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PROTECTIVE STAIR EDGING

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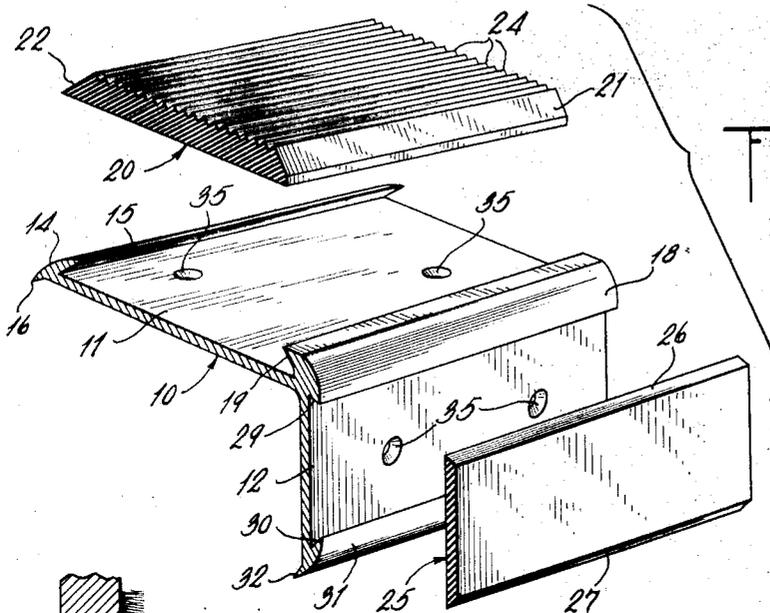


Fig. 1.

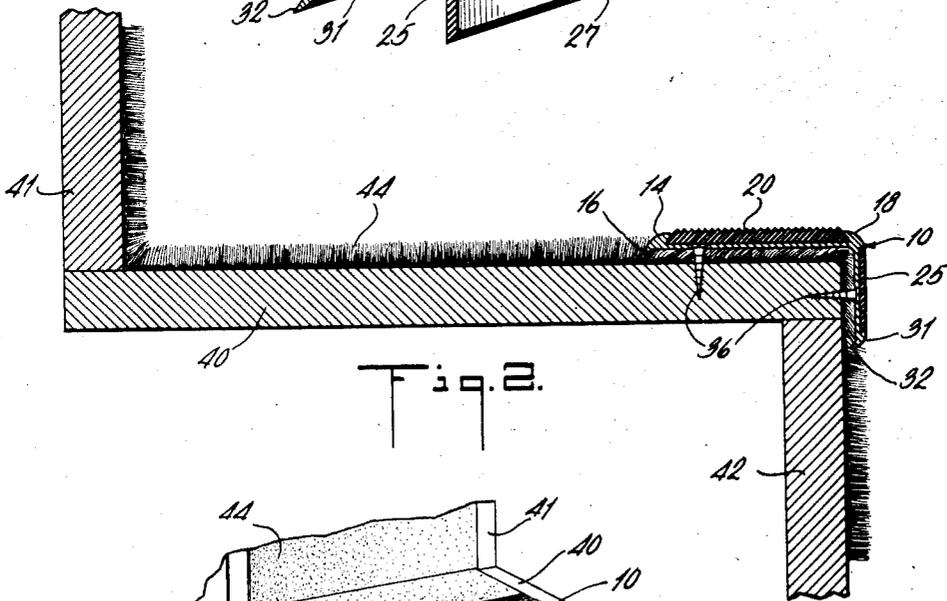


Fig. 2.

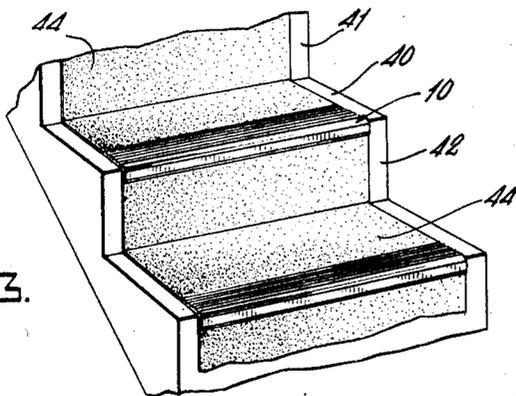


Fig. 3.

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PROTECTIVE STAIR EDGING

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2 Claims. (Cl. 20-79)

This invention relates to edging for stairs. More particularly it provides an edging for application over the carpet on carpeted stairs, covering the carpet which overlies the forward section of the tread and a part of the riser adjacent thereto.

Carpeting is applied to stairs not only in residences but in public buildings of various kinds such as theaters and hotels wherein it is subject to heavy wear. Experience has shown that most of the wear occurs over the forward portion of the tread and at the uppermost portion of the riser. Failure to protect this section of stair carpeting necessitates replacement of the entire carpet while by far the greater portion of it is still in good condition. It is, moreover, very desirable, especially on public stairways, to provide a safety or non-skid tread at the forward portion of each stair tread to minimize accidents due to worn spots, slipping and tripping.

The principal objects of this invention are to provide a protective edging for carpeted stairs which will cover that portion of the carpet subject to the most wear; which will serve to hold the carpet in place; which may be easily installed over either new or worn carpeting; which will provide a non-skid safety tread portion; and which is of rigid non-buckling construction.

