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STAIRWAY CARPETING

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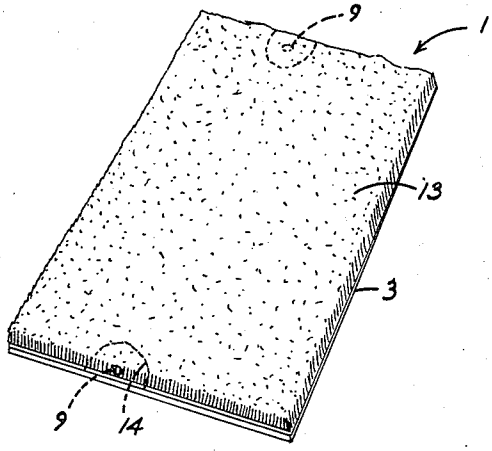


Fig. 1

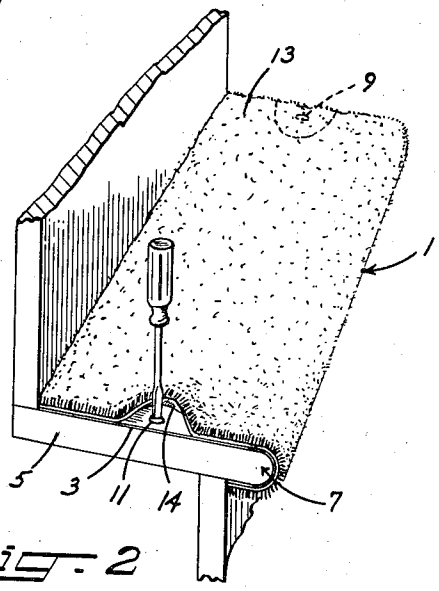


Fig. 2

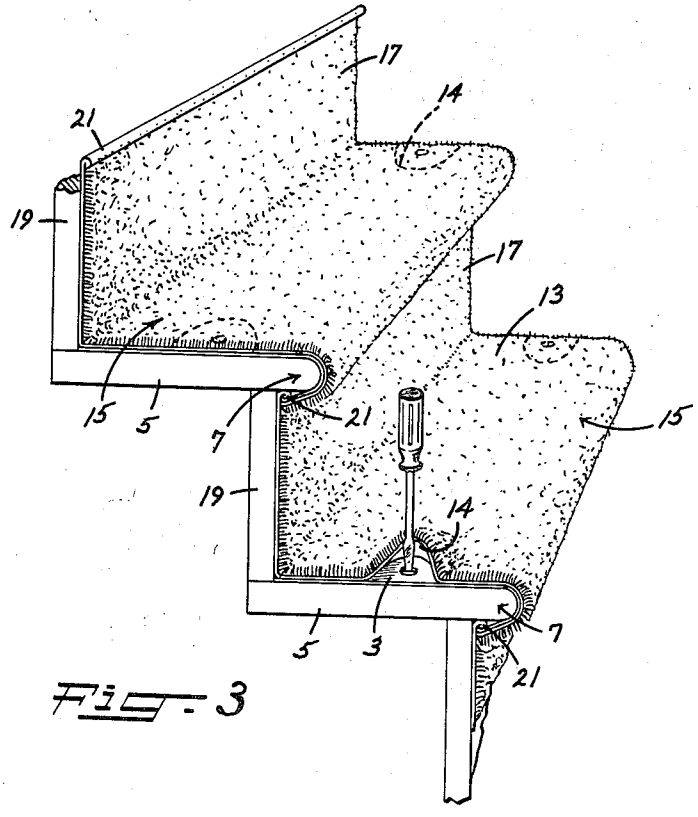


Fig. 3

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STAIRWAY CARPETING

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The present invention relates to carpet covering for stairways.

Carpet covering on inside steps and stairways in homes and places of business has become most desirable. At present, such carpeting is extremely expensive to install and necessarily requires the skill of professional carpet-layers. Once the carpet covering is installed, it is extremely difficult to remove the carpet for cleaning purposes. The expenses incurred in removing the carpeting plus the cost of cleaning the carpeting is quite expensive even when the cleaning is done at the place of installation.

It is therefore one object of my invention to provide novel and improved carpet covering for stairways which may be installed and maintained at low cost.

Another object of my invention is to provide novel and improved individual carpet sections which may easily and simply be affixed to the tread surfaces of a stairway without marring or damaging the carpet fabric by the use of usual retaining means which penetrate the actual carpet fabric.

Still another object of my invention is to provide a novel and improved individual carpet section for stairways which covers a complete tread surface of a step unit of a stairway including the nosing portion of the tread surface.

