Aug. 11, 1942. C. F. NORLIN 2,292,466

SPLASH SHIELD

Filed June 2, 1941

Fig. 1.

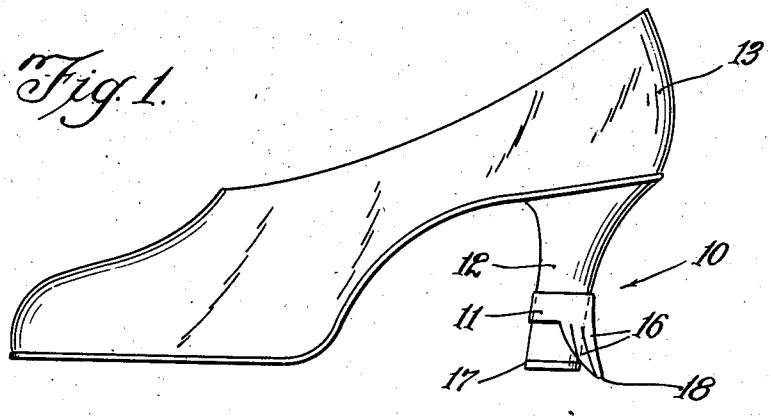
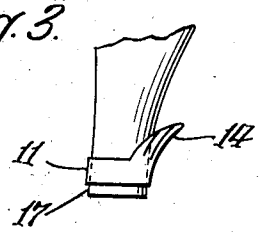


Fig. 3.



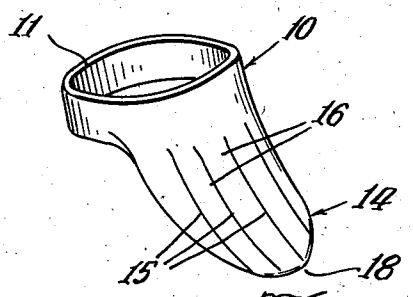
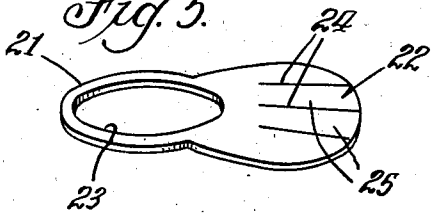


Fig. 4.

Fig. 5.



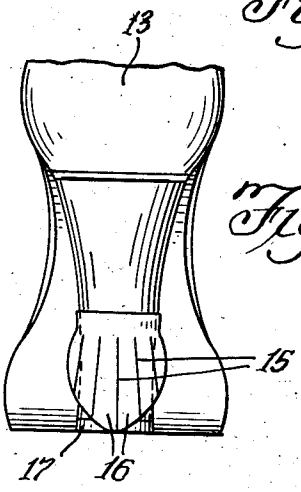
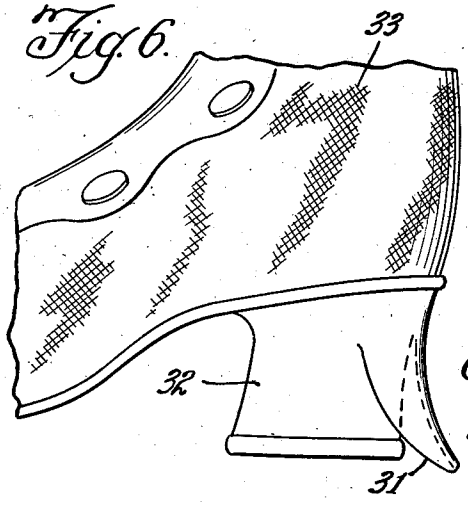


Fig. 2.

Fig. 6.



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2,292,466

SPLASH SHIELD

Clarence F. Norlin, Chicago, Ill.

Application June 2, 1941, Serial No. 396,259

4 Claims. (Cl. 36—70)

The present invention relates to footwear, and more particularly to a splash shield adapted to be attached adjacent the lower extremity of the heel portion of a shoe to prevent the discharge of water, dirt or other foreign matter from the heel cap.

It is particularly adapted for use in connection with women's shoes, and while it should not be construed as limited thereto, it is believed that its greatest utility is in connection with shoes having comparatively high heels.

