Nov. 29, 1949 G. J. NATHAN 2,489,429

PNEUMATIC SHOE RETAINING DEVICE

Filed Dec. 30, 1946

FIG. 1

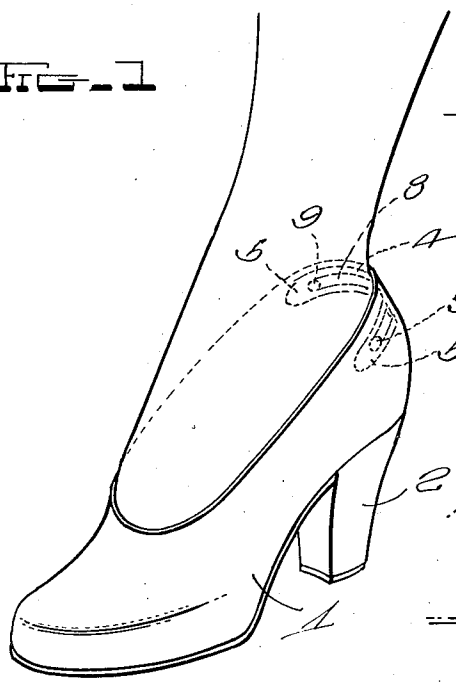


FIG. 2

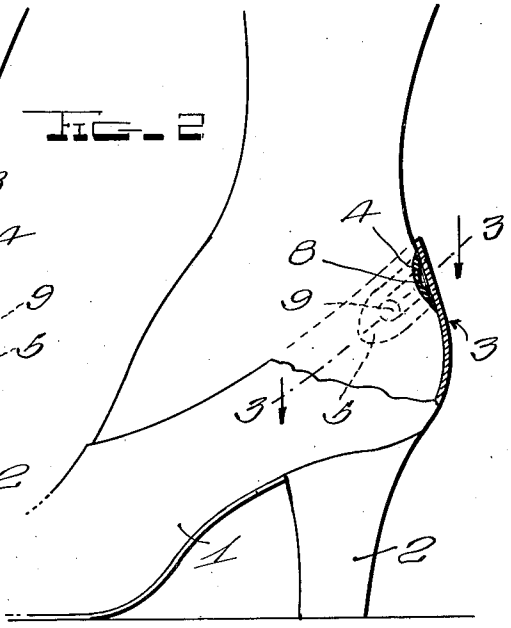


FIG. 3

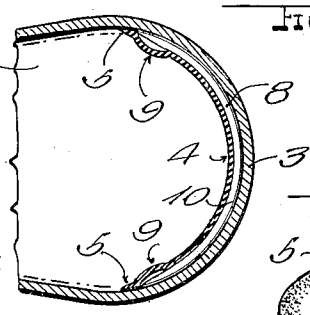


FIG. 4

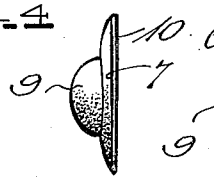


FIG. 5

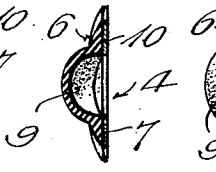


FIG. 6

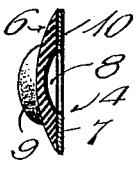


FIG. 7

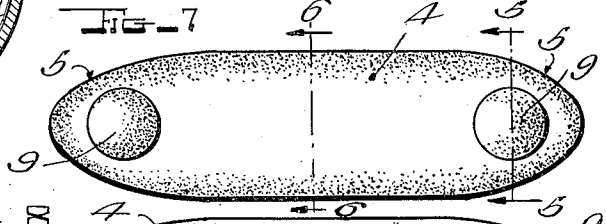


FIG. 8

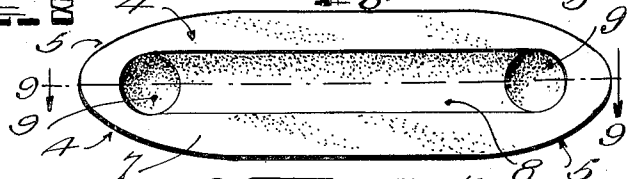


FIG. 9

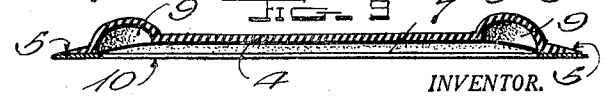


FIG. 10

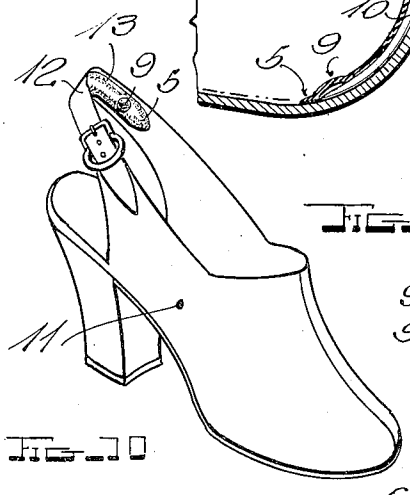
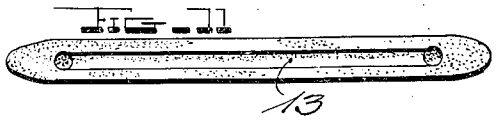


FIG. 11



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2,489,429

PNEUMATIC SHOE RETAINING DEVICE

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Application December 30, 1946, Serial No. 719,151

1 Claim. (Cl. 36—58.5)

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My invention relates to new and useful improvements in shoe attachments, and more particularly to a device for aiding and retaining slippers, pumps and low shoes on the foot of the wearer, the primary object being to provide a novel device of this character readily applicable to the counter or the back strap of a shoe.

A further object of the invention resides in providing a device of the character mentioned which may be adhesively applied to the counter of the shoe by the purchaser to prevent slipping of the shoe from the heel of the wearer or applied to the back strap of shoes of the type using such straps with no counters to retain the shoe properly on the foot.

Still another object resides in the provision of a device of the character mentioned made of rubber or latex which is designed to be permanently retained in the shoe after once being applied thereto, but which may be removed when and if desired.

Still another object resides in providing a device of the character mentioned made of rubber or latex with a suction back to aid in the retention of the device in place in the shoe.

A still further object resides in providing a device of the character mentioned provided with hollow projections communicating with the suction means which assist in retaining the shoe on the foot of the wearer.

A still further object resides in the provision of a device which is simple and durable in construction, inexpensive to manufacture and one which will be very efficient and useful in practice.

With these and numerous other objects in view, my invention consists in the novel features of construction, combination and arrangement of parts as will be hereinafter referred to and more particularly pointed out in the specification and claim.

