

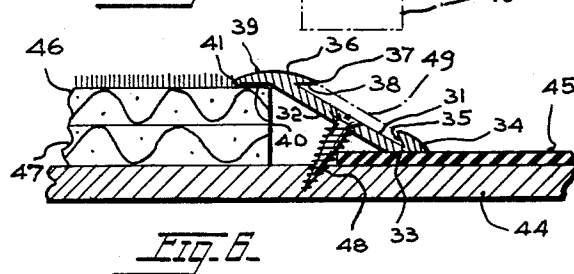
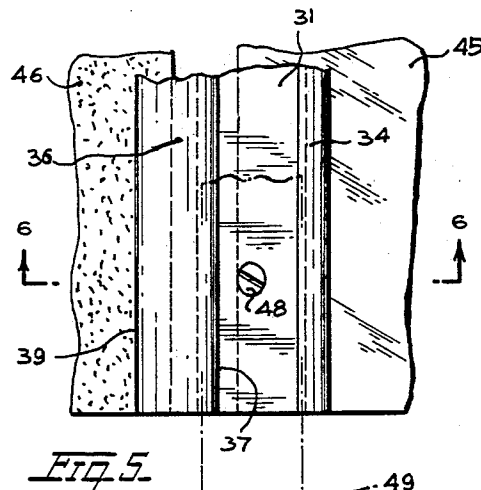
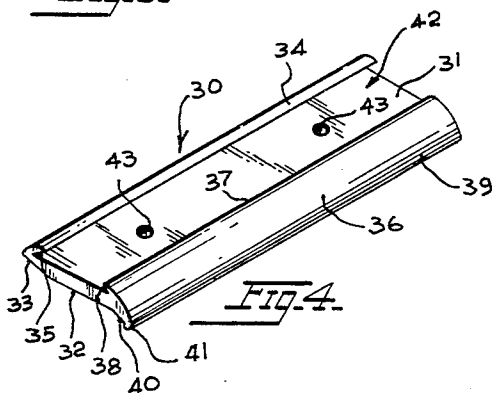
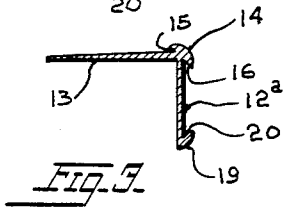
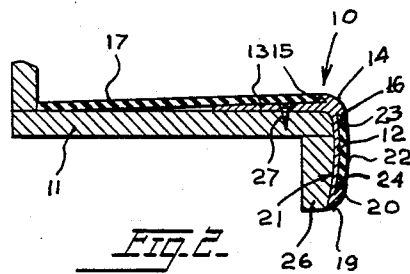
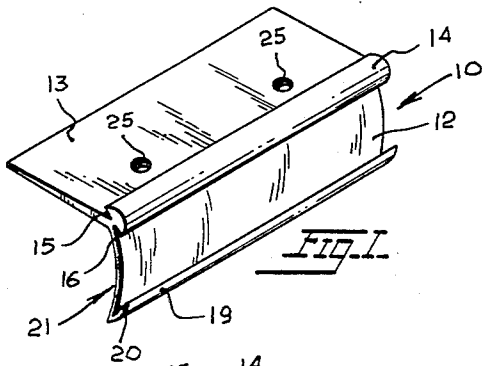
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PROTECTIVE FLOOR COVERING BAR

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PROTECTIVE FLOOR COVERING BAR

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1 Claim. (Cl. 16—16)

This invention relates to protectors for floor and stair coverings, and this application is a continuation-in-part of my application Serial No. 392,194 filed November 16, 1953, and now abandoned.

A principal object of the present invention is to provide a stair nosing which protects the edge of the stair and also protects and secures the edges of tread covering material and face covering material used on the stair.

Another object of the invention is to provide a stair nosing or edging formed of lightweight metal provided with a curved crown portion along one or more of its longitudinal edges which is adapted to protect and conceal the edge of a removable strip of covering or finishing material when used on stairs where the edge would be subjected to destructive wear.

A further object of the invention is to provide a stair nosing or edging having a vertical facing flange with a shallow channel of dovetail formation for the reception of a removable strip of finishing material, the finishing strip serving to conceal a substantial portion of the nosing device and to leave exposed to exterior view only the longitudinal edges of said facing flange.

