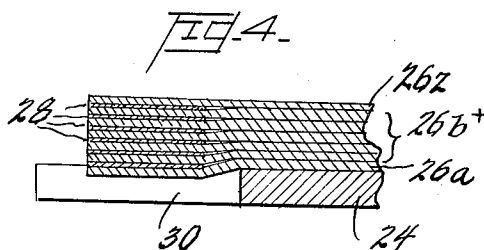
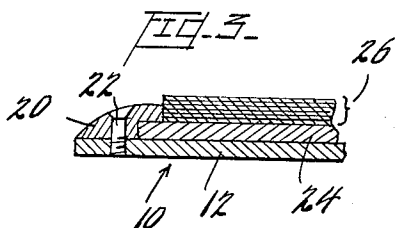
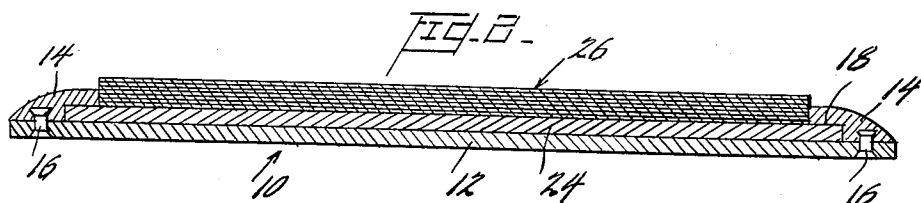
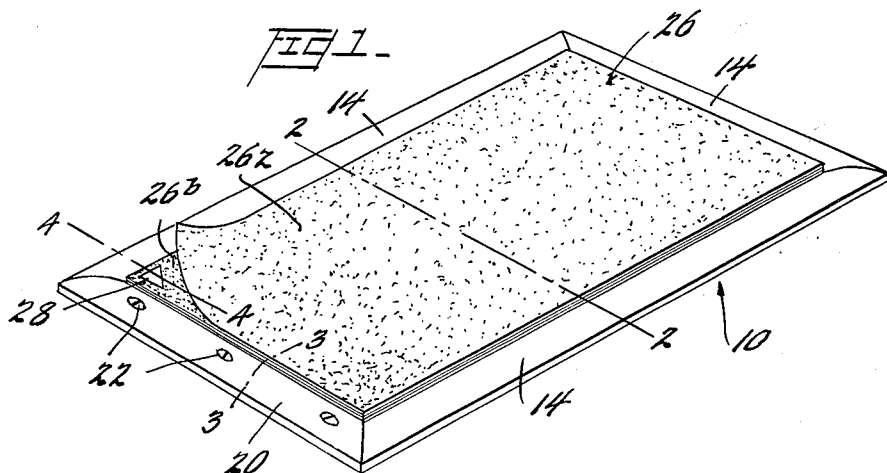


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SHOE SOLE CLEANER  
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SHOE SOLE CLEANER

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2 Claims. (Cl. 15-215)

This invention relates to shoe sole cleaners. Heretofore, shoe cleaning devices have been employed for removing gross accumulation of dirt, as by brushing or scraping. Polishing devices tend to reduce the amount of dirt clinging to shoes but such is only the incidental result of the polishing. The device of this invention is intended to remove substantial amounts of light dust clinging to shoe soles, even though the upper surfaces of the shoes are free of visible dirt.

Recently, there has been an increased awareness of the part played by dust in certain vital functions. In hospitals, it has been discovered that disease is communicated by resistant strains of bacteria carried upon dust within the relatively antiseptic atmosphere of the hospital. In certain manufacturing operations, where extremely small articles or extremely pure substances are made, airborne dust can cause critical damage.

Numerous devices are already available for reducing the amount of dust in critical areas of this type; these include air filtration systems, and the wearing of changed clothing or the enclosure of normal clothing by gowns or the like.

It has been discovered that one precaution frequently overlooked is the removal of dust from street shoes worn into the enclosed areas. It has been proposed to clean the uppers of shoes, as they are worn by workers into the enclosed area, with some consequent improvement.

The shoe sole cleaner of the present invention is essentially an easily installed tread surface to be placed at the threshold of the "white room" having exposed on its upper face, an active pressure-sensitive adhesive to be walked upon by persons entering the enclosed area. Its use has been found to substantially improve the dust situation.

