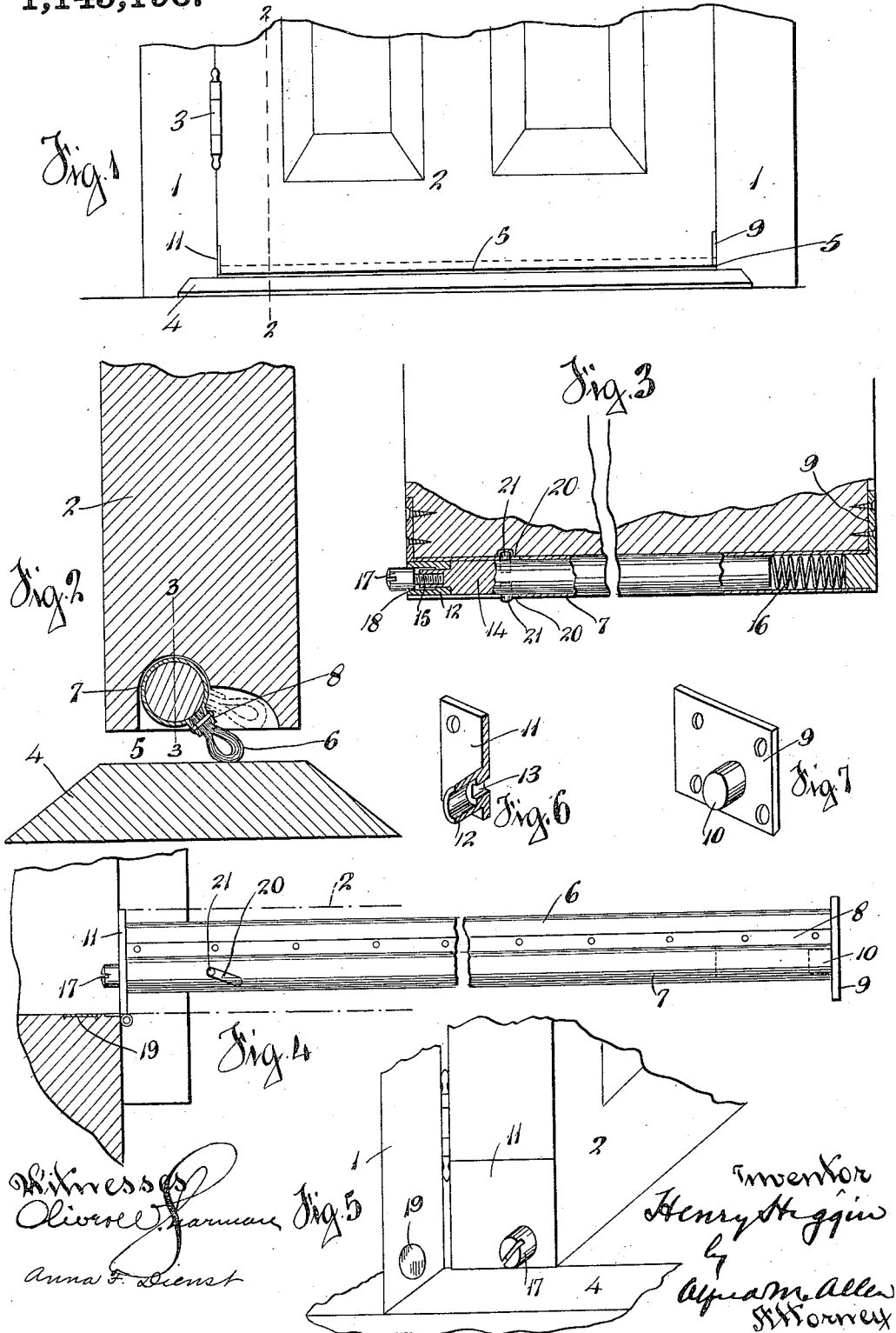


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 WEATHER STRIP.  
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1,145,196.

Patented July 6, 1915.



# UNITED STATES PATENT OFFICE.

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## WEATHER-STRIP.

1,145,196.

Specification of Letters Patent.

Patented July 6, 1915.

Application filed April 14, 1913. Serial No. 760,960.

*To all whom it may concern:*

Be it known that I, HENRY HIGGIN, a citizen of the United States, and a resident of the city of Newport, in the county of Campbell and State of Kentucky, have invented certain new and useful Improvements in Weather-Strips, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

In the weather strip art there are numerous contrivances for raising and lowering the strips around doors which swing away from and onto a jamb located on a floor or sill. It is almost universally true in these devices that knobs or pins must be located on the door jamb which are unsightly and tend to catch ladies' garments and also that these raising devices, if they fail to operate will clamp the door in any position to the floor, and above all they present an unsightly appearance on the base of the door.

