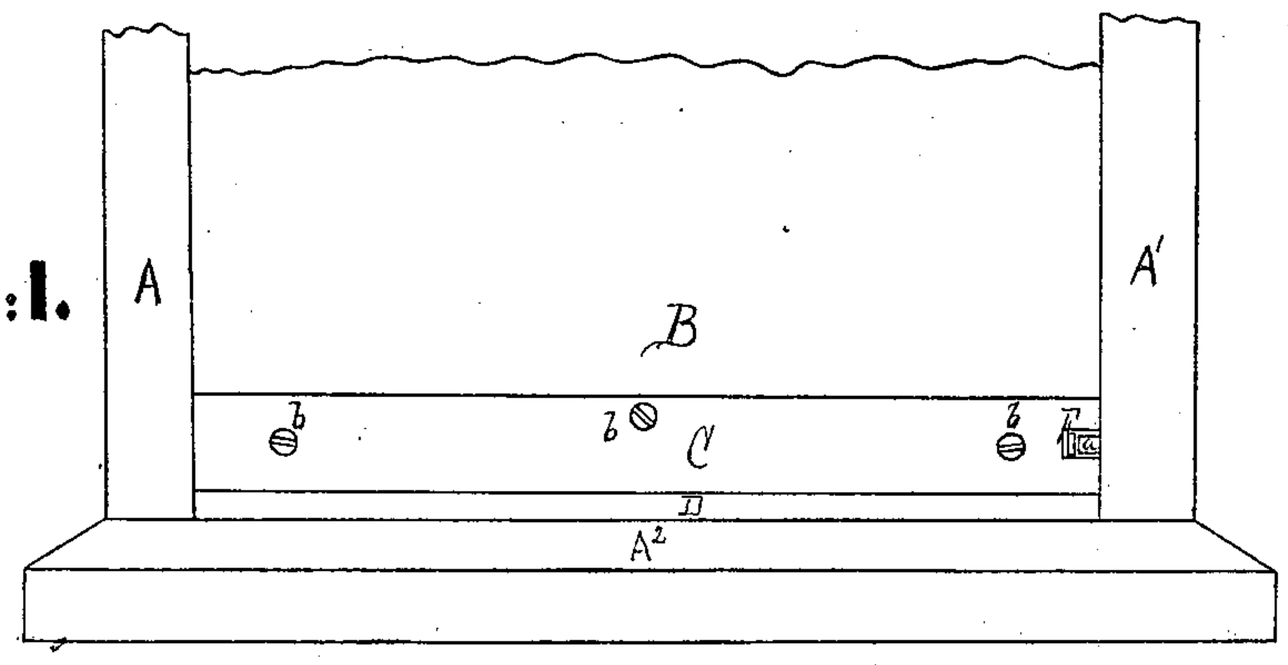
M. H. Skiff.

Weather Strip.

No. 103,788. Patented May 31. 1870.

FIG: 1.



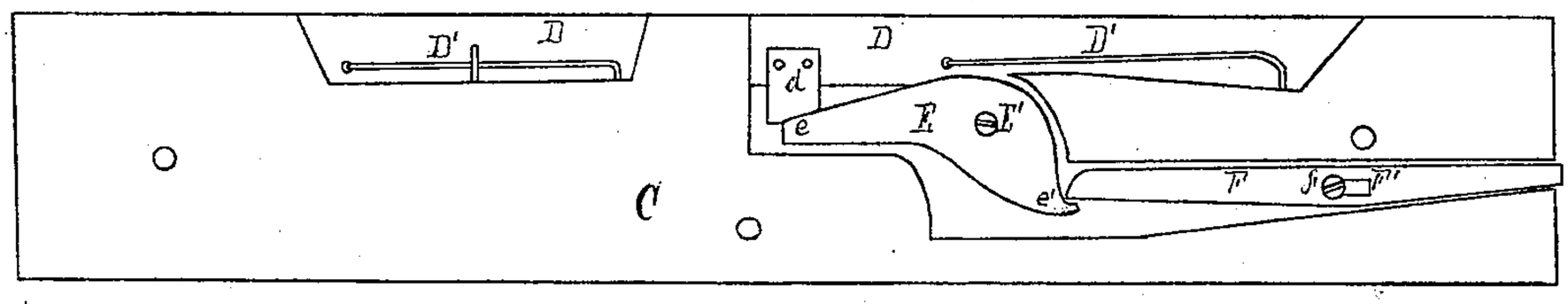


FIG: 2.

