

[54] TACKLESS STAIR CARPET PROTECTOR

3,430,291 3/1969 Hlinka 161/123 X

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[57] ABSTRACT

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[51] Int. Cl. B32b 3/00

[58] Field of Search 161/116, 121, 123, 124,
161/126, 149, 48; 16/4

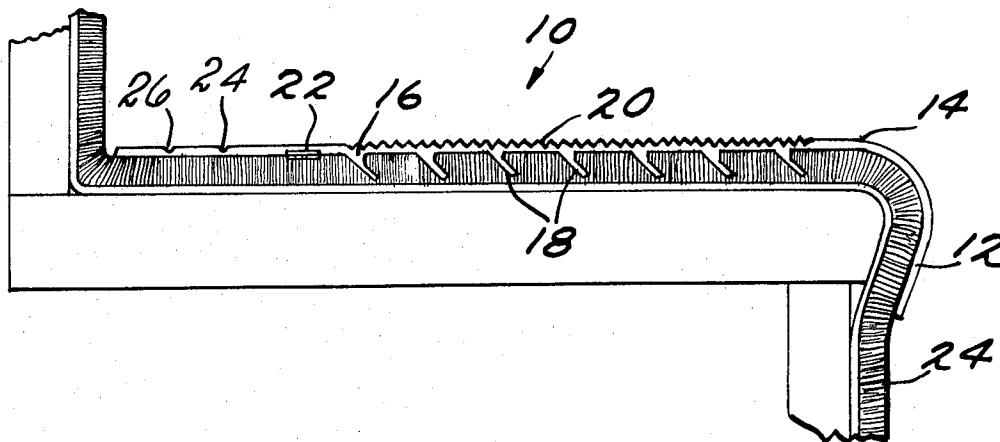
A tackless stair nose includes integral riser, nose and step portions, sharpened teeth or the like integral with and depending from the step portion and angles towards the riser portion and a strip of hook type fastening material disposed on the bottom of the step portion opposite the nose. The nose and riser portions produce a springing action which draws the teeth into the carpet when the stair nose or carpet protector is drawn over the carpet of a stair step.