It is the object of my invention to provide a weather strip together with a raising means which does not require pins or knobs on the door jamb and which will not, if in lowered position, hold the door open and which is entirely within the door, and this I accomplish by that certain construction and location of parts to be hereinafter specifically pointed out and claimed.

In the drawings, Figure 1 is an elevation of the door, when closed, taken from the inside. Fig. 2 is a vertical section on the lines 2, 2, in Fig. 1. Fig. 3 is a vertical section on the lines 3, 3, in Fig. 2. Fig. 4 is a plan view of my improved weather strip with the door removed. Fig. 5 is a perspective view of the door open, taken from the outside. Fig. 6 is a sectional perspective of the plate on the hinged side of the door. Fig. 7 is a perspective view of the plate on the side opposite the hinged end.

The frame 1, the door 2 and the hinges 3 are of any desired kind. The door swings on its hinges and is hinged in such a position that when closed and located over the jamb 4, a space 5 intervenes between the base of the door and the top of the jamb. When the door is so located, the weather strip 6 is lowered to close the said intervening space in the manner and by the means now to be described.

A tube 7 is provided, between the flanged

sides 8, 8, of which is attached the weather strip 6. The door frame is hollowed at the base to form a groove or box for this tube and strip, and located in the swinging side of the door at one end of the groove is a plate 9 having a round lug or pin 10, preferably integral therewith and extending inwardly. This pin is adapted to carry rotatably one end of the tube 7. Located at the hinged side of the door at the other end of the groove is a plate 11, having an inwardly extending sleeve 12, preferably integral therewith and open at both ends. This sleeve is adapted to carry rotatably the tube 7, and it is squared within for part of its length at 13 to slidably but not rotatably mount the rod 14. The rod 14 has a squared end 15 adapted to fit into said squared sleeve portion and extends through the tube 7. A coiled spring 16 abutting against the lug 10 on the first mentioned plate bears against the extended end of the rod 14 and thereby forces the rod against its seat in the sleeve 12. Screwed into the square end of said rod is a pin 17, which extends out through the sleeve, slides in the unsquared end 18 of the sleeve and when the door is in closed position abuts against the door frame. As a guard for said point of abutment, I prefer to have a plate 19. It can thus be seen that when the door is closed the rod 14 is forced along slidably but not rotatably in the tube 7 against the spring 16, and that upon opening the door it will slide back again by the force of the spring. This nonrotatable movement I employ to raise and lower the weather strip, as follows: In the tube 7 on opposite sides thereof, I provide slots 20, 20, cut transverse the axis of the tube and on the rod I provide the pins 21, 21, in such a position as to register with the slots. These slots 20, 20, extend in the same general direction as the movement of the rod, but outwardly toward the outside of the door. The tube is mounted on the sleeve 12 and lug 10, so that the flanged ends carrying the weather strip extend toward the inside of the door. In this position nothing shows beneath the door, the entire device being within the groove. When the door is closed, however, the action of the pins 21, 21 in the slots 20, 20, tends to force the tube to rotate away from the inside of the box and thus it lowers the weather strip. It will be understood that

this arrangement of parts would necessarily be reversed if the door opened out instead of in. Further I do not desire to limit myself to the use of a plurality of pins 21 and slots 20. A single slot and pin will operate the parts. I merely prefer a double use. The illustration adopted here is the usual arrangement of the door.

The plates 9 and 11 are preferably screwed into place so as to be easily removable, and the means of attachment of such parts as the weather strip, the pins 21, 21, are of any desired kind. For a weather strip I prefer a felt strip, but this is not essential.

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

1. In a device of the character described, a rod, a metal strip bent to form a tube around the rod to slidably mount the same and carrying between its edges a strip of felt, means for mounting the tube so formed inside the base of a door comprising end plates having inwardly extending members over which the tube so formed is mounted, a

cam connection between the rod and tube, one of said end plates having a squared aperture, a squared end for the rod to slide therein, and an adjustable abutment screw extending outwardly through said aperture, for the purpose described.

2. In a device of the character described, a rod, a metal strip bent to form a tube around the rod to slidably mount the same and carrying between its edges a strip of felt, means for mounting the tube so formed inside the base of a door comprising end plates having inwardly extending members over which the tube so formed is mounted, a cam connection between the rod and tube, one of said end plates having a squared aperture, a squared end for the rod to slide therein, an adjustable abutment screw extending outwardly through said aperture, and a spring in said tube bearing against the rod, and against the other of the end plates, for the purpose described.

HENRY HIGGEN.

Attest:

HENRY A. FABER,  
MARSTON ALLEN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."