No. 649,150. Patented May 8, 1900.

G. WINTER.

WEATHER STRIP.

(Application filed Feb. 14, 1900.)

(No Model.)

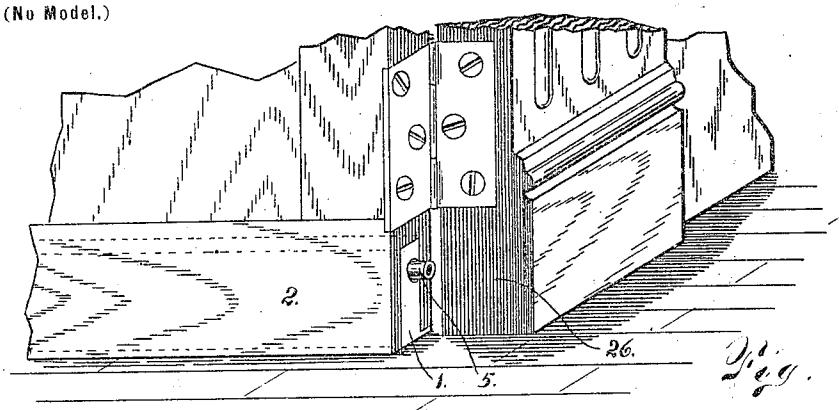


Fig. 1.

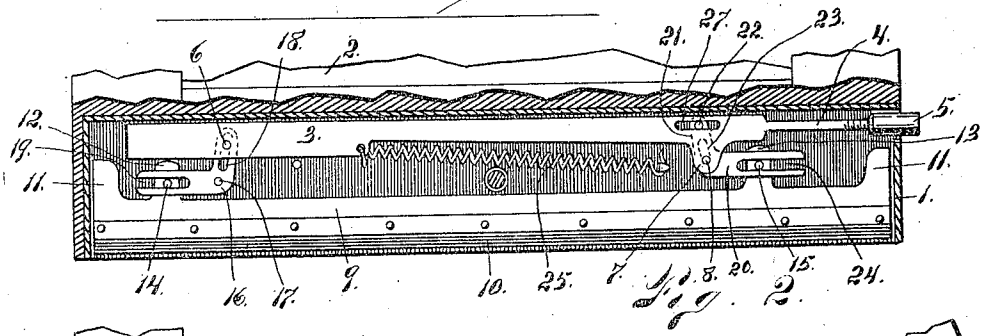


Fig. 2.

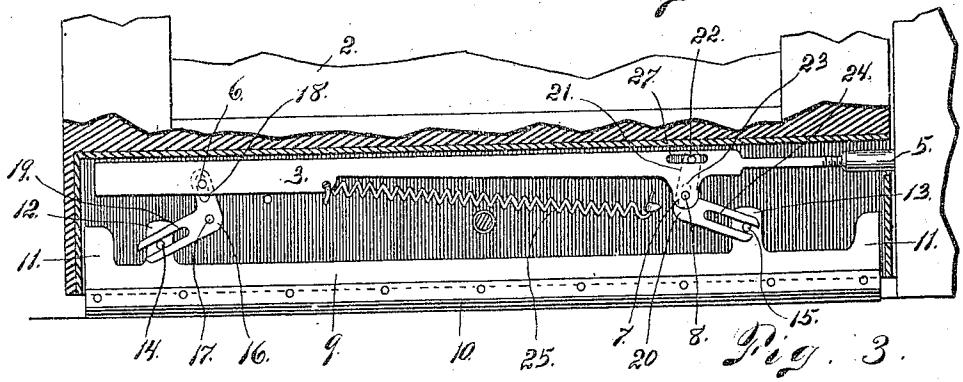


Fig. 3.

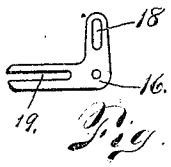


Fig. 4.

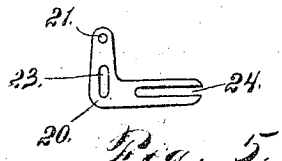


Fig. 5.

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UNITED STATES PATENT OFFICE.

GEORGE WINTER, OF BUFFALO, NEW YORK.

WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 649,150, dated May 8, 1900.

Application filed February 14, 1900. Serial No. 5,142. (No model.)

To all whom it may concern:

Be it known that I, GEORGE WINTER, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, 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, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in that class of weather-strips which are applied to the under side of doors and which are automatically raised or lowered as the door is opened or closed.

The object of my invention is to so arrange and combine the operative parts that the weather-strip is not lowered into protective position until the door is completely closed and is raised out of protective position the instant the door starts to open.

