(No Model.)

M. HOWARD.

WEATHER STRIP.

No. 417,184. Patented Dec. 10, 1889.

Fig. 1

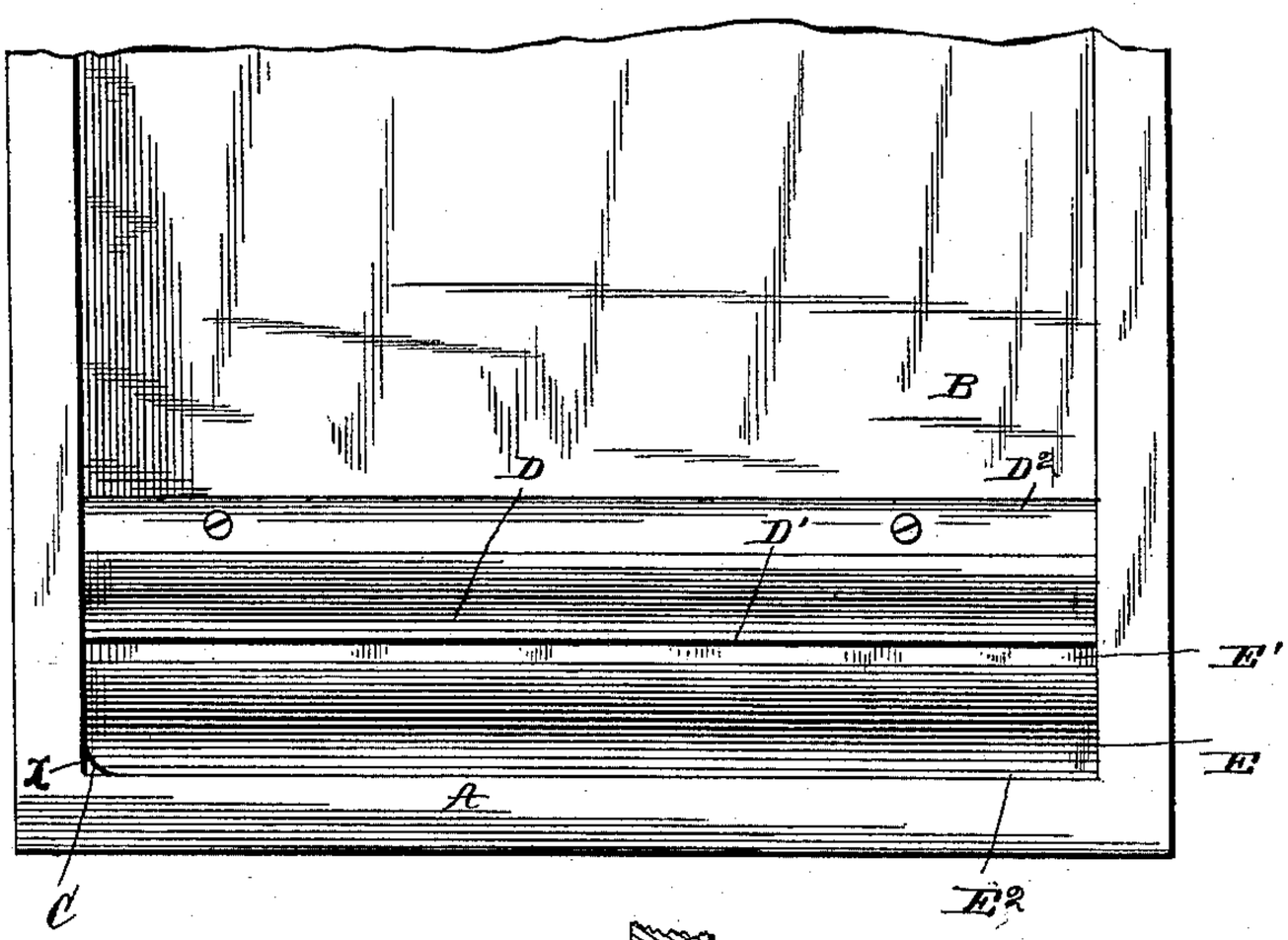


Fig. 2

