April 17, 1928. 1,666,328

W. J. DENNIS

WEATHER STRIP

Filed Feb. 23, 1926

Fig. 1.

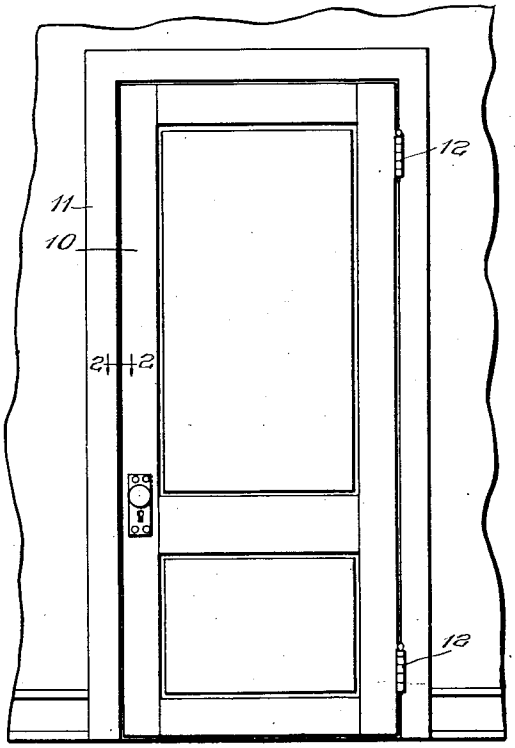



Fig. 2.

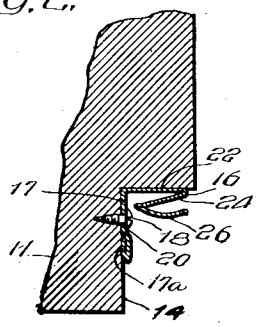



Fig. 3.

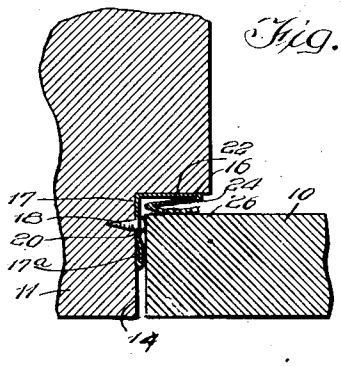
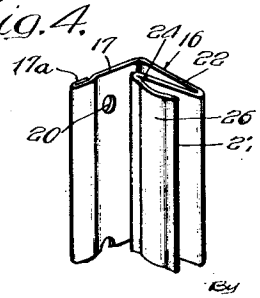



Fig. 4.




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# UNITED STATES PATENT OFFICE.

WILLIAM J. DENNIS, OF CHICAGO, ILLINOIS.

## WEATHER STRIP.

Application filed February 23, 1926. Serial No. 90,192.

My invention relates to weather strips and particularly to weather strips for preventing the admission of cold air, dust, dirt, or the like, through or past hinged closure members, such as doors, windows, or the equivalent.

The invention has among its other objects the production of devices of the kind described which are simple, convenient, durable, reliable and satisfactory for use wherever found applicable.

A particular object of the invention is to provide an improved weather strip particularly adapted for use in rabbeted door or window frames.

Many other objects and advantages of the construction herein shown and described will be obvious to those skilled in the art from the disclosures herein given.

To this end my invention consists in the novel construction, arrangement and combination of parts herein shown and described, and more particularly pointed out in the claim.

In the drawing, wherein like reference characters indicate like or corresponding parts:

Fig. 1 is an elevation of a door and door frame to which weather stripping embodying the invention has been applied;

Fig. 2 is a section taken on line 2—2 of Fig. 1, the door having been swung into its open position and not being shown;

Fig. 3 is a section taken on substantially the same line as Fig. 2, the door being shown in its closed position; and

Fig. 4 is a fragmentary perspective view of weather stripping embodying the invention.

In the drawing I have shown a preferred form of the invention embodied in weather stripping, which is particularly adapted to be used in connection with hinged doors and windows, the improved weather stripping being shown in connection with a hinged door in this instance.

In Figs. 1 and 3 I have shown a door 10 mounted in a door frame 11 by hinges 12. When the door is in its closed position, its free edge is accommodated in a rabbet 14 formed in the frame 11. Mounted in the rabbet 14 and engageable by the door is a weather strip 16 embodying my invention, the weather strip being particularly adapted for rabbeted door and window frames, or for door and window frames where it is not desirable to remove a separable stop member to permit the weather strip to be secured to the frame.

As best shown in Figs. 2, 3 and 4, my improved weather strip preferably comprises a leaf 17 adapted to be secured to the frame by screws 18 or the equivalent for the purpose. It will be noted that in the preferred embodiment of the invention, one edge of the leaf 17 is folded back upon itself as at $17^a$, to reinforce it. The leaf 17 is preferably provided with spaced apertures 20 adapted to accommodate the screws 18. Formed integral with the leaf 17 and joined to the unfolded edge thereof is a flange 22 which extends substantially at right angles to the flange 17 and terminates in a flange 24 folded back to lie in relatively close proximity to the flange 22, but normally spaced therefrom. Joined to one edge of the flange 24 is a flange 26 having a longitudinally extending arcuate portion 27 engageable with the inner side of the door 10. The flange 26 is normally disposed substantially parallel to the flange 22 and is normally spaced from the flange 24 throughout the greater portion of its width.

The weather strip 16 is preferably formed from a strip of metal that has spring or resiliency, the strip of metal being folded lengthwise to provide the several leaves 17, 22, 24 and 26.

In practice, my improved weather strip is secured to the frame in the manner illustrated in Figs. 2 and 3 so that when the door 10 is swung into its closed position it will engage the leaf 26 and compress and urge the leaves 26 and 24 against or toward the leaf 22 which is urged against a shoulder or stop 30 formed by the rabbet 14. This effectually seals the space between the rabbeted portion 14 of the frame and the free edge of the door 10 so that cold air, dust, dirt, or the like, will not flow through or past the door.

Having thus described my invention, it is obvious that various immaterial modifications may be made in the same without departing from the spirit of my invention; hence I do not wish to be understood as limiting myself to the exact form, construction, arrangement and combination of parts herein shown and described or uses mentioned.

What I claim as new and desire to secure by Letters Patent is:

A weather strip comprising right angularly disposed leaf portions, one of said leaf portions having its outer longitudinal edge folded back upon itself toward the other leaf portion, spaced flanges formed integral with the outer longitudinal edge of the other leaf, said flanges being disposed at an angle relative to the second leaf and each other and at an acute angle to the first leaf portion, and a longitudinal arcuate portion formed in the outermost flange.

In testimony whereof, I have hereunto signed my name.

WILLIAM J. DENNIS.