A further object is to provide a removable tread portion for such edging and also, if desired, a removable face portion, which can be easily and quickly inserted and removed without using any adhesive or separate fastenings, thus facilitating the renewal or changing of the tread or face portion without disturbing the edging installation.

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

Fig. 1 is an exploded perspective view of a section of edging showing its component parts;

Fig. 2 is a vertical section through a section of carpeted stairway, including one tread and portions of the adjacent risers, showing the edging installed thereon; and

Fig. 3 is a perspective view of a section of stairs showing the edging in use.

Referring to Fig. 1, the base portion of the edging is preferably a one-piece metal strip 10 having a horizontal leg 11 and a vertical leg 12, disposed substantially at right angles to one another. The horizontal leg terminates at its rear end in a raised bead 14 which has a smoothly curved outer surface, an inwardly inclined plane face 15 and a downwardly extending projection

or spur 16 coextensive with the bead. At the juncture of the horizontal and vertical legs is a similar raised bead 18 which has a plane face 19 inclined toward the face 15 so that their top edges are closer together than their bottom edges. The bead 18 also preferably has a convex outer surface. The beads 14 and 18 define between their respective faces 15 and 19 a channel for receiving a tread insert 20 having beveled front and rear edges 21 and 22 and any suitable non-skid top surface such as the serrations 24. The insert 20 is of such a size as to completely fill the said channel, and to enable it to be inserted therein it is made of a resilient material which can be buckled sufficiently to dispose the edge 22 beneath the face 15 and the edge 21 beneath the face 19.

As shown in the drawing, the vertical leg 12 may also be formed to receive an insert 25, having beveled edges 26 and 27, between complementary faces 29 and 30 formed on the opposing portion of bead 18 and the bead 31 at the end of leg 12. Like the bead 14, bead 31 is provided with an inwardly extending projection 32. The leg 12 may, however, be of plane outer surface with omission of the insert 25 if desired.

For securing the edging in place, screw holes 35 are provided at least in the horizontal leg 11, preferably alternating in position from front to back, and similar holes may be provided in the vertical leg 12 although it may not be necessary to use the latter.

The metal strip 10 is preferably made by extrusion of any suitable alloy in a manner well known in the art so that it is formed in one piece at minimum cost and in any desired length. The insert 20 may be matting of any desired composition of rubber or other sufficiently flexible material, such as linoleum or other plastic. Its upper surface may be serrated, as shown, or otherwise formed to minimize slipping or it may have abrasive or other granular material incorporated for the same purpose. The insert 25 may be made of thinner material as it is subject to less wear.

It will be noted that after the metal strip 10 has been installed, as shown in Figs. 2 and 3, as by screws 36, and the inserts 20 and 25 put in place, no fastening means are visible so that the completed unit has a very attractive appearance.

The feature of easy insertion and removability of the inserts 20 and 25 has many practical commercial advantages. In conjunction with a standardized base strip, inserts of a variety of

materials, constructions and colors may be installed. For example, inserts of various colors to blend with carpeting of different colors may be used. In such places as cinemas where semi-darkness usually prevails, inserts of white or other light reflecting materials may be used, thus increasing the visibility of steps and reducing the hazard.

The installation of a complete unit is shown in Fig. 2 wherein 40 is a stair tread and 41, 42 are risers, all covered by pile carpeting 44. The metal strip 10 has been placed upon the carpeting at the edge of a step and fastened thereto by screws 36. The projections 16 and 32 sink through the pile of the carpet and find a firm footing against the fabric backing, thus minimizing any tendency the unit might otherwise have to rock when stepped on. The pile fibers intermediate the projections are firmly compressed but due to the fact that the metal strip 10 rests to a large extent on the edge projections 16 and 32, which penetrate to the backing, any tendency the strip might have to buckle between fastenings, due to screwing the strip to a cushioning backing, is eliminated.

Various modifications may be made in the construction shown in the drawing and above particularly described, within the purview of the invention as defined in the appended claims.

What is claimed is:

1. A protective safety edging adapted to overlie the carpet on only the forward part of the tread and the upper part of the riser of a completely

carpeted stair comprising a one piece metal strip having a horizontal leg and a depending vertical leg disposed substantially at right angles to one another, said strip having raised beads at the rear end of its horizontal leg and at the juncture of the legs, the opposing faces of said beads having their upper edges closer together than their lower edges and defining a channel between them, a flexible insert having a non-skid upper surface adapted to completely fill said channel and insertable between said beads upon being slightly buckled, the faces of said beads gripping the insert to hold it in place, and a longitudinally extending projection on each of said legs adjacent its end so directed as to penetrate the pile of the carpet and firmly engage the carpet backing to prevent rocking of said edging.

2. A protective safety edging adapted to overlie the carpet on only the forward part of the tread and the upper part of the riser of a completely carpeted stair, comprising a one piece metal strip having a horizontal leg and a depending vertical leg disposed substantially at right angles to one another, each leg having insert securing means comprising longitudinally extending raised beads at the outer edges of said legs, each of said beads being extended beyond the under surfaces of said legs to form angular longitudinally extending projections so directed as to penetrate the pile of the carpet and firmly engage the carpet backing to prevent rocking of said edging.

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