

No. 872,434.

PATENTED DEC. 3, 1907.

W. J. LAWDER.
WEATHER STRIP.

APPLICATION FILED JULY 19, 1907.

Fig. 1.

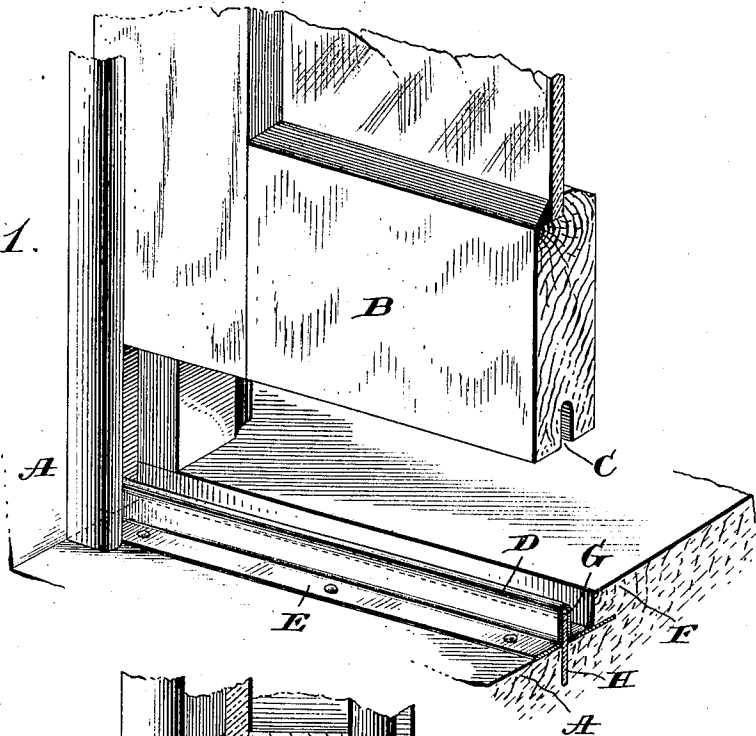
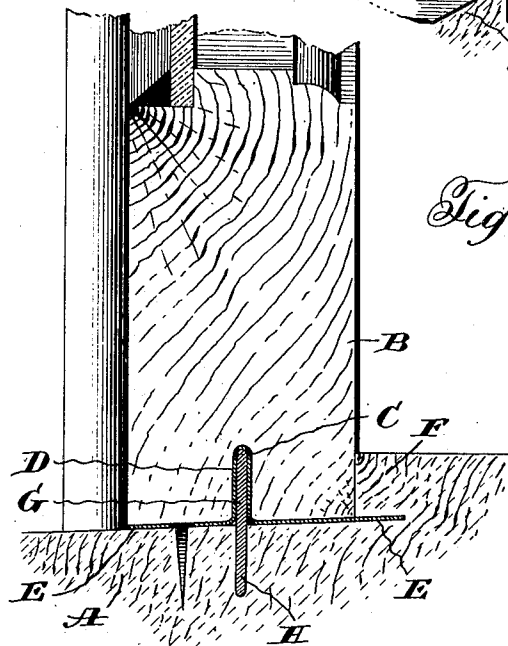


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILL J. LAWDER, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR TO CHAMBERLIN METAL WEATHER STRIP COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

WEATHER-STRIP.

No. 872,434.

Specification of Letters Patent.

Patented Dec. 3, 1907.

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To all whom it may concern:

Be it known that I, WILL J. LAWDER, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Weather-Strips, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to improvements in weather strips, and has for its primary object the provision of means for reinforcing and stiffening the sealing rib or flange thereof whereby to preserve the same against deflection or bending from its normal operating position.

Although the invention is equally applicable to other types of strips, the same is primarily an improvement of the sheet metal strip disclosed in the patent to Albert Clinton Sims No. 424,905. In the use of strips made in accordance with the patent referred to, and more especially in those instances where the strip is applied at the bottom of a window casing or frame with the rib of the strip in an upstanding position, the flange becomes bent over or distorted and its use impaired, for example, by a person accidentally stepping thereon in washing windows or by striking the same with extraneous objects.