Another object of my invention is to provide a novel and improved individual carpet section which covers the tread surface with its nosing as well as the riser surface or adjacent vertical panel of a step unit of a stairway.

Other objects and advantages of my invention will become more apparent from a study of the following description and drawing wherein:

Figure 1 is a perspective of a preferred embodiment of my stairway carpet section which is used to cover only the tread and nosing surfaces of a stairway to provide discontinuous carpet covering for a stairway;

Figure 2 is a perspective of a step unit of a stairway showing my carpet cover section of Figure 1 affixed to and covering the tread surface and nosing of the step unit; and

Figure 3 is a perspective view of a portion of a stairway showing another preferred embodiment of my carpet section affixed to and covering the tread, nosing and riser surfaces of the stairway to provide continuous carpet covering for the stairway.

Referring now to the drawing, a preferred embodiment of my carpet covering is shown in Figures 1 and 2. In this embodiment, my carpet section 1 comprises a backing panel 3 which is preferably formed of a thin somewhat flexible sheet of metal such as aluminum. The backing panel 3 is of sufficient size to cover both the tread surface 5 of a stairway (Figure 2) and the tread surface front edge extension or nosing 7. As seen in Figure 2, the front edge of the backing panel 3 is bent around and over the nosing 7 of the tread surface 5.

The backing panel 3 has a hole or opening 9 extending through the panel adjacent the middle of each end boundary of the panel 3. In the preferred embodiment, the panel preferably contains only two of these openings or holes 9 which accommodate retaining or affixing means such as a screw 11 for affixing the backing panel 3 to the tread surface 5 of the stairway. The screw 11 is of course anchored within the tread surface 5.

A carpet fabric 13 corresponding to the dimensions of the backing panel 3 is secured to the backing panel preferably by bonding the carpet fabric 13 to the panel with a suitable rubber bonding material. The entire bottom surface of the carpet fabric 13 is preferably bonded to the backing panel 3 except for two small areas preferably in the form of a half circle of about three inches in diameter at each end of the panel 3 immediately above the holes or openings 9 which extend through the panel. When affixing or removing the carpet section 1 to the tread surface of a stairway, these unbonded portions or flaps 14 of the carpet fabric 13 are merely raised or lifted to enable the installer to insert or remove the screw 11 or other affixing means for the carpet section 1.

As seen from the above description, it is a simple matter for a home owner to install his own stairway carpeting when using applicant's above-described carpet section 1. The installer merely places the section 1 upon the tread surface 5 of his stairway and bends the front edge of the section around the nosing 7 of the tread surface 5. After the section 1 is set in position, he raises the small flaps 14 at each end of the carpet fabric 13 and threads a screw 11 through the holes 9 of the panel 3 directly into the tread surface 5. To remove the carpet section 1 from the tread surface, the user need only raise the flaps 14 and remove the screws 11 which hold the section 1 in place on the tread surface. The above-described embodiment is used when the installer desires only discontinuous carpet coverage for his stairway. With the use of the above embodiment, the riser surfaces or vertical panels of the stairway adjacent the tread surfaces are not covered.

Another preferred embodiment of my invention is shown in Figure 3. This embodiment is used by the installer when he desires complete or continuous coverage of his stairway which includes coverage for the riser surfaces or vertical panels of the stairway. As seen in Figure 3, the carpet section 15 is somewhat similar to the carpet section 1 of Figure 1. The difference is that the embodiment shown in Figure 3 has an unsupported fabric portion 17 of the carpet fabric 13 which extends beyond the back edge of the backing panel 3 for a sufficient distance to cover the riser surface or vertical panel 19 of the stairway whereby the tread surface, nosing and the riser surface extending from the tread surface are all provided with carpet cover.

The embodiment shown in Figure 3 does not require additional fastening or affixing means other than that used with the embodiment shown in Figure 1 to anchor the carpet section 15 in position on the stairway in that I use a novel means of locking the riser surface portion or unsupported fabric portion 17 of the carpet fabric 13 in position. As seen more clearly at the top of Figure 3, the upper or topmost edge 21 of the riser portion or unsupported portion 17 of the carpet fabric 13 is rolled or folded back upon itself. To maintain the fabric riser portion 17 in place over the vertical panel 19 of the stairway, the rolled edge 21 of the riser portion is locked or held in place by the front edge of the backing panel 3 which is bent around and under the nosing 7 of the tread surface 5 lying immediately above the vertical panel or riser surface 19. The rolled edge 21 of the riser fabric portion 17 is lodged between the bottom surface of the nosing 7 and the edge of the panel 3 which is bent around the nosing 7. With this arrangement, the riser portion 17 of the fabric 13 is firmly held in position of the stair-

way. The carpet fabric section **15** is affixed to the tread surface **5** of the stairway in the same manner as explained with respect to the embodiment shown in Figures 1 and 2. To install this tread-riser carpet section **15**, the installer starts his installation at the bottom step and works toward the top of the stairway.

