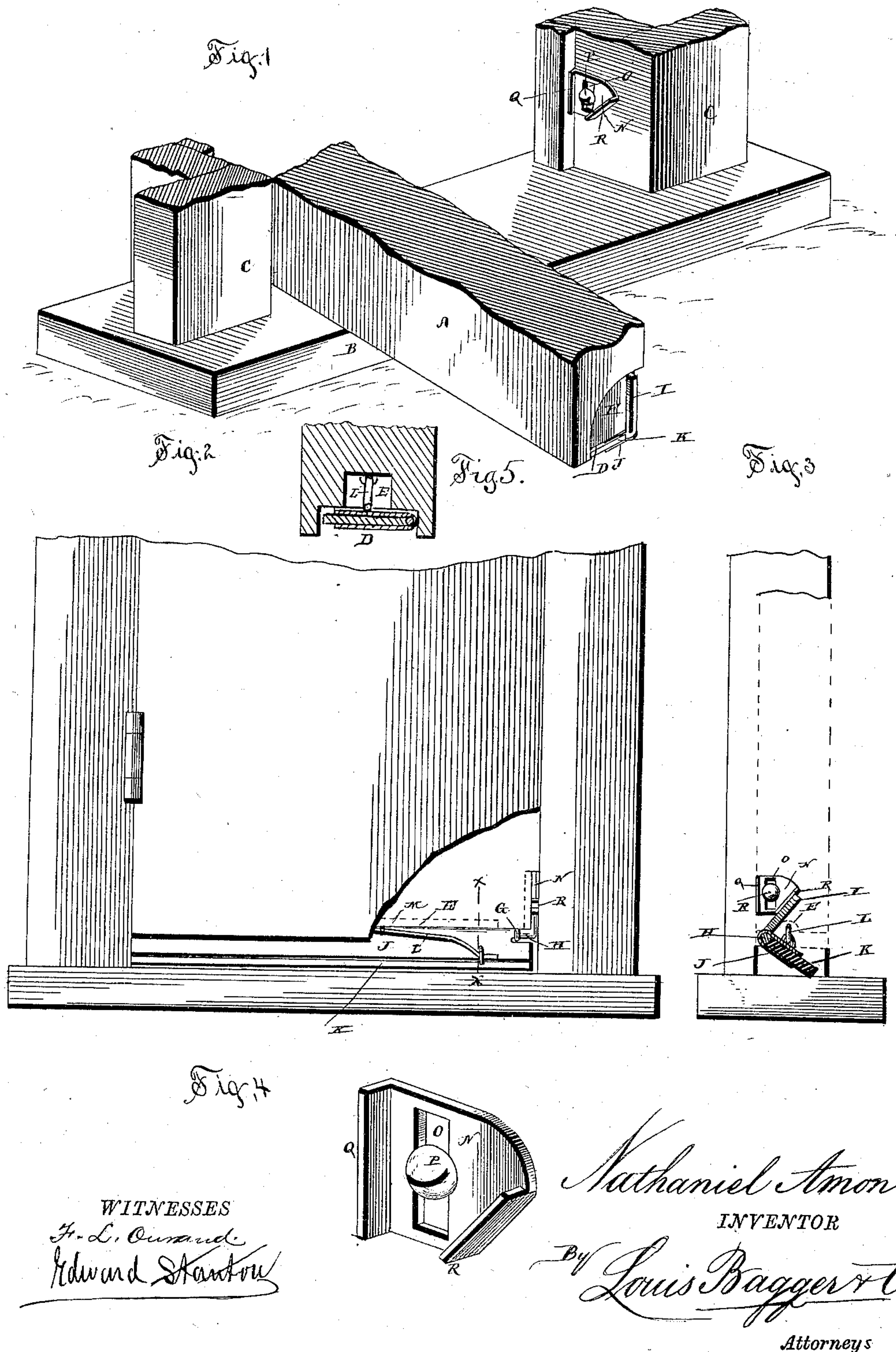


(No Model.)

N. AMON.
WEATHER STRIP.

No. 335,874.

Patented Feb. 9, 1886.



UNITED STATES PATENT OFFICE.

NATHANIEL AMON, OF SANDY LAKE, PENNSYLVANIA.

WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 335,874, dated February 9, 1886.

Application filed November 23, 1885. Serial No. 183,747. (No model.)

