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H. L. WHITMAN

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SHOE PAD

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Fig. 1.

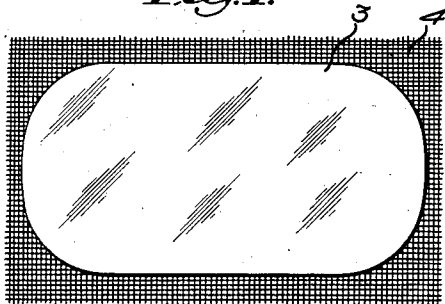


Fig. 2.

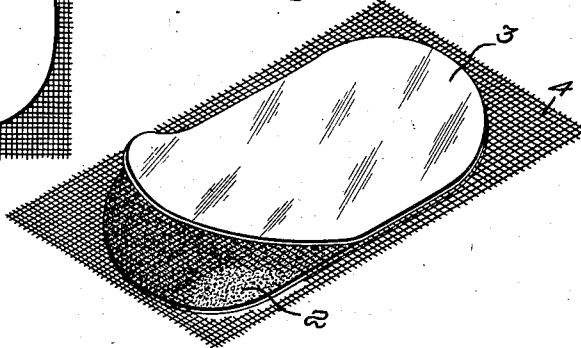


Fig. 3.

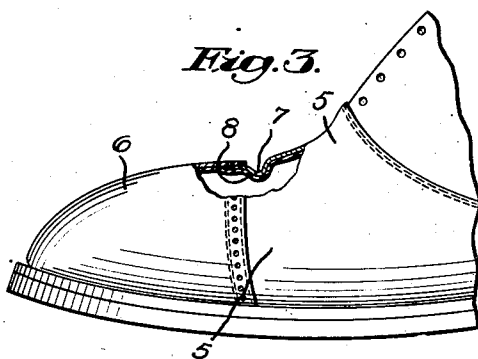


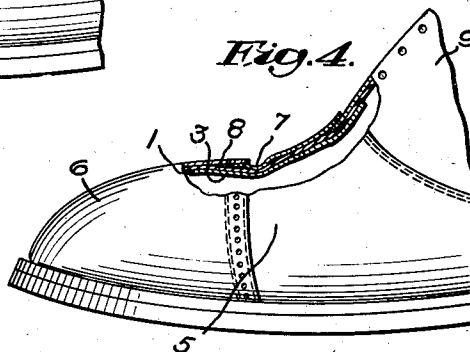
Fig. 5.



Fig. 6.



Fig. 4.



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SHOE PAD

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1 Claim. (Cl. 36—71)

This invention relates to pads for use in shoes and more especially to a pad which may be employed to soften or eliminate sharp, creased edges inside of shoes, and which I prefer to describe as a "pinch" pad.

In attempting to overcome foot discomfort, it is usual to employ pads of various types, applied directly to the foot and also inside of shoes. These pads are formed of a relatively thick, soft material, such as felt or flannel, cut into various forms, with the objects in view of minimizing pressure on sensitive areas, filling up spaces in shoes which are too large, or covering ridges or rough points.

A particular feature of practically all of these pads is a rough surface which is designed to stick to a sock or shoe lining, reduce sliding or slipping of a foot in a shoe, and thus avoid irritation of sensitive areas. For the purposes noted, these pads are highly efficient. However, when employed to protect a foot from shoe creases, particularly those occurring along the lines of flexing of shoe upper vamp portions, and at the edges of toe caps, the pads are completely unsatisfactory. The soft, relatively thick material tends to roll up into ridges, which increase the pressure or pinch of the shoe crease at a particular point. Also, the rough texture of the felt or flannel causes the pads to stick to hosiery and prevents the foot from freely sliding or slipping by the creased shoe upper parts.

A chief object of the invention is to improve shoe pads and to devise a "pinch" or "bite" pad having a special body, shape and wearing surface designed to overcome pinching of a foot by shoe upper creases, and to reducing undesirable binding with hosiery. Another object of the invention is a shoe pad designed to reduce or modify shoe creases and to correct stretched, folded or worn shoe linings. Still another object is to provide a simple, cheap, and easily installed pad.

The nature of the invention, and its objects, will be more fully understood from the following description of the drawing and discussion relating thereto.

In the accompanying drawing:

Figure 1 is a plan view of a preferred embodiment of the shoe pad of the invention.

Fig. 2 is a perspective view illustrating the pad in a partly disengaged position with a fabric covering member.

