

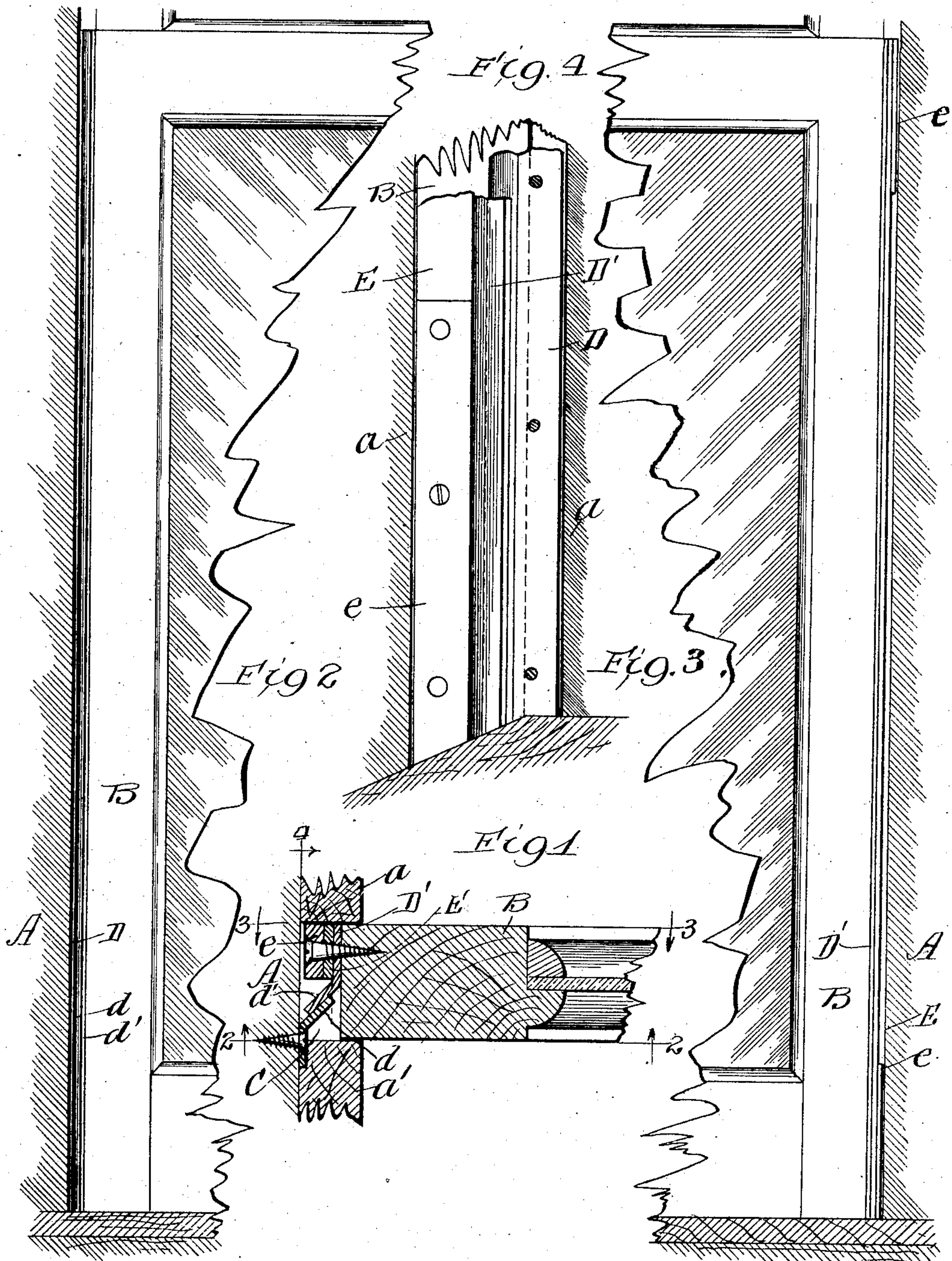
No. 883,603.

PATENTED MAR. 31, 1908.

W. W. WITHEMBURY.

WEATHER STRIP.

APPLICATION FILED MAY 27, 1907.



Witnesses.
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WEATHER-STRIP.

No. 883,603.

Specification of Letters Patent.

Patented March 31, 1908.

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To all whom it may concern:

Be it known that I, WELLINGTON W. WITHEBURY, a citizen of the United States, and residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Weather-Strips, of which the following is a complete specification.

This invention relates to improvements in weather strips and more particularly to an anti-rattling, dust proof weather strip for car windows or the like.

The object of this invention is to provide a weather strip which acts at all times to center the sash between the posts, thereby preventing its binding and insuring its easy operation.

It is a further object of the invention to provide a self adjusting weather strip adapted to afford a joint of a yielding nature so that it will not only provide a cushion to prevent rattling but also provide a weather tight joint which becomes tighter as the air pressure from without increases.

It is also an object of the invention to provide a very cheap and simple construction adapted to be attached to old as well as new windows and which can be attached without the aid of skilled labor.

