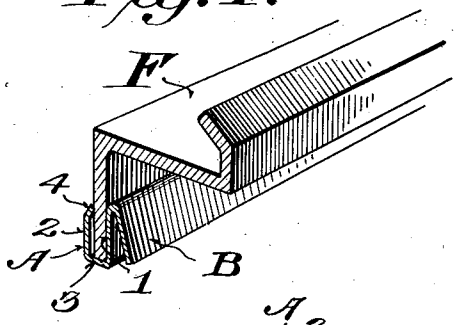
March 25, 1930. H. E. WHITE 1,751,720

WEATHER STRIP FOR CASEMENT SASHES

Filed April 13, 1927

Fig. 4.



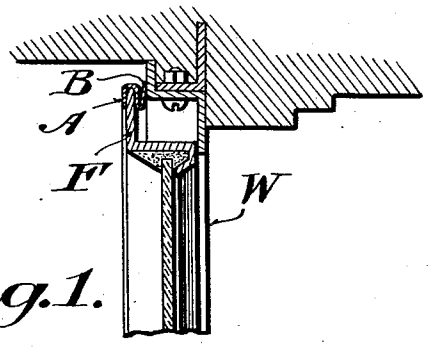
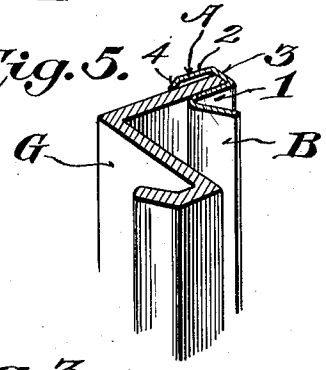


Fig. 1.

Fig. 5.



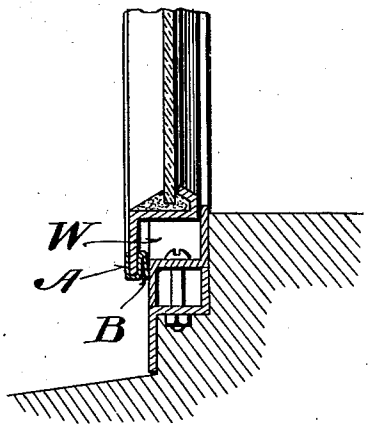


Fig. 3.

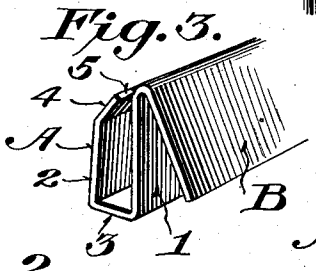
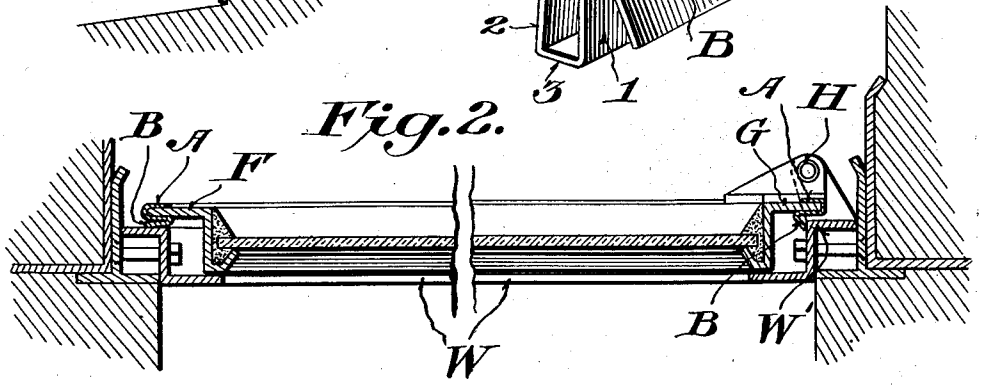


Fig. 2.



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UNITED STATES PATENT OFFICE

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WEATHER STRIP FOR CASEMENT SASHES

Application filed April 13, 1927. Serial No. 183,521.

This invention relates to weather-strips, and more particularly to a construction adapted for use in connection with steel casement sash.

With the more general use of steel sash, especially of the casement type, it is desirable to provide adequate means for tightly closing the window opening to prevent drafts and insure a thoroughly tight weather-proof construction when the sash is closed. In the case of wooden sash weather-strips may be nailed or fastened in any suitable manner to the sash or jamb, but in steel jamb and sash construction it is impractical to use fastenings for securing weather-stripping to the metal parts because such practice requires the drilling of holes, and, furthermore, to provide the jamb and sash with interlocking or interfitting parts to make a weather-tight closure is not only expensive but also impractical, especially in the lighter type of sash construction used in dwellings or other places where a comparatively small opening is to be closed.

