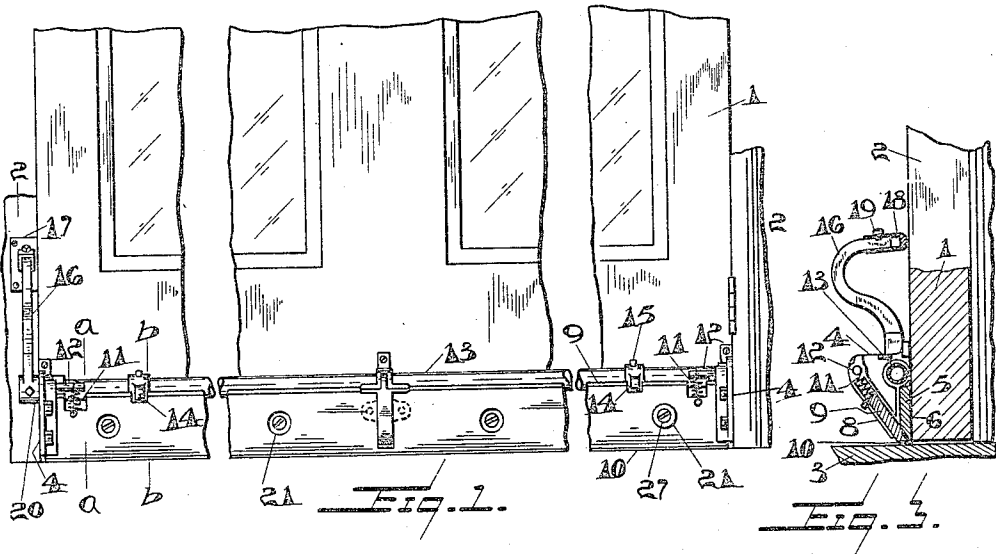
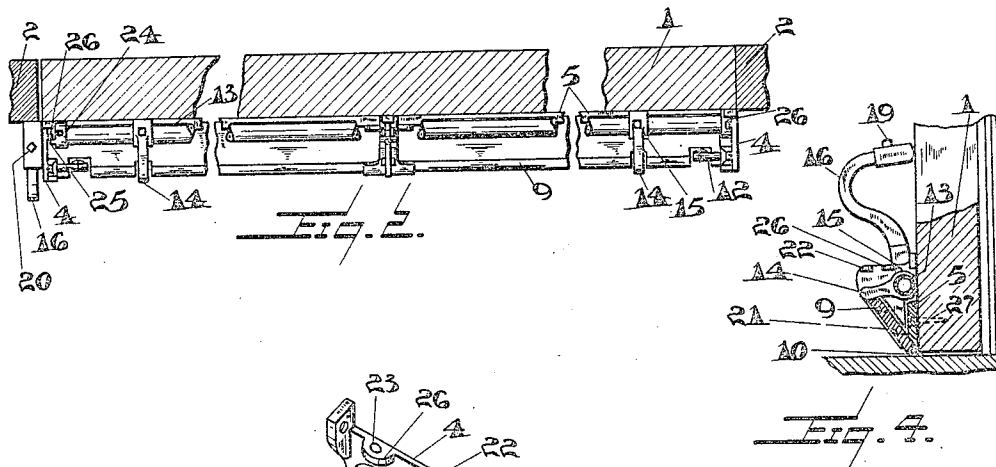
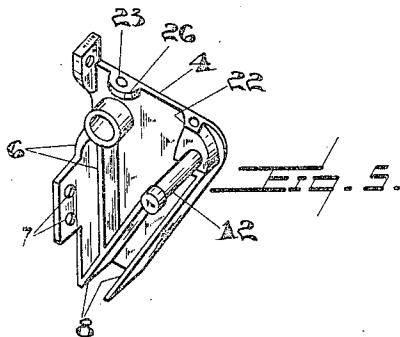


L. M. REES.
 WEATHER STRIP.
 APPLICATION FILED OCT. 15, 1917.

1,282,290.

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WEATHER-STRIP.

1,282,290.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, LLEWELYN M. REES, a subject of the King of Great Britain, residing in the city of Toronto, county of York, Province of Ontario, Canada, have invented certain new and useful Improvements in Weather-Strips, of which the following is a specification.

This invention relates to weather strips for doors of the type in which the closure of the door moves the weather strip into contact with the threshold to effectively close any gap between the door and threshold, and my object is to devise a weather strip of this type which will be simple, durable and effective, the movable part being so arranged and moved as to very effectively seal the gap.

I attain my object by means of the constructions hereinafter described and illustrated in the accompanying drawings in which—

Figure 1 is a front elevation partly broken away showing part of the door provided with my improved weather strip;

Fig. 2 a plan view of the same;

Fig. 3 a cross section on the line *a— a* in Fig. 1;

Fig. 4 a cross section on the line *b— b* in Fig. 1; and

Fig. 5 a perspective detail of one of the end frames.

In the drawings like numerals of reference indicate corresponding parts in the different figures.

1 is part of a door, of which 2 is the door frame and 3 the threshold. The weather strip frame is formed of two metal end frames 4 and the transverse wooden strip 5 secured to the end frames, the end frames being provided with the flanges 6 between which the ends of the strip 5 are secured, one of the flanges being provided with screw holes 7 for that purpose.

