

Jan. 12, 1926.

1,569,413

A. WEINGAERTNER

WEATHER STRIP FOR WINDOWS

Filed Sept. 11, 1922

Fig. I-

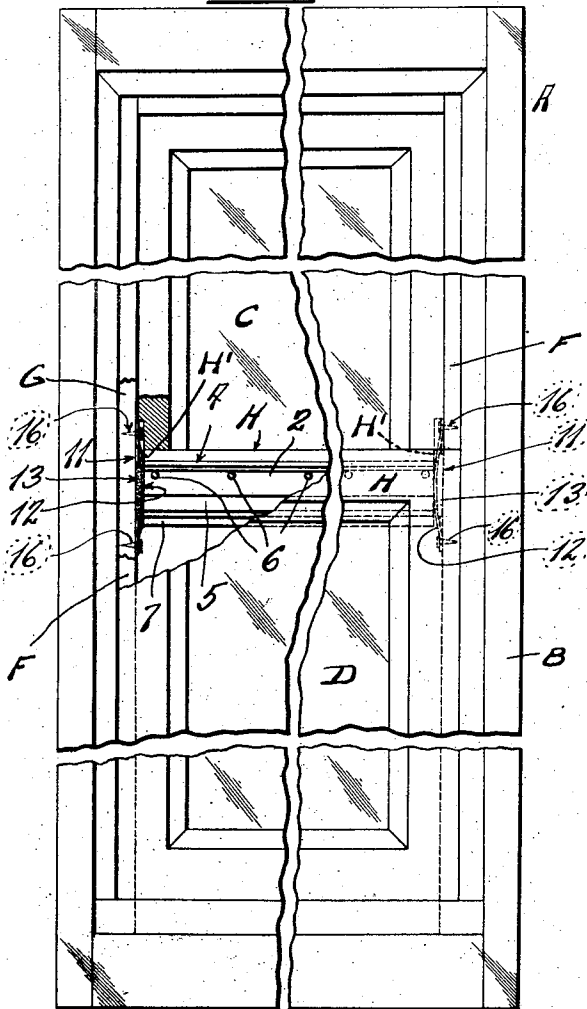


Fig. II-

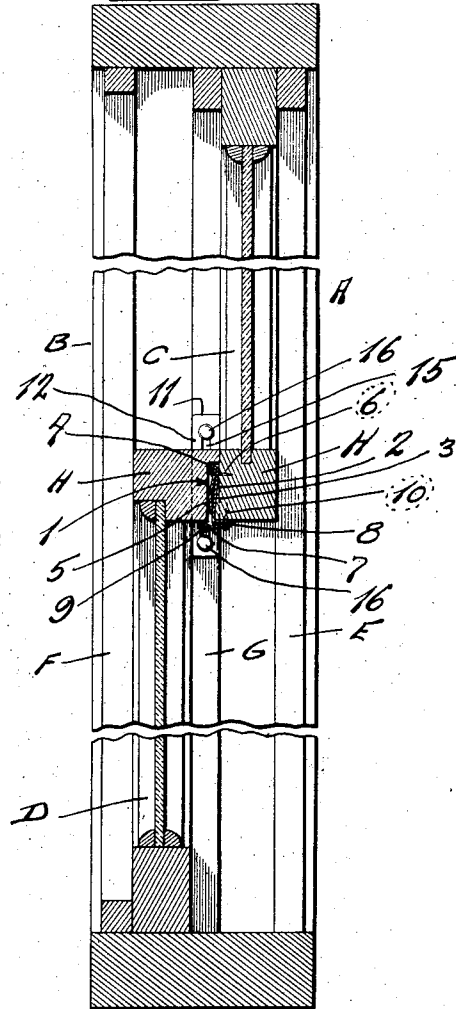


Fig. III-

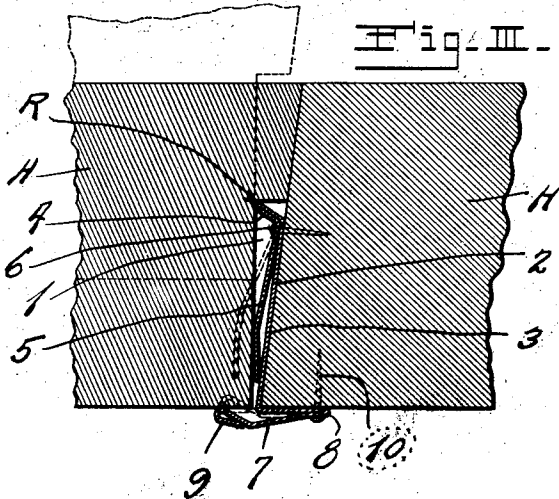
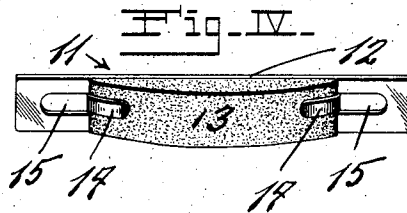


