June 24, 1958 H. N. QUOSS 2,839,796

SEALING THRESHOLD

Filed Nov. 26, 1956

Fig. 1

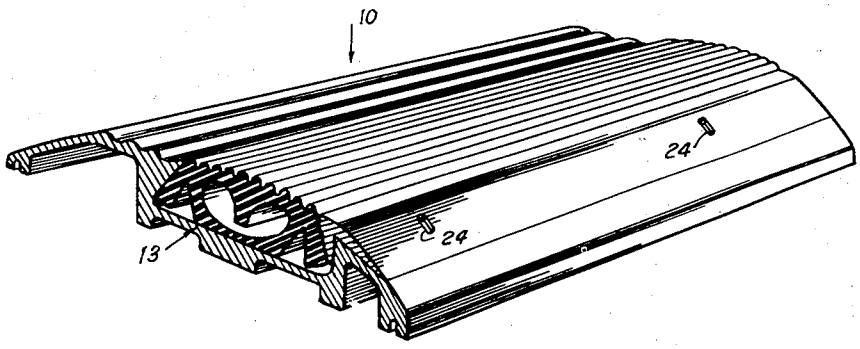


Fig. 2

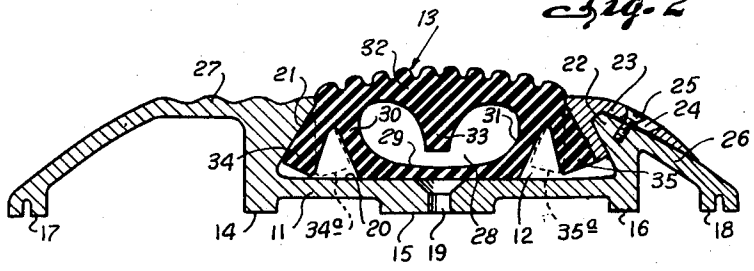


Fig. 3

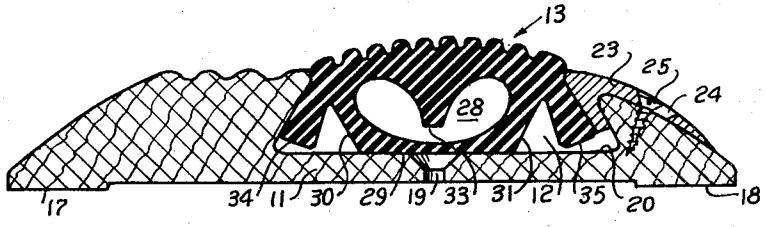
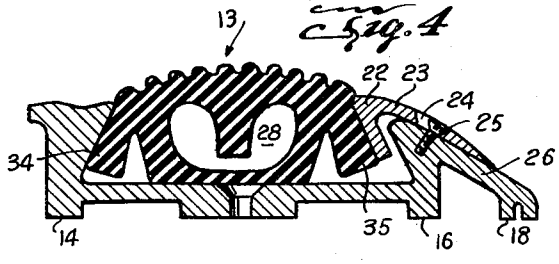


Fig. 4



Henry N. Quoss
INVENTOR.

BY Ernest A. Strood

ATTORNEY

United States Patent Office

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SEALING THRESHOLD

Henry N. Quoss, Dallas, Tex.

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2 Claims. (Cl. 20—64)

This invention relates to thresholds, more particularly to thresholds embodying sealing means for closing the space between the door and the threshold, especially outside doors.

The principal object of this invention is to provide a threshold incorporating compressible sealing means for contacting the bottom end of closed doors which can be easily installed or removed therefrom, without disturbing the threshold securing means.

Another object of this invention is to provide concealed means for securing the threshold to the floor, independent of the sealing means.

Still another object of this invention is to provide adjustable means for varying the normal height of the sealing means to suit doors which are cut shorter than usual for any reason.

Accordingly, the invention consists of a rigid threshold having a longitudinal recess extending its whole length, provided with opposite outwardly declining sides forming V-grooves with the bottom of the recess. An adjustable edge-piece is arranged on the top of the threshold along one side of the recessed portion, the edge-piece being provided with a skirt extending downwardly within the recessed portion substantially parallel with the declining side over which it is mounted. Openings are provided in the base of the recessed portion for securing the threshold to the floor or sill by means of screws or nails. The threshold can also be secured by bedding same in mastic cement or other adhesive. If screwed or nailed, adhesive can be used along the edges of the threshold to secure same, as well as to seal out moisture.

The sealing member, made of resilient material, has a crowned top formed with a safety tread and a tab formed on each side running its entire length. These tabs are formed to normally extend downwardly and to flare outwardly from the sealing member body. The sealing member is installed in the recess of the threshold by pressing the tabs inwardly sufficiently to lower the sealing member within it, whereupon the tabs spring outwardly to engage the V-grooves provided along each side of the recess.

In instances where the door bottom is cut too short, the edge-piece, already mentioned, is moved inwardly against one side of the sealing member to hump or bulge the crown of the sealing member upwardly to make a good contact with the door bottom and is then secured in position by screws arranged in slots provided in the edge-piece.

Other objects will appear from the more detailed description which follows, when considered in connection with the accompanying drawing wherein:

Fig. 1 is a perspective view of a portion of the threshold with the sealing member and adjustable edge-piece in normal position.

Fig. 2 is an elevational cross-section of Fig. 1.