Accordingly, a primary object of the present invention is to provide a simple and practical form of self-securing weather-strip adapted to be readily fitted to metal casements without the use of special tools or skill, and which requires no holes to be drilled or special fastenings to complete its application.

A further object of the invention is to provide a novel weather-strip having special features and characteristics which enable it to be easily manufactured and applied, and which may be readily made in lengths or strips which may be kept in stock lengths and then cut to suitable length to meet various sash sizes.

With the above and other objects in view which will more readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

A preferred and practical embodiment of the invention is shown in the accompanying drawings, in which:—

Figure 1 is a vertical sectional view of a casement window illustrating the application of the weather-strip to the top and bottom edges of the sash.

Figure 2 is a horizontal cross-sectional view illustrating the application of the invention to the hinged and free edges of the sash.

Figure 3 is an enlarged detail perspective view of the strip constituting the present invention.

Figure 4 is a detail perspective view of the bottom bar of a sash illustrating the present weather-stripping applied thereto.

Figure 5 is a detail perspective view of one of the vertical bars of the sash with the strip applied thereto, said vertical bar being at the hinge edge of the casement.

Similar reference characters designate corresponding parts throughout the several figures of the drawings.

In carrying the present invention into effect it is proposed to use a continuous metallic strip of spring metal, such as bronze or any equivalent alloy possessing inherent resiliency and strength to a high degree, which is preferably rolled or otherwise formed to provide a clip portion designated generally as A for attaching the same to a portion of the sash, and a weather-flange or skirt portion B which cooperates with the window jamb, sill or equivalent part of the window opening to effect a complete closure between the metallic casement sash and the window frame.

Referring to the clip portion A it will be observed that the same is of substantially channel formation in cross-section and comprises the opposite wall portions 1 and 2 connected by the web 3, the said wall 1 being substantially flat throughout its width and affording a relatively extensive frictional gripping area between the strip and the frame part F of the sash under the influence of the yielding action of the wall 2. In order to increase the resiliency of the wall 2 and also to permit the channel portion of the strip to readily adapt itself to slight inequalities in the metal sash the edge of the wall 2 is provided with an inturned lip portion 4 which

extends throughout the length of the strip and provides a normally restricted mouth or opening 5 between the free edge of the outer wall 2 and the bent edge of the inner wall 1 which has the flange B joined therewith.

As will be apparent from Figs. 3 and 4 when the clip portion A is fitted over the frame part F the outer wall 2 does not contact with the outer face of the frame member throughout the area of its inner surface, but is spaced therefrom to permit the gripping lip 4 to exert its full influence to draw the inner wall 1 firmly into frictional engagement with the inside edge of the frame part. This construction permits of fitting the strip to the sash by telescoping the clip over the edge of the sash in such a way as to cause a thoroughly practical and reliable firm engagement between the strip and the sash which dispenses with special fastenings or fittings.

The flange B carried by the inside wall of the clip portion A is adapted to contact with the jamb, sill or other part of the window frame designated generally as W, and in case the strip is applied to the top, bottom or free edge of the casement sash the flange B will be yieldingly compressed between the outer face of the window frame and the inner face of the frame part F of the sash. In other words the flange B will be folded back against the inner wall 1 of the clip. However, when the strip is applied to the frame part G located at the hinged side of the window, the flange B preferably straddles the corner W′ of the window frame. Thus, both sides of the flange B can function as closure members for the window opening.

From the foregoing it will be apparent that the novel and distinctive features of the present invention reside in the provision of a continuous self-securing or holding metal weather-strip which may be readily fitted to metal sash in a practical and expeditious manner, and which otherwise fulfills the objects heretofore set forth.

Without further description it is thought that the features and advantages of the invention will be readily apparent to those skilled in the art, and it will of course be understood that changes in the form, proportion and minor details of construction may be resorted to, without departing from the spirit of the invention and scope of the appended claim.

I claim:—

A metallic weather-strip construction for steel frame casements and the like comprising a clip portion of channel formation and having both walls thereof substantially the same height, and one of the walls thereof being deflected inwardly at an angle along its edge to provide a gripping lip for biting engagement with an outside face of the frame, and a resilient weather-flange connected with the inside wall of the channel.

In testimony whereof I hereunto affix my signature.

HERBERT E. WHITE.