For a fuller understanding of the invention, reference should be made to the accompanying drawing and detailed description that follows:

In the drawing:

FIGURE 1 is a perspective view of the invention with one corner of the top adhesive surface lifted to show the manner of its removal;

FIGURE 2 is a cross section, taken along the line 2-2 of FIGURE 1, showing the internal construction of the device;

FIGURE 3 is a partial cross section taken along the line 3-3 of FIGURE 1 showing the means provided for replenishing the wearing surface; and

FIGURE 4 is another partial cross section, taken along the line 4-4 of FIGURE 1, showing a series of peel-tabs, to be described.

Referring now to the drawing, the preferred form of the device 10 includes a broad, flat base 12, which may conveniently be made of hardboard. It should be of sufficient extent so that the somewhat smaller walking surface will be large enough to plant both of the feet of an adult upon it. Around three sides of the base are arranged fixed moldings 14, secured to the base by fastenings 16. These are preferably passed up through the base from the under side, so that they may be concealed from view. The inner portion of the molding 14 is formed with a cut-out portion 18, leaving a slot between the under side of the molding and the base. A loose molding 20 of the same cross section as the fixed molding 14, closes the fourth side of the rectangle of the base. It is held in place by the screws 22 or other removable fastening devices.

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A backing sheet 24, preferably of heavy binder's board, is of appropriate dimensions to fit snugly in the slot 18 all around. A stack 26 of adhesive sheets fills the smaller opening formed by the molding 14 and 20. Each of these pressure sensitive sheets 26a-z forming the pack 26 is made up of a base sheet of paper or fabric, coated upon its upper surface with a pressure sensitive adhesive composition of the kind retaining its tackiness over extended periods of time. I prefer to use material corresponding generally to that found in masking tape.

The lowermost sheet 26a has its back firmly secured to the backing 24. If desired, this sheet 26a may be adhesive upon both sides. The remaining sheets 26b-z, are non-tacky upon the under side so that they may be peeled, one from the other in order, beginning with the topmost sheet 26z.

Thus it will be seen that the shoe cleaning device 10 may be placed flat upon the floor at the entrance to the area being protected. If desired, it may be secured against lateral movement by being fastened to the floor either by screws passing through the backing 12 or by means of one of the adhesives used for bedding floor tile. Persons entering the protected area are advised, either by a posted sign or orally by a guard in the vicinity, to plant each of their feet firmly on the top surface 26z before entering. It has been found that a single sheet of pressure sensitive material will satisfactorily remove dust from the shoes of from 40 to 100 persons, if used as directed. When the effectiveness of one sheet has diminished to the point where harmful amounts of dirt are not removed, the top sheet is stripped away by peeling it off, leaving a new surface ready for further use.

In order to facilitate stripping off successive sheets, it is desirable to treat one small corner of the top of each sheet to render it non-adhesive. While this could be arranged by failing to apply the adhesive in this corner, it is more practical to insert a thin triangle 28 of non-tacky material such as aluminum foil or cellophane. Because the added thickness of the inserts 28 is cumulative, the corner of the pack 26, where these are inserted, tends to protrude, creating a possible hazard of tripping. In order to overcome this, it is desirable to cut out a portion of the backing 24, allowing the lowermost sheets to be depressed instead of the uppermost sheets being elevated.

It will be seen that I have devised a simple, effective appliance for the purpose indicated. Since it is obvious that many modifications can be made, while preserving the spirit of the invention, I intend to have my invention interpreted as broadly as indicated by the scope of the claims that follow.

I claim:

1. Apparatus for cleaning the soles of shoes while the shoes are being worn comprising, a base adapted for securing upon a traffic surface, a backing sheet, means removably securing said backing sheet upon said base and a pad of peelable, pressure sensitive sheets mounted on said backing sheet, said pressure sensitive sheets being mounted active side up to form a traffic surface renewable by peeling off each top sheet in succession, a non-adhesive film being applied to one corresponding corner of each pressure sensitive sheet except the lowest, the backing sheet below the non-adhesive corner of said sheets being relieved.

2. Apparatus for cleaning the soles of shoes while the shoes are being worn, comprising a housing supportable upon a walking surface, a substantially flat supporting surface therein, of sufficient expanse to permit both of the shoes of an adult person to be comfortably planted

thereon, means for temporarily holding a sheet of pressure sensitive adhesive in place, face-up upon said support, to cover said support, a sheet of pressure sensitive adhesive in place upon said support, and an opening in said housing exposing substantially the expanse of the supported active surface of the adhesive to the tread of the user, said temporary holding means being operative evenly over substantially the entire surface of the sheet being held.

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