Before describing the structure of the preferred embodiment of the invention in detail, it is believed advisable to point out that whenever a person is walking on wet pavements the sole and heel surfaces of a shoe will invariably pick up a certain amount of dirt and moisture, and the normal walking movements of the average person are such as to tend to flick droplets of water containing dirt upwardly from the rear edge of the heel cap. When this condition is allowed to exist it results in soiling the hosiery of the wearer, and with the present vogue for high-heeled women's shoes, the soil is often so pronounced as to be extremely unsightly and embarrassing to the wearer. Experiments indicate that the splashing effect of the movements of the shoe are much more pronounced on certain individuals than on others, but the movements incident to the natural walking gait of many persons are such that almost every step will flick a drop of dirt-laden water rearwardly and upwardly, and in the course of a few minutes' walking many of these droplets will strike the ankle and calf surfaces of the wearer's hosiery sufficiently to be entirely unpresentable.

It is therefore the principal object of this invention to provide a splash shield adapted to be attached to the heel portion of a high-heeled woman's shoe and to extend angularly rearwardly therefrom in such a manner as to intercept any drops of moisture discharged from the heel cap and thus prevent soiling of the hosiery of the wearer.

A further object of the invention is to provide a splash shield comprising a relatively thin flexible resilient rubber membrane which may, if desired, be split into a plurality of separate narrow ribbons adapted to lie in side-by-side contiguous relationship with each other.

A further object of the invention is to provide a splash shield so designed and constructed as to be instantly detachable from any shoe and capable of attachment to any one of a number of shoes having substantially similar heel portions.

A further object of the invention is to provide a splash shield so designed and constructed as to be capable of manufacture by stamping or otherwise cutting out a single thickness of yieldable sheet material. These and other objects, which will appear hereinafter, are accomplished in the present instance by the preferred embodiment of the invention illustrated in the drawing accompanying this specification and forming a part thereof, in which—

Figure 1 is a side elevation of a typical woman's shoe showing a preferred form of the present invention attached thereto;

Figure 2 is a rear elevation of the shoe and splash shield illustrated in Fig. 1;

Figure 3 is a fragmental detail view showing a splash shield such as illustrated in Figs. 1 and 2 applied in an alternate position on the shoe;

Figure 4 is an enlarged perspective view of the splash shield illustrated in Figs. 1, 2 and 3;

Figure 5 is a perspective view of a modified form of the invention wherein the splash shield is so constructed as to be capable of manufacture by blanking of a single thickness of resilient material;

Figure 6 is a fragmental side elevation of a second modification of the invention showing the splash shield formed as an integral part of the heel portion of the footwear.

In the form of the invention illustrated in Figs. 1 to 4, inclusive, the splash shield 10 includes a resilient band portion 11 which is preferably formed of a comparatively thin piece of resilient rubber or similar material and which is adapted to encircle the heel portion 12 of any conventional type of shoe such as the shoe 13. On one side of the band portion 11 a thin flexible resilient membrane 14 is provided which is preferably split as indicated at 15 to provide a plurality of relatively narrow resilient ribbons 16 adapted to lie in contiguous side-by-side relationship.

It will be understood that the entire splash shield 10, including the band portion 11 and the ribbons 16, are preferably formed of rubber or a similar yieldable material, but may be formed of other types of materials without departing from the spirit of this invention. A splash shield 10 should be applied to the heel 12 of the shoe 13 by inserting the lower extremity of the heel 12 through the orifice of the band portion 11.

The band 11 is at such dimensions as to fit snugly around the heel 12 of the shoe and should be positioned slightly above the heel cap 17 so that the ribbons 16, which are arranged to extend downwardly and angularly away from the

heel, will assume the position rearwardly of the rear edge of the heel cap and in spaced relationship with it. The exact position of the band 11 is largely a matter of choice although experiments indicate that the best results are obtained when the band is so positioned that the lower extremity 18 of the ribbons comprising the flexible membrane 14 normally lie slightly below the lower surface of the heel cap.

It is contemplated, however, that the membrane 14 may be arranged in somewhat different positions with more or less satisfactory results. In fact, it has been found that the entire shield structure may be reversed as shown in Fig. 3, so that the membrane 14 extends upwardly and rearwardly from the band 11 which in this case is positioned closely adjacent the heel cap 17.

