

No. 610,113.

Patented Aug. 30, 1898.

T. A. WATSON.
WEATHER STRIP FOR DOORS.

(Application filed June 12, 1897.)

(No Model.)

Fig. 1.

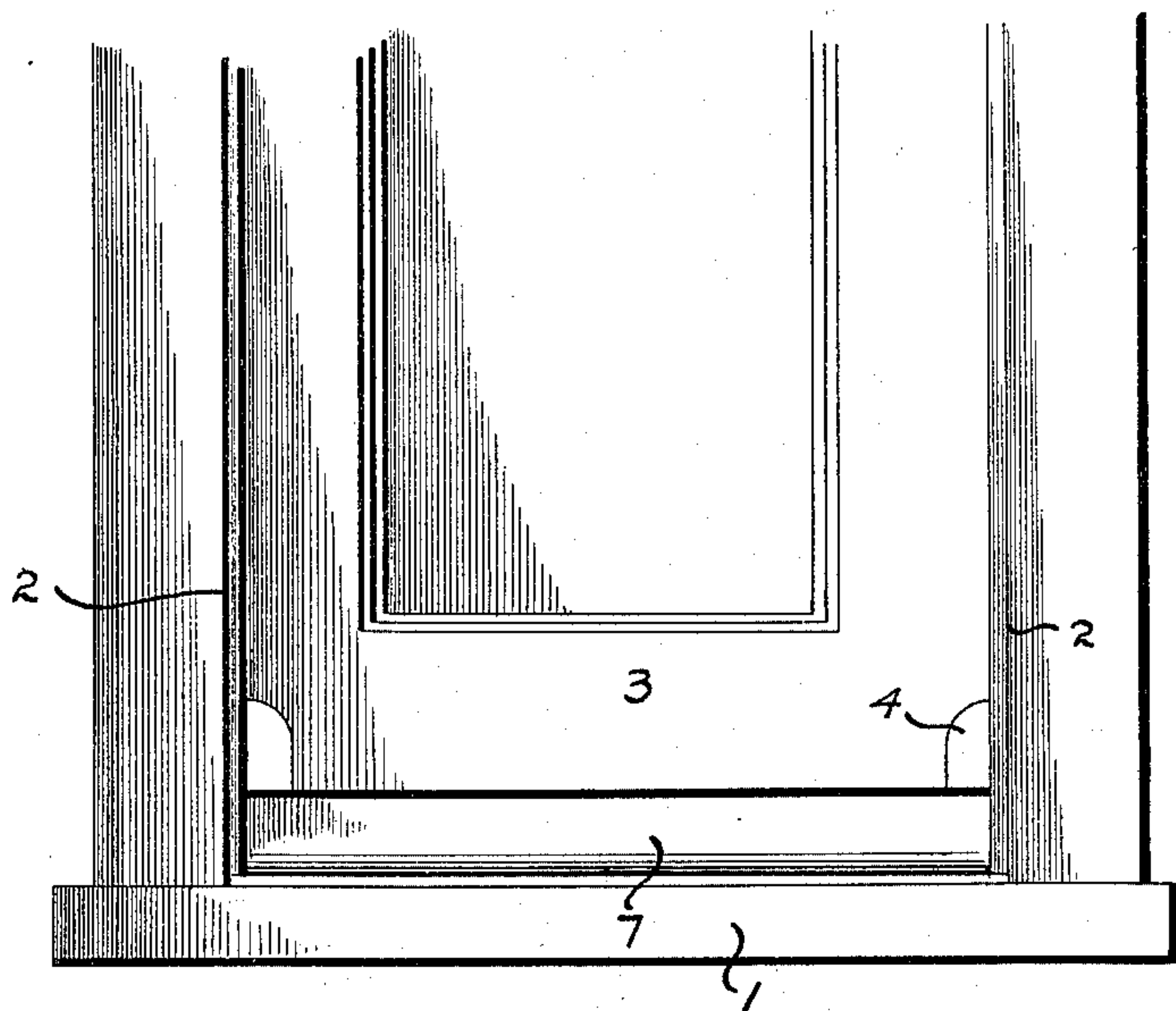


Fig. 2.

