A clean sole attachment for shoes comprising a cover for the sole and heel of a shoe, said cover having a ground contacting surface and an adhesive surface for removably affixing to the sole of a shoe. The cover includes a fold in form which is positioned intermediate the heel and sole of the shoe and which is employed for length adjusting purposes.
CLEAN SOLE ATTACHMENT FOR SHOES

BACKGROUND OF THE INVENTION

The present invention relates generally to attachments for shoes, and more particularly, is directed to a single service type clean sole attachment. It has been the common practice to employ felt or textile covers for shoes when it is desired to protect the floors of public buildings from damage due to the repeated impacts and abrasions caused by the shoes of visitors. The need for such protection has become apparent in buildings which receive large numbers of visitors, such as hospitals, schools, laboratories, public buildings and the like. The need for such protection has become even more critical in buildings of historic significance wherein great numbers of visitors could possibly cause extraordinary wear or other permanent damage to floors due to the repeated scuffing or impacts caused simply by persons walking over the floors.

The presently available felt or textile covers have proved inefficient in use in that no size adjustment could be made and also due to the fact that the present devices were somewhat unsanitary in nature in that they were designed for repeated use by different persons. Additionally, the prior art type of shoe covers were constructed in a manner to make them too costly to be used as a single service item.

SUMMARY OF THE INVENTION

The present invention relates generally to the field of clean soles for shoes, and more particularly, is directed to a clean sole attachment of a disposable nature for use with shoes.

The clean sole attachment of the present invention includes a relatively flat sole cover which is fabricated to the general configuration of the heel and sole of a conventional shoe. The sole cover is fabricated to have a ground contacting surface which may be non-slip in nature and an adhesive surface for removably affixing the cover to the sole and heel of the wearer's shoe. Preferably, the adhesive surface of the attachment is equipped with a removable sheet that is peeled from the adhesive surface immediately prior to applying the sole cover to the shoe of the wearer.

The sole attachment includes length adjusting means intermediate the sole and heel which may be a fold in form comprising three transverse folds to permit length adjustment of the cover relative to the positions of the heel and sole of the wearer's shoe. Additionally, rearwardly of the fold in form is provided a transversely extending tab which laterally extends beyond the outline of the wearer's shoe to permit easy removal of the shoe attachment following use thereof.

It is therefore an object of the present invention to provide an improved clean sole attachment for shoes of the type set forth.

It is another object of the present invention to provide a novel clean sole attachment which includes a cover having a ground contacting surface and an adhesive surface suitable for removably affixing the attachment to the bottom of the shoe of the wearer.

It is another object of the present invention to provide a novel clean sole attachment for shoes which incorporates a relatively thin cover having an adhesive surface, the adhesive surface being normally protected with a peel sheet which can be easily removed immediately prior to use for attaching the cover to the sole and heel of the shoe of the wearer.

It is another object of the present invention to provide a novel clean sole attachment for shoes which includes a generally flat cover and transversely folded means to vary the length of the cover for sizing purposes to accommodate shoes of different sizes.

It is another object of the present invention to provide a novel clean sole attachment for shoes which includes adhesive means for removably securing the attachment to the sole and heel of a wearer's shoes and integral tab extension means to facilitate removing the attachment from the shoe after use.

It is another object of the present invention to provide a novel clean sole attachment for use with shoes that is inexpensive in manufacture, extremely simple in design and trouble free when in use.

Other objects and a fuller understanding of the invention will be had by referring to the following description and claims of a preferred embodiment thereof, taken in conjunction with the accompanying drawings, wherein like reference characters refer to similar parts throughout the several views and in which:

FIG. 1 is a perspective view of the invention with the protective sheet partially peeled away to expose a portion of the adhesive surface.

FIG. 2 is a diagrammatic side elevational view, partly in section, showing a method and apparatus for applying a clean sole attachment to a shoe.

DESCRIPTION OF THE PREFERRED EMBODIMENT OF THE INVENTION

Although specific terms are used in the following description for the sake of clarity, these terms are intended to refer only to the particular structure of my invention selected for illustration in the drawings, and are not intended to define or limit the scope of the invention.

Referring now to the drawings, I show in FIG. 1 a cover 10 which is employed as a clean sole attachment. The bottom surface 11 of the cover 10 is employed for ground contacting purposes and is preferably fabricated of soft, clean material such as paper or soft plastic of suitable design so that damage to a floor surface which may be caused by persons walking thereon can thus be minimized. The top surface 12 of the cover 10 is provided with adhesive means, preferably of the pressure sensitive adhesive type to permit the cover 10 to be applied to the sole and heel of a shoe simply by pressing the attachment against the shoe. Preferably, the ground contacting face 11 of the sole attachment 10 will be fabricated to present a non-skid type surface in contact with the ground to thereby minimize the chance of accidental injury to the user, which may be caused by slipping.

As illustrated in FIG. 1, it is preferable to apply the adhesive coating in parallel stripes 13 which are angularly positioned relative to the longitudinal axis 14 of the cover 10. In order to facilitate storing of a pile of covers 10 prior to use, I provide a peel sheet 15 for each cover of suitable size and configuration to completely cover the top surface 12. The peel sheet 15 serves to protect the parallel stripes 13 of adhesive from foreign matter and to permit storage of one cover over another without adhering. For this purpose, a ma-
aterial which will not permanently adhere to the parallel adhesive stripes 13 should be employed, such as some conventional type of wax paper. Immediately prior to use, the peel sheet 15 is removed from its association with the top surface 12 to thereby expose the parallel adhesive stripes 13. Then by applying the adhesive stripes 13 directly against the sole and heel of the shoe of the wearer, the clean sole attachment 10 can be readily affixed to the wearer's shoes to thereby provide a clean, non-skid surface for walking over the floor to be protected.