In the accompanying drawing forming a part of this application,

Figure 1 is a perspective view of a shoe on the foot with my invention applied to use and shown in dotted lines thereon;

Figure 2 is a fragmentary side elevation, with parts in section and parts broken away of a shoe on the foot of the wearer having my invention applied to use thereon;

Figure 3 is a diagonal section, as seen on the line 3—3 of Figure 2;

Figure 4 is an end elevation of the retaining device removed;

Figure 5 is a vertical section therethrough, as

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seen on the line 5—5 of Figure 7, looking in the direction of the arrows;

Figure 6 is a similar view, as seen on the line 6—6 of Figure 7;

Figure 7 is a front elevation of the retaining device removed from the shoe;

Figure 8 is a rear elevation thereof;

Figure 9 is a horizontal section therethrough, as seen on the line 9—9 of Figure 8;

Figure 10 is a perspective view of a shoe of the type having no heel counters and showing a slightly modified form of my invention applied to the back strap thereon; and

Figure 11 is a rear elevation of this modified form of the retainer removed.

It is a known fact that women have some difficulty in retaining low shoes, slippers, pumps and the like on their heels as they walk, this condition being due to the fact that the shoes are not made to conform fully to the heels of all wearers. Particularly is this condition true of the popular or cheaper shoes. Various devices have been devised for retaining the heels of shoes on feet of the wearers, but one difficulty or another has been encountered with the use thereof. My invention contemplates the provision of a simple, inexpensive and efficient device which may be quickly and readily applied to the counter of a shoe to definitely retain the same on the heel of the wearer and aid in the fitting of the heel portion on the foot.

In carrying out the invention, I shall refer to the drawing in which similar reference characters designate corresponding parts throughout the several views in which 1 designates a woman's shoe having a reasonably high heel 2, the same being of the type known to the purchasing public as a pump. The counter of this shoe is designated by the numeral 3. To prevent the shoe from slipping from the foot of the wearer, I provide a retaining device which is applied to the counter immediately adjacent the top thereof and it is this specific retaining device that constitutes my invention.

