

(No Model.)

E. G. DURYEA.
WEATHER STRIP.

No. 475,391.

Patented May 24, 1892.

Fig. 1.

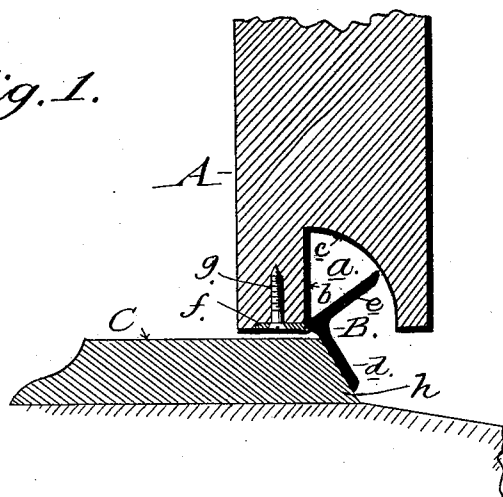
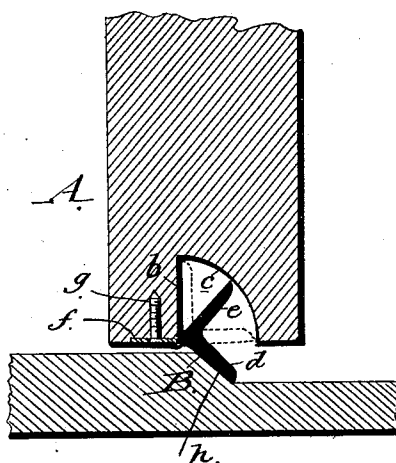


Fig. 2.



WITNESSES

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WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 475,391, dated May 24, 1892.

Application filed November 11, 1891. Serial No. 411,567. (No model.)

To all whom it may concern:

Be it known that I, EDWIN G. DURYEA, a citizen of the United States, residing at Riverhead, in the county of Suffolk and State of New York, have invented certain new and useful Improvements in Weather-Strips, as set forth in the accompanying drawings, forming part of this specification, in which—

Figure 1 is a sectional view showing the lower portion of an outside door with the strip in place. Fig. 2 is a similar view of an inside door.

My invention relates to means for preventing the ingress to dwellings, stores, and other structures of rain, wind, and dust; and it consists of the peculiar construction and combination of parts which I shall hereinafter fully describe and claim.

To enable others skilled in the art to which my invention appertains to make and use the same, I will now describe its construction and indicate the manner in which the same is carried out.

In carrying out my invention I form or provide the door A with a deep groove *a*, made in its under surface and having a cross-sectional shape approximating a quarter of a circle. In other words, the groove or recess has a vertical wall *b* and a curved wall *c*, connecting the top of the vertical wall with the lower horizontal edge or portion of the door. To the lower edge of the vertical wall *b* is pivoted or hinged an angle-iron strip or casting B, whose two arms *d* and *e* stand at right angles to each other, while the hinge or pivot-point is at the angular junction of the two arms. The hinge may be of any well-known form, and is herein shown as consisting of a plate or leaf *f*, secured to the under surface of the door by screws *g* and reaching to the vertical wall of the groove or recess, at which point the angle-iron or casting B is connected with it. The sill C of the structure is of usual form, and has its outer edge beveled or inclined, as shown at *h*.

The normal position of the angle-iron or casting B is shown in the full lines in Fig. 1, in which case the arm *d* of the casting lies close against the inclined front edge of the saddle and the other arm *e* lies within the groove *a* and extends up to the curved wall thereof. In such position it will be readily

seen that no water, wind, or dust can be driven under the door, and consequently no damage or inconvenience can result from the elements when using this construction. The wind and rain or dust beating against the arm *d* of the casting will be deflected upwardly along said arm and meeting the other arm *e* will be discharged again, as this latter arm makes a practically close joint with the curved wall of the groove.

The harder the wind blows the more effective will be the construction shown, for the greater the pressure against the arm *d* the closer will be the contact with the inclined edge of the sill or saddle. By thus locating and arranging the angle-iron plate or casting it will also be seen that when the door is opened the inclined edge of the sill or saddle causes the arm *d* to be lifted, thereby rocking the casting or angle-iron about its hinge and causing the arm *e* to traverse the curved wall of the groove and finally be seated against the vertical wall thereof. The angle-iron or casting remains in this latter position (see dotted lines, Fig. 2) by its contact with the upper surface of the sill or saddle until the door is again closed, when the arm *d* of the casting passes the front inclined edge of the sill or saddle, when the parts instantly and automatically assume their normal positions, as shown.

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

An improved weather-strip consisting of a door having its under surface formed or provided with a groove having a vertical and a curved wall, a saddle or strip secured to the door-sill and provided with a beveled or inclined front edge, and an angle-iron plate composed of two arms, one of which normally lies against the inclined edge of the sill or saddle and the other remains in the groove, said plate being hinged at its angular corner to the lower edge of the vertical wall of the groove and adapted to be lifted and enter the groove when the door is opened, substantially as herein described.

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Witnesses:

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