Intermediate the heel and sole covering portions of the clean sole attachment 10, I provide a fold in form 16 for length adjusting purposes. The fold in form 16 comprises at least three, transverse, parallel fold lines 16a, 16b, 16c which are preferably disposed perpendicular to the longitudinal axis 14. By folding the center fold line 16b downwardly and the outer fold lines 16a, 16c upwardly, a fold in form 16 of generally triangular crosssectional configuration can be formed and the two adjacent inclined panels 17a, 17b are defined between the lines 16a, 16b, 16c. It will be noted that the panels 17a, 17b incline relative to the general plane of the sole cover 10 to form a triangular configuration which upwardly projects from the plane of the cover in position to locate immediately forwardly of the heel of the shoe. At least one of the transverse ends of the fold in form 16 is provided with a pair of extension flaps 18a, 18b in the form of small, overlapping tongues which define an overlapping junction therebetween. Preferably, I provide a coating of pressure sensitive adhesive in the overlapping area so that the flaps 18a, 18b can be adhered together in a desired position by simply pressing the flaps. In this manner, a relatively easy and inexpensive method of adjusting the length of the cover 10 can be provided by simply bending the fold in form 16 along the fold lines 16a, 16b, 16c to shorten or lengthen the sole attachment 10 as necessary. It will be noted that the triangular crosssectional configuration of the fold in form 16 will vary as the overall length of the cover 10 is varied to cause more or less overlap of the extension flaps 18a, 18b. When the desired length is reached, the flaps 18a, 18b are pressed together to thereby activate the pressure sensitive adhesive to permanently join the flaps. The joiner of the extension flaps 18a, 18b finalizes the length of the sole cover 10 so that it will properly fit the heel and sole of the shoe when in use.

Still referring to FIG. 1, I show an extension tongue 19 which laterally extends outwardly from the heel portion of the cover 10 and which is preferably positioned rearwardly of the fold in form 16. The extension tongue 19 serves as a convenient area for gripping the cover 10 by the fingers after use to pull the clean sole attachment from the shoe. Optionally, the shoe with the clean sole attachment 10 can be placed against the ground and then the user, by stepping on the extension tongue 19 with his other foot (not shown) can keep the sole attachment 10 in association with the ground when the first shoe is lifted to thereby break the adhesive bonds between the cover 10 and the shoe heel.

Referring now to FIG. 2, I show a container 20 which defines an inner compartment 21 of suitable dimensions to contain a plurality of stacked clean sole attachments 10' as a form to guide the shoe of the user. Within the compartment 21 are stacked a plurality of clean sole attachments which are similar in nature to the cover 10 as shown in FIG. 1 with the exception that the peel sheets 15 have been eliminated. Intermediate each of the covers 10' are interspersed sheets which are not responsive to the adhesive stripes 13. Thus, by removing the sheet from the uppermost cover 10' to expose the parallel adhesive stripes 13, the shoe of the wearer can be pressed thereon to affix the sole attachment 10' without any need for employing hands of the user. In this manner, it will be noted that the compartment 21 closely conforms in configuration to the shoe of the user and thereby serves as a guide to assure that the shoe is applied directly to the top of the pile to properly contact the uppermost clean sole attachment 10'.

Although I have described the present invention with reference to the particular embodiments therein set forth, it is understood that the present disclosure has been made only by way of example and that numerous changes in the details of construction may be resorted to without departing from the spirit and scope of the invention. Thus, the scope of the invention should not be limited by the foregoing specification, but rather only by the scope of the claims appended hereto.

1. A generally planar Q, ver having a ground contacting surface and a shoe contacting surface,
   1. said shoe contacting surface being provided with means to affix the cover to the shoe,
   2. means permitting removal of the cover from the shoe by the application of removal forces,
   3. means comprising adhesive zones interspersed with non-adhesive zones,
   4. the adhesive zones being disposed in the configuration of parallel stripes,
   5. the stripes being positioned at an angle with the longitudinal axis.

2. The invention of claim 1 and a peel sheet applied to the cover over the adhesive zones, said peel sheet being easily removable from the cover prior to use.

3. The invention of claim 2 and a fold in form extending transversely across the cover, said fold in form extending above a plane drawn through the said top surface.

4. The invention of claim 3 wherein the said fold in form is formed of three parallel fold lines.

5. The invention of claim 3 wherein the fold in form is generally triangular in crosssectional configuration.

6. The invention of claim 3 wherein the height of the fold in form may be varied to vary the length of the cover.

7. The invention of claim 2 and an extension tongue extending laterally outwardly from the cover, said extension tongue extending beyond the outline of the bottom of the shoe to provide a tab to facilitate grasping the cover for removal purposes.

8. The invention of claim 5 wherein the fold in form defines two inclined panels.

9. The invention of claim 8 wherein the inclined panels terminate in overlapping flaps.

10. The invention of claim 9 wherein the overlapping flaps are equipped with adhesive to lock the flaps together in a predetermined position.

11. The clean sole attachment of claim 1 wherein the cover is fabricated of clean, soft material.

12. The clean sole attachment of claim 11 wherein the clean sole attachment material is paper.

13. The clean sole attachment of claim 11 wherein the clean sole attachment material is soft plastic.

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