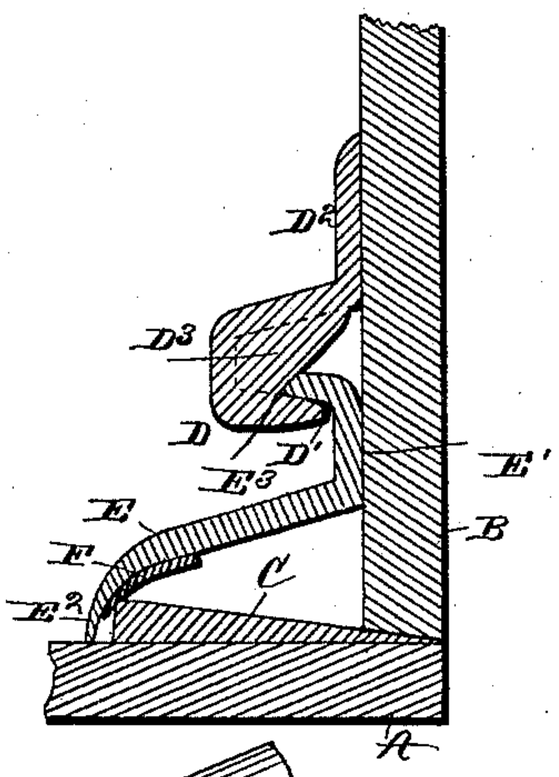
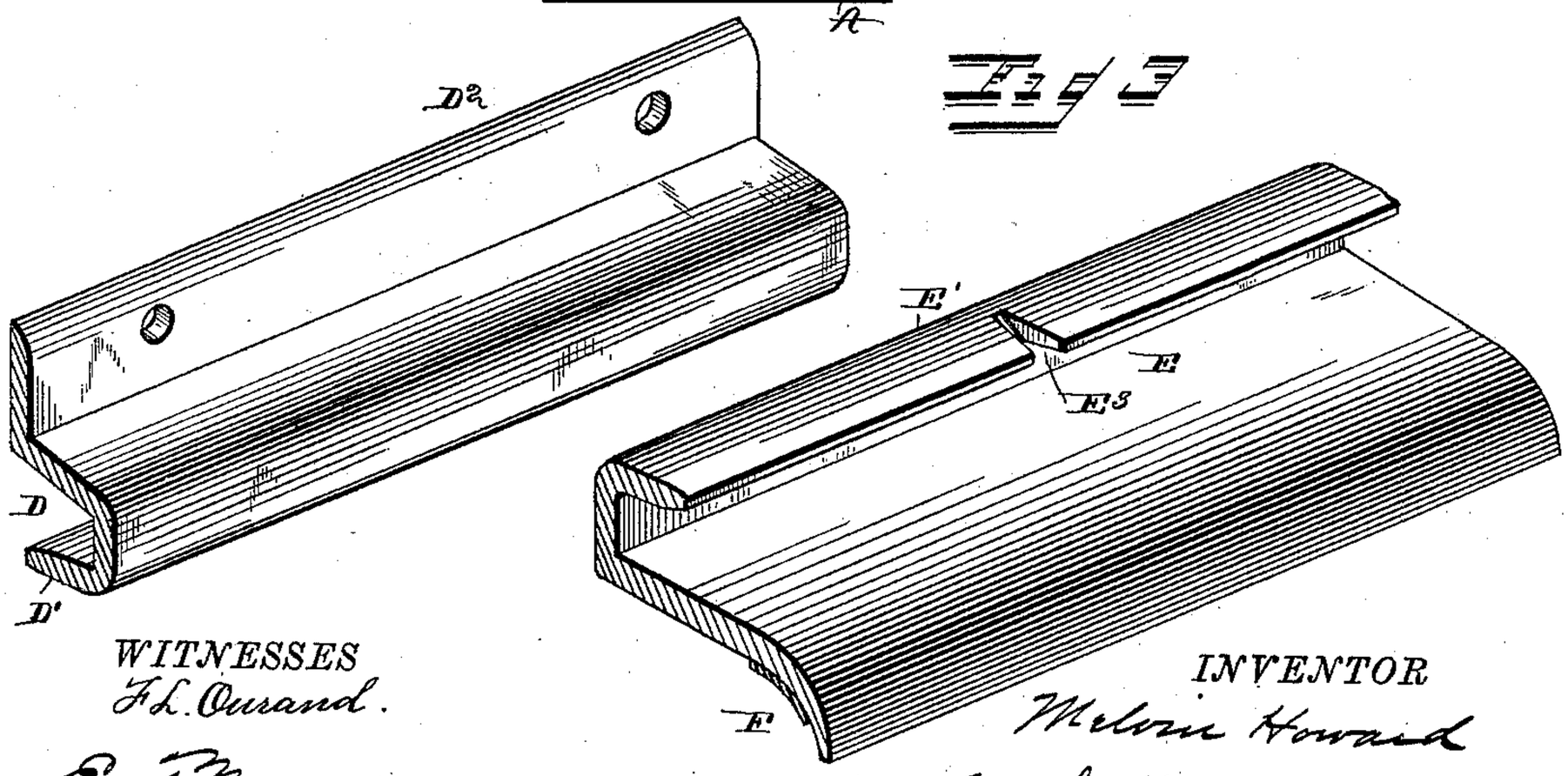


Fig. 3



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UNITED STATES PATENT OFFICE.

