

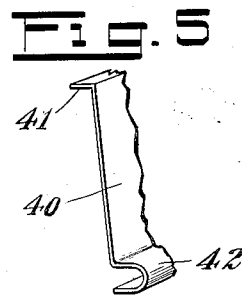
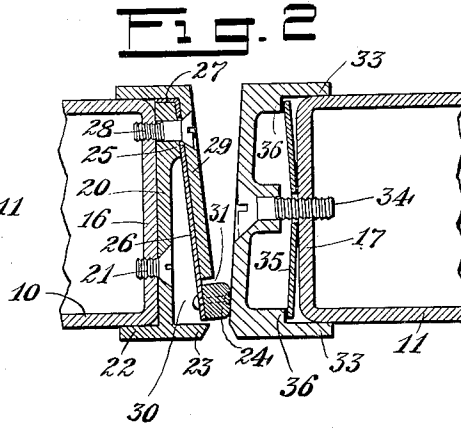
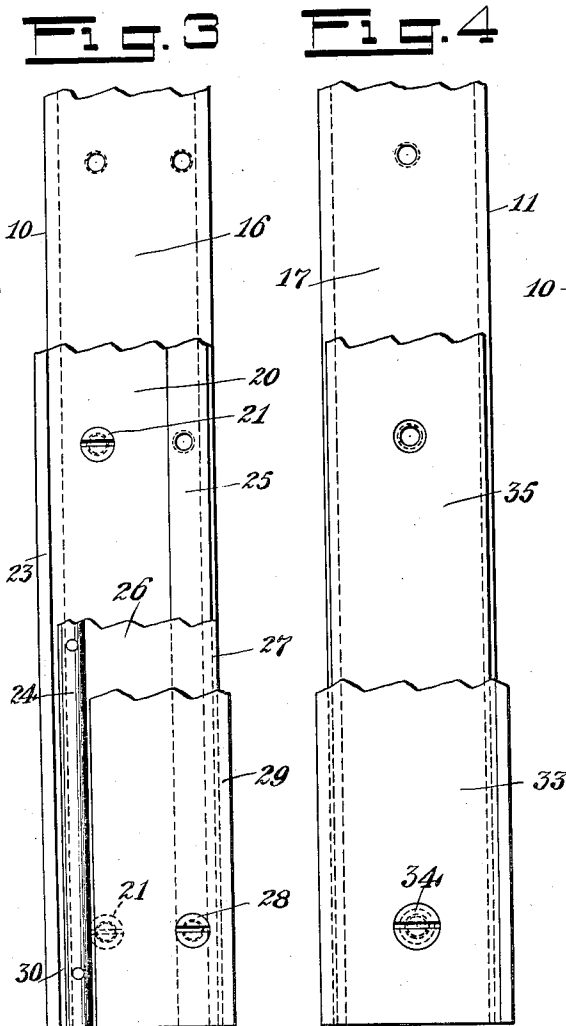
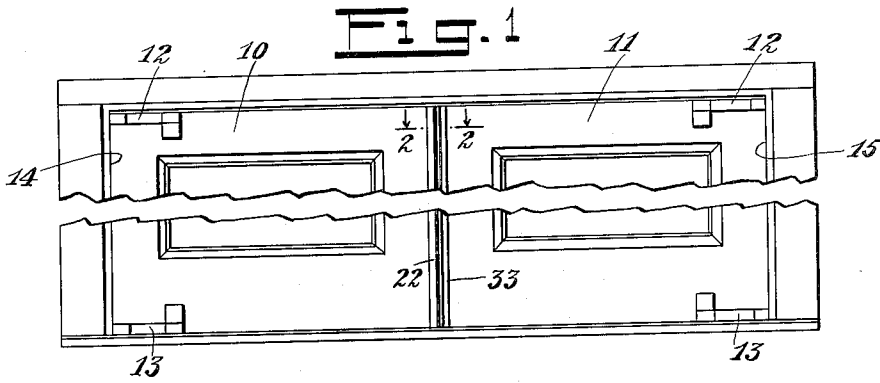
July 24, 1934.

