No. 719,599. PATENTED FEB. 3, 1903.

H. M. LUCHIA.

WEATHER STRIP FOR DOORS.

APPLICATION FILED SEPT. 15, 1902.

NO MODEL.

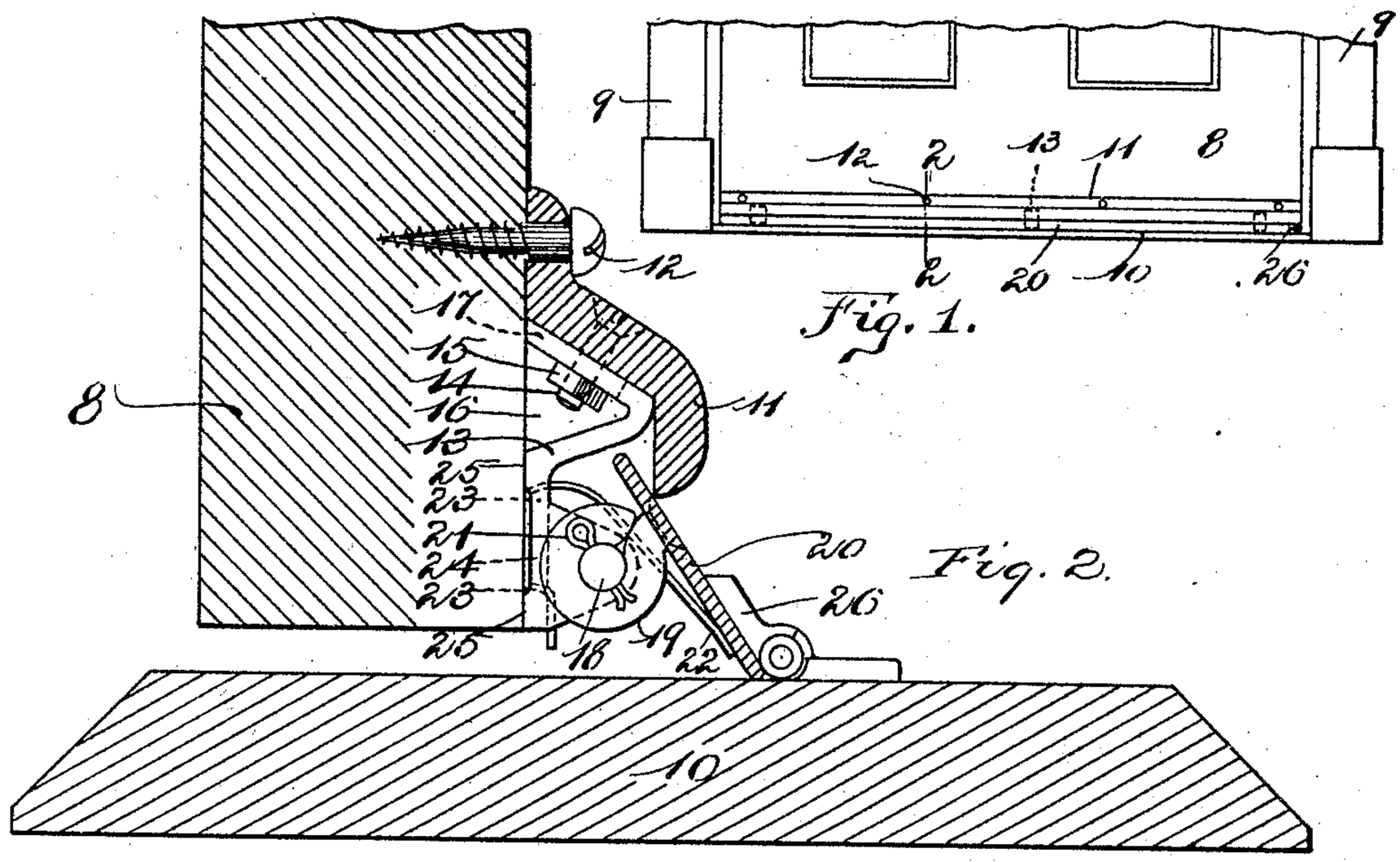

Fig. 1.

Fig. 2.