Fig. IV-



Inventor.
 Albert Weingaertner;
 by Cook & M. C. Cully
 His Attorneys.

Patented Jan. 12, 1926.

1,569,413

UNITED STATES PATENT OFFICE.

ALBERT WEINGAERTNER, OF ST. LOUIS, MISSOURI.

WEATHER STRIP FOR WINDOWS.

Application filed September 11, 1922. Serial No. 587,422.

To all whom it may concern:

Be it known that I, ALBERT WEINGAERTNER, a citizen of the United States of America, and a resident of the city of St. Louis and the State of Missouri, have invented certain new and useful Improvements in Weather Strips for Windows, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings forming a part of this specification.

This invention relates to improvements in weather-strips and particularly to weather-strips intended for use on a window having a pair of vertically movable window sashes provided with horizontal meeting rails, said weather-strip being intended to provide a means whereby a weather-tight joint may be obtained between said meeting rails when said window sashes are in their closed positions.

A further object is to provide a weather-strip by the use of which a weather-tight joint may be obtained between the ends of the meeting rails of the associated window sashes and the parting strips of the window frame.

With the foregoing and other objects in view, the invention comprises the novel construction, combination and arrangement of parts hereinafter more specifically described and illustrated in the accompanying drawings wherein is shown the preferred embodiment of the invention. However, it is to be understood that the invention comprehends changes, variations and modifications which come within the scope of the claims hereunto appended.

Fig. I is a fragmentary front elevation of a window provided with my improved weather strips, a portion of the upper and lower sash of said window being broken away to show said weather-strips.

Fig. II is a vertical section of the window shown in Fig. I.

Fig. III is an enlarged fragmentary section through the meeting rails of a pair of window sashes, showing my improved weather-strip interposed therebetween.

Fig. IV is a perspective view of the weather-strip by which a weather-tight joint is obtained between the ends of the meeting rails of the window sashes and the parting strip of the window frame.

In the drawing, A designates a window comprising a window frame B and a pair of

vertically movable window sashes C and D. The window frame B is provided with the usual stop members E and F and with the usual parting strips G interposed between the sashes C and D. The sashes C and D are provided with meeting rails H and these meeting rails are so arranged as to contact with each other when the window sashes are in their closed positions. The joint between the meeting rails of associated window sashes is not usually weather-tight and one of the purposes of the present invention is to provide a means whereby this joint is rendered weather-tight.

As stated above the meeting rails are adapted to contact with each other when the window sashes are in their closed positions and to provide a space for the reception of my improved weather-strip I provide one of said meeting rails with a recess 1 which extends longitudinally of said meeting rail from end to end thereof. My improved weather-strip 2 is located within the recess 1 and extends the full length of the meeting rails H, said weather-strip being preferably formed from a single piece of resilient material. The weather-strip 2 is provided with an L-shaped portion 3 which bears against the inside and the bottom faces of the meeting rail of the upper sash C. Extending upwardly at an angle from the upper end of the L-shaped portion 3 is a rigid sash contacting portion 4, said portion being formed by extending the material, of which said weather-strip is formed, upwardly and then doubling same back to form a projection of double thickness. The material extends downwardly from the portion 4 to form a resilient sash contacting tongue 5 which is provided with a portion adapted to bear against the associated window sash (Fig. III). A plurality of nails or similar fastening devices 6 are driven through the upper portion of the L-shaped portion 3 and through the upper portion of the resilient tongue 5 to secure the weather-strip to the meeting rail of the window sash C. Formed at the bottom of the weather-strip 2 is a second resilient sash contacting tongue 7, said tongue being formed by bending the material at the outer end of the horizontal portion of the portion 3 to provide an end portion 8 composed of two thicknesses of material. The tongue 7 extends from the portion 8 and is provided at its outer end with a looped sash contacting portion 9. A

plurality of nails or similar fastening devices 10 are driven through the portion 8 to aid the nails 6 in securing the weather-strip to the meeting rail.

