Sept. 5, 1939. R. HINCHLIFF ET AL 2,171,654

PROTECTOR FOR SHOES AND THE LIKE

Filed May 23, 1938

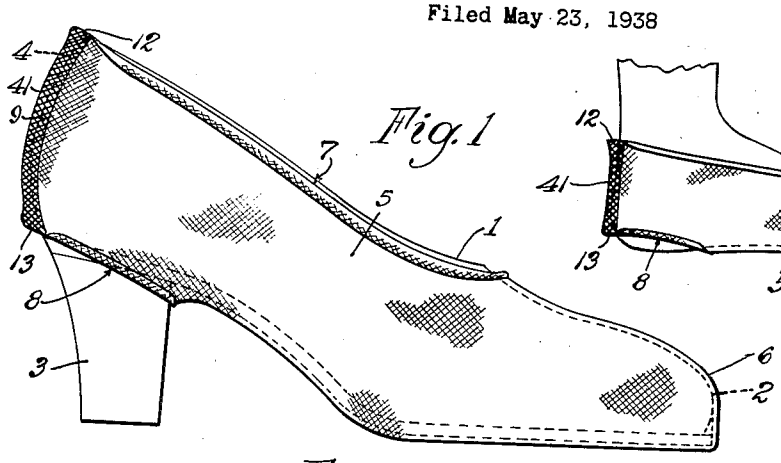


Fig. 1

Fig. 2

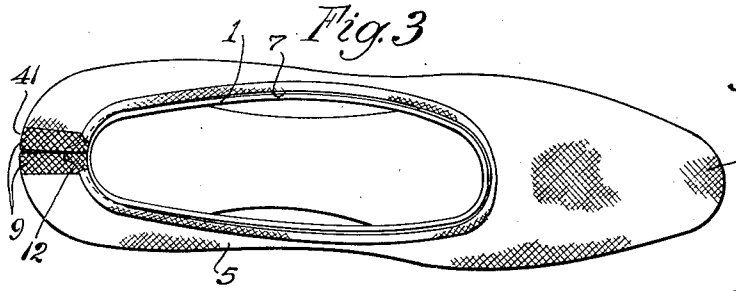


Fig. 3

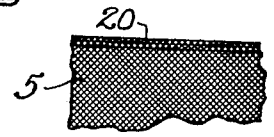


Fig. 9.

