

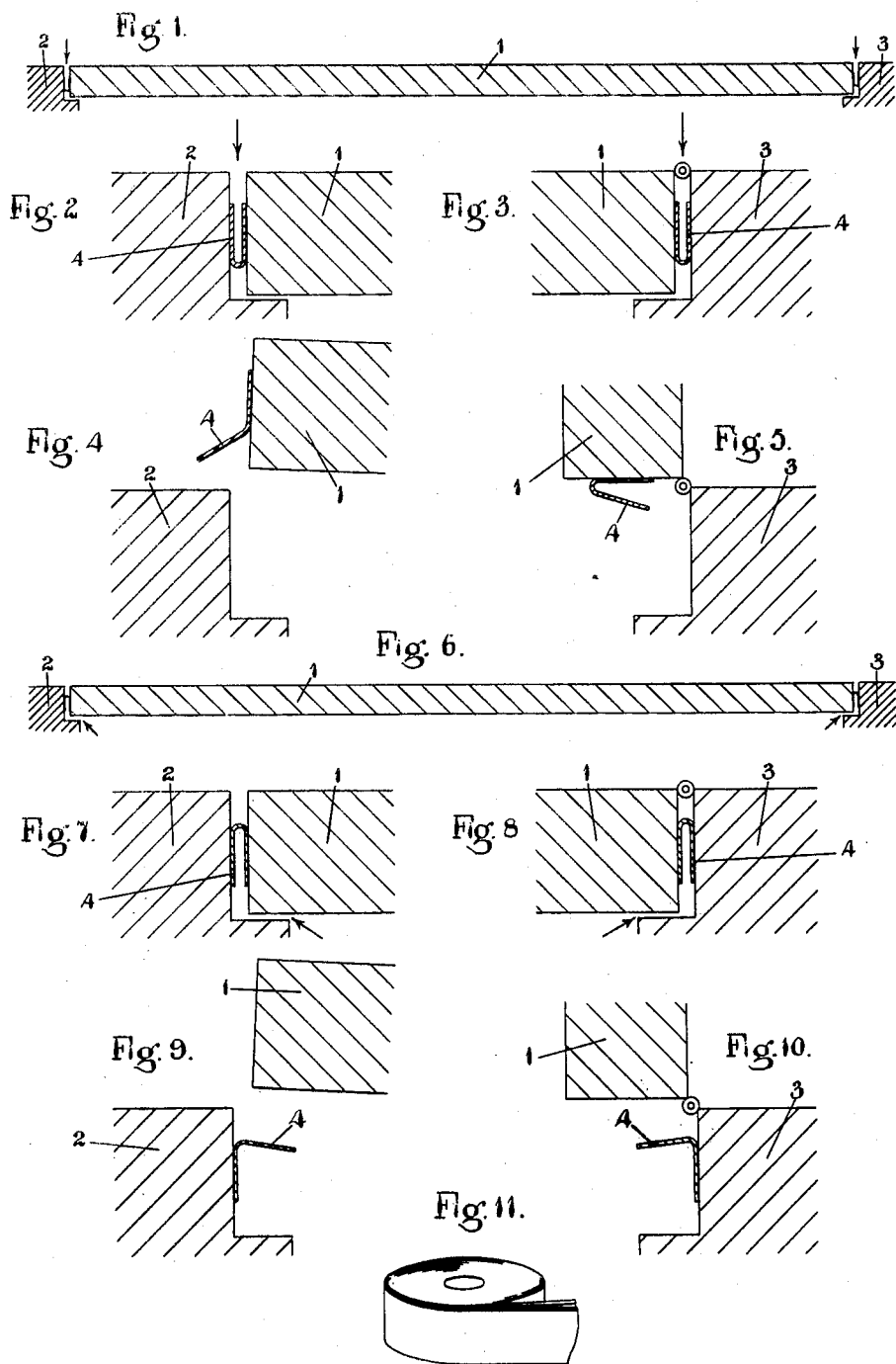
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MEANS FOR ELIMINATING DRAFT THROUGH CLOSED DOORWAYS AND THE LIKE

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MEANS FOR ELIMINATING DRAFT
THROUGH CLOSED DOORWAYS AND THE
LIKE

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This invention relates to the problem of eliminating draft through the crevices around the edges of a closed door, casement window, hatch, fanlight or the like, (all hereinafter, for brevity, referred to generically as "doors"), and has for its object to provide a simple and inexpensive form of means for meeting this difficulty, more especially a form of such means which can be sold to the user at a low price and fitted by any ordinary unskilled person.