A convenient embodiment of the invention resides in the introduction of a reinforcing or stiffening strip in the space between the parallel sides of the folded sealing rib or flange, and said strip being of a width not only to fill said space, but to project a substantial distance beyond the plane of the inner edges of the rib or flange and into a kerf or groove formed in the window frame or sash whereby to be securely anchored in the frame and hold the sealing rib or flange in proper position.

The details in the construction and arrangement of the parts will be apparent from the detailed description hereinafter contained when read in connection with the accompanying drawings forming part hereof, and wherein the before mentioned convenient embodiment of the invention is illustrated.

In the drawings: Figure 1 is a perspective view of the lower portion of a window frame and sliding sash mounted therein, the improved strip being applied to the bottom of the frame and the lower rail of the sash grooved

to receive the sealing rib or flange; and Fig. 2 is an enlarged cross sectional view.

Referring more specifically to the drawings, wherein like reference characters refer to corresponding parts in the two views, A represents the sash frame or casing, and B the slidable sash therein, these being of any ordinary or preferred construction.

The lower rail of the sash B is provided with a groove C in its under surface longitudinally thereof for the reception of a sealing rib or flange D secured to the upper surface of the bottom of the frame or casing A. In the present instance this rib or flange is formed by bending a piece of sheet metal upon itself whereby the rib has a smooth outer edge and substantially parallel sides, and offsetting the edge portions of the sheet approximately at right angles to the rib to provide securing flanges E. The flanges are fastened to the frame in the usual manner, either by tacking them both to the frame or by tacking the outer flange and running the inner flange beneath the sill F as clearly shown in Fig. 2. In the space on the interior of and between the parallel sides of the sealing rib or flange I introduce a bracing or stiffening strip G, this strip being considerably greater in width than the width of the sealing rib whereby to project to a substantial extent into the frame as at H, the latter being provided with a kerf or groove for that purpose. By this means it will be appreciated that the strip G is firmly anchored in the frame and that its projecting portion will serve to effectually prevent bending over or distortion of the sealing rib or flange.

While I have specifically described but one embodiment of my invention, it will be apparent to those skilled in the art that the invention comprehends any desired sealing rib or flange and securing means therefor, in combination with an auxiliary anchored bracing or stiffening member.

I claim:

1. A weather strip having a sealing rib formed of sheet metal folded upon itself, a bracing or stiffening member therein of a width to project a substantial distance there-without whereby to be anchored, and a securing flange integral with and offset from said rib.

2. A weather strip having a sealing rib formed of sheet metal folded upon itself, a

bracing or stiffening member therein of a width to project a substantial distance there-
without whereby to be anchored, and secur-
ing flanges integral with and offset from op-
posite sides of said rib.

3. In combination with a frame having a
groove formed therein; a weather strip hav-
ing a sealing rib arranged over said groove,
said sealing rib being formed of sheet metal
bent upon itself, and a bracing or stiffening
member introduced in the hollow interior of
said rib and projecting outwardly therefrom
and into the groove of said frame.

4. In combination with a frame having a
groove formed therein; a weather strip hav-
ing a sealing rib arranged over said groove,
said sealing rib being formed of sheet metal
bent upon itself, a bracing or stiffening mem-
ber introduced in the hollow interior of said
rib and projecting outwardly therefrom and
into the groove of said frame, and a flange
integral with said sealing rib offset therefrom
and securing the rib in position.

5. In combination with a frame having a
groove formed therein, a weather strip hav-
ing a sealing rib arranged over said groove,
said sealing rib being formed of sheet metal
bent upon itself, a bracing or stiffening mem-

ber introduced in the hollow interior of said
rib and projecting outwardly therefrom and
into the groove of said frame, and flanges in-
tegral with said rib and offset in opposite
directions therefrom securing the same in
place.

6. In combination with a frame, a weather
strip member formed of sheet metal bent
upon itself to form a sealing rib and secured
to said frame, and having a rigid bracing or
stiffening member in the hollow interior
thereof, said member being anchored at its
edge to prevent lateral deflection of the seal-
ing rib.

7. In combination with a frame, a weather
strip member secured thereto and having a
projecting hollow sealing part closed at its
outer edge and a rigid bracing or stiffening
member therein anchored to said frame to
prevent lateral deflection of said projecting
sealing part.

In testimony whereof I affix my signature
in presence of two witnesses.

WILL J. LAWDER.

Witnesses:

MARSHALL L. FABER,
JOHN T. A. BECKER.