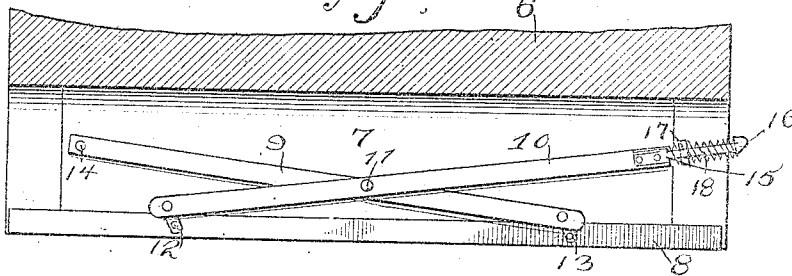


C. R. HAMMELL.  
 WEATHER STRIP.  
 APPLICATION FILED MAR. 23, 1910.

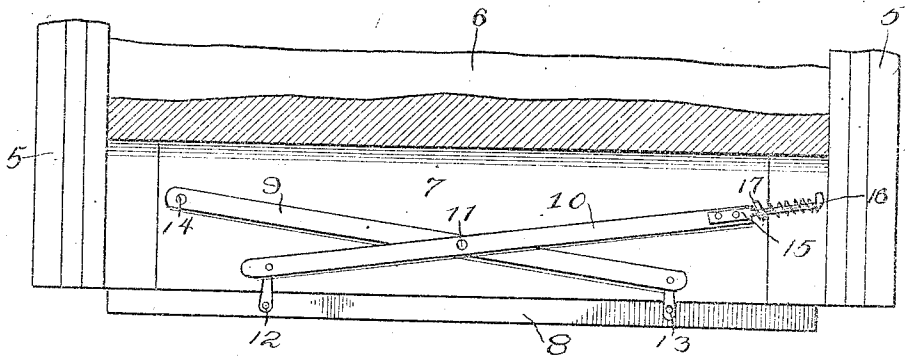
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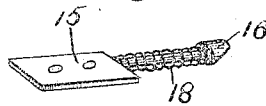
*Fig. 2*



*Fig. 1*



*Fig. 3*



Witnesses  
 W. S. McDowell.  
 John D. Duggan,

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# UNITED STATES PATENT OFFICE.

CYRUS R. HAMMELL, OF DECATUR, INDIANA.

## WEATHER-STRIP.

981,416.

Specification of Letters Patent.

Patented Jan. 10, 1911.

Application filed March 23, 1910. Serial No. 551,081.

*To all whom it may concern:*

Be it known that I, CYRUS R. HAMMELL, a citizen of the United States, residing at Decatur, in the county of Adams and State of Indiana, have invented new and useful Improvements in Weather-Strips, of which the following is a specification.

This invention relates to improvements in weather strips such as are usually applied to swinging doors.

One object of the invention is the provision of a strip which will, when the door is opened be completely concealed.

Another object is the provision of a weather strip which will be automatically lowered to cover the space between the end of the door and adjacent surface of the frame when the door is closed.

With these and other objects in view, which will more fully hereinafter appear, the present invention consists in certain novel details of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings and more particularly pointed out in the appended claim; it being understood that various changes in the form, proportion, size, and minor details of the device may be made, within the scope of the appended claim, without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, forming a part of the specification:—Figure 1 is a front elevation of the lower portion of a door and its frame partly in section and showing my improved device applied thereto. Fig. 2 is a similar view of a door partly in section without the frame and showing the position of the parts when the door is opened. Fig. 3 is a detail perspective of the frame engaging member.

Similar numerals of reference are employed to designate corresponding parts throughout.

The frame is designated by the numeral 5 and the door by the numeral 6.

The attachment about to be described may be applied to either or both the upper and lower ends of a door. For convenience I have shown it applied to the lower end of the door and formed in the said lower end is a groove or channel 7 extending vertically.

The strip proper is designated by the numeral 8 and is preferably of thin sheet metal corresponding in length approximately to the width of the door and in

width is considerably less than the depth of the channel 7.

The supporting and actuating mechanism for the strip comprises a lazy-tongs, the bars of which are designated by the numerals 9 and 10 the said bars being pivoted together at their medial portions, as shown at 11. The lazy-tongs is arranged within the channel and connection between the lower ends of the bars and opposite end portions of the strip is established by means of a pair of links 12 and 13 the opposite ends of each are pivoted to the lower ends of the bars and opposite end portion of the strip. The end portion of the bar 9 or that adjacent to the heel end of the door is connected to the door by means of a pivot pin 14 passing through an opening in the end portion of the said bar 9 and sides of the channel. The free end of the opposite bar 10 is provided with a nose which includes an elongated shank 15 arranged in a lateral opening formed in the side of the door, the said shank terminating in a beveled head 16 which normally projects beyond the side of the door and in position to engage with the door frame 5.

A staple or its equivalent 17 is driven into the door and straddles the shank 15 and encircling the shank with its opposite terminals bearing on the staple 17 and inner end of the head 16 is a helical compression spring 18, which normally holds the head 16 projected through the opening and the strip 8 retracted within the channel.

In the operation of the device it being assumed that the door is in open position and the head 16 projected through the opening, whereby the strip will be well within the channel so that its lower edge will be above the surface of the lower end of the door, a movement of the door whereby the toe end of the latter will engage with the frame will result in the head 16 likewise engaging with the frame, whereby the nose will move inwardly against the action of the spring 18 and cause the lower end portions of the bars to descend, thus projecting the strip into engagement with the threshold of the door. When the door is open and the head 16 moves out of engagement with the frame the action of the spring will project the head, whereby the lower ends of the bars will move upwardly and retract the strip.

Thus it will be seen that the device is entirely invisible and will not become dam-

aged by engagement with external objects nor detract from the appearance of the door to which it is applied. It will be further observed that the device is exceedingly simple in structure and inexpensive in manufacture, and which may be applied to most forms of swinging doors now in use.

I claim:—

10 In combination with a door provided in its lower end with a channel, and a guide arranged adjacent to one end of the channel; of a vertically movable strip located in the channel, a pair of bars crossed at their intermediate portions and pivoted together, one  
15 of said bars being pivoted at one end between the sides of the channel, and a link connection between the opposite end of said

bar and one end of the strip, a link connection between one end of the other of said bars and the opposite end portion of the strip, an elongated shank member slidably fitted in said guide and having one end fixed to the opposite end of the last-named bar and provided at its outer end with a beveled nose, and a helical compression spring bearing on said guide and nose, and yieldingly holding the latter beyond one side of the door.

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

CYRUS R. HAMMELL.

Witnesses:

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DAVID E. SMITH.