Fig. 3 is a fragmentary side elevation and partial cross section of a shoe illustrating a shoe

with a crease formed in the vamp portion thereof.

Fig. 4 is another fragmentary side elevation and partial cross section of the shoe shown in Fig. 3, having the pad of the invention associated therewith.

Fig. 5 is a fragmentary detail cross section of the pad of the invention; and

Fig. 6 is a fragmentary detail cross section of a shoe and pad greatly enlarged to show a corrected crease formation.

Most shoes are constructed with a flexible upper vamp portion 5 (Fig. 3) which allows them to conform to the various positions assumed by the foot in walking. The shoe upper vamp 5 bends or flexes along lines of bending which extend substantially transversely of the shoe from the inner border to the outer border, at points immediately in the rear of the shoe toe 6. The bending or flexing tends to develop one or more creases, as 7, which, in the case of leather shoes especially, may become rather sharply formed and may be hard enough to cause a great deal of unpleasantness when pressed across the top of the foot, and in particular, the great toe.

In some instances, the portions of the shoe lining adjacent the creases may become rolled up to form ridges which are also troublesome.

It is further pointed out that the forepart of a foot tends to move forwardly and rearwardly of the shoe a slight amount in walking, and this may result in a rubbing or scraping action along the creases noted which increases irritation.

I have found that a shoe pad having characteristics which are the opposite of the required characteristics of conventional shoe pads, is highly effective in overcoming pinching by shoe upper creases occurring along the lines of bending of the upper vamp portions, and in facilitating the normal forward and rearward movement of a foot in a shoe.

In place of the conventional thick, soft material, I employ a relatively firm thin base, and in place of a rough frictional surface I utilize a slick varnished surface which refuses to stick to hosiery and which allows the foot to slide easily and freely thereagainst at all times.

Referring more in detail to the drawing, Figs. 1, 2 and 5 illustrate a preferred embodiment of pad which includes a base 1, having one side impregnated with an adhesive material 2 of a permanently tacky character. At the opposite side of the base 1 is secured a coating or film 3 of a varnish-like material presenting a smooth slick surface.

A preferred example of coated base consists of inner or grained splits of hides, which have been subjected to a number of treatments with oil and varnish to provide a product of the type generally referred to as patent leather. The adhesive material 2 consists of a permanently tacky material such as a naphtha dispersed rubber cement.

In a preferred merchandising form, the pad is secured to a fabric backing 4 along the coated side 2, and a second pad member of the same general character is similarly applied at the opposite side of the backing 4, as shown in Fig. 2. This arrangement provides for substantially sealing the adhesive surface of each of the pads and yet permits ready removal of either of them from the backing 4.

Preferably the edges of the pad are skived outwardly and extend in a substantially oblong shape such as that illustrated in the drawing. This oblong shape has been found to be highly suitable in connection with using the pad inside of a shoe, and especially in conforming the pad to the vamp and box toe portions of the shoe.

In addition the pad, in a preferred form, is of a length such that it is adapted to extend longitudinally across and overlap the vamp portions which occur immediately between the shoe toe and the shoe quarter. A pad having a length of approximately three inches has been found to overlap the vamp portions noted in most shoes, and to substantially underlie the portions in which edges or creases may form. Other sizes of pads for smaller sizes of shoes may be resorted to.

In Fig. 4 I have fragmentarily illustrated the pad of the invention secured at the inner side of a shoe similar to that shown in Fig. 3. The pad is located adjacent the crease 7 and the inner lining 8, and extends longitudinally across the vamp 5 into overlapping relation with the toe 6 and the quarter 9. It will be noted that the pad supports the lining 8 in a substantially smooth stretched position between the shoe toe and the quarter, thereby tending to press against the crease 7 and flatten it.

An important feature of the invention is the combination with a shoe pad of a varnished surface such as is provided in patent leather and as is illustrated by the coating 3. This smooth slick surface of the coating 3 is particularly effective in facilitating movement of a foot forwardly and rearwardly of a shoe a slight amount without binding occurring between the creased shoe upper portions and hosiery covering the foot.

It is pointed out that as a shoe upper flexes it tends to exert a certain amount of pinching action across the top of the foot irrespective of how well fitted and constructed the shoe may be. As a result, a totally different type of pad from those usually resorted to should be utilized to take care of this particular functioning of a foot in sliding or slipping against the shoe upper at the particular point where the pinching action occurs.

