

H. INGHAM.
WEATHER STRIP.

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903,474.

Patented Nov. 10, 1908.

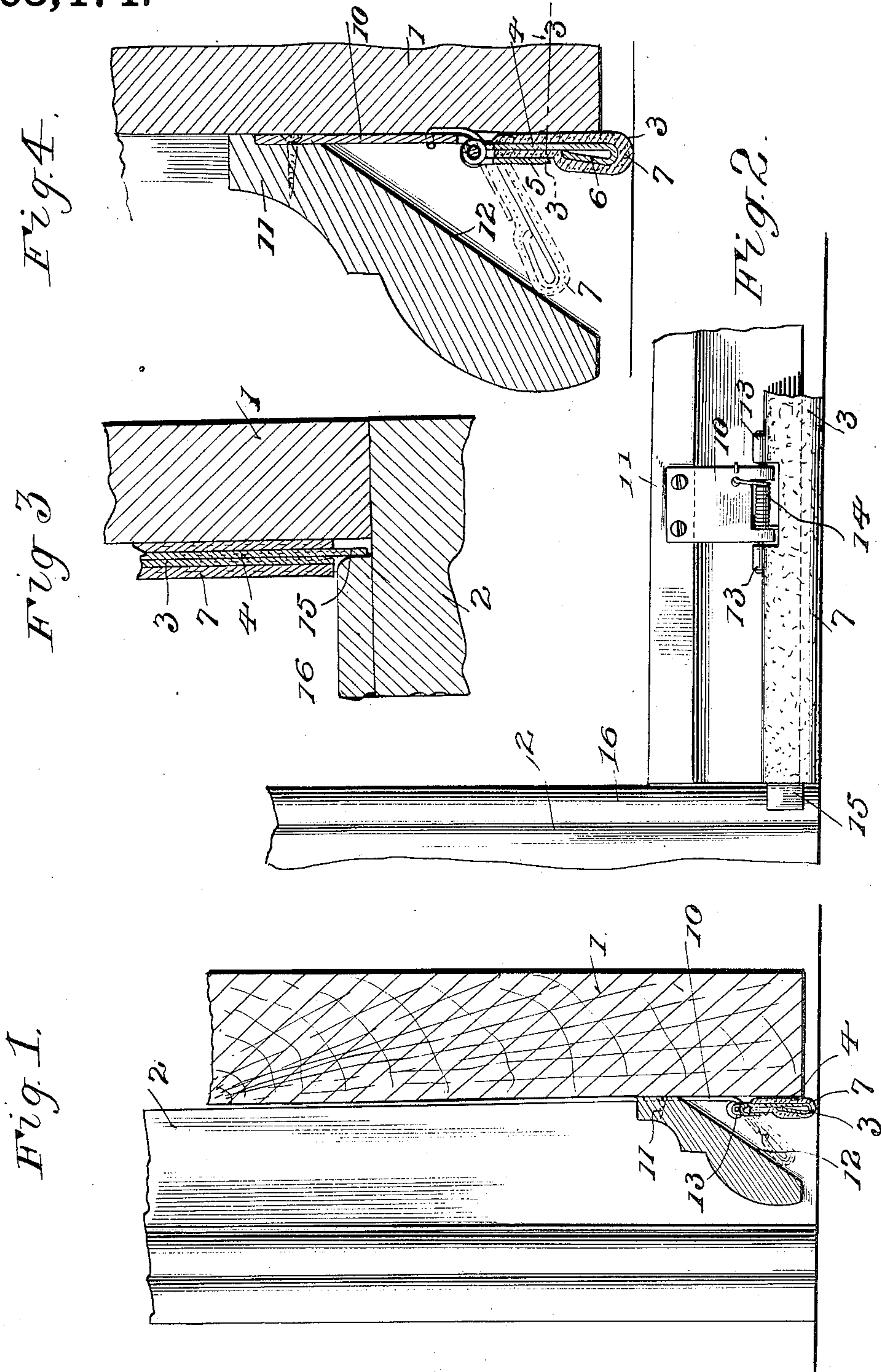


Fig. 1.

Fig. 3.

Fig. 4.

Fig. 2.

Witnesses

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HERBERT INGHAM, OF BRANDON, MANITOBA, CANADA.

WEATHER-STRIP.

No. 903,474.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HERBERT INGHAM, subject of the King of Great Britain, residing at Brandon, Manitoba, Canada, have invented certain new and useful Improvements in Weather-Strips, of which the following is a specification.