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1,967,813

WEATHER STRIP

Filed July 6, 1932



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1,967,813

WEATHER STRIP

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Application July 6, 1932, Serial No. 621,012

3 Claims. (Cl. 20-69)

This invention relates to improvements in adjustable weather strips for doors, windows and the like.

An important object of my invention is to provide for resiliently mounting a weather strip for doors and windows or closing members for other openings in combination with an adjustable edge member or abutment adapted to cooperate with said weather strip throughout its length and afford means for varying the space between the door and the edge member and also as occasion requires to vary the tension or pressure with which said weather strip is adapted to bear against said abutment.

Another object is to provide a weather strip for closing the space between the apposed or what I shall describe as the meeting edges of a pair of doors which are hinged at the remote edges thereof and mounted edge to edge in a doorway when the doors are closed.

Another object is to construct a weather strip of the class described which is easy and economical to construct and install; and which may be readily adjusted from time to time.

I show in the accompanying drawing one embodiment of my invention in which

Figure 1 illustrates a fragmental front elevational view of a pair of doors, equipped with my improved weather strip, mounted in a doorway in such a manner that when the doors are closed they are disposed edge to edge and the weather strip is adapted to be adjusted to close the space between the meeting edges of the doors irrespective of whether said space varies in width from the top to the bottom of the door.

Figure 2 shows a sectional plan view taken on line 2-2 of Figure 1 showing the construction and manner of mounting my weather strip together with its associated and cooperating parts on one of a pair of doors; and the manner of mounting the adjustable edge member or abutment on the edge of a companion door to cooperate with said weather strip.

Figure 3 shows an edge view of the left hand door shown in Figure 2 and the manner in which my resilient weather strip is mounted thereon.

Figure 4 shows an edge view of the right hand door shown in Figure 2 and the manner in which the edge member or abutment is mounted thereon.

Figure 5 shows a modified form of weather strip adapted to be secured in position between two doors by means similar to that shown in Figure 2.

Referring now to Figure 1, I illustrate a pair of doors 10-11, suitable for closing vestibule entrances to office buildings, school buildings and

other public buildings and the like, which doors are mounted on hinges 12 and 13 disposed at the top and bottom of each door respectively, whereby the doors are adapted to rotate about the remote edges 14 and 15 thereof.

In mounting the doors in this manner, it is preferable to provide a clearance of approximately one-eighth inch between their meeting edges, to insure that the doors will open and close easily without striking one another in the event variations in the size and location of either the doors or hardware appear when they are installed. It will be understood of course that the space between the edges 16 and 17 of the doors shown in Figure 2 is made greater than one-eighth inch to provide for my improved weather strip.

The embodiment of my present invention as herein illustrated and described provides means for closing the space between the meeting edges of the doors, irrespective of whether there is a variation in the size of the space between the edges of the doors and whether said space varies in width from the top to the bottom of the doors.

Referring now to Figure 2, it will be seen that I provide a strip 20, of T-shaped cross section, extending the full length or height of the door 10 which is fastened to the edge 16 thereof by screws 21. The strip 20 is secured to the edge of the door so that one surface of the strip is disposed parallel to the face of the door and adapted to project from the edge thereof; in other words, one side of the head of the T-shaped strip 20, as indicated by the numeral 22, is adapted to lie against the face of the door and the other side of the head indicated by the numeral 23 of the strip 20, is adapted to project from the edge of the door 10 toward the door 11 to protect a yieldably mounted weather strip 24. The edge of the strip 20, remote from the head 22-23, is formed to afford an obliquely disposed bearing surface or seat 25 for a thin metal strip 26 having a rearwardly projecting flange 27. The weather strip 24, is riveted or otherwise secured to the edge of the strip 26 remote from the flange 27 and is adapted to project from the surface of the strip in a direction opposite to that of the flange 27.

