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H. ZIMMON

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SANITARY AND PROTECTIVE COVERING FOR SHOES

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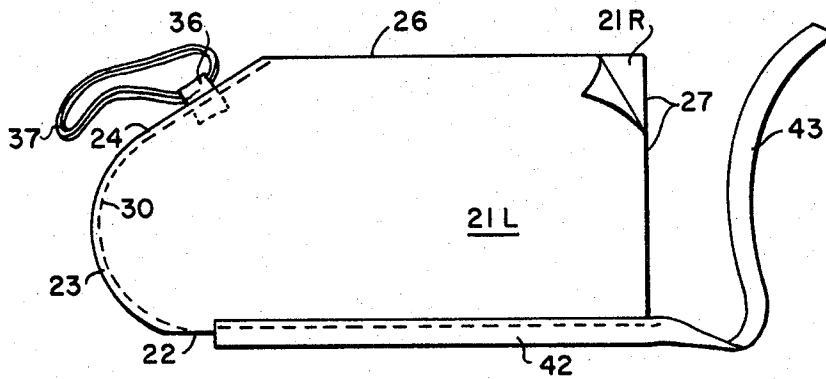


FIG. 1.

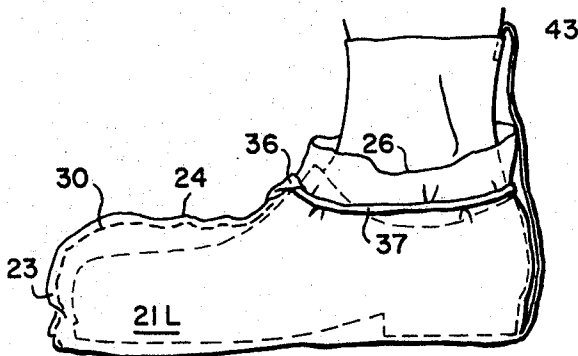


FIG. 2.

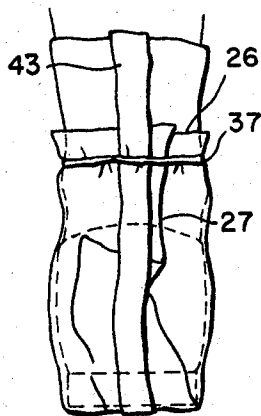


FIG. 3.

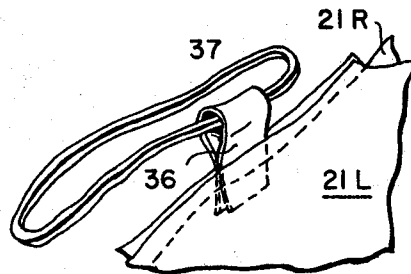


FIG. 4.

INVENTOR
HAROLD ZIMMON
BY *Julian Kaplan*
ATTORNEY

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SANITARY AND PROTECTIVE COVERING FOR SHOES

Harold Zimmon, Belmont, Calif., assignor to Zimmon
& Company, Inc., Belmont, Calif., a corporation of
California

Continuation-in-part of application Ser. No. 404,310,
Oct. 16, 1964. This application Oct. 24, 1966, Ser.
No. 588,911

6 Claims. (Cl. 317-2)

ABSTRACT OF THE DISCLOSURE

A sanitary and protective covering for street shoes for use in surgeries, and the like, is formed of paper-like material in two halves, each shaped in the outline of a shoe in side elevation, and joined together along the bottom and front but open at the top and back. A rubber band is attached to the covering about at the instep. In use, the shoe is inserted in the covering. The rear edges of the halves are folded around the back to conform the covering to a wide range of shoe sizes. The rubber band is stretched down around the front of the toe, under the sole and behind the back of the shoe to hold the covering in place.

This application is a continuation-in-part of Ser. No. 404,310, filed Oct. 16, 1964.

This invention relates to a new and improved sanitary and protective covering for shoes.

Shoe coverings of the type of the present invention have particular application in sterile rooms in hospitals, commonly known as "burn rooms," and satisfy needs in such establishments for covering the shoes of attendants to prevent dust on the shoes from contaminating the atmosphere in the room. The invention has further application in areas requiring patient isolation to prevent contamination of shoes and cross contamination of patients.

Shoe coverings also are used in cast rooms where plaster of Paris casts are applied and where table drippings are likely to fall upon the shoes of the doctors and attendants and permanently harm the same.

By the addition of a strip of conductive material, or by impregnating all or a part of the covering with a conductive substance, the present shoe covering may be used in hospital surgeries or in other establishments where static electricity creates a hazard. The conductive covering discharges static electricity which might tend to build up in the body of the attendant and thus prevents explosions of anesthetics and other hazardous substances.

Shoe coverings of the type of this invention may further be used in any commercial establishment such as by show window dressers who commonly remove their shoes in order to prevent floor dust from detracting from the appearance of the carpeting in show windows.

A particular feature and advantage of the present invention is its adaptability over a wide range of shoe sizes while still fitting snugly and neatly around the shoe. Accordingly, the inventory of coverings which must be stocked is reduced.

Heretofore, most shoe coverings have been of a slipper, shoe or boot shape formed with more or less conventional heels and toes. The present invention is not conventional in the formation of the heel and this simplifies the manufacture and makes the device much less expensive and more versatile in application.

A further advantage of the invention is that it is so constructed that it can be conveniently applied over street shoes with little time or effort consumed. Little or no skill or practice is required in order to enable the user to apply the device and fasten the same on the shoe.