The present invention relates to an improved weather strip of that type which are designed to be applied to a door or like swinging closure for the purpose of stopping up the crevices between the swinging closure and the frame and excluding wind, dust, moisture and the like which would find their way into the building through the said crevices.

The object of the invention is to design a novel weather strip which can be readily applied to any conventional form of door without interfering with the free swinging movement thereof and will operate in an effective manner to accomplish the desired result.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a vertical sectional view showing the weather strip applied. Fig. 2 is a rear view of the same, the door being removed. Fig. 3 is a sectional view on the line 3-3 of Fig. 4. Fig. 4 is an enlarged vertical sectional view through the weather strip.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawing the numeral 1 designates the lower portion of a swinging door of the usual type, the said door being hinged upon a door frame 2. Applied to the lower edge of the door is a movable weather strip 3 which is adapted to project slightly beyond the lower edge of the door so as to bear against the threshold and produce a close joint, therewith. Specifically describing this weather strip 3 it will be observed that the same comprises a stiffening strip 4 of sheet metal or similar material the upper and lower longitudinal edges of the said strip being returned upon themselves as indicated at 5 and 6 respectively. A strip of felt or similar soft compressible material 7 has one edge thereof clamped between the

upper returned portion of the sheet metal plate 4 and the body portion of the said plate, the said felt being bent around the lower returned edge 6 of the plate and extending upwardly upon the opposite side of the plate so as to be interposed between the same and the door. It will thus be apparent that when the weather strip is swung outwardly as indicated in dotted lines in Fig. 1 the same is moved away from the door and is elevated above the plane of the door or threshold so that the door can swing freely in the usual manner. However when the weather strip is swung downwardly into normal position the felt 7 is brought into contact with the door 1 and the threshold in such a manner as to close the crevice between the said members and effectively exclude wind, dust and the like.

Extending upwardly from the weather strip at points toward the opposite ends thereof are the hinge plates 10 the upper portions of which are rigidly connected to the inner face of a strip of molding 11. This molding carries the weather strip and can be quickly applied to the door or swinging closure or removed therefrom as may be found desirable. The lower and inner corner of the molding 11 is cut away or recessed as indicated at 12 to form a clearance space for the weather strip 3, the said molding serving the double function of shielding the weather strip from view and of constituting a hood for protecting the weather strip from injury due to contact with exterior objects.

More specifically describing the hinge plates 10 it will be observed that the lower portions thereof are bifurcated, the arms of the bifurcation being bent around pintles 13 applied to the upper edge of the metallic plate 4 of the weather strip. Surrounding one of these pintles 13 between the arms of the hinge plate is a coil spring 14, one end of the said spring engaging the plate while the opposite end engages the weather strip, the said coil spring operating to normally swing the weather strip outwardly away from the door and in an inoperative position as indicated in dotted lines in Fig. 1.

Projecting from one end of the weather strip 3 and preferably from the outer end at the swinging edge of the door 1 is an extension 15 designed to engage the strip 16 applied to one side of the door frame and constituting a stop against which the edge

of the door abuts when the door is in a closed position. It will thus be apparent that when the door is opened and the swinging edge thereof moved away from the stop 5 16 the coil spring 14 will operate to swing the weather strip outwardly away from the door and hold the same in an inoperative position, thereby preventing the attachment from interfering in any manner with the 10 free movement of the door in the usual manner. However when the door is closed the extension 15 engages the stop 16 and cooperates with the same to move the weather strip downwardly against the action of the 15 coil spring 14 so as to engage the door and threshold and close the crevice between the said members in the manner specified.

Having thus described the invention, what is claimed as new is:

20 In a weather strip, the combination of a strip of molding formed with a recessed portion, hinge plates carried by the molding, a swinging weather strip loosely connected to the hinge plates and operating within

the recessed portion of the molding, the said 25 weather strip comprising a stiffening strip having the upper and lower longitudinal edges thereof returned upon themselves, a strip of soft compressible material being applied to the stiffening strip and having one 30 edge thereof clamped between the upper returned edge and the body portion thereof and the said soft compressible material extending around the lower edge of the stiffening strip and upwardly upon the opposite 35 side thereof, a spring for normally swinging the weather strip into an inoperative position, and an extension at one end of the weather strip adapted to engage a stop and 40 move the weather strip into an operative position when the swinging closure is closed.

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

HERBERT INGHAM. [L. s.]

Witnesses:

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