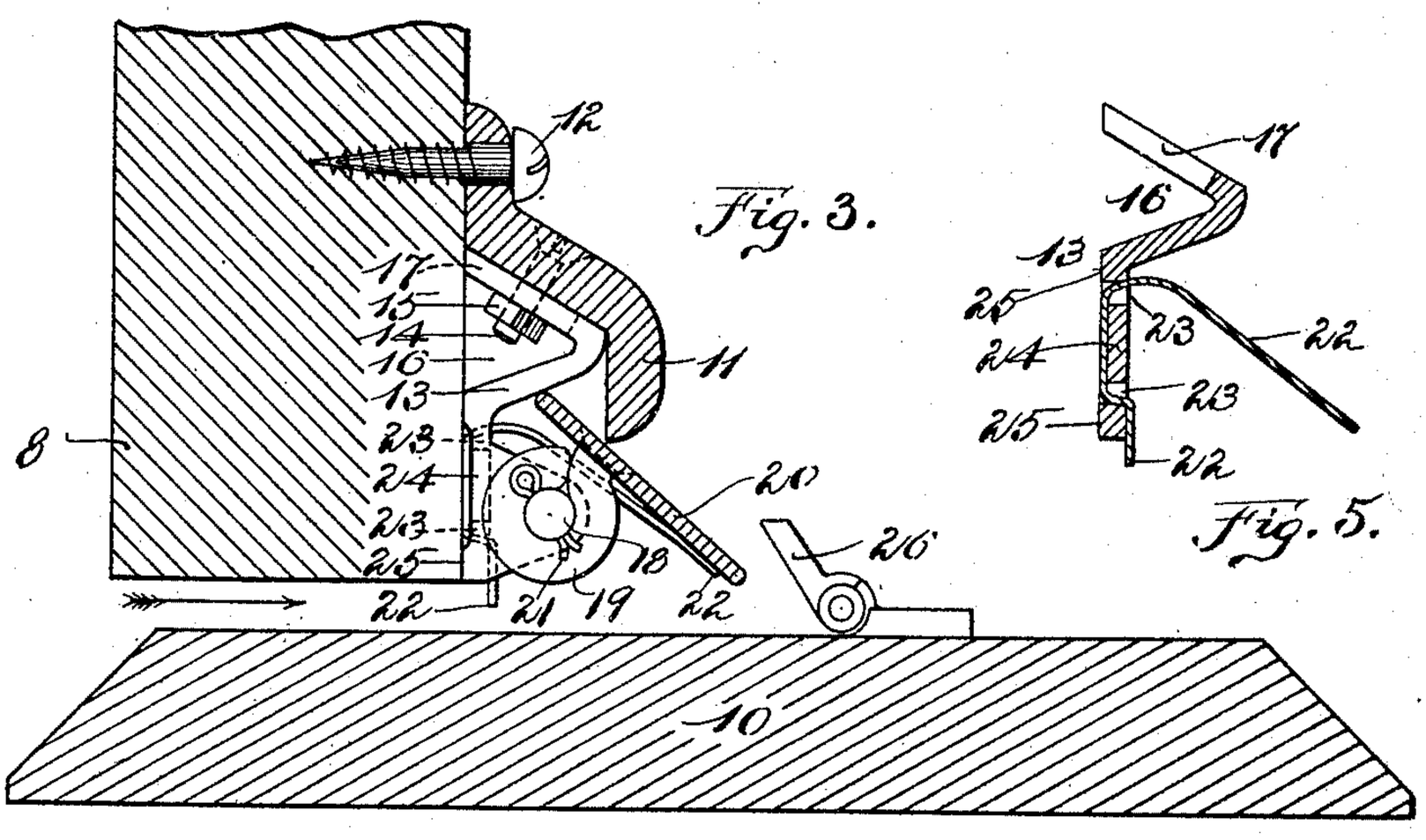

Fig. 3.

Fig. 5.

