

(No Model.)

N. N. HAZELTON.
WEATHER STRIP.

No. 514,365.

Patented Feb. 6, 1894.

Fig. 1.

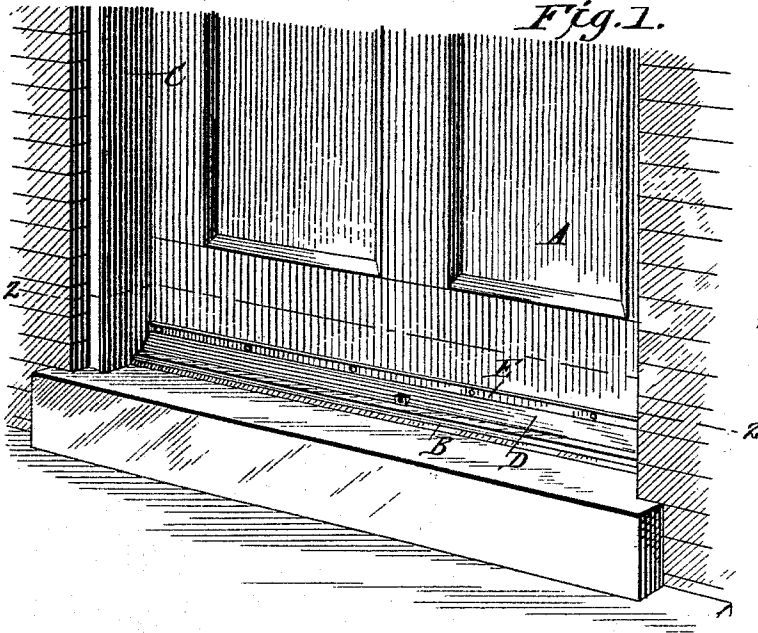


Fig. 5.

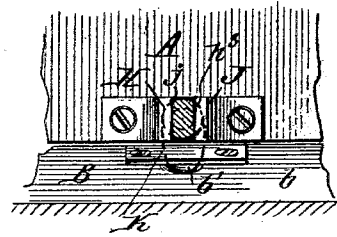


Fig. 2.

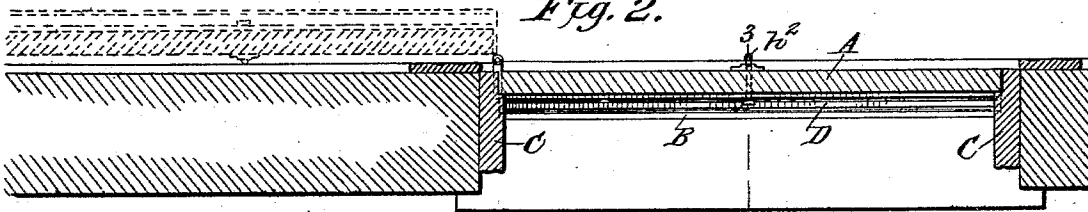
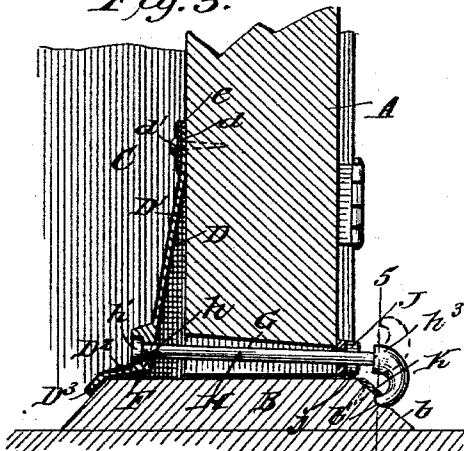


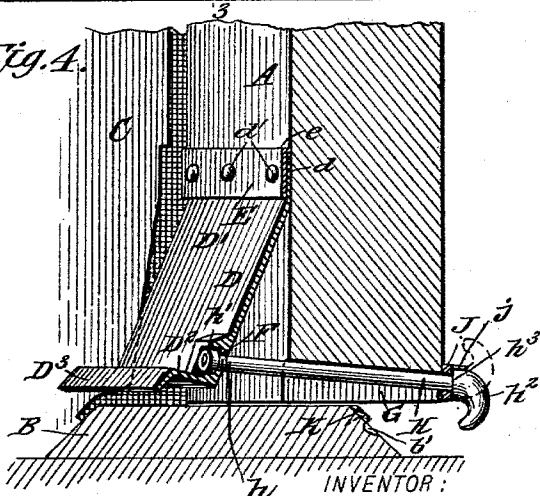
Fig. 3.



WITNESSES:

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Fig. 4.



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WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 514,365, dated February 6, 1894.

Application filed April 5, 1893. Serial No. 469,176. (No model.)

To all whom it may concern:

Be it known that I, NORMAN N. HAZELTON, residing at Lamoni, in the county of Decatur and State of Iowa, have invented certain new and useful Improvements in Weather-Strips, of which the following is a specification.