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A feature of this invention is the provision of a rubber band attached to the cover at about the instep. The covering is applied by inserting the toe of the street shoe until it contacts the toe portion of the covering. The back of the covering at this stage is open and extends beyond the rear of the shoe. The back of the side edges of the covering are then folded inward to completely enclose the back of the shoe. To complete installation the rubber band is stretched down below the sole and around the back of the ankle and thus it holds the folded back edges neatly in place.

Another feature of the invention is the low cost of fabrication. The material of which the covering is made may be cut with standard die-cutting machines or fabric-cutting machines. Further, the device may be assembled with the use of standard commercial sewing machines.

Other objects of the present invention will become apparent upon reading the following specification and referring to the accompanying drawings in which similar characters of reference represent corresponding parts in each of the several views.

In the drawings:

FIG. 1 is a side elevation of the covering showing it flat.

FIG. 2 is a side elevation showing the covering applied to a shoe.

FIG. 3 is a rear elevation of the structure of FIG. 2.

FIG. 4 is an enlarged fragmentary view showing a means for securing the rubber band to the covering.

The present invention provides a wrapping of a sanitary or a non-contaminating nature of simple and inexpensive construction. The body of the device may be formed of a wide variety of materials. Non-woven materials such as paper or yarn-reinforced cellulose materials and non-woven fabrics are particularly suitable for the present invention by reason of their low costs. Such materials may be received from the manufacturer in webs or rolls of extended widths and lengths from which a plurality of lengths may be cut with economy of material. Cloth, such as light canvas, muslin or almost any fabric may be used. Similarly, plastic may be used, depending upon the end use of the covering.

In some forms of the invention hereinafter described in detail, it is desirable to ground the wearer to the floor and for such purpose the entire device may be formed of a conductive material, as by impregnating with a conductive substance such as a suspension containing graphite. Alternatively, spots of conductive substance may be printed or otherwise applied to specific locations on the body blank, the remainder of the body being left non-conductive. Alternatively, and particularly as shown in the accompanying drawings, a conductive strip is sewn, glued, stapled, or otherwise attached to the covering and is formed of a conductive material. A preferred conductive material is a conductive polyolefin of the thickness of two or three mils, one such product being known as "Valostat" manufactured by Custom Materials, Inc. of Chelmsford, Mass. Aluminum foil tape is also suitable for such purpose.

The invention uses two body blank members 21L, 21R, each being a flat piece of material of the type heretofore described. The two halves are similar in shape. Each has a substantially horizontal straight bottom edge 22, a semi-circular front or toe edge 23, an upwardly rearwardly slanted instep edge 24 disposed at an angle of approximately 30° with respect to the horizontal, a top edge 26 generally parallel to bottom edge 22 and spaced therefrom about 8" and of the length about two-thirds that of bottom edge 22 and a vertical back edge 27. The two halves of the body 21L, 21R may be stitched together by means of thread stitching 30 which commences at the top of edge 24 and thence proceeds downwardly parallel

and spaced slightly inward of edges 23 and 22 terminating at the rearward end of the blank. The rear edges 27 are not stitched and likewise the top edges 26 are not stitched.

A folded over or loop-like tab 36 is formed of the same material as body 21 or of other suitable material and a rubber band 37 is caught in the tab 36. The open ends of tab 36 are inserted between the halves 21L and 21R about midway of the length of instep edge 24 and attached to the covering by the same stitching 30 which attaches the two halves of the covering together. Tape may be used instead of the rubber band.

In a preferred use of the device a tape of conductive material 42 is applied along the bottom edge of the covering and having an elongated rearwardly extending tab 43. Tape 42 is stitched by the same stitching 30 as joins the two halves together.

Directing attention to FIGS. 2 and 3, the use of the device is illustrated. The wearer inserts the toe of the street shoe through the top edges 26 and back edge 27 until the toe engages the seam at the front of toe portion 23. The back edges are folded inward behind the heel of the street shoe and overlapped, thereby completely enclosing the shoe. Rubber band 37 is then stretched down around the front of the toe, under the sole, and behind the back of the shoe behind the ankle. The band 37 thus holds the covering snugly in place around the shoe so that the shoe is completely covered and dust thereon will not contaminate the atmosphere nor will anything in the room contact the shoes. Where the conductive tape 42 is used, the tab 43 may be tucked over the top edge of the sock. In cases where socks are not worn, the tab 43 may be placed inside the shoe under the heel of the wearer where, by reason of body moisture, a grounding contact is established. In this means, the accumulation of static electricity in the body of the wearer is grounded.

It will be seen that the device may be installed in either right or left shoe and will accommodate a wide range of different shoe sizes.

What is claimed is:

1. A sanitary and protective disposable covering for a street shoe formed of foldable material comprising a right half and a left half, each shaped in the outline of a shoe viewed from the side, said halves seamed together along the bottom and front and open at the top and back for insertion of said shoe, the rear edges of said halves foldable around the back of said shoe to conform the length of said covering to said shoe, a rubber band, securing means securing said rubber band to said covering about at the instep, said rubber band adapted to extend around the sides and behind the ankle of said street shoe to hold said covering in place smoothly conforming to the shape of said street shoe.

2. A covering according to claim 1 in which said securing means is a loop through said rubber band, said loop secured to said covering.

3. A covering according to claim 2 in which said loop is inserted between said halves through the front and attached to said covering by said stitching.

4. A covering according to claim 1 in which said halves comprise separate pieces of material meeting along a longitudinal medial plane.

5. A covering according to claim 1 in which at least a portion of said covering is electrically conductive to ground the wearer.

6. A covering according to claim 1 which further comprises a strip of conductive material extending along at least a portion of the sole and having an extended tab protruding rearwardly.

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MILTON O. HIRSHFIELD, *Primary Examiner.*

J. A. SILVERMAN, *Assistant Examiner.*