The metal strip 26 is held against the seat 25 by screws 28 passing through an angle strip 29, of L-shaped cross-section so that one leg of the strip 29 is adapted to lie against the face of the door and the flange 27, while the other leg is adapted to extend obliquely with respect to the edge of the door and substantially parallel to the strip 26 to a point near the weather strip 24.

In Figure 3 I show fragmental portions, of the parts just described, secured to the face 16 of the door 10. From the description thus far it will appear that strips 20 and 29 as shown in Figures 5 2 and 3 form a cavity 30 having an aperture 31 extending from the top to the bottom of the door 10 through which the weather strip 24 is adapted to project.

Referring again to Figure 2, it will be seen that I provide a U-shaped adjustable edge piece or abutment 33 mounted on the edge 17 of the door 11 by means of screws 34. Like the strip just described this abutment extends from top to bottom of the door 11. A curved or cambered spring strip 35 co-extensive with the abutment 33 is disposed between the edge 17 of the door 11 and shoulders 36 formed on the inside of the abutment. It will be seen from the description of parts 33, 35 and 36 that the screws 34 are adapted to move the abutment 33 toward and away from the edge 17 of the door 11 as desired, to either vary the space between the doors or if the space is found unequal in width to make the proper correction in the same to enable the abutment to cooperate with the weather strip 24 throughout the length thereof.

Referring now to Figure 4, I illustrate fragmental portions of the parts 33 and 35 and the manner in which these parts are secured to the edge 17 of the door 11 as above described.

In Figure 5 I illustrate a modified form of weather strip having a thin metal strip 40 with a flange 41 and a curved metallic surface 42. The surface 42 is adapted to cooperate with the abutment 33 in much the same way as above described in connection with the weather strip 24. In some cases it is found desirable to construct the strip 26 in one piece as shown in Figure 5 instead of fastening the strip 24 to the edge thereof as above described. In either case, where the weather strip is constructed as shown in Figure 2, with a rubber or felt contacting means, or as shown in Figure 5 with a metal surface 42 or contacting means, the body of the strip is adapted to yield and accommodate itself to contact with the abutment 33 throughout the length or height of the doors 10 and 11 throughout the necessary range of adjustment afforded the abutment 33 by the screws 34.

While I have described what now seems to me to be the preferred embodiment of my invention, the same is susceptible of modification without

departing from the spirit thereof or exceeding the scope of the appended claims.

What is claimed is:

1. A closing member for an opening, comprising in combination means forming a cavity with an aperture at one side of the edge face of said closing member and yieldable means secured within said cavity at the other side of the face of said member, said yieldable means comprising a contact piece projecting through the aperture in said member and adapted to contact with the edge of said opening when the closing member is closed.

2. A closing member for an opening, comprising in combination a T-shaped strip secured to the edge of said member so that one surface of said strip is disposed parallel to the face of said member and adapted to project from the edge thereof, a resilient strip having contact means at one edge thereof, and means for clamping said resilient strip along the edge thereof remote from said contact means to the edge of said member and said T-shaped strip whereby said contact means is disposed in proximity to the projecting portion of said T-shaped strip, said clamping means comprising an L-shaped strip having one leg disposed in proximity to the projecting portion of said T-shaped strip to form an aperture at the edge of said member through which said contact means is adapted to project to make contact with the margin of the opening when said member is in closed position therein.

3. A door and a doorway, comprising a T-shaped strip secured to the edge of a door so that one surface of said strip is disposed parallel to the face of said door and adapted to project from the edge thereof, a resilient strip having contact means at one edge thereof, and means for clamping said resilient strip along the edge thereof remote from said contact means to the edge of said door and said T-shaped strip whereby said contact means is disposed in proximity to the projecting portion of said T-shaped strip, said clamping means comprising an L-shaped strip having one leg disposed in proximity to the projecting portion of said T-shaped strip to form an aperture at the edge of said door through which said contact means is adapted to project to make contact with the doorway when said member is in closed position therein.

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