The backing panel **3**, which is preferably formed of metal, may constitute a grid, a heavy mesh, a perforated panel or a solid panel which has a rough surface to facilitate and strengthen the bonding between the carpet fabric and the panel. Regardless of which type of panel is used, it must be sufficiently malleable to permit bending of the panel around the nosing surface of the tread surface of the stairway. The main part of the panel although soft is of course adequately supported by the tread surface. At the same time, the metal panel holds the carpet fabric firmly in position. The riser portion of the carpet fabric requires no unusual or extra support other than that necessary to keep it taut. This tautness is adequately provided through the locking arrangement between the rolled edge of the riser portion of the carpet fabric and the nosing portion of the backing panel which lies immediately above and adjacent the riser or vertical panel of the stairway.

It should also be pointed out that carpet sections, such as described above, may be cut as desired for use on curved or odd shaped stairways.

My invention is particularly valuable in that any type of carpet fabric may be used including the tufted type of carpeting.

As pointed out above, individual carpet units that have been accidentally soiled or marred may be individually removed for cleaning and reinstalled. This is also an important feature of my invention in that it is not necessary to remove the entire stairway carpeting to have one section of the carpeting cleaned.

While preferred embodiments of the invention have been shown and described, it is to be understood that changes and variations may be made without departing from the spirit and scope of the invention as defined in the appended claims.

I claim:

1. A stairway carpet section adapted to cover at least the tread surface of a stairway comprising a backing panel, and a covering secured to the backing panel in contacting relationship, said fabric covering being free of the panel for a small area at least along one boundary of the panel whereby the fabric covering may be raised from the panel at this area, and means cooperating with the panel at said free area for use in affixing the carpet section to the tread surface of the stairway.

2. A stairway carpet section according to claim 1 wherein the backing panel comprises a thin sheet of metal.

3. A stairway carpet section according to claim 2 wherein the backing panel comprises a panel of thin aluminum.

4. A stairway carpet section adapted to cover at least the tread surface of a stairway including the nosing of the tread surface comprising a backing panel having end, front and back boundaries, said panel being bent along its front boundary to fit around the nosing of the tread surface, a fabric covering bonded to the backing panel in contacting relationship, said fabric covering being free of the panel for a small area along each end boundary of the panel whereby the fabric covering may be raised from the panel at these areas, and an aperture extending through the panel at each free area for use in affixing the carpet section to the tread surface of the stairway.

5. A stairway carpet section according to claim 4 wherein the fabric covering is free of the backing panel for a small area at the middle of each end boundary of the panel.

6. A stairway carpet section adapted to cover the tread, nosing and the riser surface lying immediately adjacent the tread surface of a unit of a stairway comprising a backing panel having front, end and back boundaries and of sufficient dimension to cover the tread surface and its nosing, a fabric covering secured to the backing panel in contact relationship which covering is of sufficiently larger dimension than the panel whereby an unsupported portion of the fabric extends beyond the back boundary of the panel for covering the riser surface extending upwardly from the tread surface, said portion of the fabric covering secured to the panel being free of the panel at least in one area along its boundary whereby the fabric covering may be raised from the panel at this area, and an aperture extending through the panel at said free area for use in affixing the carpet section to the tread surface.

7. A stairway carpet section according to claim 6 wherein the backing panel comprises a thin flexible sheet of metal.

8. A stairway carpet section adapted to cover the tread, nosing and the riser surface lying immediately adjacent the tread surface of a unit of stairway comprising a backing panel having end, front and back boundaries and which is of sufficient dimension to cover the tread surface and the nosing surface, said panel being bent along its front boundary to fit around the tread surface nosing, a tufted fabric covering secured to the backing panel in contacting relationship which covering has an unsupported portion which extends beyond the back boundary of the panel for covering the riser surface extending upwardly from the tread surface, said fabric covering being free of the panel for a small area along each end boundary of the panel whereby the fabric covering may be raised from the panel at these areas, and an aperture extending through the panel at each free area for use in affixing the carpet section, to the tread surface of the stairway.

9. A stairway carpet section according to claim 8 wherein the fabric covering is free of the backing panel at the middle of each end boundary of the panel.

10. A stairway carpet section according to claim 8 wherein the unsupported portion of the fabric covering is rolled at its outermost edge lying beyond the back edge of the panel whereby the rolled edge of the covering may be locked in place beneath the bent nosing portion of the panel which covers the tread surface lying immediately above and adjacent the riser surface.

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