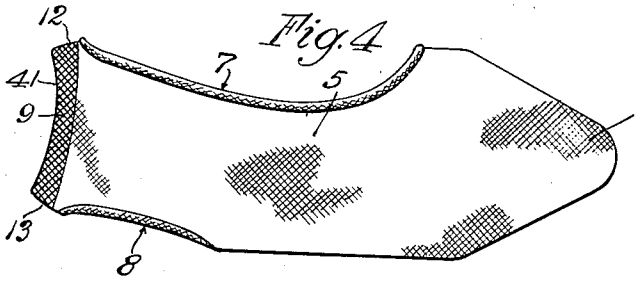


Fig. 4

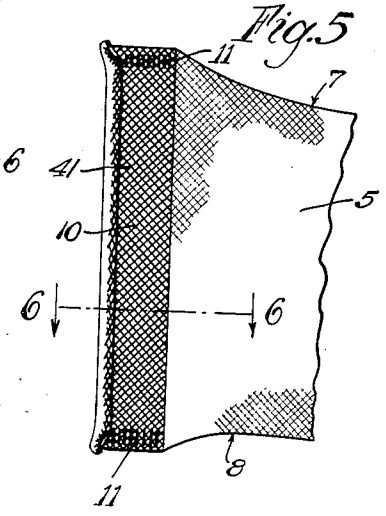


Fig. 5

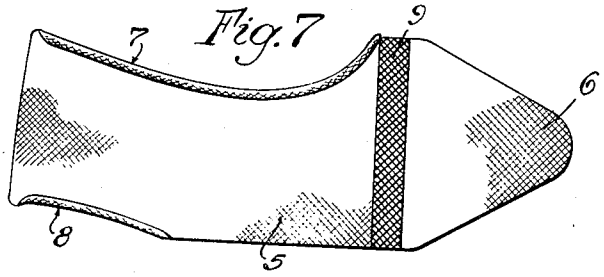


Fig. 7

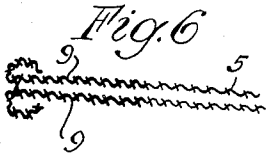


Fig. 6

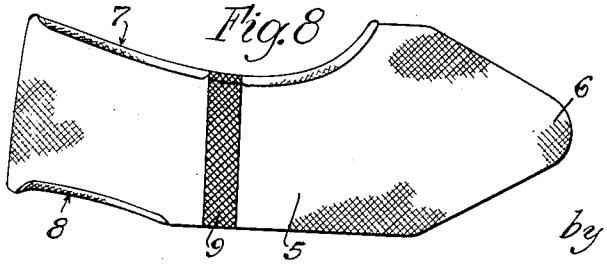


Fig. 8

Inventors
Ralph Hinchliff
Edward C. Hinchliff
by Parker Hunter
Attorneys.

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PROTECTOR FOR SHOES AND THE LIKE

Ralph Hinchliff and Edward C. Hinchliff, Rockford, Ill., assignors to Burson Knitting Company, Rockford, Ill., a corporation of Illinois

Application May 23, 1938, Serial No. 209,544

6 Claims. (Cl. 36—72)

Our invention relates to protectors for shoes and the like and has for one object to provide a new and improved type of protector which may be easily put on and taken off, which will stay correctly in place while being worn, and which will be to a minimum extent subject to tearing in connection with the process of putting it on and taking it off.

Our invention comprises generally a fabric protector preferably though not necessarily knit but at any rate shaped to conform to the contour of the shoe or foot of the wearer. The protector comprises a tubular toe portion tapered and closed at the forward end, a foot portion closed at the underside but open at the top, a heel portion open at top and bottom and a tubular portion or heel pocket extending rearwardly beyond the open heel portion and closed at the end.

While the protector is preferably made of knitted fabric, knitted to shape, the upper and lower openings being bounded by selvage edges, it will be understood that it might be made of knitted or woven fabric with or without selvage edges and it might be sewed or otherwise shaped rather than knitted to shape. However the article is made, it will be made of soft, comparatively flexible fabric but fabric at least no more elastic than ordinary cotton stocking fabric and so since the article is intended to first be slipped over the toe of the wearer and then brought up over the heel, it must be stretched considerably beyond its normal size to permit clearance over the heel. The reason for this is that unless the greatest of care is used, the protector is likely to be split or torn. This can be obviated by knitting or weaving into the protector at some point, preferably not in front of the rear extremity of the toe portion a plurality of courses or lines of stitches of elastic thread such as the well known "Lastex" or rubber thread with cotton covering which is well known in the textile industry.

Such elastic insert or panel, experience teaches, should preferably come at the rear extremity of the heel because this material is somewhat more rough and clinging than the body of the fabric and by placing it at the extreme rear of the heel, it supports and stiffens the protector and binds it to the shoe at a point where that protection is most needed.

Other objects will appear from time to time throughout the specification and claims.

Our invention is illustrated more or less diagrammatically in the accompanying drawing, wherein—

Figure 1 is a side view of the protector applied to a shoe;

Figure 2 is a side view of the protector applied to a foot without a shoe;

Figure 3 is a plan view of the protector as applied to a shoe;

Figure 4 is a side view of the protector in its flat condition before being placed in use;

Figure 5 is a side elevation of the rearward elastic panel in reverse position;

Figure 6 is a section along the line 6—6 of Figure 5;

Figure 7 is a view similar to Figure 4 showing a modified form;

Figure 8 is a similar form showing a further modification.

