(No Model.)

W. HARRISON.

WEATHER STRIP.

No. 333,296. Patented Dec. 29, 1885.

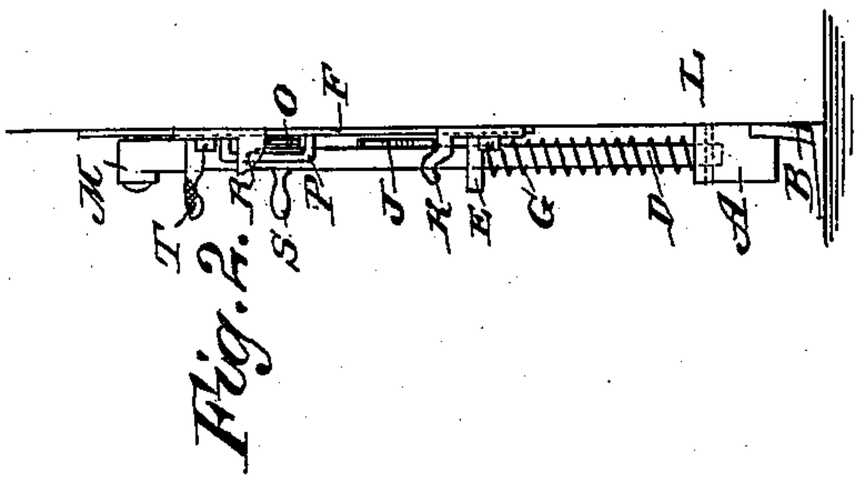

Fig. 2.

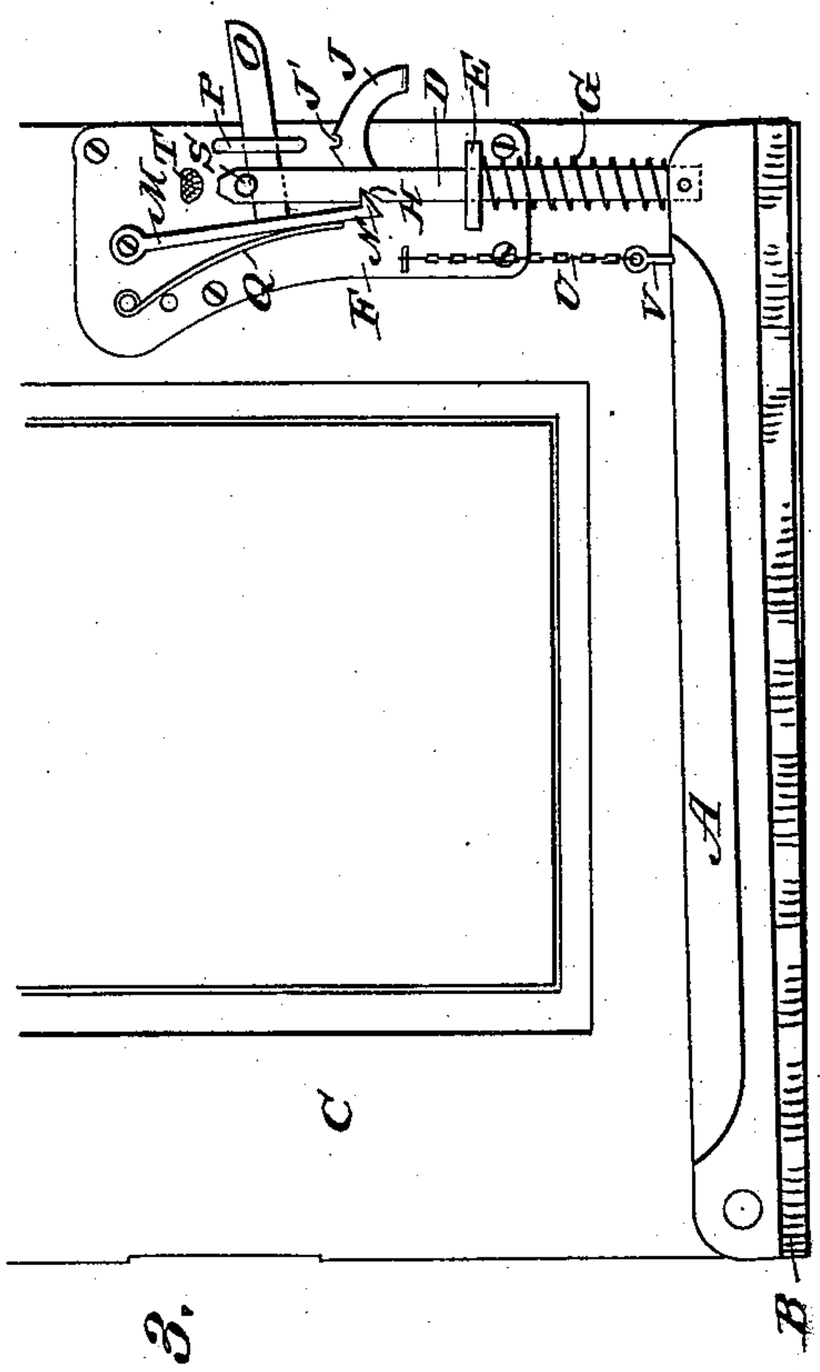

Fig. 3.