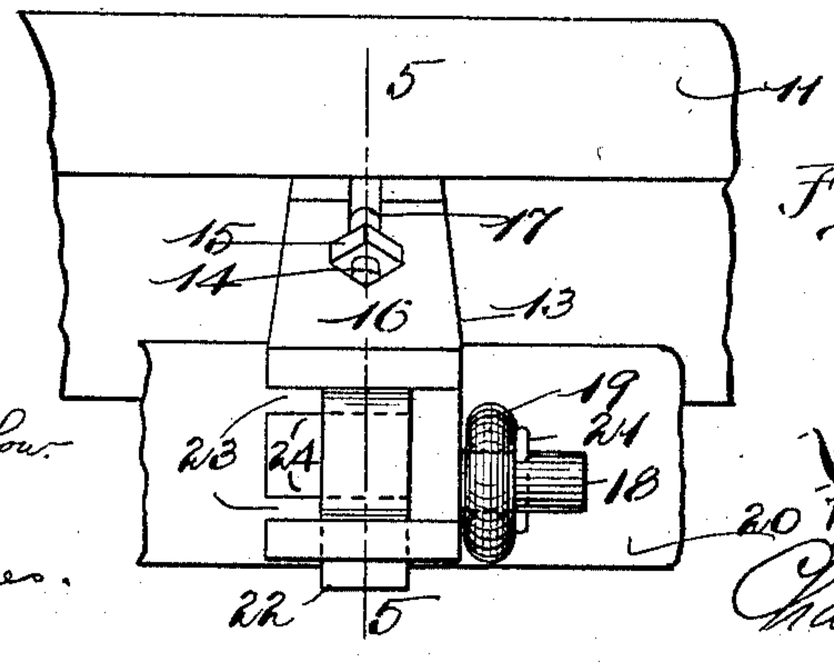

Fig. 4.

Witnesses:
Franklin E. Low.
Louis A. Jones.

Inventor:
Henry M. Luchia
by his Attorney,
Charles S. Fowling.

UNITED STATES PATENT OFFICE.

HENRY M. LUCHIA, OF NORTH ABINGTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO JOHN J. ARECENEAU, OF NORTH ABINGTON, MASSACHUSETTS.

WEATHER-STRIP FOR DOORS.

SPECIFICATION forming part of Letters Patent No. 719,599, dated February 3, 1903.

Application filed September 15, 1902. Serial No. 123,417. (No model.)

To all whom it may concern:

Be it known that I, HENRY M. LUCHIA, a citizen of the United States, residing at North Abington, in the county of Plymouth and State of Massachusetts, have invented new and useful Improvements in Weather-Strip for Doors, of which the following is a specification.

The object of this invention is to provide a strong, cheap, and durable weather-strip for doors.

The invention consists of a weather-strip for doors comprising a supporting-strip adapted to be fastened to a door and a sealing-strip pivotally attached to a bracket of certain specified construction, particularly set forth in the following specification and claims.

Referring to the drawings, Figure 1 is a front elevation of the lower portion of a door and casing with my improved weather-strip attached thereto. Fig. 2 is an enlarged vertical section taken on line 2 2, Fig. 1. Fig. 3 is a section similar to Fig. 1, showing the door partly open. Fig. 4 is a detail rear elevation of a portion of the supporting and sealing strips and a bracket upon which said sealing-strip is pivoted. Fig. 5 is a detail section taken on line 5 5, Fig. 4, of the bracket upon which the sealing-strip is pivoted.

Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, 8 is a door, 9 the door-casing, and 10 the threshold, all of the usual well-known construction. A supporting strip or molding 11 is rigidly fastened by screws 12 to the door 8. To the under side of the molding 11 is fastened a bracket 13 by means of a bolt 14 and nut 15. The bracket 13 has a recess 16 extending longitudinally thereacross and is provided upon its upper face with a slot 17, extending transversely thereof, through which the bolt 14 projects. A pin 18 projects from one side of the bracket 13, longitudinally of said supporting-strip and integral with said bracket. Upon said pin 18 is pivotally mounted an eyebolt 19, which is riveted to a sealing-strip 20. The eyebolt 19 is prevented from becoming detached from pin 18 by a cotter-pin 21. The sealing-strip 20 is held away from the threshold 10 by a spring 22, one end of which bears against the under side of said sealing-strip, the other end passing through two slots 23, provided in the bracket 13 and extending lengthwise of the supporting-strip 11. The slots 23 23 open from one side of the bracket 13, Fig. 4, and between said slots is a tongue 24 around which the spring 22 partly extends.

