June 10, 1958 J. E. FRYAR, JR 2,837,786

ADJUSTABLE THRESHOLD

Filed April 13, 1956

FIG. 1

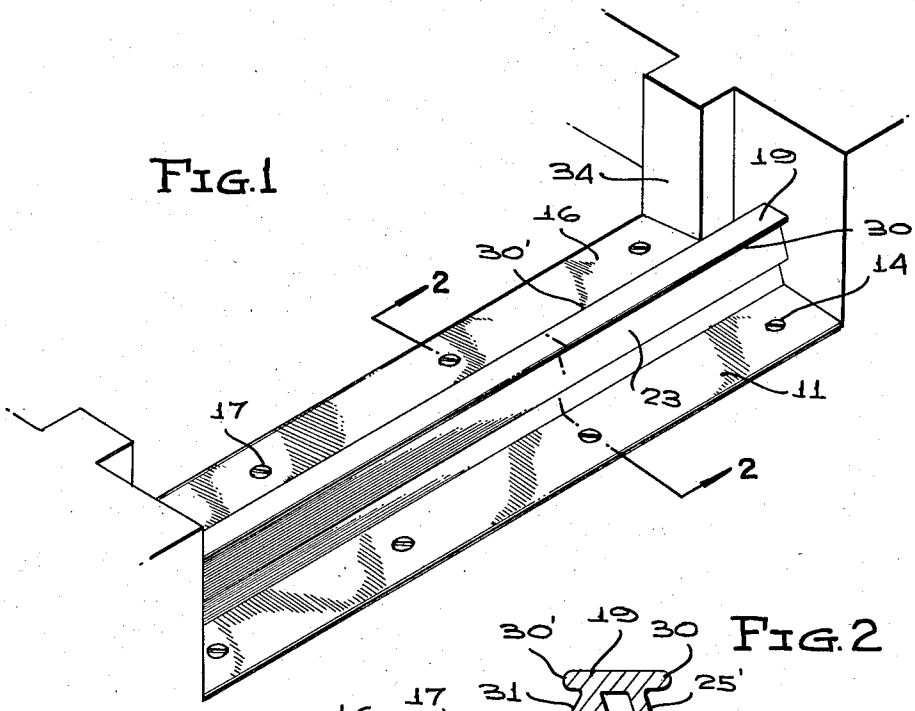


FIG. 2

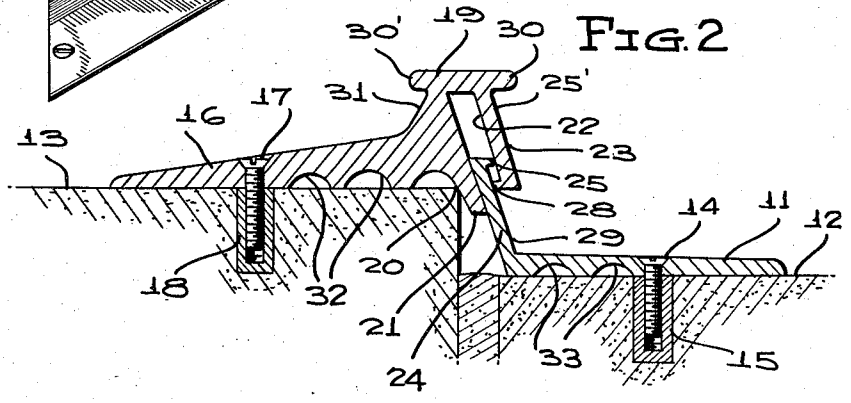
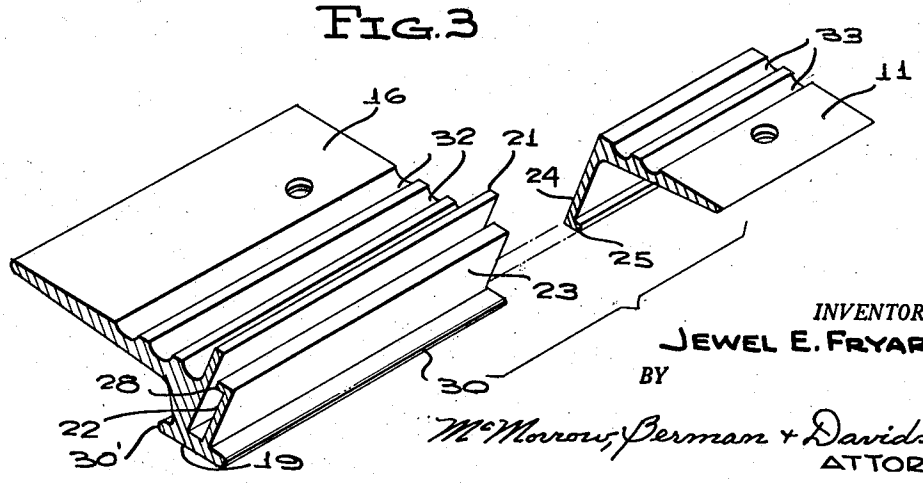