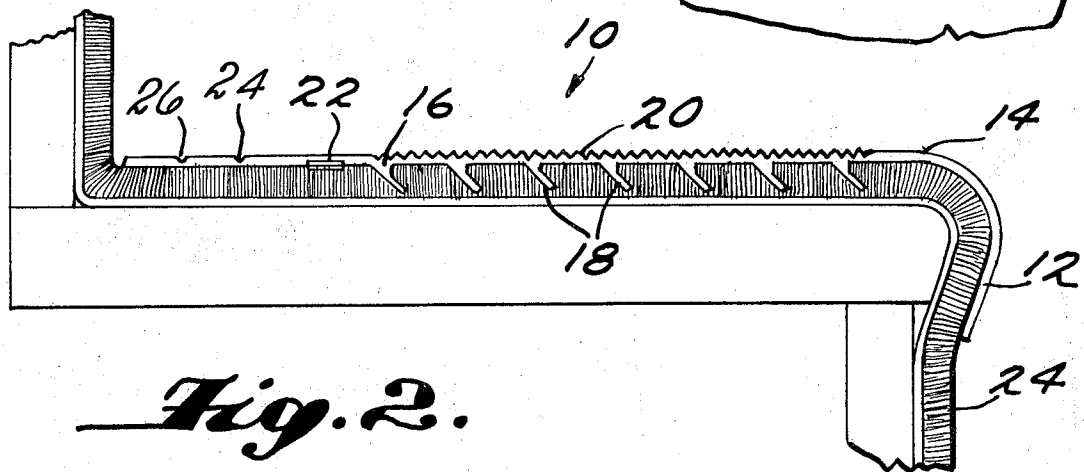
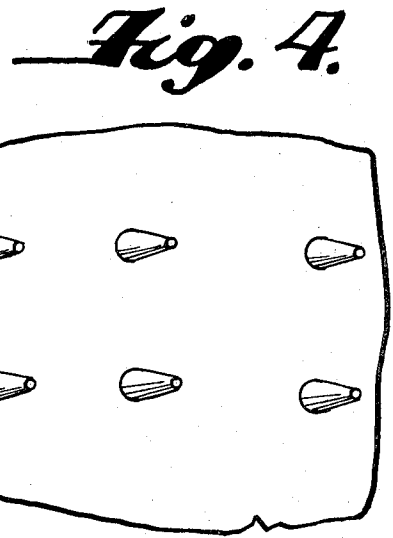
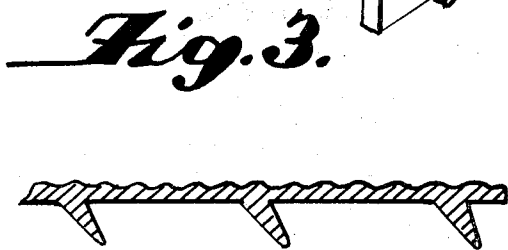
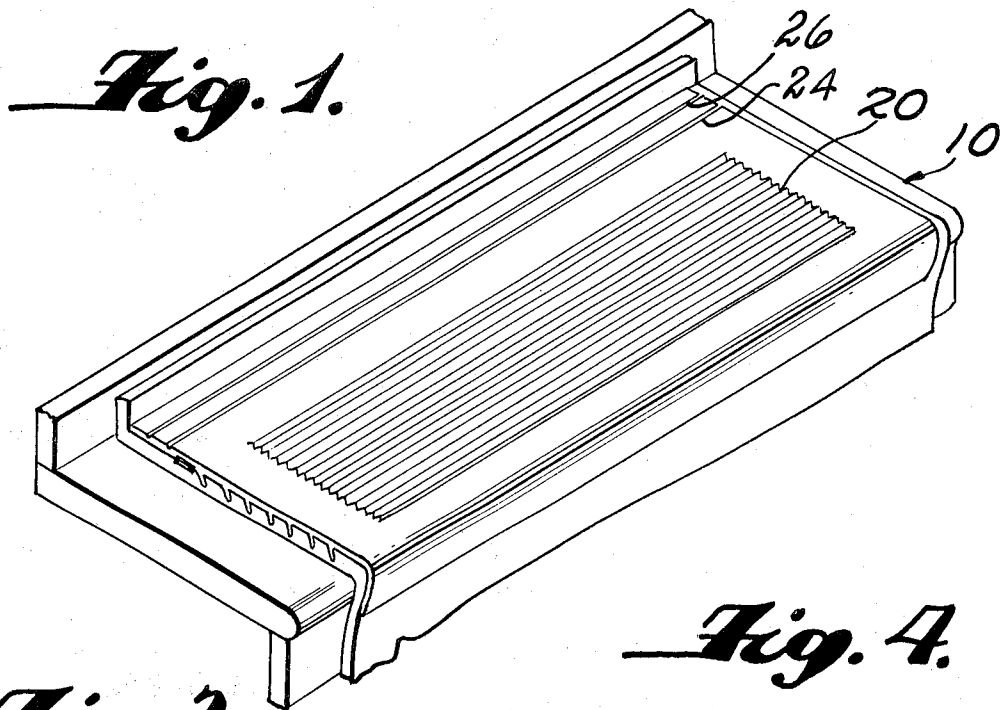
[56] References Cited

UNITED STATES PATENTS

372,941 11/1887 Sperry..... 161/119 X
3,242,034 3/1966 Trager 161/123 X

6 Claims, 4 Drawing Figures





TACKLESS STAIR CARPET PROTECTOR

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to stair noses and especially to stair noses of substantially clear plastic which are adapted to be placed over the forward edges or noses of carpeted stairs.

2. Description of the Prior Art

It is well known to protect the carpeting on a flight of stairs by placing a plurality of transparent plastic protectors over at least the nose of each step, i.e., the forward edge of the step where the riser portion meets the step portion. Furthermore, it is known to secure such protectors to the carpet by using downwardly depending ribs integral with the step portion of the protector. This type of stair step carpet protector is called tackless because no tacks are used with the protector itself. However, even in this type a separate member is needed which is secured to the step by tacks driven through the carpeting and into the underlying step and is then interlocked with the protector. Of course, such an arrangement produces damaging holes in both the carpet which it was supposedly protecting as well as underlying stairs.

