J. BALDWIN.

WEATHER-STRIP.

No. 184,691. Patented Nov. 28, 1876.

Fig 1.

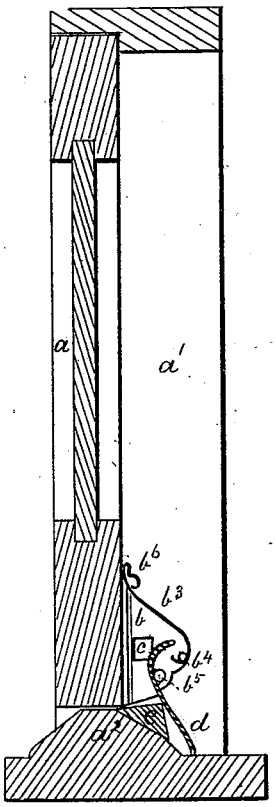
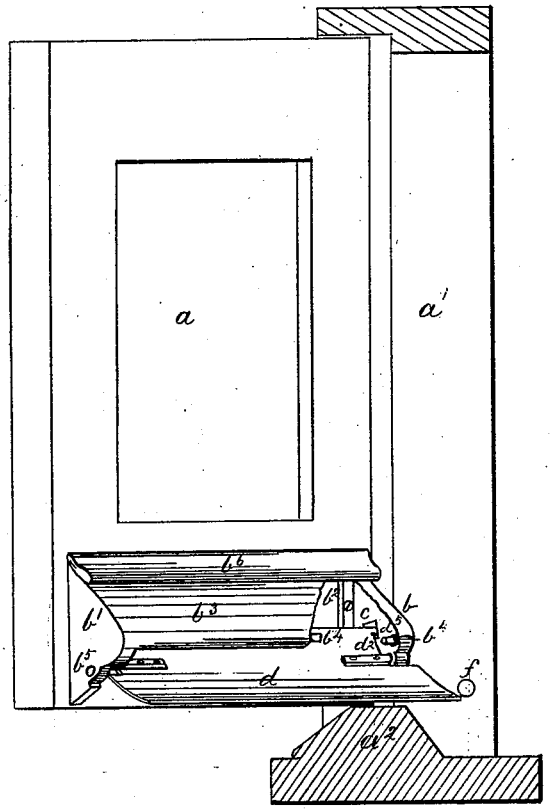


Fig 2.



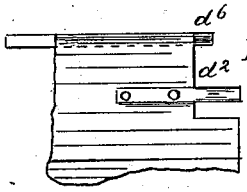


Fig 6.

Fig 5.

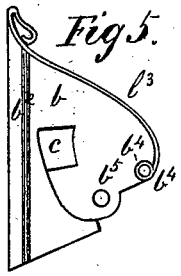
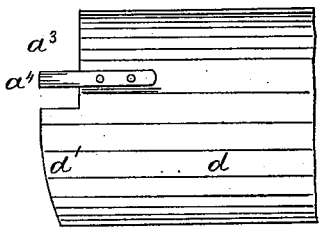


Fig 3.



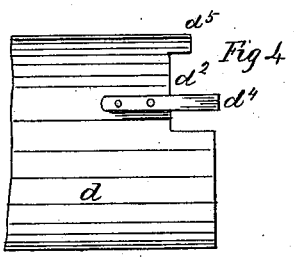
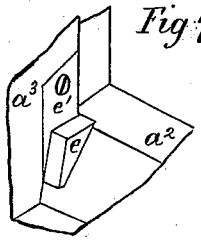


Fig 4

Fig 7.



Witnesses
B. C. Pole.
J. B. Holderby

Inventor
Joseph Baldwin,
Per R. S. & A. P. Lacey.
attorneys.

UNITED STATES PATENT OFFICE.

JOSEPH BALDWIN, OF HOPEDALE, OHIO.

IMPROVEMENT IN WEATHER-STRIPS.

Specification forming part of Letters Patent No. **184,691**, dated November 28, 1876; application filed August 30, 1876.

To all whom it may concern:

Be it known that I, JOSEPH BALDWIN, of Hopedale, in the county of Harrison and State of Ohio, have invented certain new and useful Improvements in Weather-Strips; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in weather-strips, and has for its object to furnish a cheap and simple device capable of being attached to any door without cutting or mortising the latter, and that will be automatic in its operation.

