Aug. 3, 1954

P. N. DAVENPORT

2,685,141

ANTISKID ATTACHMENT FOR SHOES

Filed Sept. 20, 1951

Fig. 1

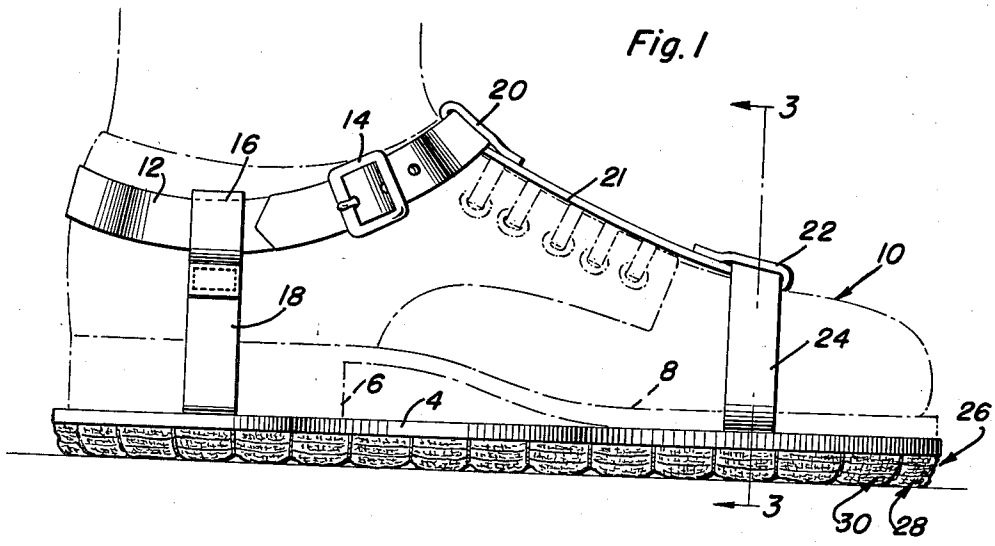
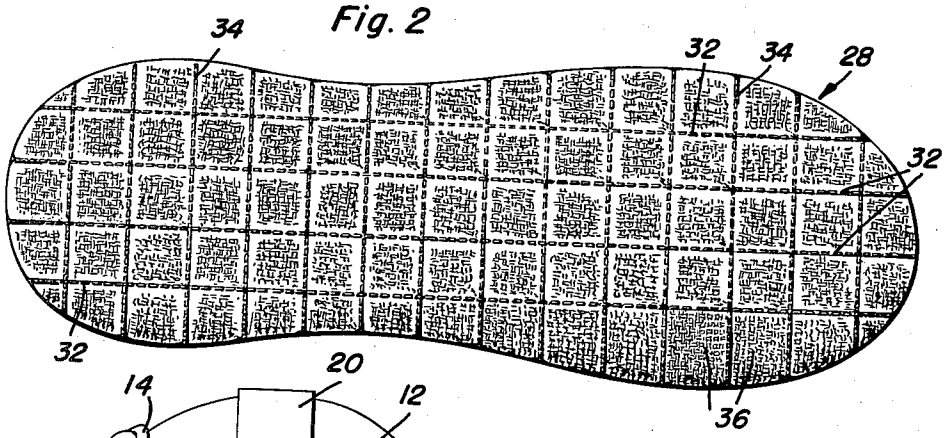



Fig. 2



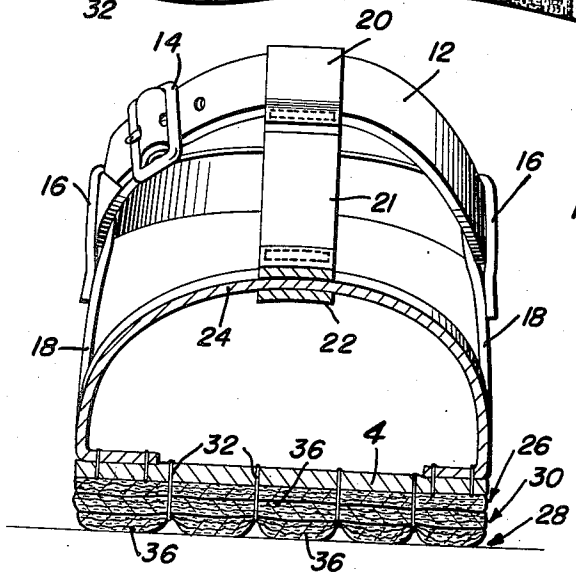




Fig. 3

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# UNITED STATES PATENT OFFICE

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## ANTISKID ATTACHMENT FOR SHOES

Pearl N. Davenport, Truth or Consequences, N. Mex.

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1 Claim. (Cl. 36—7.6)

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The present invention relates to certain new and useful improvements in shoe attachments which are employed to enable one to walk, perhaps even run, on slippery surfaces covered with ice, snow, oily-water, and the like and has more particular reference to devices which have been referred to as ice creepers, antiskid overshoes, traction attachments and so on.