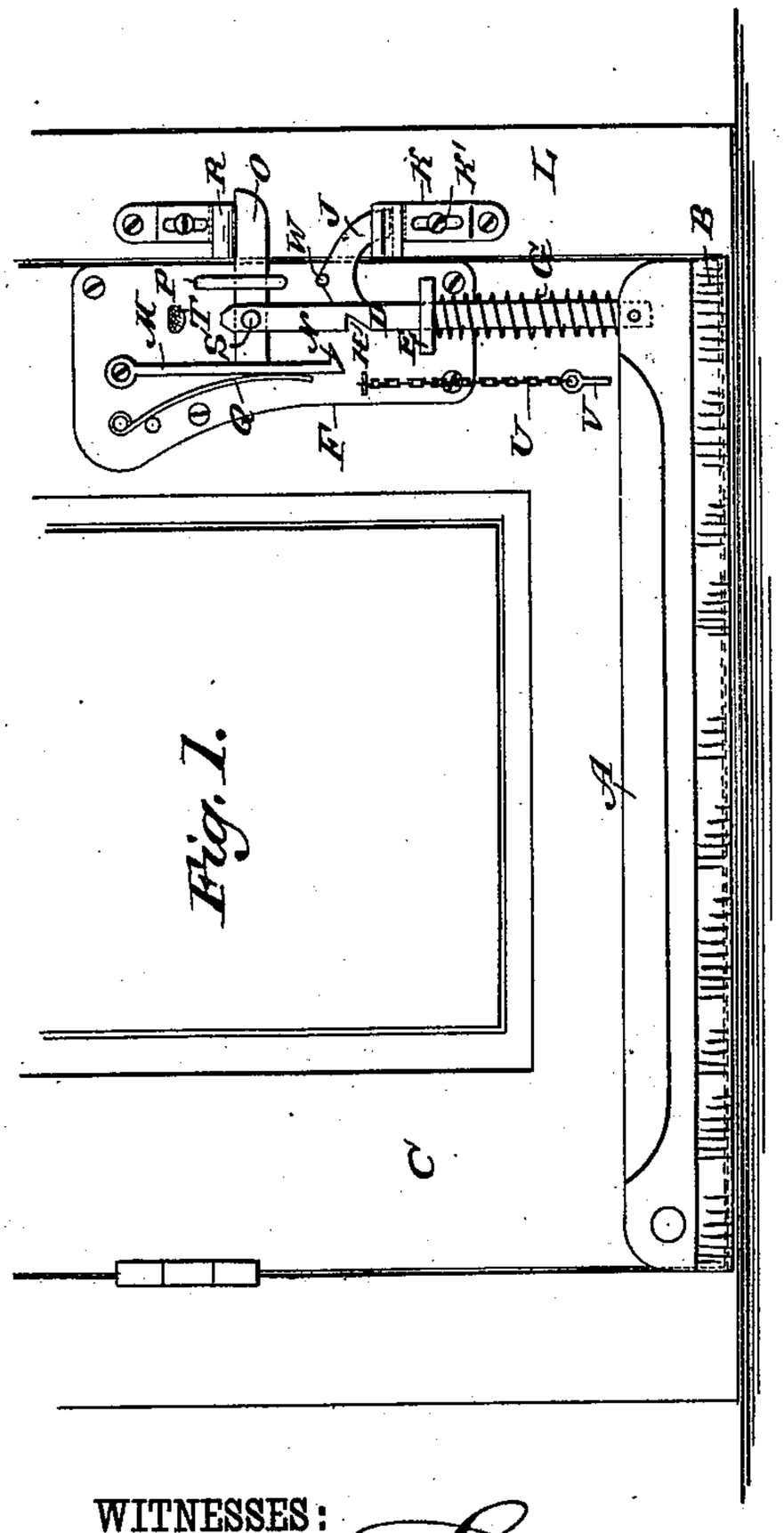

Fig. 1.

WITNESSES:

Otto Beyer

C. Sedgwick

INVENTOR:

W. Harrison

BY Munn & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM HARRISON, OF KINGSTON, ONTARIO, CANADA.

WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 333,296, dated December 29, 1885.

