

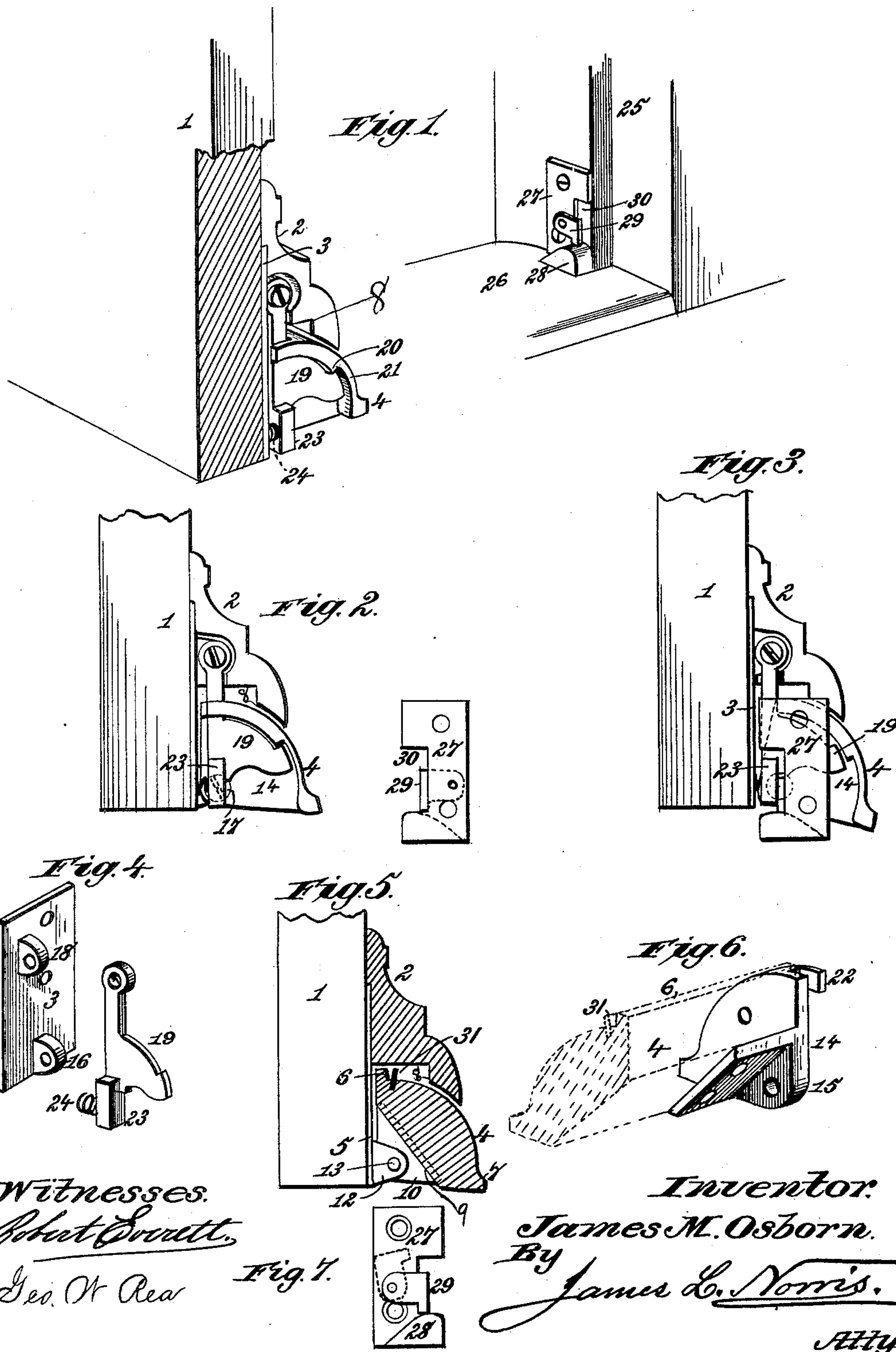
(No Model.)

J. M. OSBORN.

WEATHER STRIP.

No. 339,009.

Patented Mar. 30, 1886.