FIG. 3



INVENTOR.
JEWEL E. FRYAR, JR.
BY
McMorrow, Berman & Davidson
ATTORNEYS

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ADJUSTABLE THRESHOLD

Jewel E. Fryar, Jr., Alexandria, La., assignor to National Guard Products, Inc., Memphis, Tenn., a corporation of Tennessee

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2 Claims. (Cl. 20—64)

This invention relates to threshold plate devices, and more particularly to an adjustable threshold assembly for use on a pair of vertically offset surfaces adjacent a doorway, or the like.

The main object of the invention is to provide a novel and improved adjustable threshold assembly which is simple in construction, which is attractive in appearance, and which is automatically adjustable so that it may be employed to fit a wide variety of situations wherein the vertical distance between a pair of offset surfaces adjacent the doorway is not a definite value, and whereby the threshold assembly may be standardized in construction, yet may be employed for variable conditions, as above mentioned.

A further object of the invention is to provide an improved threshold plate assembly which is adjustable in height, which is inexpensive to fabricate, which is durable in construction, and which is easy to install.

Further objects and advantages of the invention will become apparent from the following description and claims, and from the accompanying drawings, wherein:

Figure 1 is a perspective view of an improved threshold assembly according to the present invention, shown installed adjacent a doorway and on vertically offset surfaces at said doorway.

Figure 2 is an enlarged transverse vertical cross sectional view taken on the line 2—2 of Figure 1.

Figure 3 is a fragmentary perspective view showing the segments of the threshold assembly of Figures 1 and 2 in separated position.

Referring to the drawings, the threshold assembly comprises a first plate member 11 adapted to be secured on the lower surface 12 of a pair of vertically offset surfaces adjacent a doorway, the upper surface being shown at 13. The surfaces 12 and 13 may be of any of the usual materials employed in construction, being shown in the drawings as of concrete. Thus, the plate member 11 is secured to the surface 12 by means of a plurality of fastening bolts 14 engaged in bolt anchors 15 embedded in the concrete member 12, as shown in Figure 2. The members 14, 15 may be any suitable fastening means, for example, conventional expansion bolts.

Designated at 16 is a second plate member which is secured on the upper surface 13 in the same manner as the first plate member 11, for example, by the bolts 17 engaged in bolt anchor sleeves 18 embedded in the body 13. The second plate member 16 is formed with a vertically thickened portion 19 which extends over the corner 20 between the surfaces 12 and 13, as shown in Figure 2, the vertically thickened portion 19 having a depending flange portion 21 projecting below said corner. The longitudinal vertically thickened portion 19 is formed with a groove 22 of substantial depth, said groove extending upwardly for the major portion of the height of the vertically thickened portion, as shown, and being inclined so that it extends substantially parallel to the inclined end surface 23 of the vertically thickened portion 19. The first plate member 11 is formed at its inner longitudinal margin with a similarly inclined upstanding flange 24 which is slidably received in the groove 22, cooperating with the groove 22 to provide an offset of adjustable height between the plate members 11 and 16.