According to the present invention, means for eliminating draft through a crevice between the edge or margin of a closed door and the opposed face of the door jamb, lintel, sill or equivalent part of the door frame, comprises a strip of material longitudinally folded over once upon itself for positioning in the crevice in attachment to the said edge of the door or to the said face of the door frame with its folds disposed substantially in the flat, face to face, with the outer edges towards the direction from which the draft would come into the crevice, the strip being composed of substantially air-proof material of sufficient thinness, flexibility and resilience to enable the strip to balloon in the crevice upon filling with the draft attempting to course therethrough and thereby to stop the draft, the free fold of the strip being blown into sealing contact with the adjacent face of the crevice.

The action of the folded strip in preventing draft through the crevice of the door is due to the fact that the current of air which would otherwise pass through the crevice and form a draft becomes caught as in a pocket between the two folds of the strip. It is important, therefore, that the edge of the outer fold of the strip, that is to say, the fold which is not connected to the door, or to the door jamb, lintel or the like, as the case may be, shall be quite free when the door is closed and capable by ballooning of intercepting any current of air attempting to course through the crevice and to form a draft therethrough on the inside of the door. In this connection, it will be appreciated that an advantage of the present invention, as distinguished from known weather strips consisting of a strip of felt or the like folded over upon itself and occupying a snug fit in the crevice, is that the strip of the present invention, operating as it does to seal the crevice by ballooning as an air pocket therein, is applicable to crevices of widely varying widths, which of course the known weather strips referred to are not, depending as they do for their sealing action upon a snug fit in the crevice.

Preferably, in the event of the strip being disposed between the edge of the door and the opposed face of the door jamb, the strip is applied as regards those portions of it which extend down the free edge of the door and along the top and bottom thereof, according to the following practical rule. Where the door opens into the draft, the strip is applied to the door, and where the door opens away from the draft, the strip is applied to the jamb, lintel or equivalent part of the door frame. By this means, as will be shown hereinafter, the neat, effective and otherwise proper fitting of the folded strip is ensured.

Instead of fitting the strip in the crevice between the jamb and the edge of the door, it may if desired, as already mentioned, be fitted in the crevice between the door frame and the face margin of the door. In this event, it may conveniently be secured to the face of the door stop.

The folded strip may be composed of any suitable material possessing the essential characteristics for the purposes of the invention hereinbefore specified, for example paper, fabric or sheet rubber, and it may be secured in position by any convenient means.

A preferred material, however, is colourless transparent cellophane or a like film material. With the use of a material of this kind the presence of the strip in position upon the door or door frame does not to any material degree mar the appearance of the door or frame for it is practically invisible and the colour of the door or door frame decoration is shown through the strip.

The strip is made up in folded condition in readiness for direct application by the user, and it may conveniently be packed for sale in the form of a roll accommodated say in a small box, the roll containing, for example just sufficient of the strip for the purposes of one average sized door.

The strip may either be pre-gummed along the outer face of one fold in readiness again for direct application by the user and packed and sold in this form, or it may be made up and sold in ungummed condition along with a small tube or other container of gum. In the former event, the user has simply to wet the gummed surface of the strip, and then apply the latter to the door or door frame.

The accompanying drawing illustrates the invention by way of example as applied to a hinged door.