Suitable inclined guides 8 are formed on the end frames, the guides being preferably flanges between which the movable strip 9 is guided. The inclination of the guides, and consequently of the movable strip, is of great importance in my invention, as the movable strip not only moves to and from the threshold, but also to and from the door, so that its lower end actually moves into any gap which may exist between the bottom of the door and the threshold.

The lower edge of the strip, it will be noted, is substantially parallel to the threshold so that the forward edge of the movable strip forms an acute angle, which is particularly adapted to enter the gap aforesaid. The lower edge of the movable strip is preferably provided with a strip 10 of felt or other soft material, which is fitted over the forward acute angled edge of the strip.

Normally the wooden strip is retracted by coil springs 11, which are fitted in notches in the movable strip and are secured at their lower ends to the strip and at their upper ends to any suitable part of the end frames such, for example, as the pins 12 integral with the end frames. To depress the movable strip when the door is closed, I provide the following mechanism. A rock shaft 13 is journaled on the end frames, and has secured thereto rock arms 14 which have rounded under faces engaging the upper edge of the movable strip 9. This edge has preferably shallow notches formed therein to enable the downward push of the arms being more in the direction of movement of the strip. The rock arms are preferably rotatably adjustable on the rock shaft, being secured in position by set screws 15. This enables me to cause one end of the strip to be thrown down farther than the other in cases where the gap between the door and threshold is not of even width from end to end. The rock shaft is actuated through the medium of a rock arm 16, which is secured to one end or the other according as the door is a right or left hand opening door. This arm is extended out so as to engage the door frame, which is preferably provided with a rubbing plate 17 to take the wear of the arm. The arm is adjustable in length, the movable end 18 being slidable on the main part of the arm and adapted to be secured by means of a set screw 19. By adjusting this end the throw of the movable strip may be regulated. Preferably also the arm is secured to the rock shaft by means of a set screw 20, where further adjustment can be made if desired.

To enable the device to be secured in place I provide screw holes 27 in the strip 5 and in the strip 9 I provide the larger openings 21 through which a screw driver may be introduced to screw the strip 5 to the bottom of the door.

To hold the shaft 13 from endwise mo-

tion, I secure thereon by means of a set screw a collar 24 provided with a shoulder 25 adapted to engage a shoulder 26 formed on one of the end frames. The engagement of these shoulders prevents the rock shaft tipping over so far that the rock arm 16 is not in a position to properly engage the door frame.

It will be noted that lugs 22 are cast on the end frames 4 and a sheet metal cover is secured thereto by means of the screws 23 threaded into the lugs. All the parts are thus covered over to exclude dirt and give a neat finish to the device.

What I claim as my invention is:—

1. In a weather strip, the combination of metal end frames; a transverse wooden strip secured to said end frames; inclined guide ways on said end frames extending downwardly toward said wooden strip; and a strip movable in said guideways so that it may be projected to operative position or retracted.

2. In a weather strip, the combination of metal end frames; a transverse wooden strip secured to said end frames; inclined guide ways on said end frames extending downwardly toward said wooden strip; and a strip movable in said guideways so that it may be projected to operative position or retracted, openings being formed through the movable strip through which access to the fixed strip may be had to secure it to a door.

3. In a weather strip, the combination of metal end frames; a transverse wooden strip secured to said end frames; inclined guide ways on said end frames extending downwardly toward said wooden strip; a strip movable in said guideways so that it may be projected to operative position or retracted; a rock shaft journaled in said end frames; rock arms secured to the shaft and adapted to engage the upper edge of the movable strip; springs tending to raise the movable strip; and a rock arm on said shaft the end of which is adapted to engage the door jamb to rock the shaft and thus depress the movable strip.

4. In a weather strip, the combination of metal end frames; a transverse wooden strip secured to said end frames; inclined

guide ways on said end frames extending downwardly toward said wooden strip; a strip movable in said guideways so that it may be projected to operative position or retracted; a rock shaft journaled in said end frames; rock arms secured to the shaft and adapted to engage the upper edge of the movable strip; springs tending to raise the movable strip; and a rock arm on said shaft the end of which is adapted to engage the door jamb to rock the shaft and thus depress the movable strip, said rock arm having an adjustable end movable to and from the door.

5. In a weather strip, the combination of metal end frames; a transverse wooden strip secured to said end frames; inclined guide ways on said end frames extending downwardly toward said wooden strip; a strip movable in said guideways so that it may be projected to operative position or retracted; a rock shaft journaled in said end frames; rock arms secured to the shaft and adapted to engage the upper edge of the movable strip, said rock arms being rotatably adjustable on the shaft; springs tending to raise the movable strip; and a rock arm on said shaft the end of which is adapted to engage the door jamb to rock the shaft and thus depress the movable strip.

6. In a weather strip, the combination of metal end frames; a transverse wooden strip secured to said end frames; inclined guide ways on said end frames extending inwardly and downwardly toward said wooden strip; a strip movable in said guideways so that it may be projected to operative position or retracted; a rock shaft journaled in said end frames; rock arms secured to the shaft and adapted to engage the upper edge of the movable strip; springs tending to raise the movable strip and a rock arm on said shaft the end of which is adapted to engage the door jamb to rock the shaft and thus depress the movable strip, all of said rock arms being rotatably adjustable on the shaft.

Signed at Toronto, Canada, this 5th day of October, 1917.

LLEWELYN M. REES.

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