MELVIN HOWARD, OF SANDWICH, ILLINOIS.

WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 417,184, dated December 10, 1889.

Application filed May 15, 1888. Serial No. 273,954. (No model.)

To all whom it may concern:

Be it known that I, MELVIN HOWARD, a citizen of the United States of America, residing at Sandwich, in the county of De Kalb and State of Illinois, have invented certain new and useful Improvements in Weather-Stripping, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in weather-stripping, and more particularly to that class of weather-stripping which is applied to doors, swinging windows, and like constructions.

It consists in a novel construction and arrangement of the parts for preventing the admission of drafts of wind, or leakage of snow or water, under the door or window to which it is applied.

It further consists in a novel construction and arrangement of the parts for preventing them becoming frozen together.

It further consists in a novel construction and arrangement of the parts for retaining them in their relations to each other; and it further consists in a novel construction and arrangement of the parts, whereby simplicity and durability of construction are obtained.

In the drawings, Figure 1 is an elevation of a door provided with this invention. Fig. 2 is a vertical section of Fig. 1. Fig. 3 is a detailed view, in perspective, of the parts of the invention. In this view the parts are separated to show their separate constructions.

The letter A designates the ordinary door-sill, upon which the door B closes. Upon this is secured my supplementary sill C, which is preferably constructed of metal. In placing this sill C the door B is closed until latched. The sill C is then placed upon the sill A on the outer side of the door. In this position the said sill C is screwed firmly upon the sill A. The sill C, as shown in the drawings, is constructed of a wedge shape, the largest dimension of which is the outer side of the door, and it extends across the opening of the door from jamb to jamb, when secured, as mentioned. When the sill C is thus secured in position, the door B is again closed to place in position the elongated hook D. When so closed, the strip E is laid over the sill C, with the hooked end E′ resting against the door, and the curved end E^2 resting upon the sill A over the thickest portion of the sill C. The hook D is then adjusted upon the door, so that the hooked portion D′ is locked with the hooked end E′ of the strip E. The straight back D^2, which rests against the door, is provided with perforations to receive screws which are driven into the door to secure the said hook D firmly thereon. The door may now be opened and closed, carrying the hinged strip E with it.

The strip E and hook D are loosely interlocked, as shown, by their hooked ends E′ and D′ clasping each other, the ends of each extending into the other. They are prevented from becoming separated by the body of the strip E impinging upon the hook D′ before the engaged end of the hooked end E′ is in position to pass between the hook and the door, as shown in dotted lines in Fig. 2. From this position the said strip is caused to drop to its normal position by its weight. Between the walls of the hook D′ extends a lug D^3, to accommodate which the slot E^3 is cut in the interlocked end of the hooked end E′. It is by means of this engagement between the lug D^3 and slot E^3 that lateral movement of the strip E and consequent inconvenience of having the said strip strike the jamb in closing is prevented.

Upon the under side of the strip E, and where it rests upon the edge of the sill C, is secured a strip of soft material F—such as rubber, leather, &c.—to prevent air passing between the strip E and the sill C. When the edge E^2 of the strip E is resting on the sill A over the sill C, the strip F rests easily on the sill C.

At the end of the strip E next the hinges of the door it is rounded, as shown at *x* in Fig. 1 of the drawings. It is by means of this construction that I have provided for the strip E riding over the sills A and C. When the door is closed, the rounded end of the strip E comes in contact with the said sills, and, they being inclined, rides over them, easily raising the strip E until the door closes, when the edges E^2 drop over the sill C and the parts assume their relative positions, as shown in Fig. 2 of drawings. In opening the door the incline of the edge E^2 raises it over the sill C.

By means of the construction as herein de-

scribed, and shown in the drawings, the sill C and strip E are prevented from becoming frozen together, as the space inclosed by the edges E^2 and said sill forms an air-chamber to separate the two while the said edge rests upon the sill A and cuts off the admission of water to the said chamber and under the door B.

What I claim is—

1. The combination, in a weather-strip, of a portion secured to the door and having an angular hook D, provided with interior central lug, and a strip having a portion to engage said hook and notched centrally to receive the lug, and an inclined sill, substantially as set forth.

2. The combination, in a weather-strip, of a portion secured to a door and having an angular hook D, provided with interior central lug, and a strip having a portion to engage said hook and rounded at one corner, and a wedge-shaped sill, substantially as set forth.

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

MELVIN HOWARD.

Witnesses:

SYLVESTER C. LINCOLN,

W. M. CARPENTER.