To all whom it may concern:

Be it known that I, NATHANIEL AMON, a citizen of the United States, and a resident of Sandy Lake, in the county of Mercer and State of Pennsylvania, have invented certain new and useful Improvements in Weather-Strips; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of the lower portion of a door-frame and door provided with my improved weather-strip, showing the door open. Fig. 2 is a front view of the same, showing the door closed and a portion of the lower end of the door broken away. Fig. 3 is a vertical sectional view of the strip, showing the arm of the strip and the catch upon the jamb in engagement, and showing the door and jamb in dotted lines. Fig. 4 is a detail view of the catch upon the jamb, and Fig. 5 is a sectional view taken on the line *x x* of Fig. 2.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to that class of weather-strips which are hinged to the lower edge of the door and have springs for raising their free edges when the door is opened, and means for automatically tilting the free edges of the strips against the floor when the door is closed; and it consists in the improved construction and combination of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates the door. B is the sill, and C C are the jambs of the door-frame. The lower edge of the door has a recess, D, extending the entire length of the lower edge, and this recess has in its bottom another recess or groove, E, and the side edge of the door has a sector-shaped recess, F, at its lower end, the said recess having the center of the sector at the corner toward the jamb. The inner side of the recess in the lower edge of the door or the side toward the door-jamb has staples G G, in which a rod, H, is journaled, which rod has at one end an arm, I, bent at a right angle to

the rod, and rocking in the sector-shaped recess in the edge of the door. A longitudinally doubled strip, J, of sheet metal, is secured at its doubled edge to this rod, and a strip, K, of rubber or other similar flexible material, is clamped between the flanges of the metallic strip and firmly retained between the same.

A spring rod, L, is secured at one end in the groove in the lower edge of the door, and is secured near its middle by a staple, M, while its other end is secured to the upper side of the metallic strip, so that the said spring-rod will serve to draw the metallic strip and its rubber strip up into the recess in the lower edge of the door, the spring-rod resting in the groove in the recess.

A plate, N, is secured upon the jamb of the door, having a vertical slot, O, sliding upon a screw, P, in the jamb, and this plate has its inner edge provided with a bent flange, Q, which bears against the bead of the door, and which flange serves to keep the plate in its vertical position, while the lower outer corner of the plate is cut off obliquely and provided with an oblique flange, R.

When the door is closed, the arm of the rocking weather-strip will strike the inclined flange and be tilted into a horizontal position, or nearly so, bringing the edge of the elastic strip to bear against the sill of the door, and when the door now is opened the arm will be released, and the spring-rod will draw the weather-strip up into the recess in the lower edge of the door. The plate upon the jamb being provided with a vertical slot with which it slides upon the adjusting-screw, may be adjusted upon the said screw at any desired height, and as the elastic strip wears out the plate may be lowered, the arm being tilted closer to the horizontal position as the plate is moved closer to the sill. The vertical flange upon the plate, bearing against the bead of the door-jamb or against the abutment upon the said jamb, will serve to keep the plate in its proper position and prevent it from being tilted when the arm strikes it, so that the arm will be tilted to its proper angle and the weather-strip be forced against the sill with sufficient force to exclude water or air, but not with sufficient force to destroy the rubber strip.

The plate may be on either jamb, and the arm of the weather-strip may project either at the latch edge of the door, as shown in the drawings, or at the hinge edge, the operation 5 of the device being the same; but I prefer to have the arm upon the latch end of the door and the plate consequently upon the latch-jamb, inasmuch as the arm will almost be forced directly in upon the plate when the 10 arm is upon the hinge end of the door.

I am aware that it is not new to construct weather-strips consisting of a longitudinal strip hinged in a recess in the bottom part of the door and operated by means of an attachment 15 secured to the side of the jamb of the door, and I do not claim such construction, broadly; but

I claim and desire to secure by Letters Patent of the United States—

20 1. The combination, with a door having a grooved recess across its bottom, of a rod pivoted in said recess, a longitudinal folded strip secured at its doubled edge around said rod, and having an elastic strip clamped between 25 its outer edges, a spring-rod secured in the groove of the recess and to the strip, the outer end of said hinge-rod being bent at an angle and moved in a sector-shaped recess in the

edge of the door, and an inclined stop secured to the side of the jamb of the door against 30 which the bent end of said rod operates, as shown and described.

2. The combination of a door having a recess in its lower edge formed with a groove, and having a sector-shaped recess in the lower 35 end of one edge, a rod rocking in staples in the inner side of the recess, and having an arm at one end rocking in the sector-shaped recess, a longitudinally-doubled metallic strip secured at its doubled edge to the rod, and 40 having an elastic strip clamped between its flanges, a spring-rod secured in the groove of the recess and to the strip, and a plate having a vertical slot and a vertical flange bearing against the abutment of the jamb and an ob- 45 lique flange at its lower outer corner, the said plate sliding adjustably upon a screw entering the door-jamb, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as 50 my own I have hereunto affixed my signature in presence of two witnesses.

NATHANIEL AMON.

Witnesses:

H. BRADBURY,
J. W. LENIGAN.