Still another object of the invention is to provide a stair nosing having a horizontal securing flange adapted to bear upon the tread surface of the stair, said flange having its under surface normally in a horizontal plane and its upper surface inclined to a rear edge that is relatively thin whereby no appreciable shoulder or lump in the tread covering material is produced.

It is further proposed, according to another form of the invention, to provide a substantially flat bar for effectively binding adjacent strips of carpet and linoleum to a supporting surface, said bar having means for supporting an ornamental facing strip over the joint between said strips.

Another object of the invention is to provide a floor covering protector of this kind that is simple and rugged in construction, easy to install, pleasing in appearance and which may be manufactured and sold at a reasonable cost.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

Fig. 1 is a perspective view of a stair nosing embodying one form of my invention.

Fig. 2 is a vertical sectional view through a section of a stairway, including one tread and portions of the adjacent risers, showing the nosing installed thereon, with a step covering and facing material applied to the nosing.

Fig. 3 is a cross-sectional view through the center of a modified form of the invention.

Fig. 4 is a perspective view of a carpet binder bar embodying another modification of the invention.

Fig. 5 is a top plan view of a fragment of a floor showing the binder bar of Fig. 4 in operative position, with a facing strip shown partially applied in dot-dash lines.

Fig. 6 is a sectional view taken on the plane of the line 6—6 of Fig. 5.

Referring in detail to Figs. 1 and 2 showing the first form of the invention, the stair nosing herein illustrated consists of an elongated one-piece body or strip 10 of substantially right-angular formation which may be rolled or cast or extruded suitable material such as chromium, aluminum, yellow or white brass or like material adapted to protect the stair tread 11. The body of the nosing includes a vertically disposed arcuate nosing or facing flange 12 and a horizontally extending securing flange 13. At the juncture of the vertical and horizontal flanges 12 and 13, respectively, there is a raised bead 14 having a smoothly curved outer surface. The bead extends over both flanges and the portion projecting over the horizontal flange 12 is formed with an upwardly and outwardly inclined plane face 15, and the portion projecting over the vertical flange 13 is formed with a downwardly and outwardly inclined plane face 16.

As shown in the drawings, the horizontal flange 13 is preferably of improved cross-sectional contour to facilitate mounting of the strip of flexible material 17 for covering the stair tread 11. In accordance with the present invention, the flange 13 at its forward edge, where joined to the nosing flange 12 is of maximum thickness and tapers therefrom rearwardly whereby the upper surface thereof will substantially converge with the upper surface of the stair tread 11. The undersurface is positioned to be in a horizontal plane to have a firm bearing rest upon the upper marginal edge surface of the stair tread, and the tapered form is produced by the progressive and rearward inclination of the upper surface to substantially a point or sharpened edge at the rearward extremity of the securing flange. As a result, the stair covering 17 of linoleum, composition, rubber tile, or other wear resisting material may be laid of normal thickness overlying the securing flange 13 and extending forwardly to the nosing where its beveled edge 18 fits beneath and is secured and concealed by the projecting portion of the bead 14. The construction accordingly allows installing the nosing without cutting of the tread or cutting or building up of the covering material to be used therewith, and the rearward taper of the securing flange to a relatively thin sharpened edge substantially eliminates the formation of a shoulder or lump at the rearward edge. The elimination of the shoulder or lump overcomes the excessive wear which would occur were the shoulder present and likewise, danger of tripping, and the improved tapered securing flange further provides a desirable slight inclination to the tread surface at its forward edge conducive to safety in the use of the stairs.

The vertical flange 12 has a thin pliable wall and also terminates at its bottom end in a protruding bead 19 having an upwardly and outwardly inclined plane face 20. The beads 14 and 19 define between their respective faces 15 and 20, respectively, a channel 21 of dovetail formation for receiving a facing insert strip 22 having beveled top and bottom edges 23 and 24, respectively. The insert strip 22 is made of suitable material such as linoleum and the like and is of such a size as to fill the channel completely. The strip may be installed lengthwise of the channel or may be buckled sufficiently to dispose its side edges beneath the face of the beads.

For securing the nosing in place, screw holes 25 are

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provided in the horizontal flange 13 and similar holes may be provided in the vertical flange 12 if desired.

In Fig. 2, a nosing unit is shown installed on the outer edge of the stair 11 and upper end of the riser 26 and fastened in position by screws 27 extending through the holes 25. The covering material 17 and facing strip 22 are shown in position, concealing the major portion of the nosing and the screws 27 and leaving only the longitudinal beads exposed thereby presenting a very attractive appearance.