WITNESSES.

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MILES H. SKIFF, OF WESTFIELD, NEW YORK.

Letters Patent No. 103,788, *dated May* 31, 1870.

IMPROVEMENT IN WEATHER-STRIP.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, MILES H. SKIFF, of Westfield, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Weather-Strips, which I call "Skiff's Adjustable Weather-Strip;" and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon making part of this specification, in which—

Figure 1 is a front view of a section of a door, with my improved weather-strip attached.

Figure 2 is a plan view, showing the strip detached and the arrangement of the mechanism therein, the same being shown in reverse position or as if the strip had been detached and turned down.

My invention is as follows:

In a suitably-recessed strip I secure a metal plate, retaining-springs, cam-lever, and sliding-bar or key. This strip is to be attached to the bottom rail of the door.

When the mechanism is in its normal condition, which is always the case while the door is open or ajar through the tension of the springs, the metal plate is retained in an elevated position, its lower edge being on a line with the lower surface of the door. The metal plate is depressed through pressure on the sliding bar or key from a projecting button or pin attached to the jamb of the door.

Owing to the relative position at which the button or pin is attached, this pressure occurs the instant the door is closed, and, through the action of the sliding bar on the cam-lever, depresses the metal plate, thus forcing the same down, so as to close the space between the door and threshold, and so detaining it until the door is opened, when, through the tension of the spring, the plate is again instantly elevated.

To enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

A A^1 represent the jambs;

A^2, the theshold or door-sill; and

B, the door.

On one side of the jambs A^1, (usually the one to which the door is hinged,) there is a projecting button or pin, *a*.

C is a wooden strip, and is secured to the lower rail of the door by screws *b b*. This strip C is so recessed as to receive and allow of the free working of the entire mechanism, the same being arranged and secured, as clearly shown in fig. 2.

D is a flat metal plate, which is of the same length as the strip, and of width sufficient to close the space between the door and threshold when the door is closed, so as to exclude all wind, rain, &c.

D′ D′ are metallic spring rods, one end of each being secured to the plate D, and the other end to the strip. The spring-tension of these rods is sufficient to retain the plate D in an elevated position so long as the door is open or ajar.

d is a metallic cap attached at or near the center of the plate D.

On this cap *d* rests the angular flange *e* of one of the arms of the cam-lever E.

This lever E is of the form shown in fig. 2, and is pivoted at E′.

Under the lip *e′* of this lever rests the end of the sliding bar or key F.

This bar or key F is slotted, as shown at F′, and is attached to the strip C by a bearing and guide-bolt or pin, *f*, on which it also works.

The operation is follows:

The strip C, with the mechanism attached, is secured to the door by screws *b b*. The door being open, the relative position of the several features is as shown in fig. 2.

So soon as the door is closed, the button or pin *a*, acting on the sliding bar F, forces the same up against the lip *e′* of the cam-lever E, which movement forces down the flange *e* on the cap *d*, causing the same to be depressed, which carries with it the metal plate D, and causes the same to entirely close the space between the door and threshold, as clearly shown in fig. 1.

The moment the door is opened all pressure from the button or pin *d* on the sliding bar or key is removed, when the springs D′ D′ will, through their tension, instantly elevate the plate D.

It will be observed that the entire mechanism is contained in an independent strip, than can be readily attached to the door without cutting away any portion of its surface, or otherwise injuring the same.

I do not claim broadly so connecting a plate with levers or rods and a spring that the closing of the door shall depress the plate, and the tension of a spring shall elevate and retain the same when the door is opened, as I am aware that this was clearly shown in the patent of Isaac D. Brower, issued in 1837, and which expired July 29, 1851.

Having thus fully described my invention,

What I claim therein as new, and desire to secure by Letters Patent of the United States, is—

The strip C, plate D, cap *d*, spring rods D′ D′, cam-lever E having flanges or lips *e e′*, sliding bar F, and button or pin *a*, when the same are combined and arranged as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MILES H. SKIFF. [L. S.]

Witnesses:

JOHN FRANCIS,

WILLIAM B. BARTON.