In the modified form of the invention illustrated in Fig. 5, the resilient band 21 and the flexible membrane 22 are formed by being stamped out of a single thickness of sheet rubber. The orifice 23 in this case is somewhat smaller than the size of the heel with which the device is to be used, so that when the shield is inserted on the heel the band portion 21 will be tightly stretched around the heel portions and will draw the membrane 22 out of its normal alignment and into a position somewhat similar to the position of the membrane illustrated in Fig. 1. In this form of the device it is also desirable to shear the rubber along the lines 24 to form a plurality of ribbons 25, although quite satisfactory results can be obtained by the use of a single one-piece membrane.

In the modified form of the invention illustrated in Fig. 6 the resilient membrane 31 is formed as an integral part of the heel portion 32 of a galosh 33.

Inasmuch as this class of footwear is usually made of rubber or similar material, the shield 31 may be easily molded during the process of manufacture and will function in the same manner as the other forms of the invention heretofore described.

While I have shown and described the preferred embodiment of this invention in compliance with the patent statutes, I am aware that it is subject to numerous modifications without departing from the invention's spirit and therefore wish to be limited only by the scope of the appended claims.

I claim:

1. A splash shield comprising a resilient band portion adapted to encircle the heel of a shoe and a relatively thin flexible resilient rubber membrane joined as an integral part of said band and composed of a plurality of relatively narrow resilient ribbons lying in the same plane with each other and in contiguous side-by-side relationship so that the marginal edges of each of said ribbons abut and contact the edges of adjacent ribbons throughout their length; said membrane being adapted to be attached to the heel portion of a shoe at a point closely adjacent the heel cap and positioned to extend angularly outwardly from the heel, the arrangement being such that the outer extremity of said membrane will assume a position spaced apart from and rearwardly from said heel cap and in the path of foreign matter flicked upwardly by movement of the heel.

2. In combination with the heel portions of footwear, a splash shield comprising a relatively thin flexible resilient rubber membrane adapted to be attached to said heel and composed of a plurality of relatively narrow resilient ribbons in contiguous side-by-side relationship so that the marginal edges of each of said ribbons abut and contact the edges of adjacent ribbons throughout their length; said membrane being adapted to extend angularly outwardly from the heel and downwardly to a point below the lowermost portion of the heel, the arrangement being such that the outer extremity of said membrane will assume a position spaced apart from and rearwardly of the lower extremity of said heel and in the path of foreign matter flicked upwardly by movement of the heel.

3. In combination with the heel portions of footwear, a splash shield comprising a flexible stretchable resilient band of a width greatly in excess of its thickness, said band being adapted to be stretched over the lower portion of a shoe heel and to be fixedly engaged with the shoe heel by the inherent tension and frictional characteristics of the band; a relatively thin flexible resilient membrane joined as an integral part of the band throughout a portion of the circumference of said band; the resilient flexible membrane being adapted to extend downward from the band, and being split upwardly from its lower extremity at a plurality of points in spaced relationship to each other, to provide a membrane having a substantially uninterrupted marginal edge, but being composed of a plurality of relatively narrow resilient ribbons lying in the same plane with each other and in contiguous side by side relationship, so that each ribbon is independently yieldable for flexing movement in a direction normal to the general plane of the membrane.

4. In combination with the heel portions of footwear, a splash shield comprising a flexible stretchable resilient band of a width greatly in excess of its thickness, said band being adapted to be stretched over the lower portion of a shoe heel and to be fixedly engaged with the shoe heel by the inherent tension and frictional characteristics of the band; a relatively thin flexible resilient membrane joined as an integral part of the band throughout a portion of the circumference of said band; the resilient flexible membrane being unsupported at its side edges and arranged to extend downward from the band, and being split upwardly from its lower extremity at a plurality of points in spaced relationship to each other, to provide a membrane having a substantially uninterrupted marginal edge, but being composed of a plurality of relatively narrow resilient ribbons lying in the same plane with each other and in contiguous side by side relationship, so that the marginal edges of each of said ribbons abut and contact the edges of adjacent ribbons on either side; the arrangement being such that no portions of the ribbons overlap each other so that each ribbon is independently yieldable for flexing movement in a direction normal to the general plane of the membrane; the construction and arrangement of the band and membrane being such that the band will serve to maintain the membrane on the lower portion of the heel of a shoe so that the individual ribbons of the membrane will extend downwardly from the band portion in close association with and immediately behind the heel cap.

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