Fig. 3 is an elevational cross-section of the threshold assembly having the base-member made of wood.

Fig. 4 is an elevational cross-section of a part of the threshold assembly of Fig. 1, showing the edge-piece moved inwardly and the crown of the sealing member arched upwardly.

Continuing now with the detailed description of the invention, reference numeral **10**, Fig. 1, of the drawing, designates the threshold assembly generally consisting of threshold member **11**, carrying a longitudinal recess **12**, extending the entire length of the threshold, into which the sealing member **13**, is arranged. Floor engaging supports **14**, **15**, **16**, are provided on the underside of said recessed portion and on the edges of the threshold at **17**, **18**. Openings **19**, are provided along the bottom **20**, of said recess for securing said threshold to a sill or floor. The said recess has opposite outwardly declining sides **21**, **22**, extending the whole length of the recess, which detachably secure and support the said sealing member in said recess, as explained below. The sides **21**, **22** form V shaped grooves with the bottom of the recess **12**. An adjustable edge-piece **23** is arranged on the top of the threshold along one side of the recessed portion **12**. The edge-piece **23** is provided with a skirt extending downwardly into the recessed portion **12**, substantially parallel with the declining side **22** over which it is mounted, by means of which the said sealing member, to be further described below, can be laterally compressed as shown in Fig. 4, to bulge or arch said sealing member upwardly to insure good contact with the door bottom, especially in instances where the door has been cut shorter than usual for any reason. Said edge-piece is provided with slots **24**, through which screws **25**, pass for engaging threaded openings thereunder in the threshold portion **26**, to secure said edge-piece in any adjusted position desired. The said edge-piece can, of course, be similarly arranged over the recess side **21**, and threshold portion **27**.

The sealing member **13**, made of any suitable resilient material, such as rubber or certain plastic, has the internal space **28**, formed by the bottom or base **29**, the outwardly and upwardly inclining sides **30**, **31**, and the top or crown **32**. The ridge or rib **33** is formed on the under side of said crown, extending downwardly, and arranged to contact the said base to support said crown, when said crown is depressed substantially level with the top of the threshold.

Tabs **34**, **35**, are provided, one along each side of the sealing member, said tabs being joined thereto near the top, and extend downwardly and outwardly therefrom as shown. These tabs are pressed inwardly as indicated by dotted lines **34*a*** and **35*a***, to insert said sealing member in said threshold recess. As the sealing member is moved downwardly the tabs are released and spring outwardly to hold said sealing member in place within said recess, as shown. This concludes the detailed description of the invention.

Precisely, the invention comprises a rigid threshold having a recess arranged to carry a door sealing member; said sealing member preferably being made hollow of resilient material, and provided with a tab on each side extending its entire length downwardly and outwardly from its top; the said tabs and sides of said sealing member being arranged for collapsing or depressing said tabs inwardly until their outer surfaces are substantially vertical while placing said sealing member in said recess; said recess being formed with a flat bottom and inwardly inclining sides and an adjustable edge-piece mounted along one of said recess sides, having a skirt extending downwardly in said recess substantially parallel to said one side and a top extending from said skirt over the

threshold portion adjacent said side, said top being provided with slotted openings and screws through same which engage threaded openings in said threshold portion over which said top extends, for securing said edge-piece in position, said recess and edge-piece being arranged to receive and support said sealing member when said tabs are depressed and said sealing member is placed in said recess, substantially as shown and described.

The construction shown and described herein is of course capable of some modification, and such modification as may be construed to fall within the scope and meaning of the appended claims is also considered to be within the spirit and intent of the invention.

What is claimed is:

1. A threshold assembly comprising a threshold having a longitudinal upwardly opening recess extending its entire length, a sealing member of the same length made of resilient material having a bottom, a convex top narrower than the bottom, two inclined sides between the bottom and the top, mounted in the recess, the recess having a bottom and inwardly inclining sides rising therefrom to the top of the threshold forming V grooves therewith, arranged to receive and removably secure the sealing member therein, the convex top having its edges substantially even with the top of the recess when the sealing member is installed therein, the sealing member being hollow whereby its resiliency is increased, the recess being widened to accommodate an adjustable edge piece mounted on the top of the threshold, adjacent one side of the recess, and extending its entire length for movement against the sealing member to bulge or arch the top upwardly to insure good contact with a door bottom under which the threshold assembly is installed, the edge piece having a skirt extending downwardly into the recess parallel to said one side, and a top extending from the skirt over the threshold, the top being provided with slotted openings and screws operating through same which engage threaded openings beneath it in the threshold, for securing the edge piece in adjusted position.

2. A threshold assembly comprising a threshold having a longitudinal upwardly opening recess extending its entire length, a sealing member of the same length made of resilient material having a bottom, a convex top narrower than the bottom, two inclined sides between the bottom and the top, mounted in the recess, the recess having a bottom and inwardly inclining sides rising therefrom to the top of the threshold forming V grooves therewith, arranged to receive and removably secure the sealing member therein, the convex top having its edges substantially even with the top of the recess when the sealing member is installed therein, the sealing member being hollow whereby its resiliency is increased, the sealing member being provided with a tab on each side running its entire length, the tabs being arranged to extend downwardly from the top of the sealing member and normally flare outwardly from the sides thereof, the tabs being pressed inwardly sufficiently to place the sealing member within the recess, the tabs thereupon springing outwardly to hold the sealing member within the recess.

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