# UNITED STATES PATENT OFFICE.

JAMES M. OSBORN, OF FALL RIVER, MASSACHUSETTS.

## WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 339,009, dated March 30, 1886.

Application filed February 9, 1886. Serial No. 191,343. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES M. OSBORN, a citizen of the United States, residing at Fall River, in the county of Bristol and State of Massachusetts, have invented new and useful Improvements in Weather-Strips, of which the following is a specification.

My invention relates to a weather-strip composed of a fixed upper portion and a lower pivoted portion adapted to be secured to the lower part of a door to exclude drafts, dust, rain, and snow, the lower portion of said strip being provided with a catch that is adapted to be engaged by a spring-latch pivoted to the upper portion or strip.

The invention also embraces a striker that is adapted to actuate the pivoted portion of the weather-strip both in opening and closing the door, so as to prevent its catching in the carpet; and it further consists in certain novel features of construction, as hereinafter more fully set forth.

In the annexed drawings, Figure 1 represents my improved weather-strip and striker secured to a door and its frame, respectively. Fig. 2 shows the weather-strip and striker in elevation, the door being partly open. Fig. 3 is a similar view, showing the door closed. Fig. 4 shows the pivoted latch and one of the strip-connecting plates in perspective. Fig. 5 is a sectional elevation of the other end of the weather-strip. Fig. 6 is a perspective rear view of one end of the pivoted strip. Fig. 7 is a face view of the striker-plate.

The numeral 1 designates a door, and 2 is the fixed portion of my improved weather-strip secured to one side of the door, near the bottom, by nails, screws, or otherwise. This fixed or stationary strip 2 is recessed on its inner side at the outer or swinging edge of the door for receiving the upper end of a plate, 3, to which is hinged or pivoted one end of a movable strip, 4. The other end of this movable strip 4 is hinged or pivoted, as herein- after described, to a plate, 5, the upper portion of which is secured to a recess on the inner side of the fixed strip, near the hinged edge of the door.

It will be observed that the pivoted or hinged strip 4 is approximately segmental or quarter-round in cross-section, and formed

with an outer curved surface having a longitudinal flange, 6, at top, and a similar flange, 7, at bottom. It will also be seen that the fixed strip 2 is rabbeted along its lower edge to receive and lap over the upper portion of the pivoted strip 4, a flange, 8, being provided along the lower edge of the fixed strip, which serves as a stop for the flange 6 when the pivoted strip is lowered.

On the under side of the pivoted strip 4, near its inner end, is secured a plate, 9, having a lug, 10, one side of which is in contact with a similar lug, 12, on the plate 5, both lugs being perforated for a pin or screw, 13, by which the fixed and movable parts of the weather-strip are pivotally connected at that end.

At the outer or swinging edge of the door an approximately segmental angle-plate, 14, is secured to the end of the pivoted strip. This angle-plate is formed with a projecting corner or lug, 15, which is arranged in contact with the outer side of a lug, 16, on the lower end of the plate 3, said lugs 15 and 16 being perforated for receiving a pin or screw, 17, which serves as a pivot.

Near the upper end of the plate 3 is a perforated lug, 18, that is partly mortised into the inner side of the fixed strip 2, and to this lug 18 is pivoted the upper end of a latch, 19, which is adapted to engage a catch, 20, on the angle-plate 14. This catch 20 is formed on the under side of a segmental flanged rim, 21, with which the angle-plate 14 is provided, and the inner or upper end of said rim is forked at 22, so as to pass the shank of the latch 19. The lower end of the latch 19 is provided with a downward and laterally projecting lug, 23, between which and the plate 3 is arranged a spring, 24, that forces the latch outward and holds it normally in engagement with the catch 20 after the pivoted strip 4 has been raised.