SUMMARY OF THE INVENTION

In order to overcome the disadvantages of the prior art outlined above the applicant has provided a truly tackless carpeted stairstep protector. Essentially, the stairstep protector of the present invention comprises in one integral piece a riser portion which is shaped to engage the riser portion of the carpeted stair, a nose portion which is designed to envelop the nose portion of the carpeted stair and a step portion which rests upon and protects the step portion of the carpet. The stair portion also has serrations formed upon its upper surface for improved footing and a plurality of downwardly depending sharpened cleats which point towards the riser portion. These serrations may have any suitable pattern. The cleats grip the carpet and resist the tendency of the stair step protector to slip forward when a person steps thereupon. Aiding the cleats in securing the protector to the carpet is a strip of hook type fastening material secured to the underside of said step portion, for example, at the farthest edge thereof from the nose portion which interlocks with the natural loops of the carpet.

BRIEF DESCRIPTION OF THE DRAWINGS

The preferred embodiment of the invention will now be described with reference to the drawings in which:

FIG. 1 is a perspective view of the preferred embodiment of the invention;

FIG. 2 is a side view of a segment of the preferred embodiment; and

FIG. 3 is a portion of a side view of a segment of another embodiment; and

FIG. 4 is a bottom view of the segment shown in FIG. 3.

The same elements are designated by the same reference numerals throughout the drawings.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawings, a tackless stair carpet protector 10 is shown to be comprised of an integral piece

of material. Preferably, this material is a transparent or translucent plastic which allows the color of the underlying carpet to be seen. Protector 10 has a riser portion 12, a nose portion 14 and a step portion 16 each of which is designed to tightly engage the riser, nose and step portions of a carpeted stairstep.

The riser and nose portions 12 and 14, respectively, and the step portion 16 have a substantially uniform thickness. But it is desirable that when the nose portion is tightly placed over the stair carpet, the step portion is drawn forward by the springing action of the nose and riser sections and this action in turn drives the plurality of sharpened cleats 18 which depend from the step portion 16 into the carpet since cleats 18 are angled towards riser 12. The cleats 18 may have the form shown in FIG. 2 or that shown in FIG. 3. In either case, the cleats are arranged in parallel rows as illustrated in FIGS. 1 and 4.

Of course, the rigidity of nose and riser portions 14 and 12, respectively, also resists any forces attempting to remove teeth 18 from the carpet. If necessary to insure appropriate springing action, the nose portion 14 may be thicker than the step and riser portions 16 and 12, respectively, and this modification is shown in FIG. 2.

The top of step portion 18 contains a plurality of serrations 20 to improve the frictional qualities of step portion 16. A straight line pattern is shown in FIG. 1 but other patterns may also be utilized such as, for example, a chevron pattern. Also, the serrations may be molded into step portion 18 or may be added after molding as by score lines. As can best be seen from FIG. 2 a strip 22 of hook type fastening material is affixed to the bottom side of step portion 16 which helps keep the step portion 16 firmly attached to the step interlocking with the loops of carpet 24. As may be seen from FIG. 2 score lines 24 and 26 follow strip 22 at regular intervals. Thus, the carpet tread 10 may be easily modified to fit a narrower step merely by cutting along the appropriate score line. Of course, more than the two score lines shown in FIG. 3 may be used.

While the above description fully covers the preferred embodiment of the applicant's invention, many modifications are possible thereto within the scope of the invention. Thus, the following claims must be referred to to determine the proper scope of the invention.

What is claimed is:

1. A stair carpet protector comprising an integral riser section and step portion joined together at a nose section and having a first fastening means including a plurality of sharpened members depending from said step portion, the sharpened ends of which are directed towards said riser section.

2. The stair carpet protector recited in claim 1 further including a second fastening means disposed along the bottom of said step portion opposed to said nose.

3. The stair carpet protector recited in claim 2 wherein said second fastening means comprises a strip of hook type fastening material.

4. The stair carpet protector of claim 1 wherein said step portion includes a plurality of serrations upon its upper side.

5. The stair carpet protector of claim 1 wherein said nose and riser portions are fabricated from resilient plastic material to provide a springing action which drives said teeth into said carpet.

6. The stair carpet protector of claim 1 wherein said protector includes a plurality of sections adjacent the edge of said step portion opposite said nose section which are separated from one another by score lines so as to be easily removed from said protector.

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