My invention has for its object to provide a simple, more durable and inexpensive weather strip, which will effectively serve to exclude all rain, snow, and wind, from entering under the door, and which will also serve as a door stop or bumper, to protect the wall and wall paper; and such invention consists in the peculiar combination and novel arrangement of parts, all of which will be hereinafter described and particularly pointed out in the claims, reference being had to the accompanying drawings in which—

Figure 1 is a perspective view of the lower portion of a door with my improvement applied. Fig. 2 is a horizontal section of the same on the line 2—2 Fig. 1 the door being also shown swung to its open position in dotted lines. Fig. 3 is a transverse section of the same on the line 3—3 Fig. 2, the door being closed. Fig. 4 is a similar view, the door being shown in a partially opened position. Fig. 5 is a detail section taken on the line 5—5 Fig. 3.

In the drawings A indicates the door, B the threshold strip and C the jamb or stop pieces. Upon the lower front face of the door is secured the weather strip proper D, which consists of a longitudinal strip of sheet brass, steel, or other suitable material, in practice about two and one-half inches wide, or wider if desired. This strip extends entirely across the door and its upper end *d* may be secured thereto, by brads passed directly through the same, but is preferably secured by means of a longitudinal metal strip E, the upper end of which has an intumed end *e* which overlaps the upper edge of the end *d*, such strip E and end *d* being secured to the door by screws *d'* as shown. The plate D is bent outward as at D', to form a spring portion, the lower end of which is bent outward and inclined downward as at D², such end terminating in a scraper flange D³, which is adapted to fit over the upper edge of the outer inclined face of the threshold piece B, when the door is closed as shown in Fig. 3. In case the

threshold B begins to slope right at the bottom of the door, then the outward incline D² may be left out and scraper flange D³ take its place. To make the strip D of a sufficient strength to withstand the hard knocks which it might be subjected to through careless use by children, such strip is made somewhat thinner at the top than at the bottom as clearly shown in Fig. 3 of the drawings.

Centrally and just above the horizontal portion D² the strip D has an aperture F, which registers with an aperture G in the door, and through these apertures passes a bolt H, the outer end *h*, of which is threaded to receive a cap nut *h'*, while its inner end passes through an apertured and slotted keeper or guard plate J, on the inner face of the door, and such end terminates in a hook member *h*², the outer face of which forms a stop or mop board bumper when the door is swung open as shown in Fig. 2. The hook member *h*² has shoulders *h*³ *h*³ which when the bolt is drawn out as in Fig. 3 are held from engagement with the slots *j* in the keeper J, but when drawn in they seat in such slots and hold the bolt from rotation, as will be clearly understood from Fig. 4.

K indicates a lock plate secured on the inner inclined face *b* of the threshold strip B, the lower edge of which overlaps a notch *b'* in such strip B. It will be readily seen by reference to Fig. 3, when the parts are in their operative position, and the door is being closed, the hook *h*² will enter the notch *b'* and engage the plate K, and as the door is finally closed, tension will be applied to the strip D on the outside, and its scraper flange brought to bear tightly over the upper edge of the outer inclined face of the threshold strip. It is manifest that the width of the outer or scraper flange, is in practice of a size suited to the height of the threshold strip B, and it should be here stated that as the entire strip D extends from the outer to the inner edges of the door, the jambs or stops are suitably cut out at their lower end on their inner edges, to allow for a free movement of the strip, or strip D may be made the proper length to fit and play between the stops. It will be also readily understood that the tension of such weather strip D is of such a nature as not to interfere with the opening of the door, and such plate

when the door opens pulls up over the threshold in the manner clearly shown in Fig. 4, the scraper flange just clearing the threshold. Now after the door has been opened, and dirt or snow shall have accumulated on the threshold, such scraper flange will scrape such accumulation off the threshold as the door is again closed. In fair weather the bolt and catch can be turned to the position shown in dotted lines in Fig. 3, and when in such position the weather strip will be out of operative position, the catch however still serving as a mop board bumper.

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

1. A weather strip, comprising a longitudinal spring plate, secured at its upper end to the outer face of the door, its lower end being free and adapted to engage and ride on the threshold piece, a catch member having a shank portion passed through the door and connected with the spring plate and its inner or catch end adapted to engage the inner face of the threshold strip, said catch member held for rotation in its bearings, whereby its catch end can be turned up to disengage the said inner face of the threshold when the door is closed, as and for the purposes set forth.

2. In a weather strip, the combination with the door, and the spring plate or strip secured to the outer face thereof, such strip having

its lower end free to ride over the outer face of the threshold strip, of a rotary catch bolt passed through the door, connected with the spring plate at its outer end, its inner end having a hook member adapted to engage the inner face of the threshold, and keeper plate on the inner face of the door, adapted to engage the bolt and hold same from rotary movement when the hook member of such bolt, is turned to engage or from engagement with the threshold strip, all substantially as shown and described.

3. In combination with the door A the threshold strip B having a notch b' on its inner end, of the spring plate D, having an outwardly bent portion D' and a scraper flange D^3 arranged as shown, an apertured and slotted keeper J on the inner face of the door, the bolt H secured to the plate portion D' passed through the door and the apertured keeper J, and formed at its end with a hook catch h^2 adapted to engage the notch b' on the threshold, said catch having shoulders h^3 adapted to engage the slots in the keeper J, all arranged substantially as shown whereby the catch can be rotated in its bearings, to be swung into or out of operative position as and for the purposes set forth.

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Witnesses:

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