To the lower part of the door-frame, near the usual door-stop, 26, is secured a striker-plate, 27, by which the pivoted portion of the weather-strip is actuated in opening and closing the door. This striker-plate is provided at the bottom with a laterally-projecting lug, over which the lower edge of the pivoted strip



4 easily rides in the act of opening the door. Owing to the form and position of the lug 28, this upward movement of the pivoted strip 4 necessarily begins as soon as the door com-  
 5 mences to open, and the door is therefore enabled to move easily without obstruction from the carpet or rug. As soon as the pivoted strip 4 is thus sufficiently raised the latch 19 springs into engagement with the  
 10 catch 20, and thereby secures the weather-strip in an elevated position. The striker-plate 27 is also provided above the lug 28 with a pivoted button, 29, in front of which the plate is cut away or recessed at 30, to ad-  
 15 mit the lug 23 of the pivoted spring-latch 19 when the door is closed. Ordinarily the pivoted button 29 is to be turned forward, so as to rest on the lug 28 at the side of the recess 30, as shown in Figs. 1 and 2; and if the door  
 20 is now closed the lug 23 on the lower end of the latch 19 will come in contact with the button 29 just as said lug enters the outer edge of the recess 30, whereby the latch 19 is pressed back against its spring 24 and becomes  
 25 disengaged from the catch 20, so as to cause the pivoted weather-strip to drop into place on the threshold, as shown in Fig. 3.

If it should be desired to keep the weather-strip elevated and inoperative, the button 29  
 30 will be turned back, as shown by dotted lines in Fig. 7, thus enabling the door to be closed without disengaging the locking or latching mechanism by which the pivoted portion of the weather-strip is secured in an elevated po-  
 35 sition.

It will be seen that this weather-strip is automatically adjustable both in opening and closing the door, so that there is no liability of its becoming caught in the carpet or in any  
 40 ordinary rug or mat, and at the same time it affords a thorough and effective guard against the entrance of drafts, dust, rain, or snow when the door is closed.

The weather-strip may be made partly or  
 45 wholly of wood or metal, as desired; and, if preferred, an elastic substance—such as rubber or other suitable material—may be attached to the lower edge of the pivoted portion.

In front of the longitudinal flange 6, on the  
 50 movable strip 4, I propose to insert a strip of rubber or other elastic material, 31, which will cushion against the flange as the movable strip is dropped. This will prevent the abrupt im-  
 55 pact of the parts, deaden noise, and give a much closer joint, while at the same time it facilitates the operation of the parts.

What I claim as my invention is—

1. A weather-strip composed of a stationary portion having a rabbeted and flanged lower edge, and provided at or near its ends with 60 lug-carrying plates, a movable portion or strip having a pivotal connection with said lugs and provided at one end with a segmental flanged plate having a catch, and a spring-latch pivoted to the stationary portion or strip 65 and having a lateral lug or projection adapted to come in contact with a striker, whereby the latch and catch are disengaged, substantially as described.

2. A striker for a pivoted weather-strip, com- 70 posed of a recessed plate having a pivoted button and a laterally-projecting lug provided with a curved or beveled upper surface, substantially as described.

3. The combination, with a door, of a fixed 75 strip secured thereto and provided with a flanged and rabbeted lower edge, a movable strip pivoted beneath and in engagement with the fixed strip, said movable strip being provided with a catch at one end, a spring-latch 80 pivoted to the fixed strip and adapted to engage said catch, and a striker-plate secured to the door-frame and adapted to actuate the movable strip both in opening and closing the door, substantially as described. 85

4. The combination, with a door, of the fixed strip 2, having a lower rabbeted edge, the movable strip 4, having a catch-plate secured to one end and pivotally connected to the fixed strip, a spring-latch, 19, pivoted to the fixed 90 strip and having a laterally-projecting lug, 23, and a striker-plate secured to the door-frame and provided with lug 28, pivoted button 29, and recess 30, substantially as described.

5. The combination, with a door, of the fixed 95 strip 2, having a lower rabbeted edge, the hinged or movable strip 4, having at its upper edge a flange, 6, and cushion 31, and provided at one end with a catch, 20, a spring-latch, 19, pivoted to the fixed strip and adapted to en- 100 gage said catch, and a striker secured to the door-frame for disengaging the latch, substantially as described.

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

JAMES M. OSBORN.

Witnesses:

MARCUS G. B. SWIFT,  
 H. K. BRALEY.