended rearwardly to lie along the sole of said shoe.

5. A shoe tree comprising a single length of resilient rod formed to define a semi-circular heel strap engaging portion having a pair of arms extending forwardly and downwardly therefrom to be received within the toe of a shoe, each of said arms being turned outwardly back upon themselves and extended rearwardly to lie along the sole of said shoe, said arms being terminated and joined at a point disposed beneath said heel strap engaging portion.

6. A shoe tree comprising a single length of resilient rod formed to define a semi-circular heel strap engaging portion having a pair of arms extending forwardly and downwardly therefrom to be received within the toe of a shoe, said arms being convergent toward said toe and each of said arms being turned outwardly back upon themselves and extended rearwardly to lie along the sole of said shoe, said rearwardly extending portions being convergent from said toe and lying in a plane disposed at an acute angle to the plane of said forwardly and downwardly extending portions.

7. A shoe tree comprising a single length of resilient rod formed to define a semi-circular heel strap engaging portion having a pair of arms extending forwardly and downwardly therefrom to be received within the toe of a shoe, each of said arms being turned outwardly back upon themselves and extended rearwardly to lie along the sole of said shoe, said arms being terminated and joined at a point disposed beneath and rearwardly of said heel strap engaging portion to define an eye positioned outside of said shoe, whereby said eye may be employed to engage a support and suspend said shoe.

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