The top edge of the flange 24 is formed with a marginal bead 25 which slidably engages an inner surface of the groove 22, namely, the surface of said groove adjacent the outer edge 23 of the thickened portion 19. The depending flange 25' defined between groove 22 and the outer surface 23 is formed at its bottom end with a bead 28 which engages the outer surface 29 of flange 24, opposing the bead 25, and providing bearing contact between bead 28 and surface 29 which is complementary to the bearing contact between bead 25 and the inside surface of groove 22, guiding the flange 24 for relatively close telescopic adjustment in the groove 22.

The thickened portion 19 is formed at one top edge with a horizontally extending flange portion 30 which substantially overlies the inclined surface 23 and at its opposite top edge with a flange portion 30'. Said flanges 30 and 30' provide scraper edges for the threshold assembly. As shown, the top surface of the first plate member 11 is slightly inclined with respect to the horizontal, and the top surface of the second plate member 16 is somewhat more inclined to the horizontal, but in an opposite direction with respect to the inclination of the top surface of the first plate member 11. The top surface of plate member 16 joins the thickened portion 19 by a relatively steeply inclined offset surface 31, as shown.

The plate member 16 is formed on its bottom surface with a plurality of spaced parallel longitudinal grooves 32, the depending flange element 21 being a downward extension of the wall of the innermost groove 32. The plate member 11 is likewise formed with a plurality of longitudinally extending bottom grooves 33. The bottom grooves 32 and 33 allow free drainage beneath the threshold plates, thus reducing possible corrosion of the bottom surfaces of the plates.

As will be readily apparent, the threshold plates 16 and 11 may be readily adjusted relative to each other to accommodate varying vertical distances between the surfaces 12 and 13, so that a standardized assembly of the threshold members may be employed to cover a wide range of variations in the vertical height between the two surfaces adjacent a doorway at which the threshold assembly is to be employed.

Thus, as shown in Figure 1, the threshold assembly may be installed adjacent a doorway 34 with the first plate member 11 secured on the lowermost surface adjacent said doorway and the second threshold plate 16 secured on the upper surface at the doorway, as illustrated, the threshold plates being adjustably connected together and cooperating, as above described, to cover the corner between the vertically offset surfaces adjacent said doorway in the manner illustrated in Figure 2.

While a specific embodiment of an improved threshold assembly has been disclosed in the foregoing description, It will be understood that various modifications within the spirit of the invention may occur to those skilled in the art. Therefore, it is intended that no limitations be placed on the invention except as defined by the scope of the appended claims.

What is claimed is:

1. A threshold assembly comprising a first plate member, means for securing said first plate member to the lower of a pair of vertically offset surfaces adjacent a doorway, an upstanding flange at a longitudinal margin of said first plate member, a second plate member, means for securing said second plate member to the upper of said pair of vertically offset surfaces adjacent said first-named plate member in overlying relationship to said

upstanding flange, said second plate member being formed with a longitudinal groove slidably receiving said upstanding flange, and opposed guiding means on the top edge of said flange and the lower end of an inner surface of said groove and engaging the inner surface of the groove and said flange respectively.

2. A threshold assembly comprising a first plate member, means for securing said first plate member to the lower of a pair of vertically offset surfaces adjacent a doorway, an upstanding flange at a longitudinal margin of said first plate member, a second plate member, a longitudinal bead element on the top edge of said flange, and means for securing said second plate member to the upper of said pair of vertically offset surfaces adjacent said first-named plate member in overlying relationship to said upstanding flange, said second plate member being formed with a longitudinal groove slidably receiving said upstanding flange with said bead element engaging an inner surface of said groove, the lower end of said inner surface being formed with an opposing bead element engaging the surface of said flange.

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