The varnished surface on a thin pad is especially provided for this purpose and insures free movement of the top of a foot relative to a creased shoe upper surface, thereby preventing the occurrence of binding at any one point. Whatever pressure or pinching effect of the creased shoe upper is present is distributed over an extended portion of the foot and sensitivity

or irritation in one particular point is thus avoided.

The varnished surface also lends a certain amount of stiffness which tends to resist being rolled or creased as sharply as the shoe upper leather or the lining underlying the shoe upper. As a result, the pad provides a less sharply curved surface adjacent creased leather portions over which it is applied, and the sharp pinching action of a relatively narrow crease of leather is modified.

Another important feature of the pad of the invention is the combination of a slick varnished surface with a thin, relatively firm base material such as a grained split of a hide. The thickness of the base is preferably such that the combined thickness of base, coating 3, and adhesive 2 generally approximate about double the thickness of a shoe lining. Such a thin base is particularly desirable since it avoids increasing the thickness of the shoe upper and hence adding to the pinching effect occurring as the upper is flexed. The thin base is further advantageous, in that it remains flat and refuses to curl or roll up into ridges such as may occur with thicker materials.

The combination of a thin adhesive base with a slick varnished surface cooperates in novel fashion with the shoe lining in modifying creases formed in the upper vamp portion of a shoe as it is flexed in walking. The adhesive side of the pad is preferably installed against the shoe lining while the creased upper vamp portions are being pressed outwardly into a substantially smooth flat state. The shoe lining 8, in most shoes, occurs as a continuous layer extending from the quarter to the toe, and the pad, by reason of its extending well beyond the creased areas of the vamp, holds the part of the shoe lining adjacent the creased vamp in a smooth stretched position, even though the leather in the upper vamp portions tends to take a creased position, and the stretched lining tends to urge the crease outwardly as is more clearly shown in Fig. 6. When the shoe is flexed, however, and a sharper crease develops, the slick varnished surface 3 allows the foot to slide at one side of the pad and the vamp leather moves at the other side into various creased positions, independently of the shoe lining, thereby avoiding any tendency to roll the lining into a ridge.

The cooperative functioning of the pad with a shoe lining is particularly desirable in "breaking in" a new pair of shoes since the pad may be utilized to hold a shoe lining in a flat stretched position during the period that the upper leather is being stretched and worked to a point where it does not press too tightly against the foot, and the lining is thereby prevented from being formed into ridges during the earlier period of wear.

I may also desire to employ the pad at other points as for example in the toe and heel portions of a shoe, where the lining has become worn through. The oblong shape of the pad is particularly adapted to conforming either to the heel portion or to the box toe portion of a shoe, and when so employed affords a simple, efficient and cheap means of repairing worn-through shoe linings.

If desired, the pad may be constructed in various other shapes and may be assembled for merchandising in other ways than that illustrated in Figs. 1 and 2. Similarly, the layer 1 may be formed of other materials, such as fabrics, ar-

tificial leathers, plastic films, and the like. It may also be desired to employ materials such as Celluloid and other plastic materials in place of the combined coating 3 and layer 1. In place of the patent leather surface 3 obtained from oil and varnish treatments, other types of slick surfaces may be resorted to, as those obtained from plastic films or coatings such as Cellophane, Celluloid, and others.

It will be seen that an outstanding feature of the invention is the combination of a slick, varnish-like surface or coating on a thin, firm base. This provides an element which prevents pinching of a foot by creased portions of the shoe and maintains linings from becoming rolled up or formed into a bunch. It is pointed out that the use of a pad having a varnished surface, in combination with a shoe lining, is a novel and useful improvement greatly facilitating wearing of new or tight shoes, and eliminating many foot troubles in general. The size and shape of the pad are of a particular design, adapting it for use

with the upper vamp portions of a shoe occurring between the toe and quarter. The device may also be used at various points in a shoe, and is simple, cheap, readily applied, and highly effective in use.

While I have shown a preferred embodiment of the invention, it should be understood that various changes and modifications may be resorted to, without departing from the spirit of the invention, as defined by the appended claim.

Having described my invention, I claim:

The combination in a shoe of an upper vamp portion, a lining member having one side lying adjacent the vamp portion within the shoe, said lining at an opposite side thereof having a patent leather pinch pad adhesively attached thereto along the rough surface of the pad, said patent leather pinch pad being skived along its outer portions to provide relatively thin edges adapted to conform substantially to the contour of the said lining member.

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