In the drawing, which is purely diagrammatic, Figure 1 is a horizontal section through a door and its frame, fitted with the folded draft excluding device of this invention;

5 Figure 2 is a similar section on a larger scale than Figure 1 but confined to the free edge of the door;

Figure 3 is a section similar to Figure 2 through the hinged edge of the door;

10 Figure 4 is a section similar to Figure 2 but showing the door being approached to its closed position in the fitting of the strip;

Figure 5 is a section similar to Figure 3 showing the door in the fully open position in the fitting of the strip, Figures 1, 2, 3, 4, and 5 showing the strip and the fitting of the strip in the case of a door opening into the draft as indicated by the arrows;

20 Figures 6, 7, 8, 9 and 10 are views exactly similar to the previous Figures 1, 2, 3, 4 and 5 respectively, showing the strip and the fitting thereof in the case of a door opening away from the draft, and;

25 Figure 11 is a perspective view of a roll of the draft-excluding strip.

Like reference numerals indicate like parts in the various figures.

30 In the drawing, 1 is the door, 2 the door frame at the face-edge side of the door and 3 is the door frame at the hinged side of the door.

35 In fitting the strip in the case of a door opening into the draft (Figures 1-5) a layer of gum about $\frac{1}{4}$ " wide (for a strip $\frac{1}{2}$ " wide) is first applied to the edge of the door $\frac{1}{4}$ " or so in from that face of the door which is towards the direction from which the draft is coming. The folded strip 4 is then applied to the layer of gum on the edge of the door. It is then opened out to the position shown in Figure 4 along the free edge of the door and along the top and bottom edge thereof, and to a position somewhat as shown in Figure 5, along the hinged edge of the door. The door is then closed, which results in the strip being re-bent to the folded operative condition shown in Figures 2 and 3.

45 The process and manner of applying the strip in the case of doors opening away from the draft (Figures 6-10) is generally similar, the principal difference being that the strip is gummed in this case to the door frame instead of to the door, as shown.

50 It will be understood that as already stated the drawing is diagrammatic and that the width of the crevices shown, more especially in the larger scale figures, is exaggerated. Actually the gap between the folds of the applied strip will generally be very small and the two folds will practically be in contact with one another. The edge of the unsecured fold, however, should be quite free, as previously stated.

55 What I claim and desire to secure by Letters Patent of the United States is:—

1. A device for eliminating draft through the crevice between the surface of a closed door and the opposed face of the door frame which comprises a strip of sheet material longitudinally folded over upon itself once for positioning in the crevice in attachment to the surface of the door or to the said face of the door frame with its folds both disposed substantially in the flat, face to face, with the free edges towards the direction from which the draft would come into the crevice, the strip being composed of substantially air-proof material of sufficient thinness, flexibility and resilience to enable the strip to balloon in the

crevice upon filling with the draft attempting to course therethrough and thereby to stop the draft the free fold of the strip being blown into sealing contact with the adjacent face of the crevice.

2. A device for eliminating draft through the crevice between the surface of a closed door and the opposed face of the door frame which comprises a strip of sheet material longitudinally folded over upon itself once for positioning in the crevice in attachment to the surface of the door or to the said face of the door frame with its folds both disposed substantially in the flat, face to face, with the free edges towards the direction from which the draft would come into the crevice, the strip being composed of film of sufficient thinness, flexibility and resilience to enable the strip to balloon in the crevice upon filling with the draft attempting to course therethrough and thereby to stop the draft, the free fold of the strip being blown into sealing contact with the adjacent face of the crevice.

3. A device for eliminating draft through the crevice between the surface of a closed door and the opposed face of the door frame which comprises a strip of sheet material longitudinally folded over upon itself once for positioning in the crevice in attachment to the surface of the door or to the said face of the door frame with its folds both disposed substantially in the flat, face to face, with the free edges towards the direction from which the draft would come into the crevice, the strip being composed of cellulose film of sufficient thinness, flexibility and resilience to enable the strip to balloon in the crevice upon filling with the draft attempting to course therethrough and thereby to stop the draft, the free fold of the strip being blown into sealing contact with the adjacent face of the crevice.