Those familiar with devices and appliances in the stated category are aware that countless persons year in and year out encounter serious injuries to arms, legs and other body parts which are chargeable to sliding and falling on icy walkways, slippery steps, pavements and so on. Naturally, prior inventors have not in any sense of the word overlooked the need for shoe attachments to cope with the problem of safe wallking difficulties during winter seasons. Nevertheless, and despite the various single and joint efforts of inventors in this line of endeavor, prior art devices purposed to solve the problem have never met with widespread indorsement, adoption or use. It follows that it is the object of the instant invention to provide an antiskid shoe attachment which, it is believed, more aptly answers the need for a satisfactory traction promoting device, one which is safe and reliable, easy to apply and remove and otherwise aptly intended to achieve desired ends.

Another object of the invention, generally speaking, is to improve upon and reduce the number of parts entering into the over-all combination, thereby not only increasing the sufficiency of the structure as a whole, but also rendering same less costly to manufacture and to otherwise simplify factors of assembling and sale.

An equally general, but nevertheless important object, is to provide a simple, economical and efficient antiskid attachment which is calculated to better meet the needs for more satisfactory and acceptable construction but is one in which manufacturers, retailers and users will find their respective requirements and needs fully met and appropriately contained.

Prior art constructions similar in purpose and construction to the one herein under advisement reveal that it is old to use a sole-shaped member or platform, to provide means whereby same is strapped or otherwise connected with the shoe of the wearer and wherein the underside has antiskid means of one type or another. The present invention appertains, as an improvement, to the particular antiskid material and the manner in which the same is applied for best results.

Other objects and advantages will become more

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readily apparent from the following description and accompanying sheet of illustrative drawings.

In the drawings, wherein like numerals are employed to designate like parts throughout the same:

Figure 1 is a side elevation of the attachment constituting the instant invention and showing the manner in which the same is constructed and applied for use.

Figure 2 is a bottom plan view of the improved tread means.

Figure 3 is a cross-section taken on the vertical line 3—3 of Figure 1, looking in the direction of the arrows.

Referring to Figures 1 and 3 the numeral 4 designates a sole-shaped platform. This may be of leather, rubber, rubberized fabric, or any suitable combination of these materials where, for instance, they are suitable to provide the desired platform element or means. The platform underlies and is, of course, fastened against the heel 6 and sole 8 portions of the conventional shoe 10. Means is provided to bring about the desired coacting relationship between the elements 4, 6 and 8. For example, there is what may be conveniently called an ankle strap 12 and this has buckle means 14 and is attached to loops 16 on vertical attaching straps 18. It is also attached by loop means 20 to an instep strap 21 having a loop 22 joined to a toe strap 24.

As before stated, the chief novelty of the instant case, has to do with the media or material means employed to provide the underside of the platform with reliable and prerequisite traction and antiskid properties. Properties which are such that members of the public may be readily persuaded to adopt and use antiskid attachments of the type herein revealed. One or more compressibly resilient layers or laminations of antiskid material are required to achieve this end. In Figure 3 three such layers or laminations are shown, the upper lamination being denoted at 26, the lower one at 28 and the intermediate one at 30. Here again, these laminations are sole-shaped and they are superimposed one upon the other. Each lamination is a composition of metallic material, actually a cushion-like mat, the latter being made up of ribbon-like strands of copper or suitable or equivalent metal and these being interwoven or otherwise interconnected in pad-like form, similar for instance, to the interlaced open wire construction found for example in copper or equivalent household scouring pads. One might utilize the latter types of pads by having them made in the layer or lamination form shown in the drawings. In any event, each layer or lamination

becomes a pad having proper wear resisting, traction promoting and cushioning characteristics. Not only this, the three padded layers are disposed in superimposed alignment and they are then all three stitched orderly in place to give the tufted patchwork appearance shown in the drawings. Actually, what is accomplished here is that the metallic pads are quilted by rows of stitchings. There are lengthwise rows of stitchings denoted in Figure 2 by the numerals **32** and these are in spaced parallelism and then there are coacting crosswise rows of stitchings which are denoted by the numerals **34**. The stitchings are so arranged in crossed relationship that the quilted effect is had and triple layer cushioned metallic block-like treads **36** are provided. Obviously, these wire stranded laminations not only provide the desired cushioning or padded effect but they constitute ideal ways and means affording reliable traction on ice and the more the weight exerted, the greater the antiskid pressure is against the slippery surface. It is believed that this quilted compressibly resilient multiple layer construction forms tread means which is far superior to tread elements of rubber, special cleats, chains, calks and other antiskid members.

Minor changes in shape, size, materials and rearrangement of parts may be resorted to in



actual practice provided no departure is made from the invention as claimed.

Having described the invention, what is claimed as new is:

An antiskid attachment for a shoe comprising a sole-shaped platform, means for fastening the same against and securing it to said shoe, antiskid tread means comprising a plurality of duplicate laminations superimposed upon each other, each said lamination being made up of interwoven loosely interconnected metallic wires having antiskid and cushioning properties, and means for securing said laminations to the underside of said platform comprising stitching arranged in first rows which extend in spaced parallelism lengthwise of the platform and second rows which extend in spaced parallelism with each other crosswise of the platform, the respective rows crossing each other and defining substantially rectangular tufts.

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