In Fig. 3 the facing flange 12^a is shown to be substantially straight. In other respects this form of the invention is similar to the previous form and the corresponding parts may be recognized by the same reference numerals.

Referring now to Figs. 4-6, the modification therein shown comprises a bar or strip 30 for binding a strip of carpet or the like to a supporting surface. The bar is formed of the same material as the nosing strip 10 of the form of Fig. 1 and has an elongated substantially flat body with its top side 31 flat throughout its length and width. The body of the bar, however, on its bottom side 32 along one long edge thereof, is thinned out to form a tapering portion 33, tapering upwardly and outwardly from a point inwardly of said long edge to said elongated side edge of the body, as viewed in Fig. 4. The elongated side edge of the body adjacent the tapered portion 33 is formed with an upwardly and inwardly turned flange portion 34 for the length thereof, the flange portion being provided with an inclined smoothly curved face 35.

On its opposite long edge, the body is formed with an enlargement 36 extending the length thereof and being substantially twice the width of the flange portion 34. The enlargement is inclined to the plane of the body of the bar as seen in Fig. 4 and has a smoothly curved outer surface. The enlargement at one long edge extends above the plane of the body of the bar and inwardly of its adjacent long edge thereby providing an upper flange portion 37. The upper flange portion has an inner inclined plane face 38. The enlargement also at its other long edge extends below the plane of the body and outwardly of its adjacent long edge thereby providing a lower flange portion 39 with an inclined plane inner face 40. Flange portion 39 terminates along its lower edge in a beaded portion 41. The flange portion 34 and the upper flange portion 37 define between their respective faces 35 and 38, a channel 42 of dovetail formation in cross section. A plurality of holes 43 are spaced along the center of the body of the bar for receiving fastening elements 48 such as screws and the like.

In Figs. 5 and 6, a portion of a floor 44 is shown covered with a strip of linoleum 45 and a strip of carpet 46, a cushioned lining or pad 47 being shown under the strip of carpet. The binder bar 30 is shown in inclined position over the joint between the strips of carpet and linoleum for binding the adjacent long edges thereof to the floor 44. The bar is fastened to the floor by screws 48, only one screw being shown, passing through the holes 43 in the bar and through the space between the strips of carpet and linoleum and into the floor.

When the binder bar is thus positioned, it spans the joint between the strips of carpet and linoleum, with

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bottom face of the tapering portion 33 horizontally disposed and seated upon and clamped against the upper surface of the strip of linoleum adjacent its adjacent long edge, and with the bottom face of the flange 39 being horizontally disposed and seated and clamped against the tufts on the upper surface of the adjacent long edge of the strip of carpet so that the long edges of both the carpet and linoleum are securely clamped to the supporting floor 44. A strip 49 of facing material similar to the strip 22 of the form of Fig. 1 is removably mounted in the channel 42 and is held in position by the flanges 34 and 37 for finishing off the binder bar in a manner similar to the form of Fig. 1.

The long edge of the cushioned lining or pad 47 may be shaved down and beveled off to reduce the thickness of the floor covering so as to reduce the angle of inclination of the binder bar.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claim.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

A protective floor covering structure adapted to overlie a joint between adjacent strips of floor covering, comprising a one-piece flat metal body of elongated rectangular shape, said body having spaced countersunk holes extending along a medial line of said body for receiving fastener elements, said body having flanges extending outwardly of one surface of the body along its long opposite edges, said flanges slanting toward each other and overhanging said one surface to provide a channel of dovetail formation removably to receive a strip of facing material therein, said body having a further flange extending outwardly of the opposite surface of the body along one of the long edges thereof to provide a clamping edge on one of said strips of floor covering, said further flange slanting outwardly of the adjacent long edge of the body and being disposed in alignment with the face of the inwardly slanting flange on the same long edge, said outwardly slanting flange having a bead along its free extremity to improve the clamping function of said clamping edge, the other one of said long edges being thinned out and forming a tapered bearing portion extending at an obtuse angle to the said opposite surface of said body for engaging on the other strip of floor covering and supporting said body at an acute angle thereto, and a plurality of fastening elements extending through said holes at acute angles to said body for securing said body to said floor, said elements passing between spaced edges of said strips of floor covering.

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