4. A device for eliminating draft through the crevice between the surface of a closed door and the opposed face of the door frame which comprises a strip of sheet material longitudinally folded over upon itself once for positioning in the crevice in attachment to the surface of the door or to the said face of the door frame with its folds both disposed substantially in the flat, face to face, with the free edges towards the direction from which the draft would come into the crevice, the strip being composed of colourless transparent film of sufficient thinness, flexibility and resilience to enable the strip to balloon in the crevice upon filling with the draft attempting to course therethrough and thereby to stop the draft, the free fold of the strip being blown into sealing contact with the adjacent face of the crevice.

5. A device for eliminating draft through the crevice between the surface of a closed door and the opposed face of the door frame which comprises a strip of sheet material longitudinally folded over upon itself once for positioning in the crevice in attachment to the surface of the door or to the said face of the door frame with its folds both disposed substantially in the flat, face to face, with the free edges towards the direction from which the draft would come into the crevice, the strip being composed of film of sufficient thinness, flexibility and resilience to enable the strip to balloon in the crevice upon filling with the draft attempting to course therethrough and thereby to stop the draft, the free fold of the strip being blown into sealing contact with the adjacent face of the crevice and the

folded strip being pre-gummed upon the outer face of one of its folds.

into the crevice, the strip being composed of colourless transparent film of sufficient thinness, flexibility and resilience to enable the strip to balloon in the crevice upon filling with the draft attempting to course therethrough and thereby to stop the draft, the free fold of the strip being blown into sealing contact with the adjacent face of the crevice.

9. The combination with a swinging door forming between one of its edges other than the rear edge and the opposed face of the door jamb a crevice through which draft may course, of a draft excluding strip of sheet material longitudinally folded over upon itself once and positioned in the crevice in attachment to the said edge of the door with its folds disposed in the flat, face to face, and with the free edges towards the direction of opening movement of the door, the strip being composed of film material of sufficient thinness, flexibility and resilience to enable the strip to balloon in the crevice upon filling with the draft attempting to course therethrough and thereby to stop the draft, the free fold of the strip being blown into sealing contact with the adjacent face of the crevice.

10. The combination with a jamb of a swinging-door frame, other than the jamb adjacent the rear edge of the door, of a draft excluding strip of sheet material longitudinally folded over once upon itself and positioned in the crevice which exists between the said jamb and the opposed edge of the door, in attachment to the jamb with its folds disposed in the flat, face to face and with the free edges away from the direction of opening movement of the door, the strip being composed of film material of sufficient thinness, flexibility and resilience to enable the strip to balloon in the crevice upon filling with the draft attempting to course therethrough and thereby to stop the draft, the free fold of the strip being blown into sealing contact with the adjacent face of the crevice.

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6. The combination with one of the surfaces which form the crevice between a door frame and a door in closed position therein, of a draft excluding strip of sheet material longitudinally folded over once upon itself and positioned in the crevice in attachment to one of the said surfaces thereof with its folds disposed in the flat, face to face, and with the free edges directed towards the direction from which the draft would come into the crevice, the strip being composed of substantially air-proof material of sufficient thinness, flexibility and resilience to enable the strip to balloon in the crevice upon filling with the draft attempting to course therethrough and thereby to stop the draft, the free fold of the strip being blown into sealing contact with the adjacent face of the crevice.

7. The combination with one of the surfaces which form the crevice between a door frame and a door in closed position therein, of a draft excluding strip of sheet material longitudinally folded over once upon itself and positioned in the crevice in attachment to one of the said surfaces thereof with its folds disposed in the flat, face to face, and with the free edges directed towards the direction from which the draft would come into the crevice, the strip being composed of film of sufficient thinness, flexibility and resilience to enable the strip to balloon in the crevice upon filling with the draft attempting to course therethrough and thereby to stop the draft, the free fold of the strip being blown into sealing contact with the adjacent face of the crevice.

8. The combination with one of the surfaces which form the crevice between a door frame and a door in closed position therein, of a draft excluding strip of sheet material longitudinally folded over once upon itself and positioned in the crevice in attachment to one of the said surfaces thereof with its folds disposed in the flat, face to face, and with the free edges directed towards the direction from which the draft would come

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