The invention consists of the matters hereinafter described in the specification and more fully pointed out and defined in the appended claims.

In the drawings: Figure 1 is a fragmentary, horizontal section of a window provided with a device embodying my invention. Fig. 2 is a fragmentary section taken on line 2—2 of Fig. 1. Fig. 3 is a fragmentary section taken on line 3—3 of Fig. 1. Fig. 4 is a fragmentary section taken on line 4—4 of Fig. 1.

As shown in said drawings: A indicates the window post, one of which is at each side of the window opening, and *a* and *a'* indicate respectively the outer and inner window stops, between which is formed the guideway in which the sash B travels. Said sash B is of somewhat less width than the distance between the posts, thereby providing an opening or chamber C at the lateral edges of the sash to receive the weather strips, as shown more clearly in Fig. 1. Said weather strip comprises as its essential features two flat faced members, one of which projects into said chamber from one side thereof, and the

other from the opposite side, and one of which overlaps and yieldingly engages the other so as to provide a tight joint irrespective of the position of the sash with respect to the stops or posts. As shown however an angle plate D is engaged to the post A adjacent the inner stop *a'*, and extends the full length of the window opening. The flange *d* of said plate extends from the post into said chamber to near the sash, preferably at an angle to the face of the post of approximately 45 degrees and directed towards the outer side of the window, though obviously it may be at any other desired angle.

Secured to the edge of the sash and extending the full length thereof adjacent to the outer stop, is a retaining or binding piece E of metal or other preferred material, between which and the sash is rigidly engaged one edge of a flexible strip D' of any preferred material such as rubber. Said flexible strip extends the full length of the sash, and the free edge *d'* thereof is bent outwardly from the sash and engages over the flange *d*, on the side adjacent the outer stop *a*. Owing to the resiliency of said strip D' the edge *d'* thereof tends to resume its normal position adjacent the edge of the sash, as shown in dotted lines in Fig. 1, so that it always binds against the flange *d* with sufficient force to afford a tight joint, and tends to draw the sash towards the adjacent post as well as to throw it against the outer sash.

A bearing plate *e* is rigidly engaged to the face of the binding piece E, both at the upper and lower ends thereof, and is adapted to bear against the post when the sash is forced laterally for any reason, thereby providing a relatively small bearing surface at the edges of the sash.

The operation is as follows: Owing to the fact that the flexible strip lies flat against the flange of the angle plate on the side thereof towards the outer side of the window it is obvious that it will not only bind against the flange but will be forced into closer binding contact therewith by any drafts of air that may attempt to pass around the edge of the sash. It is obvious also that inasmuch as the flexible strips tend to return to their normal position against the sash, that they exert a tension on the flanges which acts to center the sash between the posts and prevent its binding thereon, and also act to force the sash against the outer stop.

I claim as my invention:

1. In a device of the class described the combination with an outer and an inner window stop, of a sash slidable therebetween, 5 a diagonal plate between said stops, and a strip of flexible material engaging said plate and acting to throw the sash against one of said stops.
2. In a device of the class described the 10 combination with the outer and inner window stops of a sash slidably engaged therebetween, a plate engaged beneath one stop and projecting at an angle between said stops, and a strip of flexible material en- 15 gaged on the sash and lying flat against said sash and acting to force the sash against the other stop.
3. In a device of the class described the combination with the outer and inner stops, of 20 a sash slidable therebetween, a plate extending diagonally between said stops and resilient means overlapping said plate and acting to force the sash against one of said stops.
4. In a device of the class described the 25 combination with the outer and inner stops of a window, of a sash slidable therebetween, a plate engaged beneath the inner stop and extending diagonally between the stops, a strip, of rubber engaged on the edge of the 30 sash and bent outwardly over said plate and acting to force the sash against the outer stop, and a binding piece engaging said strip to the sash.
5. In a device of the class described the 35 combination with a window sash, of the post

and stops affording a guideway therefor, an angle plate carried on the post and having its flange projecting into the guideway and towards the outer side of the window, and a strip of flexible material engaged to the edge 40 of the sash and having its edge overlapping the rear face of the flange and acting both to center the sash between the posts and to force it against the outer stop.

6. In a device of the class described the 45 combination with a window sash and the posts and stops forming the guideway therefor, of a plate in said guideway extending from the post at an angle to the plane of the sash and towards the outer side thereof, a 50 strip of flexible material carried on the edge of the sash and having the edge thereof inserted between the flange and the post and acting against the flange to force the sash against the outer stop, and a binding piece 55 adapted to engage said strip to the sash.

7. In a device of the class described the combination with the window stops, of a sash slidable therebetween, a rigidly supported, vertical plate projecting between said stops, 60 and a flexible strip yieldingly engaging said plate and acting to force the sash against one of said stops.

In testimony whereof I have hereunto affixed my signature in the presence of two 65 witnesses.

WELLINGTON W. WITHEBURY.

Witnesses:

F. M. CROCKER,
ALBERT J. W. APPELL.