Aug. 2, 1960 A. KLEMMA 2,947,043

ADJUSTABLE THRESHOLD

Filed April 10, 1959

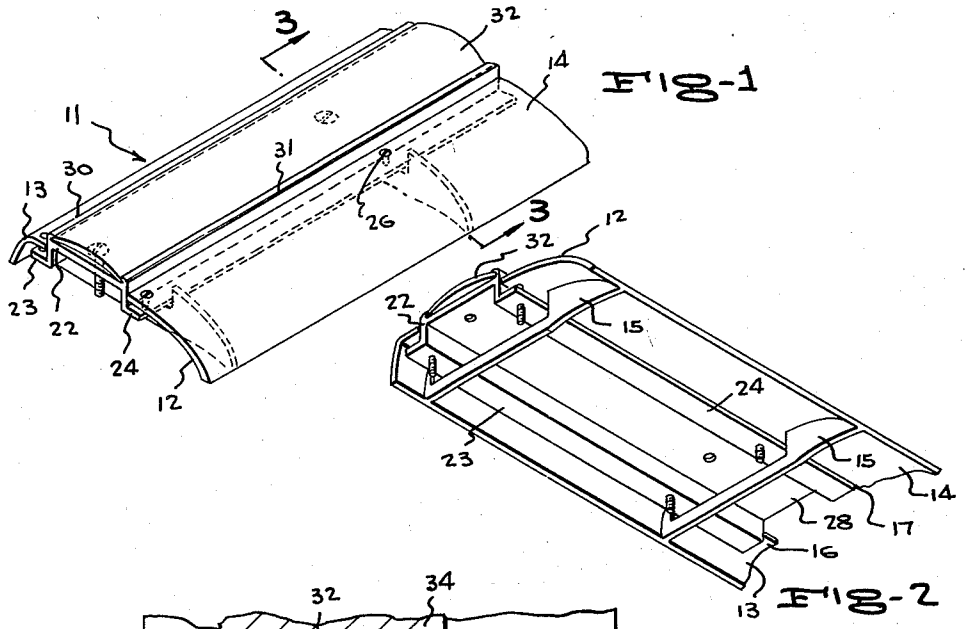


Fig-1

Fig-2

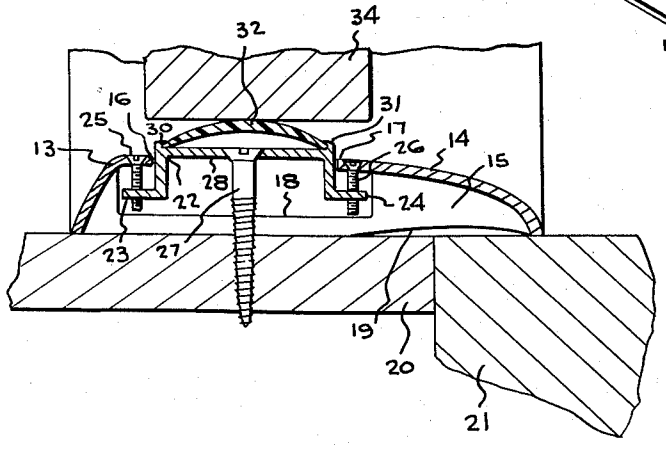


Fig-3

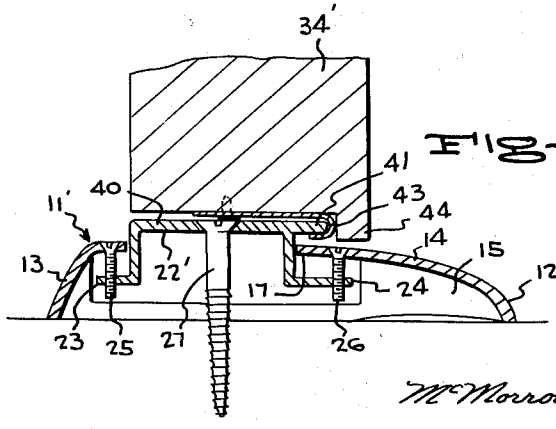


Fig-4

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ADJUSTABLE THRESHOLD

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3 Claims. (Cl. 20—64)

This invention relates to door thresholds, and more particularly to a threshold adapted to be adjusted in height to provide a close seal with respect to the bottom of a door.

A main object of the invention is to provide a novel and improved threshold assembly which is simple in construction, which is easy to install, and which may be readily adjusted to provide a tight seal with respect to the bottom edge of the door associated therewith.

A further object of the invention is to provide an improved adjustable threshold assembly which involves inexpensive components, which is durable in construction, which is easy to maintain, and which is neat in appearance.

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 fragmentary perspective view of a threshold assembly according to the present invention.

Figure 2 is a bottom perspective view of a fragmentary portion of the threshold assembly of Figure 1.

Figure 3 is an enlarged transverse vertical cross sectional view taken substantially on the line 3—3 of Figure 1.

Figure 4 is a transverse vertical cross sectional view similar to Figure 3 but showing a modified form of threshold assembly according to the present invention.

Referring to the drawings, and more particularly to Figures 1, 2 and 3, 11 generally designates a threshold assembly constructed in accordance with this invention. The assembly 11 comprises an elongated riser strip 12 which comprises a pair of spaced upwardly and inwardly inclined side marginal approach walls 13 and 14 rigidly connected by transversely extending integral cross bar members 15 connecting the bottom surfaces of the approach wall members 13 and 14 and being spaced apart along the length of the strip 12. Thus, the spaced inner cross bar members 15 rigidly connect the approach wall members 13 and 14 in spaced parallel relationship whereby to define an elongated recess between the inner marginal edges 16, 17 of the approach wall members 13, 14. The cross bars 15 are formed to define the substantially rectangular notches 18 which are of sufficient width to allow the marginal edge portions 16, 17 of the approach wall members to overlie the end portions of the notches, as is clearly shown in Figure 3.