The bracket 13 is provided with a vertical face 25, which bears against the face of the door 8, extends above and below a horizontal plane passing through the axial center of the pin 18, and acts to support said bracket and the sealing-strip 20 and relieves the strain upon the molding 11 and screws 12.

The operation of my improved weather-strip is as follows: Assuming the door to be in the position shown in Fig. 3 and that the same is being closed in the direction of the arrow in said figure, the sealing-strip 20 being held away from the threshold 10 by the spring 22, the said sealing-strip as the door is closed will come in contact with the bracket 26, fast to said threshold 10, and when the door is entirely closed, as in Fig. 2, said sealing-strip will be tipped into the position shown in said figure, one edge thereof bearing against the threshold 10, and one face thereof bearing against the lower edge of the supporting-strip 11. When the door is opened from the position shown in Fig. 2 to that shown in Fig. 3, the springs 22 tip the sealing-strip 20 from the position shown in Fig. 2 to that shown in Fig. 3, thus raising the lower edge of the sealing-strip from contact with the threshold 10. In practical operation I prefer to use three brackets 13 and springs 22 to each weather-strip.

The advantages of my improved weather-strip consist in the extreme simplicity and practicability of the bracket 13, by which the sealing-strip is pivoted to the supporting-strip. It will be seen that said bracket is cast in a single piece and that the spring 22 is attached thereto by simply slipping it into the slots 23.

Another advantage of the bracket consists in the strength imparted to the whole construction by the vertical face 25 resting against the face of the door and extending above and below a horizontal plane passing

through the axial center of the pin 18, taking a large proportion of the strain from the screws 12 and molding 11.

Another advantage of my improved construction resides in the fact that by removing the cotter-pin in the bolt the sealing-strip may be moved lengthwise thereof and detached from the pivotal pin 18 in seasons of the year when the weather-strip is unnecessary.

I prefer to construct the sealing-strip 20 of metal, as it makes a much more durable and practical construction than those constructed of wood, such as have been previously used, and my improved bracket and eyebolt are particularly adapted to be used with a metal sealing-strip.

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

1. A weather-strip for doors, comprising a supporting-strip adapted to be attached to a door, a bracket fast to said supporting-strip and having a pin projecting from one side thereof longitudinally of said supporting-strip, a sealing-strip pivotally supported upon said pin, and a spring, one end fastened to said bracket and passing through two slots provided in said bracket, said slots extending lengthwise of said supporting-strip, the other end of said spring bearing against said sealing-strip.

2. A weather-strip for doors, comprising a supporting-strip adapted to be attached to a door, a bracket fast to said supporting-strip and having a pin projecting from one side thereof longitudinally of said supporting-strip, a sealing-strip pivotally supported upon said pin, and a spring, one end fast to said bracket, the other bearing against said sealing-strip, said bracket being provided with a vertical face adapted to bear against one face of said door, said vertical face extending above and below a horizontal plane passing through the axial center of said pin for the purpose specified.

3. A weather-strip for doors, comprising a supporting-strip adapted to be attached to a door, a bracket fast to said supporting-strip and having a pin projecting from one side thereof longitudinally of said supporting-strip, an eyebolt pivotally mounted upon said pin, and a sealing-strip rigidly fastened to said eyebolt, means to raise said strip when said door is opened and means to depress said strip when said door is closed.

4. A weather-strip for doors, comprising a supporting-strip adapted to be attached to a door, a bracket fast to said supporting-strip and having a pin projecting from one side thereof longitudinally of said supporting-strip, a cotter-pin extending transversely through said bracket-pin, an eyebolt pivotally mounted upon said bracket-pin between said cotter-pin and bracket, and a sealing-strip rigidly fastened to said eyebolt, means to raise said strip when said door is opened and means to depress said strip when said door is closed.

5. A weather-strip for doors, comprising a supporting-strip adapted to be attached to a door, a bracket fast to said supporting-strip and having a pin projecting from one side thereof longitudinally of said supporting-strip, a cotter-pin extending transversely through said bracket-pin, an eyebolt pivotally mounted upon said bracket-pin between said cotter-pin and bracket, a sealing-strip rigidly fastened to said eyebolt, and a spring, one end fast to said bracket, and the other bearing against said sealing-strip.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

HENRY M. LUCHIA.

Witnesses:
CHARLES S. GOODING,
JOHN J. ARECENEAU.