5 In the use of my improved weather-strip, said weather-strip is secured to the meeting rail of the upper sash C. When the lower sash D is in a raised position, or the upper sash C is in a lowered position, the resilient
10 tongue 5, and the resilient tongue 7 are in the positions in which they are shown by dotted lines in Fig. III. When the lower sash is moved downwardly the bottom edge of the meeting rail of said sash will contact
15 with the tongue 5 and as said meeting rail continues to move downwardly said tongue will be moved to the position in which it is shown in full lines in Fig. III in which position said tongue is bearing firmly against
20 said meeting rail. Immediately before the lower sash D reaches its closed position the bottom face of the meeting rail thereof will contact with the resilient tongue 7 and said tongue will be moved from the position in
25 which it is shown by dotted lines in Fig. III to the position in which it is shown by full lines in said view, whereby a firm contact is obtained between said tongue and said meeting rail.

30 As has been stated the lower sash D is provided with a longitudinal recess 1 and said recess is so formed as to have a corner R at its upper end. The rigid sash contacting portion 4 of the weather-strip is so arranged
35 that it will firmly contact with the corner R of the recess 1 when the sashes are in their closed positions thereby aiding the tongues 5 and 7 in rendering the joint between the meeting rails weather proof. From the
40 foregoing it is apparent that the weather-strip disclosed herein contacts with the associated meeting rail at three points whereby the likelihood of drafts and dampness passing through the joint is greatly reduced.

45 To provide weather-tight joints between the outer ends of the meeting rails H and the parting strips G I employ weather-strips 11 comprising bowed strips of resilient material 12 which are fastened to said parting
50 strips and extend into recesses H' formed in the opposite end faces of the meeting rails H. Interposed between each of the bowed strips 12 and the parting strips G is a body of resilient material, such as felt, said material being designated by the reference character
55 13. The bowed strip 12 is provided with a pair of integral tongues 14 which are adapted to secure said body of material 13 to said bowed strip. The integral tongues 14 are
60 formed by slitting the strip 12 and bending a portion of the material of said strip outwardly.

65 The striking out of the tongues 14 from the strip 12 will leave openings 15 which are utilized to receive nails or similar fastening

devices 16 whereby said weather strip is secured to the parting strip.

In use, when the window sashes C and D are in their closed positions the ends of the meeting rails of said sashes will contact with
70 the bowed strips 12 and will produce a weather-tight joint between said meeting rails and the parting strips of the window frame.

I claim:

75 1. A weather-strip for windows having a pair of window sashes, comprising a single member adapted to be secured to one of said sashes, said member being provided with a rigid contacting portion and a plurality of
80 resilient contacting portions, said rigid contacting portion and said plurality of resilient contacting portions being adapted to bear against the associated sash.

85 2. The combination with the meeting rail of a window sash provided with a recess, of a single weatherstrip member adapted to lie within said recess, said member being provided with a rigid sash contacting portion at its upper end, a resilient sash contacting
90 tongue at its lower end, and a resilient sash contacting tongue intermediate of said rigid contacting portion and said lowermost resilient sash contacting tongue, said rigid sash contacting portion and said resilient
95 sash contacting tongues being adapted to bear against the associated sash.

100 3. A weather-strip for windows having a pair of window sashes provided with meeting rails, comprising bowed strips adapted to be secured to the frame of the window, and a body of resilient material interposed between each of said bowed strips and said window frame, said bowed strips being
105 adapted to contact with said meeting rails.

110 4. A weather-strip for windows having a pair of window sashes provided with meeting rails, comprising bowed strips adapted to be secured to the frame of the window, a body of resilient material interposed between each of said bowed strips and said window frame, and clamping means on said bowed strips for securing said resilient material to
115 said bowed strips, said bowed strips being adapted to contact with said meeting rails.

120 5. A weather-strip for windows having a pair of window sashes provided with meeting rails, comprising bowed strips adapted to be secured to the frame of the window, a body of resilient material interposed between each of said bowed strips and said window frame, and clamping means comprising integral tongues formed on said bowed strips for securing said resilient material to said bowed strips, said bowed strips being adapted
125 to contact with said meeting rails.

In testimony that I claim the foregoing I hereunto affix my signature.

ALBERT WEINGAERTNER.