

(No Model.)

S. M. HORNER.
WEATHER STRIP.

No. 544,355.

Patented Aug. 13, 1895.

Fig. 1.

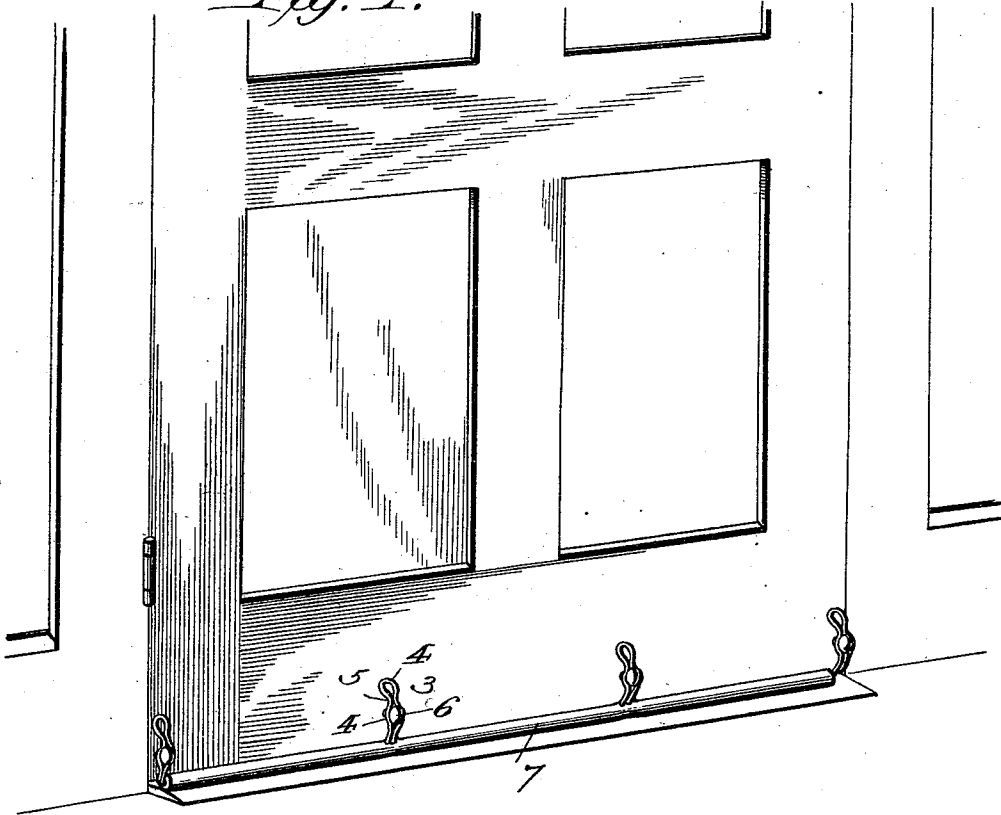


Fig. 2.

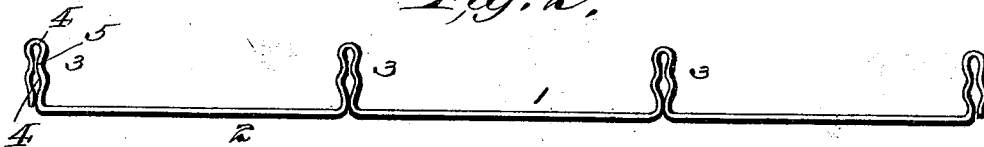
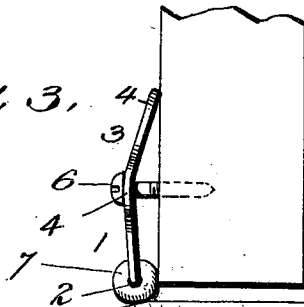


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 544,355, dated August 13, 1895.

Application filed May 14, 1895. Serial No. 549,289. (No model.)