Figure 9 is a plan view of the selvage edge of the panel 7, flattened out and not rolled.

Like parts are indicated by like characters throughout the specification and drawing.

1 is a shoe having a toe portion 2, a heel lift or block 3, and a heel portion 4. 5 is a protector having a tapered toe pocket 6, an upper foot opening 7, extending from the toe pocket rearwardly toward the back of the protector body. 8 is a heel opening on the under side of the protector extending forwardly from a point adjacent the rear of the body and terminating further from the front than does the upper foot opening and 11 is a heel pocket. As indicated the protector is knitted to shape though to be sure it might be otherwise formed either by knitting or weaving and it might be sewn to shape from either knitted or woven fabric.

9 is an elastic panel, in this case at the rear end of the body and immediately behind the rearmost extremities of the two openings in the protector. This panel takes the form as knitted of a short tube 10. In knitting the toe pocket is closed as indicated. The side panels 5, are then knitted and they terminate in elastic portion or tube 10. This forms a tube because when the elastic portion is reached the two panels 9, are knitted together top and bottom. This of course forms a tube. Whether they are knitted on a tubular machine or flat bed Lamb type machine is of no consequence. As used on the shoe the elastic portion is a short tube, and it will be noted in the reverse view that the upper and lower extremities of the panel, that is the upper and lower sides of the tube are reinforced by overcasting or sewing at 11. It is this reinforcement that gives the elastic panel its tapered shape when in the collapsed and flattened position because the panel portions which reinforce at top

and bottom are more or less collapsed to give an increased body at the two corners 12 and 13. The importance of this is that this increased body at top and bottom of the heel pocket where it engages the shoe or the foot of the wearer tends to anchor the protector and hold it in place and this effect cooperates with the increased adhesive effect to the shoe or foot resulting from the presence of the elastic panel.

In certain cases it may be preferable to fashion or shape that portion that covers the heel of the shoe, in this instance the heel portion would fit snugly over the heel without reinforcement and the knit in shaping would do away with the necessity of reinforcing by sewing in order to provide the tapered shape. This type of heel is especially fixed for use in case the article is made as in Figures 7, 8. It also will be noted that should this bottom opening 8 in Figures 1, 2, 5, 7, 8 be left closed a new type of foot covering is obtained which can be used without shoes.

It will be understood that this elastic panel may be of the same or different color as the body of the protector and will preferably be knitted or woven from rubber threads covered by the same general kind of material as the material from which the fabric of the protector is made.

The tube is closed when the protector is knitted as a unit, as is preferably the case, by stitches extending across from the two panels, but after these stitches have been extended across, the panels are continued separately and because of this, when they reach their end, the tension of the thread causes the two panels to curl over upon the body of the protector making the characteristic curved reinforcing which cooperating with the thickening at top and bottom and with the essential non-slip characteristic of the elastic panel tends to stiffen the back portion of the protector and insure that it will lay snugly on the foot of the wearer or on the shoe of the latter especially if the protector is used on a shoe in connection with galoshes and the like.

In a modified form shown in Figure 7, the elastic panel is shown adjacent the rear extremity of the toe pocket. A further modified form shows two separate elastic panels on both sides of the foot portion. The preferred form is with the elastic panel at the back of the heel but it may be forward of this so long as the panel is between that part of the toe pocket which firmly grips the toe and the body of the protector. The idea is that the yield of the elastic panel enables the wearer to stretch the protector enough to put it on over the heel lift or over the heel if there is no lift and at the same time contract sufficiently to make a snug fit. It would do no good to have the elastic panel at the extreme forward or toe end because the friction of the fabric upon the toe would render the panel largely inoperative and at least altogether too ineffective in connection with the necessary yield for fitting.