The cross bar elements 15 are formed with downwardly concave edge portions 19 adapted to bridgingly engage over the joints between abutting floor elements 20 and 21 and to allow for slight differences in height of the top surfaces of said abutting elements.

Designated at 22 is a generally channel-shaped downwardly facing bar member which is disposed in the recess defined between the marginal edge portions 16, 17 of the approach wall elements 13, 14 and which is vertically slidable therein. The channel-shaped bar member 22 is provided at its bottom edges with the outwardly extending horizontal flanges 23 and 24 which underlie the

marginal portions 16, 17 of the respective approach wall members 13 and 14. Respective headed adjusting screws 25 and 26 are engaged through the marginal portions 16 and 17 of the approach wall members and threadedly engage in the flanges 23 and 24, whereby to adjustably support the channel-shaped bar member 22 in the recess defined between the approach wall members 13, 14. As will be readily apparent, the height of the bar member 22 may be adjusted by rotating the respective headed supporting screws 25 and 26.

After the bar member 22 has been adjusted to its desired height, additional headed fastening means, comprising the wood screws 27 are engaged through apertures provided in the top wall 28 of the bar member 22 and are driven through the underlying floor member 20, as shown in Figure 3, to lock the bar member 22 in its adjusted positions, and to prevent the bar member 22 from being further elevated by the screws 25, 26.

The respective side marginal portions of the top wall of bar member 22 are formed with inwardly facing locking channel elements 30, 31, in which are received the respective longitudinal edge portions of an elongated upwardly arched sealing strip 32 of resilient deformable material, such as rubber or the like, which covers the headed fastening members 27. The arched resilient deformable strip 32 rises a sufficient distance above the bar member 22 to sealingly engage with the bottom edge of a door 34 overlying the threshold.

As will be readily apparent, the height of the bar member 22 may be adjusted to provide a desired degree of sealing pressure of the resilient deformable strip 32 against the bottom edge of the door 34.

In the form of the invention illustrated in Figure 4, the assembly is designated generally at 11′ and comprises the same riser strip member 12 as is employed in the embodiment illustrated in Figures 1 to 3. However, the channel-shaped bar member, shown at 22′, is formed with a horizontal top wall 40 projecting forwardly at one side margin thereof to define a horizontal marginal flange 41 of substantial width overlying the marginal edge portion 17 of the approach wall element 14. The flange 41 is adapted to sealingly interengage with the conventional metal weather strip member 43 fastened to the bottom edge of a door 34′, the door being provided with the depending lip 44 against which the channeled portion of the conventional weather strip element 43 is received, as is clearly shown in Figure 4. Thus, by adjusting the screws 25, 26, the bar member 22′ may be elevated to the proper level for being received within the channel portion of the metal weather strip element 43 when the door 34′ is closed, as shown in Figure 4. Headed screws 27 are employed to lock the bar member 22′ in its adjusted position and to prevent said bar member 22′ from being further elevated.

While certain specific embodiments of an improved adjustable 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 an elongated riser strip having spaced upwardly and inwardly inclined side marginal approach walls defining an elongated recess therebetween extending parallel to said approach walls, a generally channel-shaped, downwardly facing bar member disposed in said recess and being vertically adjustable therein, outwardly extending horizontal flanges on the bottom edges of said bar member underlying the inner marginal portions of said approach walls, and a plurality of vertical headed adjusting screws having ex-

posed heads and extending through said inner marginal portions of the approach walls and supportingly engaging said inner marginal portions at their heads and threadedly engaging said flanges at their shanks, whereby to adjustably support said bar member.

2. A threshold assembly comprising an elongated riser strip having spaced upwardly and inwardly inclined side marginal approach walls defining an elongated recess therebetween extending parallel to said approach walls, a generally channel-shaped, downwardly facing bar member disposed in said recess and being vertically adjustable therein, outwardly extending horizontal flanges on the bottom edges of said bar member underlying the inner marginal portions of said approach walls, a plurality of vertical headed adjusting screws having exposed heads and extending through said inner marginal portions of the approach walls and supportingly engaging said inner marginal portions at their heads and threadedly engaging said flanges at their shanks, whereby to adjustably support said bar member, and headed fastening means extending through the top wall of said bar member and being engageable with an underlying floor portion to secure said bar member to said floor portion after it has been vertically adjusted.

3. A threshold assembly comprising an elongated riser strip having spaced upwardly and inwardly inclined side

marginal approach walls defining an elongated recess therebetween extending parallel to said approach walls, a generally channel-shaped, downwardly facing bar member disposed in said recess and being vertically adjustable therein, outwardly extending horizontal flanges on the bottom edges of said bar member underlying the inner marginal portions of said approach walls, a plurality of vertical headed adjusting screws having exposed heads and extending through said inner marginal portions of the approach walls and supportingly engaging said inner marginal portions at their heads and threadedly engaging said flanges at their shanks, whereby to adjustably support said bar member, headed fastening means extending through the top wall of said bar member and being engageable with an underlying floor portion to secure said bar member to said floor portion after it has been vertically adjusted, and an elongated, upwardly arched sealing strip of resilient deformable material mounted on the top wall of said bar member and covering said headed fastening means.

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