To all whom it may concern:

Be it known that I, SUMMERS M. HORNER, a citizen of the United States, residing at Potterville, in the county of Eaton and State of Michigan, 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.

My invention relates to weather-strips, and more particularly to that class of weather-strips which are adapted to be applied to the lower edge of doors to form a batten or pack the space between the threshold and the bottom of the door to prevent the entrance of air or moisture beneath the door; and it has for its object to construct a weather-strip that can be readily adjusted to various positions to compensate for wear of either the packing or threshold without the removal of the securing means from the door, and also by which the packing will be constantly pressed into contact with the threshold or floor, so as to automatically form a tight packing when the door is closed.

The invention consists of the construction and combinations of parts hereinafter set forth in the specification and more particularly defined by the claims.

In the accompanying drawings, which form part of this application, Figure 1 is a perspective of a door with my invention applied thereto. Fig. 2 is an elevation of the wire frame with the packing removed, and Fig. 3 is a detail end view illustrating the inclination of the loops by means of which a spring-pressure is imparted to the packing when the strip is secured to a door.

In the drawings, the numeral 1 indicates a frame formed of stout spring-wire, which is provided with the horizontal portions 2 and the securing-loops 3. These loops extend upwardly from the horizontal portions and are so bent as to provide apertures 4, through which the securing means or screws 6 pass to secure the frame to the door. I form two or more of these apertures 4 and connect them by narrow ways 5, so that the strip can be adjusted up or down upon the door to compensate for wear of the packing 7 or threshold by simply loosening the fastening means and pressing

the frame up or down until the next aperture comes into alignment with the securing means, when these means are again tightened to clamp the parts in position. As the loops are made of spring-wire and integral with the body of the frame, a slight expansion of the walls may take place when the frame is moved up or down over the fastening means. By this construction of parts it is only necessary that one set of holes be made in the door by the fastening means, as the plane of the packing on the strip can be changed as often as desired by simply changing the position of the loops on the fastening means.

The upwardly-extending loops are bent slightly inward, so that their upper ends stand at an angle to the horizontal portion of the strip. By this means when the parts are secured to the door the horizontal portion of the frame, which is covered by a suitable packing 7, of felt or other material, will be continuously pressed downward and inward, so as to be in contact with the threshold or floor when the door is closed. If the frame should become loose or the spring or the wire weaken, the tension of the spring can be readily increased by tightening up the fastening means, which will draw the parts into closer contact with the door. This compensates for any slight wear and insures the packing always being in close contact with the threshold, so that a perfectly-tight weather-strip is thereby provided.

It will be noted that, the frame and loops being made of one piece of spring metal, the whole device will readily accommodate itself to any slight irregularities of the threshold or floor and will readily resume its former position if accidentally bent by coming into contact with any obstacle.

By bending downward the horizontal portion of the frame the packing may be made to conform to the outline of a threshold or floor which is more worn away at the center than at the sides of the door, which state of wear frequently occurs.

It will be readily observed that my construction of parts permits the easy adjustment of the strip to compensate for any wear of the packing or threshold, and by means of the spring-pressure imparted to the strip it will always make close contact with the threshold

or door-frame. The device is also very simple and can be manufactured at a very reasonable cost.

5 Having described my invention and set forth its merits, what I claim, and desire to secure by Letters Patent, is—

10 1. In a weather strip, the frame formed of spring metal covered with a suitable packing and provided with upwardly extending securing loops bent inwardly at their upper ends whereby the strip is held under spring tension when secured in position for use, substantially as described.

2. In a weather strip, the frame formed of

spring metal covered with a suitable packing, 15 upwardly extending securing loops formed integral with the horizontal body of the frame and bent inward at their upper ends and provided with a series of apertures in each loop, and fastening means passing through one of 20 said series of apertures, substantially as described.

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

SUMMERS M. HORNER.

Witnesses:

J. M. C. SMITH,
ADA O'NEIL.