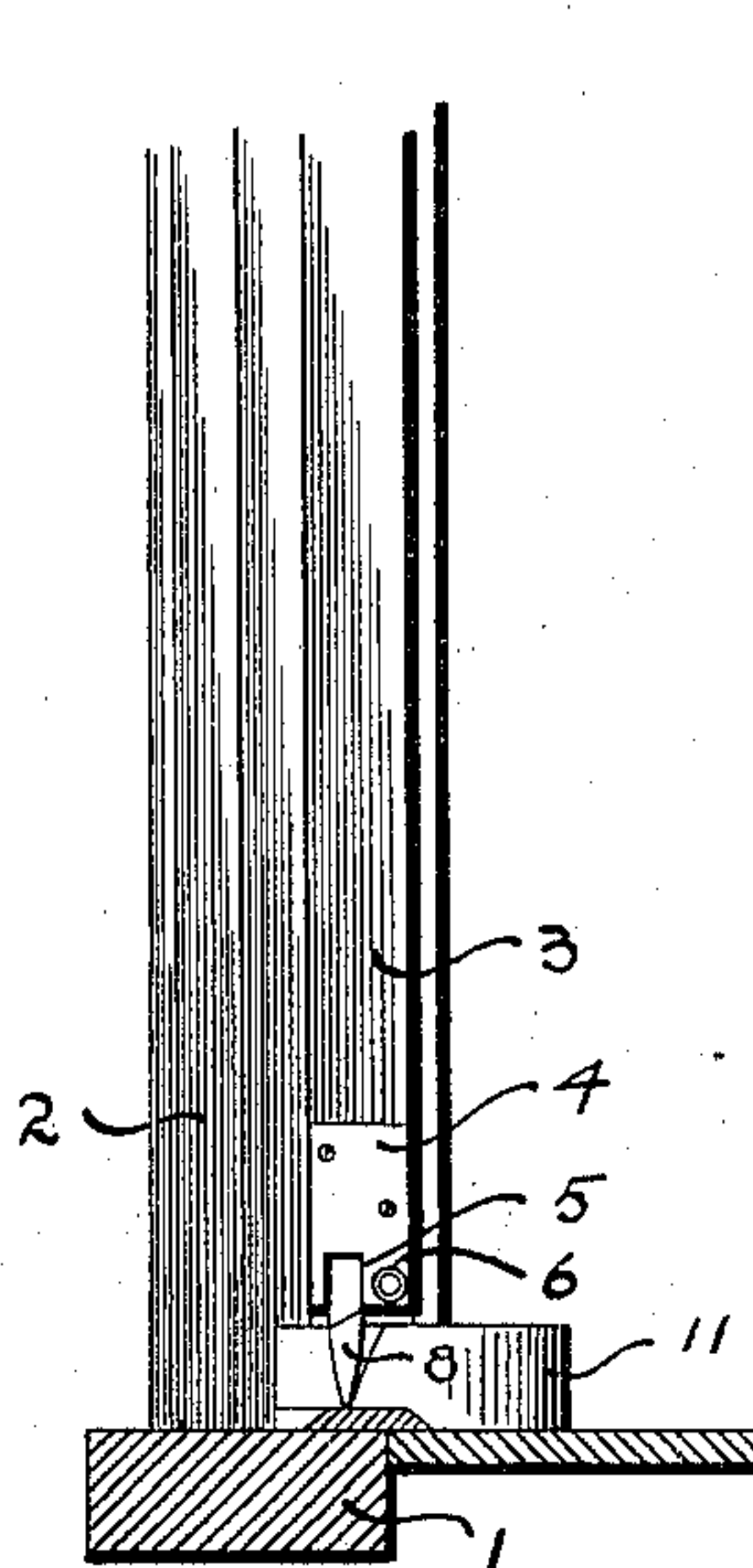


Fig. 3.

