

L. BECKER.
WEATHER-STRIP.

No. 173,438.

Patented Feb. 15, 1876.

Fig. 1.

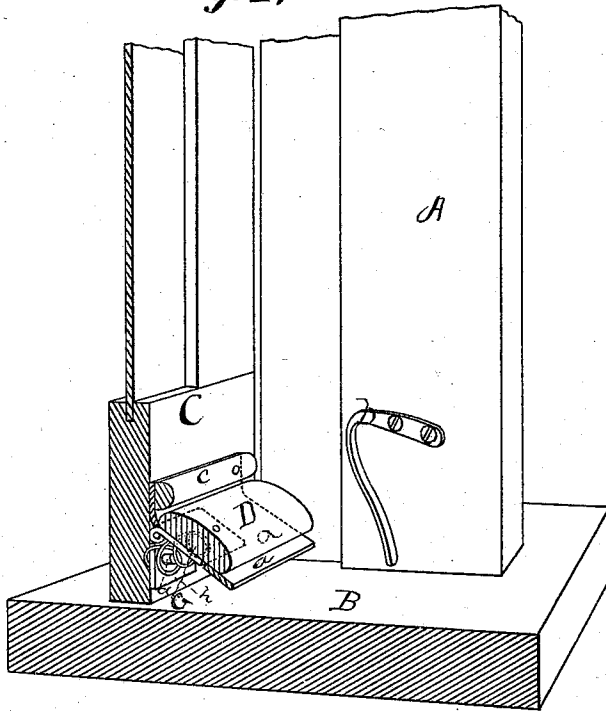
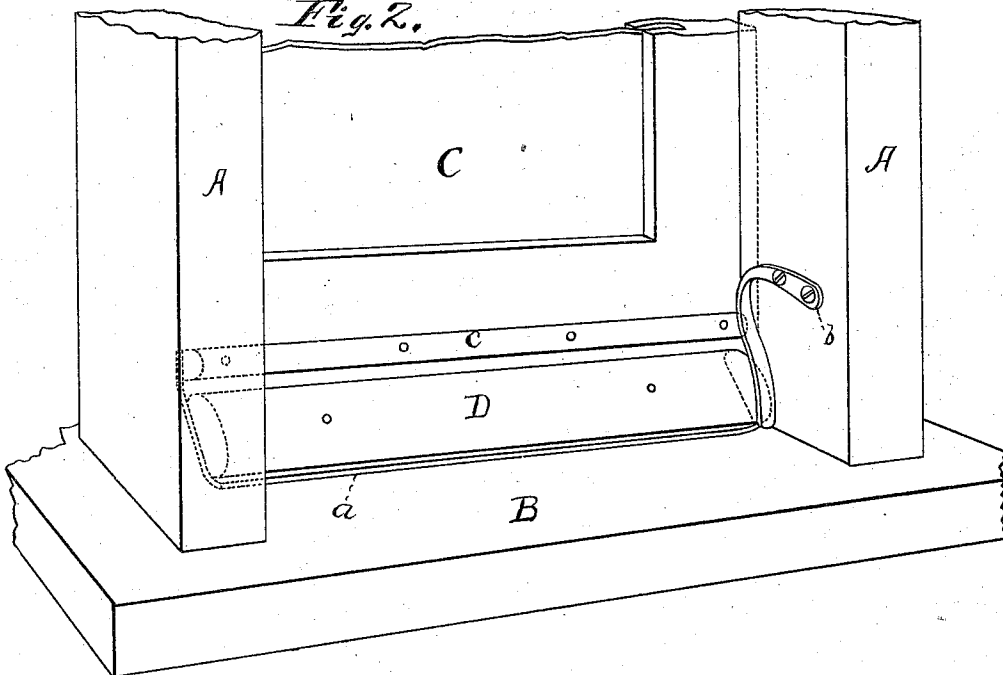


Fig. 2.



WITNESSES

Villette Anderson.
E. H. Bates

INVENTOR

Lauder Becker.
Chipman Hosmer & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE

LEANDER BECKER, OF YORK, PENNSYLVANIA.

IMPROVEMENT IN WEATHER-STRIPS.

Specification forming part of Letters Patent No. **173,438**, dated February 15, 1876; application filed December 11, 1875.

To all whom it may concern :

Be it known that I, LEANDER BECKER, of York, in the county of York and State of Pennsylvania, have invented a new and valuable Improvement in Weather-Strips; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal section of my weather-strip, and Fig. 2 is a front view of the same.

This invention has relation to improvements in weather-strips which are applied to the lower edge of a door for the purpose of preventing wind, rain, or snow from penetrating into a building under the door; and it consists in combining, with a hinged weather-strip held free from the door by means of springs, a spring-stop rigidly secured to the door-frame, abutting against which the strip will be jammed against the sill, as will be more fully shown and described.

In the annexed drawings, A designates a door-frame, B the sill, and C the door, all constructed in the usual well-known manner. At or near the lower end of frame B, on its inner side, is rigidly secured a curved spring-stop, *b*, the lower end of which is left free, for a purpose hereinafter described. Door C, near its lower edge, is provided with a preferably wooden strip, D, hinged by its under side to the door, passing under which, and over hinges *h*, is a strip of rubber, *a*, secured to weather-strip D, and extending a little beyond the lower edge of the same. It also reaches somewhat above its upper edge, and is clamped against the door above the said weather-strip, and at a suitable distance therefrom, by means of a narrow wooden strip, *c*, which is nailed or otherwise secured to the door, for the purpose of preventing rain from entering the house by passing between the weather-strip D and the door, which would otherwise be the case. On the under side of the weather-strip, between the straps of the

hinges *h*, are secured helical springs G, which serve to force the strip D forward, thereby raising it free of the floor, and preventing it from interfering with the closing or opening of the door. *d* designate metallic studs projecting from one of the straps of the said hinges into the center of the coils of springs G, which stops or studs, by arresting the inward vibration of the weather-strip, will prevent the said springs from being unnecessarily compressed, and thus losing their elasticity and becoming inoperative.

It is evident that when the door is about to be closed the end of the strip D will abut against the lower end of the spring-stop above described, thereby causing the said weather-strip to vibrate inwardly toward the door, by which means its lower edge, covered by the rubber strip *a*, will be jammed against the sill B, making an almost hermetical seal, and effectually preventing the entrance of wind, rain, snow, or ice.

By this means not only is the penetration of wind, rain, and snow into a building effectually done away with, but the lower edge of the strip D is also prevented from wearing away, and thereby forming a crack, or from cutting a groove in the sill of the door-frame, the result of which, in either case, would be to impair the weather-tight quality of the strip.

What I claim as new, and desire to secure by Letters Patent, is—

The weather-strip D, hinged to the lower part of the door, and having a rubber strip, *a*, secured to its lower face, extending above the weather-strip, and clamped to the door by a strip, *c*, in combination with the hinges *h*, provided with studs *d*, coiled springs G, surrounding said studs, and spring-stop *b*, substantially as described, and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

LEANDER BECKER.

Witnesses:

GEO. FISHER,
JNO. A. MEZELL.