Application filed May 16, 1885. Serial No. 165,728. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HARRISON, of Kingston, in the Province of Ontario and Dominion of Canada, have invented a new and Improved Weather-Strip, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved weather-strip which is automatically raised and locked in place when the door is opened and is automatically forced down when the door is closed.

The invention consists of the combinations of parts, including their constructions, substantially as hereinafter more fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front view of the lower part of a door provided with my improved weather-strip, the same being lowered. Fig. 2 is an end view of the same. Fig. 3 is a front view, the strip being raised.

The weather-strip A, from the bottom edge of which a packing-strip B, of rubber or analogous material, projects downward, is pivoted to the inside of the door C at the lower hinged corner. From the swinging end of the strip A a bar, D, projects upward, and is guided by a hook, E, projecting from a plate, F, secured on the face of the door at the swinging edge. A spiral spring, G, surrounding the bar D, between the hook E and strip A, presses the latter downward. A notch, H, is formed in the bar D in the inner edge, the bottom edge of the notch being beveled. From the other edge of the bar D a curved prong, J, projects having a beveled end. A catch, K, having its top beveled, is held on the door-casing L by a screw, K′, passed through a longitudinal slot in the catch to permit adjusting the catch so that the prong J can engage with it. The upper end of the bar D is at an arm, O, projecting from a latch, M, pivoted on the plate F, and having a beveled hook, N, on its lower end. The arm O is passed through a guide, P, on the plate F. A spring, Q, presses the latch M against the bar D. A beveled lug, R, is held vertically adjustable on the frame L in such a manner that the top edge of the arm O can strike the bevel. A knob, S, projects from the front of the bar D at the top, and a knob, T, projects from the plate F above the knob S. The prong J has a notch, J′, in its top edge, and above the notch an aperture, W, is provided in the plate F for receiving a pin, V, hung by a chain, U, on the plate F.

The operation is as follows: When the door is open, the strip A is raised, as shown in Fig. 3. By closing the door the upper edge of the arm O is brought in contact with the bevel of the lug R and forced downward, whereby the latch M is forced from the edge of the bar D, permitting the spring G to force the bar D and the strip A downward. The end of the prong J slides down the top bevel of the catch K. If desired, the parts can be locked in place by passing the pin V into the aperture W. The door is also locked by this pin, as it prevents raising of the bar D. When the pin V is withdrawn and the door opened, the end of the prong J slides up the bevel of the catch K and raises the bar D. The spring Q forces the hook N of the latch M into the notch H, thus locking the bar D in the raised position. The strip is thus held raised as long as the door is open, and the door can move freely and is not obstructed by the strip B. When it is desired to hold the door open at any particular angle, the outer end of the arm O is pulled upward, whereby the hook N is removed from the notch H, permitting the spring G to pull the bar D downward and to press the rubber strip B upon the floor, whereby the door is held in place by friction. The door is thus held so firmly that it cannot be closed by the wind. The weather-strip thus serves to prevent wind and snow from entering in the winter, and in summer serves to hold the door open enough to make the desired draft. In order to close the door, the strip must be raised so as not to scrape along the floor, and the prong J must be raised sufficiently to pass over the catch K. The hand is placed on the knob T, and the fingers under the knob S, and the bar D is pulled upward. When the strip is to be held raised, so as to clear the floor, the pin V is placed under the bottom edge of the prong J in the aperture W.

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

1. The combination, with a pivoted weather-

strip, of an upwardly-projecting bar on the same, a spring for pressing the bar and the strip downward, and of a catch for holding the bar and weather-strip raised, substantially as herein shown and described.

2. The combination, with a pivoted weather-strip, of a bar projecting upward from the same, a spring for pressing the strip and bar downward and holding the bar and strip, and a catch on the door-frame and a lug on the bar for raising said bar and strip when the door is opened, substantially as herein shown and described.

3. The combination, with the pivoted strip A, of the bar D, having a prong, J, the spring G, for pressing the strip A and bar D downward, the catch K on the door-frame, and the latch M, for locking the bolt when raised, substantially as herein shown and described.

4. The combination, with the pivoted strip A, of the bar D, the spring G, the pivoted latch M, having an arm, O, the spring Q, and the beveled lug R on the door-frame, substantially as herein shown and described.

5. The combination, with the pivoted strip A, of the bar D, having the prong J, the pivoted latch M, having the arm O, the beveled catch K, and the beveled lug R on the door-frame, and the spring G, substantially as herein shown and described.

6. The combination, with the plate F, having the aperture W, of the bar D, having the prong J, the beveled catch K, the hinged strip A, connected with the bar D, and of the pin V, substantially as herein shown and described.

7. The combination, with the pivoted strip A, of the bar D, the knob S, the plate F, and the knob T, substantially as herein shown and described.

WILLIAM HARRISON.

Witnesses:
EDW. H. SMYTHE,
JOHN GEALE.