The boundaries of the two openings, the top for the foot entrance and the bottom for the heel are preferably formed or knitted with a selvage edge. When the protector is reversed to bring the curled end of the elastic panels on the inside the whole fabric is reversed and the result is that the two selvage edges associate with each of the two openings curl outwardly, thereby giving a reinforcement or thickening of the protector around the openings.

In Figure 9, is diagrammatically shown the selvage edge which is rolled as at 7, in Figure 4. The selvage edge is formed as usual in the formation of selvage edges in knitting, the thread coming out to the edge of the fabric and then going back into the fabric to form interlocked stitches in the usual manner as at 20.

It will be understood that it is of the utmost importance that the shoe protector be actually knit as one continuous unit. When worn as a protector under galoshes if the protector is built up of a number of separate pieces sewn or otherwise fastened together, it will be bulky in spots and the pressure of the galosh on the shoe will cause damage to the shoe and discomfort to the wearer.

We claim:

1. A shoe covering comprising a toe pocket, continuous side panels extending rearwardly therefrom and terminating at the extreme rear end of the covering in a short closed tube of elastic fabric, the pocket, side panels and tube being integrally knit, the side panels being joined at their bottom for a portion of the distance between the pocket and the tube and being separated at the bottom for the remainder of that distance, the panels at the top between the pocket and tube being entirely separated.

2. A shoe covering comprising a toe pocket, continuous side panels extending rearwardly therefrom and terminating at the extreme rear end of the covering in a short closed tube of elastic fabric, the pocket, side panels and tube being integrally knit, the side panels being joined at their bottom for a portion of the distance between the pocket and the tube and being separated at the bottom for the remainder of that distance, the panels at the top between the pocket and tube being entirely separated, the panels being bounded by selvage edges which are rolled outwardly at top and bottom to form a reinforcement.

3. A shoe covering comprising a toe pocket, continuous side panels extending rearwardly therefrom and terminating at the extreme rear end of the covering in a short closed tube of elastic fabric, the pocket, side panels and tube being integrally knit, the side panels being joined at their bottom for a portion of the distance between the pocket and the tube and being separated at the bottom for the remainder of that distance, the panels at the top beween the pocket and tube being entirely separated, the panels being bounded by selvage edges which are rolled outwardly at top and bottom to form a reinforcement, the tube being reinforced by stitching at top and bottom in general alignment with the edges of the panels.

4. A shoe covering comprising a toe pocket, continuous side panels extending rearwardly therefrom and terminating at the extreme rear end of the covering in a short closed tube of elastic fabric, the pocket, side panels and tube being integrally knit, the side panels being joined at their bottom for a portion of the distance between the pocket and the tube and being separated at the bottom for the remainder of that distance, the panels at the top between the pocket and tube being entirely separated, the panels being bounded by selvage edges which are rolled outwardly at top and bottom to form a reinforcement, the tube being reinforced by stitching at top and bottom in general alignment with the edges of the panels, the closed end of the tube being reinforced by two short oppositely curled integral portions extending from top to bottom of the body.

5. A shoe covering comprising a toe pocket, continuous side panels extending rearwardly

therefrom and terminating at the extreme rear end of the covering in a short closed tube of elastic fabric, the pocket, side panels and tube being integrally knit, the side panels being joined at their bottom for a portion of the distance between the pocket and the tube and being separated at the bottom for the remainder of that distance, the panels at the top between the pocket and tube being entirely separated, the tube being reinforced by stitching at top and bottom in general alignment with the edges of the panels.

6. A shoe covering comprising a toe pocket, continuous side panels extending rearwardly therefrom and terminating at the extreme rear end of the covering in a short closed tube of elastic fabric, the pocket, side panels and tube being integrally knit, the side panels being joined at their bottom for a portion of the distance between the pocket and the tube and being separated at the bottom for the remainder of that distance, the panels between the pocket and tube being entirely separated, the closed end of the tube being reinforced by two short oppositely curled integral portions extending from top to bottom of the body.

RALPH HINCHLIFF.
EDWARD C. HINCHLIFF.