

No. 671,786.

Patented Apr. 9, 1901.

A. W. ALLISON.
WEATHER STRIP.

(Application filed May 2, 1900.)

(No Model.)

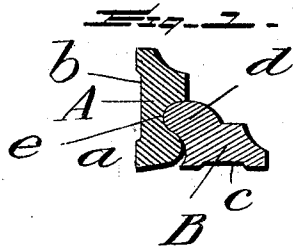


Fig. 2 -

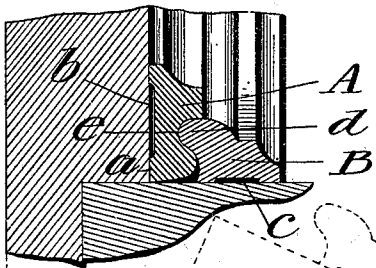


Fig. 3 -

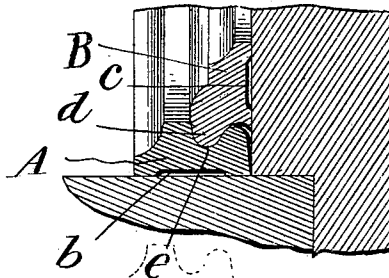
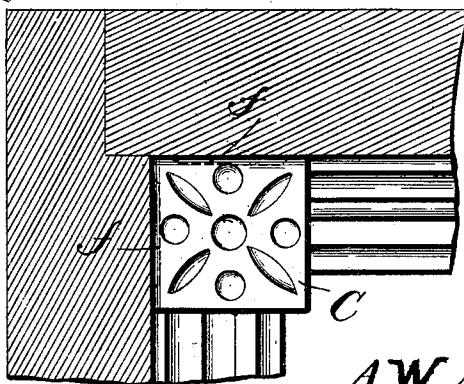


Fig. 4 -



WITNESSES:

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UNITED STATES PATENT OFFICE.

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WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 671,786, dated April 9, 1901.

Application filed May 2, 1900. Serial No. 15,238. (No model.)

To all whom it may concern:

Be it known that I, ANDREW W. ALLISON, a citizen of the United States, residing at Janesville, in the county of Rock and State of Wisconsin, have invented certain new and useful Improvements in Weather-Strips; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to weather-strips of that class composed of two moldings or strips with interengaging tongue and groove, so that when closed together they serve to completely exclude dust, cold, storm, and wind. Weather-strips of this character have been proposed; but they are liable to warp and twist, and thus destroy their effectiveness. It has been proposed, in one instance brought to my notice, to cut away one edge of the strip or molding at one edge, so as to form a spring; but this leaves the edge of the strip unsupported along its entire length, and shrinking or swelling of the strip will force the inner edge to the casing, where the recess is formed, which will draw the nails on the outer edge, and by so doing it renders the strip practically worthless, as it will not spring back again. It is necessary that the strip have a bearing on both of its edges or it will not stay in its proper place and will warp. A flat strip—that is, a strip with a flat base—will warp and twist, being easily affected by the damp weather, and when once thus warped it fails to exclude satisfactorily the water, air, and dampness.

The object of the present invention is to provide a strip of such construction that it will fit closely to the part to which it is affixed and will draw down tight where the door or casing is rough from old paint or from rough weather, and thus effectually exclude the weather and water. To accomplish this, I form the back or base of the strip with a recess, not at one edge, but practically in the center, so as to leave a flat bearing edge upon both sides of the recess. The shape of this recess is not essential, although I have found from experience that a concave base will stand the weather better and will not warp so easily. By so forming the strip that it will snugly fit the part to which it is attached it not only better excludes the dampness, &c., but it will

not warp or spring, nor will it be affected by the slamming of the door.

Having the above objects in view, the invention resides in the novel construction of the strip, as will be hereinafter more fully described, shown in the drawings, and then particularly pointed out in the claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is an enlarged cross-section of a portion of the improved strip. Fig. 2 is a view showing a portion of the door and jamb with the strips attached, the door being shown closed in full lines and partly open in dotted lines. Fig. 3 is a sectional view showing the strip attached to the door. Fig. 4 is a view showing the corner-block in the angle and the strip against the same.

Like letters of reference indicate like parts throughout the several views.

A designates one of the strips. Its base *a* is formed with a recess or groove *b*, which may be of any desired configuration in cross-section, preferably, however, substantially that shown; but in all instances it must be confined wholly within the side edges of the strip, as shown, so as to afford a firm flat bearing along each edge of the strip. By this means the strip when once secured will at all times stay in its proper place and will not warp. Besides the strip can be drawn closer to the woodwork, readily adapting itself to any roughness or unevenness in the wood. Water cannot find its way beneath the strip, and the slamming of the door will not cause it to change its position with respect to the door.

B is the complementary strip. It is likewise formed with a recess or groove *c* upon its base for a similar purpose. The two strips are formed to interengage at their adjacent faces, the one being provided with a tongue *d* to enter a groove *e* in the other, as shown, so that when the door is closed they form an absolutely air-tight joint sufficient to exclude all dust, water, and wind.

C is a block disposed in the corner on the hinged side. The hinge-side corner cannot be mitered, as the strip is reversed at the top. This block may be provided upon the end

which abuts against the woodwork with a series of recesses or concavities, as seen at *f* by dotted lines in Fig. 4, for a purpose similar to the recess or groove in the base of the

5 strip.

It is evident that the strips although herein shown as applied to a door may be employed in connection with windows, where they will serve the same function, and also it is evident
10 the strips may be employed wherever a strip can be applied to exclude wind and dust.

What is claimed as new is—

1. A weather-strip comprising a compression or packing strip formed with a base having a recess which is confined within the opposite edges thereof whereby a bearing is
15 formed upon opposite sides of the recess, as and for the purpose specified.

2. A weather-strip comprising a compression or packing strip having its base provided

20 with a shallow recess or concavity extending lengthwise thereof, with a flat bearing portion along each edge of the strip upon opposite sides of the said recess, substantially as and for the purpose specified. 25

3. The combination of two strips each with a concave base with bearing edges upon opposite sides of the shallow concavity, the said strips being disposed with their bases at substantially right angles to each other, and the
30 faces of the strips being formed with inter-engaging portions, substantially as described.

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

ANDREW W. ALLISON.

Witnesses:

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GEORGE I. JONES.