D. O. HINK.

WEATHER-STRIP.

No. 186,085. Patented Jan. 9, 1877.

Fig. 1.

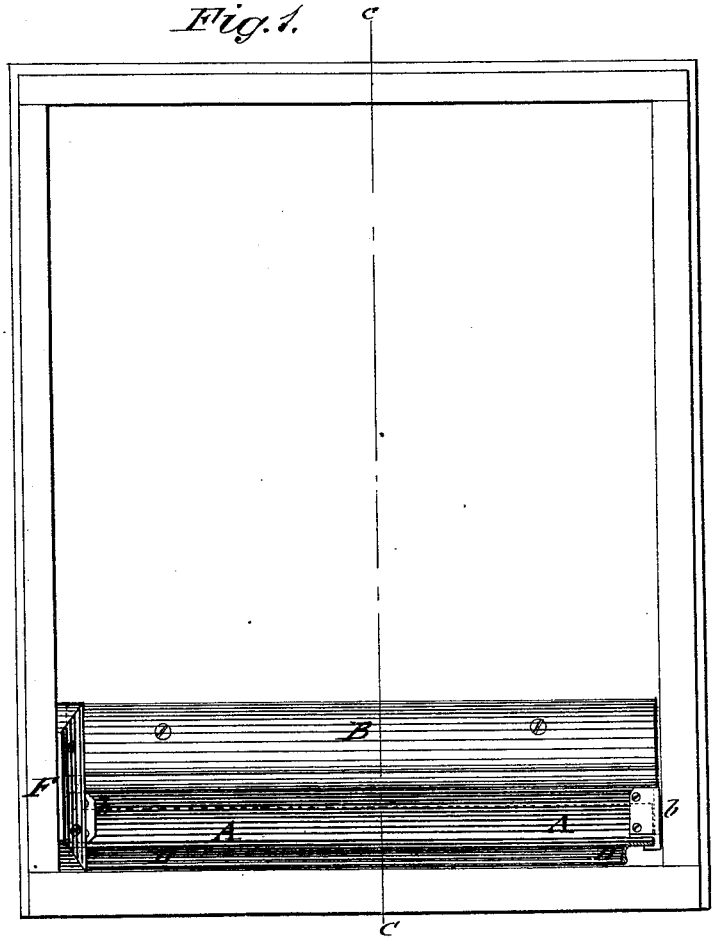


Fig. 2.

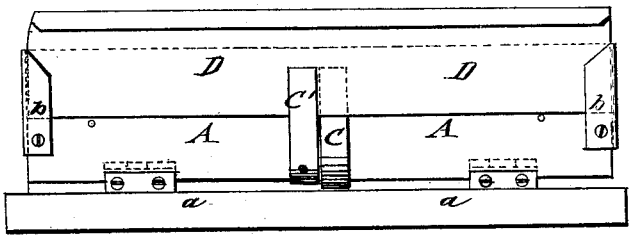
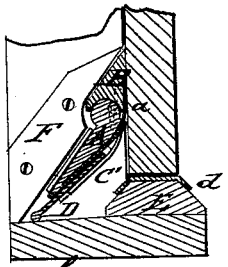


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

DAVID O. HINK, OF MARYVILLE, MISSOURI.

IMPROVEMENT IN WEATHER-STRIPS.

Specification forming part of Letters Patent No. **186,085**, dated January 9, 1877; application filed October 30, 1876.

To all whom it may concern:

Be it known that I, DAVID O. HINK, of Maryville, in the county of Nodaway and State of Missouri, have invented a new and Improved Weather-Strip, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a front view of a door with my improved weather-strip; Fig. 2, a bottom view of door and strip, and Fig. 3, a vertical transverse section of the same on line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of my invention is to provide an improved weather-strip for outside doors, that adjusts itself in automatic manner on the sill, so as to give perfect protection against the entrance of moisture in stormy weather.

In the drawing, A represents a drop with a raised round knuckle, which is attached to a molding or bed piece, B, and applied at suitable distance from the bottom edge of the door. The bed piece B has a concave groove, and is so constructed as to form a projecting lip, in which the knuckles of drop A swing, being held in position by means of hinges *a* embedded in the knuckle-joint, thus forming a continuous knuckle-hinge. The groove or cavity of the bed-piece and the shape of the knuckle of the drop allow the same to be swung into a nearly vertical as well as horizontal position, without straining or breaking the hinge-connection of drop A and bed-piece B. A band-spring, C, attached to the bed-piece, bears on the drop and raises the same when the door is opened. A similar spring, C′, bears on a sliding metallic extension, D, of the weather-strip, that is guided in the end caps *b*, and adjusted according to the height of the so-called carpet-strip E. The carpet-strip is lined either along its entire length, or only at the points where the weather-strip slides when opening or closing the door, with metallic protecting-pieces *d*, that prevent the wearing of the carpet-strip by the friction of the weather-strip.

A stop, F, that is molded to fit the shape of bed-piece and drop, is screwed in adjustable manner to the lower corner of the door-casing, as seen in Fig. 3, and bears on the weather-strip when the door is closed, so as to retain the same in locked position, and prevent any chance for the rain or snow, thrown against the weather-strip by the storm, to enter to the inside of the door.

The continuous knuckle-hinge joint of bed-piece and drop prevents any moisture from passing through between them, and sheds the water on the weather-strip and extension-slide to the inclined sill.

The door is readily opened and closed, the weather-strip adjusting itself into position. The weather-strip may also be applied to double doors for churches, business-houses, &c., in which the stop piece is dispensed with, as the stop of one door adjusts that of the other by means of a metallic plate fastened to the drop of the weather-strip of the stationary door, to adjust that of the swinging door.

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

A weather-strip, provided with an extension-slide, clamped between the drop and spring, substantially as and for the purpose specified.

DAVID O. HINK.

Witnesses:
J. G. GREMS,
SAMUEL H. LUTES.