It consists in a notched or recessed weather-strip, provided with a rear-side projection, and journaled in with capability of a horizontal to-and-fro movement between a pair of lugs or brackets, one of which is recessed to receive the rear-side projection or stop; and it consists, further, in other improvements, all of which will be hereinafter more fully explained.

In the drawings, Figure 1 is a vertical section, and Fig. 2 is a perspective, of a door having my improved strip applied thereto; and Figs. 3, 4, 5, 6, and 7 are detail views of parts.

a is the door, hinged to the frame a^1. a^2 is the threshold-strip, and a^3 is a portion of the lower end of the jamb, or part of the door-frame against which the door shuts, with a portion of the threshold-strip attached thereto. b b^1 are the brackets or lugs in which the weather-strip is journaled. They are provided with suitable flanges b^2, which give the necessary facilities for fastening to the door. They may be made of any desired ornamental form, with their upper edges made sloping to give pitch or slant to the hood or cover b^3, placed thereon for the protection of the strip against rain or other injuring cause. Their outer ends are connected by, or support in suitable bearings, a rod, b^4, to which the lower edge of the hood b^3 is secured. They are provided with the bearings b^5, in which the axes of the weather-strip turn. The bracket b is provided on its inner face with the recess *c*, in which a side projection, hereinafter described, on the weather-strip, engages, for the purpose of holding the strip elevated when the door is open.

The bearings b^5 and the recess *c* may be arranged in relation to each other, so that a straight convex or concave strip may be employed, instead of the form shown in Fig. 1. *d* is the weather-strip, which fits neatly between the door-posts, and, when the door is closed, covers the opening above the threshold-strip. Its end is rounded or slightly curved, as shown at d^1, so as not to interfere with the jamb in the opening or closing of the door. Its rear side is shortened by having the portions d^2 d^3 cut from the ends, which permits the setting of the brackets b b^1 far enough in on the door so as not to strike the door-frame, and so that it will have a horizontal to-and-fro movement on its axes d^4 d^4, sliding in the bearings b^5, whereby it is automatically adjusted to the curvilinear movements of the door in opening and closing the latter. In cutting away the portion d^2, a projection, d^5, is left on the weather-strip, which projection engages in the notch *c*, and, when the door is open, holds the strip in the horizontal or elevated position shown in Fig. 2. Instead of having the projection d^5 a part of the strip, as above set forth, I prefer to attach to the under side of the strip, by suitable rivets, a long spring, d^6, secured near the center of the strip, its end projecting, as shown in Fig. 6. When the door is open, the spring will yield to any pressure on the outer wing of the strip, and will prevent injury thereto. The sheet-metal hood or cover b^3 is secured to the cross-rod b^4, as hereinbefore stated, and to the door *a*. It rests on and takes the form of the top of the brackets b b^1. Its upper end b^6 is made long enough so that when secured to the door by nails or screws it may be turned down over and protect the latter from the weather, as shown. The extended end may be so formed that when turned down it will present a neat, ornamental appearance. *e* is an angular block, made of metal or other suitable material, and secured to the threshold-strip, for the purpose of elevating the weather-strip as the door is opened. It is arranged so that it will be immediately behind the weather-strip when the door is closed, and so that the slightest movement of the door outward from the jamb will

cause the elevation of the weather-strip into a horizontal position. By preference I form it with the lug e', which is let into the jamb, and provides facilities for fastenings, and also makes a bearing-surface, against which the rounded end d^1 moves, and thus protects the jamb from being worn away. f is a metallic bearing placed in the post a^1 to protect the latter from being worn by the frequent striking of the weather-strip thereagainst.

The operation of the device is as follows: The weather-strip being elevated, as shown in Fig. 2, by closing the door the end d^5 comes in contact with the post a^1, and pushes the strip toward the jamb, and just as the door is closed the projection d^5 becomes disengaged, and the strip drops into the position shown in Fig. 1. When the door is opened, the block e elevates the strip to a horizontal position, and as the door swings back, the end d^1, bearing against the jamb a^3, moves the strip toward the lug b, and causes the projection d^5 to enter the recess c and hold the strip elevated.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The weather-strip d, having the rear-side notches d^2 d^3, and journaled in the brackets b b^1, with capability of a horizontal to-and-fro movement, for the purposes set forth.

2. The combination, with the weather-strip d, having the notches d^2 d^3 and projection d^5, and journaled in the brackets b^1 and b, having the recess c, of the angular block e and door-posts a^1 a^3, for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOSEPH BALDWIN.

Witnesses:
DAVID H. COPE,
W. H. MANSFIELD.