My improved retaining device comprises a somewhat elongated strip of rubber designated by the numeral 4, the ends of which are somewhat tapered, as shown at 5, the front or outer face of said strip being arcuately designed, as shown at 6. The rear face of this strip is flat, as shown at 7 and formed in said rear face and extending longitudinally for the greater portion of the length thereof is a groove 8. This groove 8 terminates in hollow or knob-like projections 9, said projections extending outwardly from the outer

face of said strip 4 adjacent the ends thereof, as clearly shown in Figures 7 and 9 of the drawing. In view of the fact that the outer face of this strip 4 is arcuately designed and the rear face thereof flat, said strip is gradually reduced in thickness towards its marginal edges, as best illustrated in Figure 9 of the drawing.

Secured in any desired manner to the rear flat face of the strip 4 surrounding the groove 8 thereof is a fabric layer 10, the outer face of which has an adhesive applied thereto so that the strip 4 may be readily and quickly applied by the purchaser to the counter of the shoe in the manner shown in Figures 1, 2 and 3 of the drawing. As aforesaid, this strip is applied to the counter adjacent the upper edge thereof and, being somewhat elongated, will extend around the sides of the counter to contact the sides of the heel of the wearer. The groove 8 in the strip will permit of a suction or vacuum being formed to aid in the retention of the device on the shoe.

When the foot is inserted in a shoe having my improved retaining device applied thereto, there will be no tendency to force the retaining device from its bindings, since the tapered edges will eliminate this condition and the foot will ride readily over the curved face of the retaining device pressing outwardly thereon, which action will tend to secure the device more firmly to the counter of the shoe. The hollow knob-like projections will be contacted by the sides of the heel of the wearer and depressed, which action will also tend to secure the retaining device more firmly on the shoe. Likewise, these knob-like projections will assist in retaining the shoe to the foot of the wearer, as appears obvious. Naturally, this device being formed of rubber or latex will frictionally contact upper portions of the heel of the wearer and securely retain the shoe on the foot, regardless of the movement thereof in walking. The device obviously will also create a form-fit for the rear or heel portion of the shoe with respect to the foot of the wearer.

Some shoes of present day styles eliminate the counters and the shoes are retained in place on the foot by a rear strap. Difficulties have been encountered in retaining the straps in their upright positions. I have designed my improved retaining device for application to use with such shoes. To this end, I have shown a modification, as best illustrated in Figures 10 and 11, wherein a shoe designated by the numeral 11 is provided having the rear strap 12 thereon Applied to the inner face of this strap is a retaining strip 13 which is of the same general design and construction as retaining strip heretofore described, except that the same is much narrower, as would be necessarily required in view of the narrower strap to which it is applied. Other than being made narrower and longer, if necessary, this modified form of strip is identical to that heretofore described. When applied to the strap in the manner shown in Figure 11, the strap contacting with the lower portion of the leg just above the heel will be retained in its upright position and slipping thereof will be avoided. With the strap retained in this upright position, the shoe will obviously be retained more firmly on the foot of the wearer.

The shape or design of the strip as shown in the preferred and modified forms of the invention may be varied or changed, as may be desired, and in this connection it will be understood that various changes in form, proposition and in the minor details of construction may be resorted to, without departing from the spirit or sacrificing any of the principles of the invention.

From the foregoing description of the construction of my improved retaining device, the method of applying same to use and the operation thereof, will be readily understood, and it will be seen that I have provided a simple, inexpensive and efficient means for carrying out the various objects of the invention.

Having thus described my invention, what I claim is:

A shoe retaining device comprising an elongated strip of flexible rubber having a vertically transversely convexed front face and having marginal portions of its rear face flat along its length and across its end portions for its full length and width, the portion of the strip surrounded by the said flat marginal face being projected forwardly and of concavo-convexed formation and forming a rear recess and a forwardly projecting rib extending longitudinally of the strip midway the width thereof, and end portions of said rib being projected forwardly and forming hollow knob-like members of concavo-convexed formation projecting forwardly from the rib in superposed relation thereto.

GEORGE J. NATHAN.

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