To these ends my invention consists of a certain arrangement and combination of parts, all of which will be fully hereinafter described and claimed.

In the drawings, Figure 1 is a fragmentary perspective view of the door and its jamb, showing the application of my improved weather-strip. Fig. 2 shows my improved weather-strip and its operative parts as they appear when the door is open. Fig. 3 shows the strip and its operative parts as they appear when the door is closed. Fig. 4 is a detached detail of the outer angular lever, and Fig. 5 is a detached detail of the inner angular lever.

Referring to the drawings, 1 is the casing, containing the weather-strip and its operative parts. It is preferably secured in a recess in the under side of the door 2 and extends entirely across the same.

3 is a horizontally-acting metal bar located in the upper part of the casing 1. Its narrow inner end 4 is screw-threaded, adapting it for the adjustable reception of the screw-threaded thimble or knob 5, which projects out through the casing 1. A pin 6 is located near the outer end of bar 3, and near the inner end of bar 3 is the downwardly-extending lug 7, upon which is the pin 8.

9 is a vertically-acting metal bar carrying along its under edge the weather-strip 10 of suitable flexible material, such as rubber or leather. Upon the upper edge of this bar 9 are the end guiding-lugs 11 11 and the inner vertical lugs 12 and 13, upon which are located the pins 14 and 15.

16 is an angular lever which is centrally pivoted upon the pin 17 on the casing 1. The lever 16 is provided with the two outer slots 18 and 19, the slot 18 being adapted for the loose reception of the pin 6 on the bar 3 and the slot 19 being similarly adapted for the loose reception of the pin 14 on the lower bar 9. 20 is another angular lever, the outer end of its upper arm 21 being pivoted upon the pin 22. On the casing 1 this lever 20 has the central slot 23 and the outer slot 24, the central slot 23 being adapted for the loose reception of the pin 8 on the bar 3 and the outer slot being similarly adapted for the loose reception of the pin 15 on the lower bar 9. A spring 25 has one of its ends secured to the horizontally-acting bar 3, its other end being secured to the wall of the casing 1.

The horizontally and vertically acting bars 3 and 9 and their attached parts just described in detail operate as follows: 27 is an elongated slot in the bar 3 into which the pin 22 enters, which permits the bar 3 to lie flat against the casing 1 and at the same time to have sufficient horizontal play for operating the lower bar 9. When the door is closed, the jamb 26 forces in the knob 5 on the bar 3, which throws the bar horizontally toward the outer end of the casing 1. This causes the lower slotted ends of the two angular levers 16 and 20 to be swung downwardly upon their pivots 17 and 22 and in directions toward each other, which gives to the lower bar 9 a vertical throw, causing the attached weather-strip to project down below the door, as shown in Fig. 3. The instant the door is opened the spring 25 throws the bar 3 back to its former position, as shown in Fig. 2, causing the angular levers 16 and 20 to be swung back in opposite directions on their pivots and lifting the rod 9 vertically in the casing, 1 which carries the weather-strip 10 up

out of sight and keeps it in such position until the knob 5 again reaches the door-jamb in the act of closing the same. It will be seen that the weather-strip only appears the instant the door is completely closed and is hidden from view as soon as the door commences to open and while it remains in such opened position.

The knob 5 is made adjustable on the bar 3 for the purpose of regulating the throw of the weather-strip to accommodate it to different spaces between the door and threshold.

I claim—

1. An automatic weather-strip for the under side of doors consisting essentially of a horizontally-acting spring-bar, a vertically-acting bar carrying the weather-strip, an angular lever centrally pivoted to the casing and having end slots loosely engaging pins on the horizontally and vertically acting bars, an angular lever pivoted at the outer end of one of its arms to the casing and having a central and an outer slot loosely engaging pins on the horizontally and vertically acting bars, and the horizontally-acting bar having a protruding knob adapted for impact against the jamb of the door all combined and operating substantially as and for the purpose stated.

2. An automatic weather-strip for the under side of doors consisting essentially of a horizontally-acting spring-bar, a vertically-acting bar carrying the weather-strip, an angular lever centrally pivoted to the casing and having end slots loosely engaging pins on the horizontally and vertically acting bars, an angular lever pivoted at the outer end of one of its arms to the casing and having a central and an outer slot loosely engaging pins on the horizontally and vertically acting bars, and the horizontally-acting bar having a protruding adjustable knob adapted for impact against the jamb of the door all combined and operating substantially as and for the purpose stated.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE WINTER.

Witnesses:
MAX FELLON,
W. T. MILLER.