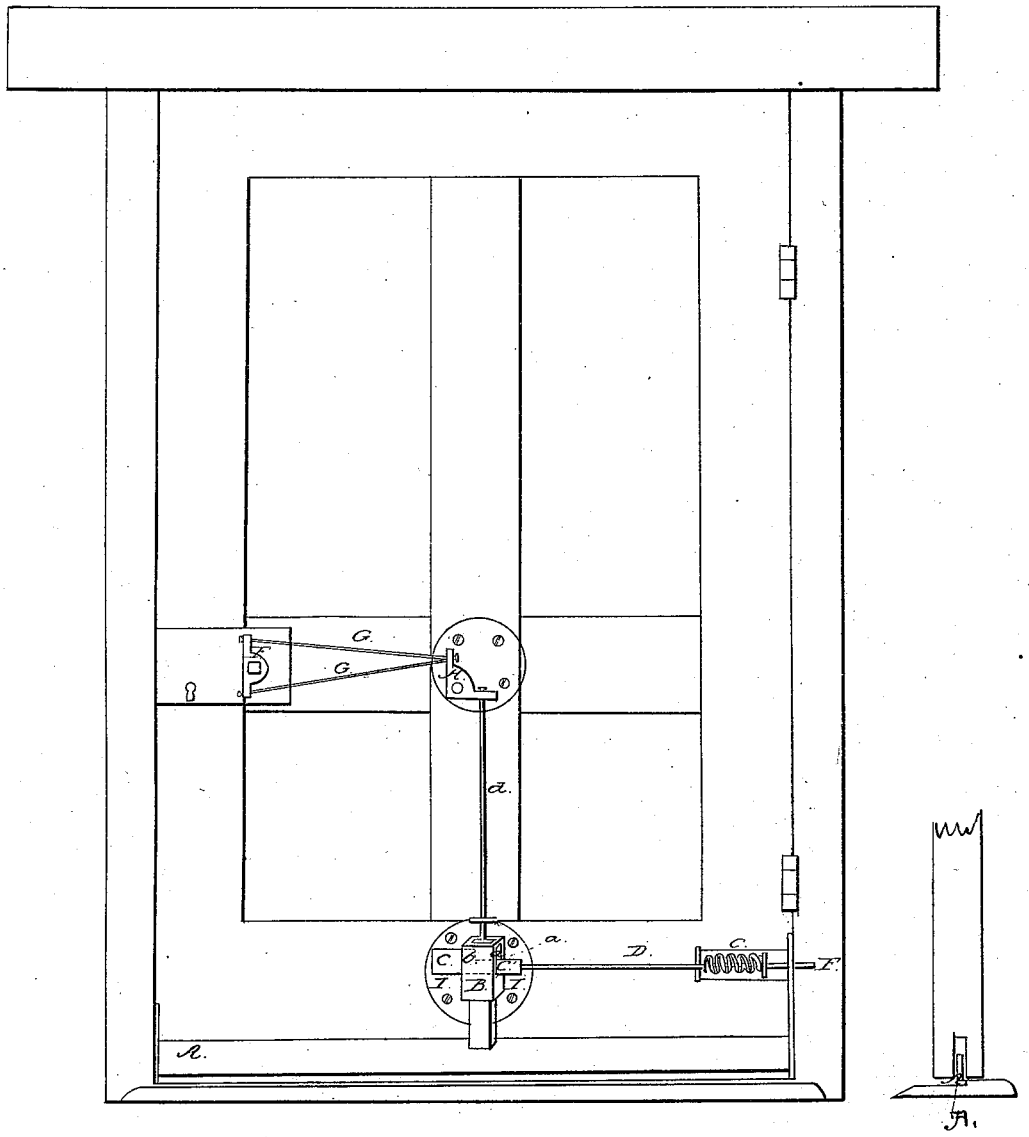
I. D. Brower,

Weather Strip,

No. 313, Patented July 29, 1837



UNITED STATES PATENT OFFICE.

ISAAC D. BROWER, OF NEW YORK, N. Y.

MODE OF FIXING WEATHER-STRIPS TO THE BOTTOM OF DOORS.

Specification of Letters Patent No. 313, dated July 29, 1837.

To all whom it may concern:

Be it known that I, ISAAC D. BROWER, of the city of New York, in the State of New York, have invented a new and Improved Mode of Fixing Weather-Strips to the Bottoms of Doors for the Purpose of Preventing the Entrance of Wind or Rain, when the Door is Closed; and I do hereby declare that the following is a full and exact description thereof.

A strip of metal, or other suitable substance, A, A, is let into a groove along the bottom edge of the door, and works freely up and down within it, so that it may descend below, or be drawn up within the lower rail of the door; this strip is attached to the lower end of a vertical slide B, which slides up and down within the frame of the door. This slide has a mortise through it, from edge to edge, at *a*, and within this mortise a sliding bolt C, C′, works freely, the end C, of which is wider than the end C′, there being an offset, or shoulder, at *b*, as represented in the dotted line which designates that part of the bolt which is supposed to be within the mortise *a*. It will be evident that if the bolt C, is removed so far to the left as that the offset *b*, is without the mortise, the slide B, and the strip A, A, will be free to descend.

D, is a rod screwed into the bolt C′, extending thence within the lower rail of the door, and projecting out at its back edge at E, as near to the inner side of the door as may be, in order to allow the necessary length of projection, and as much leverage as possible between it and the hinge.

c, is a spiral spring which forces the rod D, E, out, as the door is opened. When it is closed, the rod E, comes against the rabbet of the door frame, and it is forced in, relieving the offset *b*, of the bolt C, C′, and allowing the slide B, and the strip A, A, to descend. To insure its descent there may be a spiral spring on the rod *d*, above it, or the same may be effected by springs between the upper edge of A, A, and the bottom of the groove into which it passes. The rod E, is not allowed to bear directly upon the wood-work of the rabbet of the door frame, but it touches against the head of a screw, by the turning of which the action of the rod may be accurately adjusted.

It will be seen by the foregoing description, that the closing of the door will cause the weather strip A, A, to descend, and to come into contact with a strip extending under the door in the usual way. Along this strip there is a rabbet against which the strip closes, the more effectually to prevent the entrance of wind and rain. The weather strip is raised by the turning the knob of the spring bolt of the lock, and the door, consequently, opens freely; the means by which this is effected is the following:

F, is a tumbler through which the shank of the knob passes, and this tumbler is connected by rods G, with the bell-crank H, let into the lock rail of the door, and connected with the slide B, by the rod *d*. The slide B, lies upon a plate I, I, and is retained in its place by guide cheeks attached to the plate, and the whole together is let into, and secured within, the lower rail of the door, and then covered in any suitable way, as is also the bell crank H, in the lock-rail.

What I claim as my invention, and wish to secure by Letters Patent, is—

The manner in which I have arranged and combined the slide B, with the bolt C, the rods D, *d*, and the lock, so as to operate upon the weather strip, raising and depressing the same substantially in the manner, and for the purpose, herein fully set forth.

ISAAC D. BROWER.

Witnesses:
THOS. F. JONES,
CLEMENT T. FOOTE.