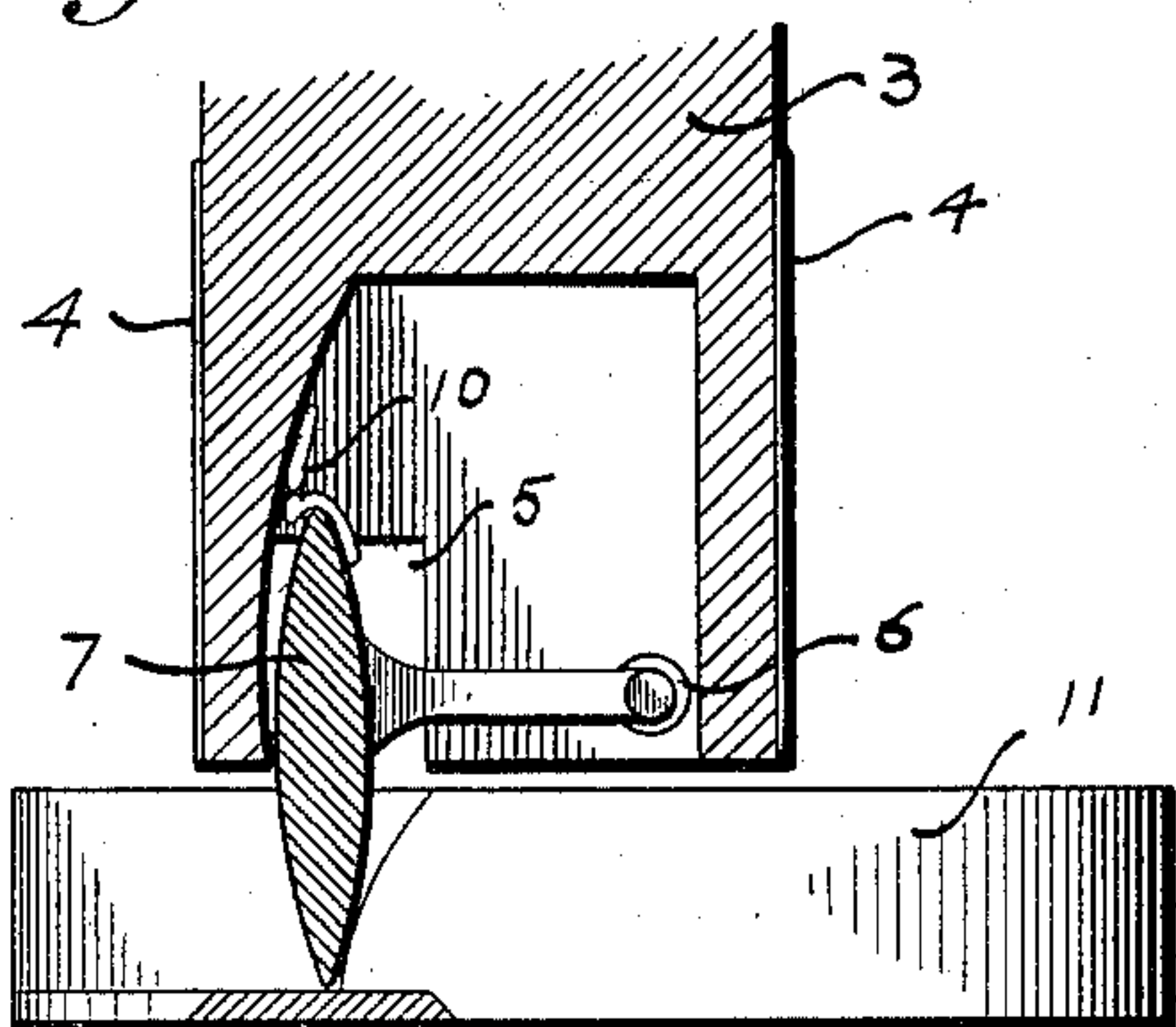


Fig. 5.

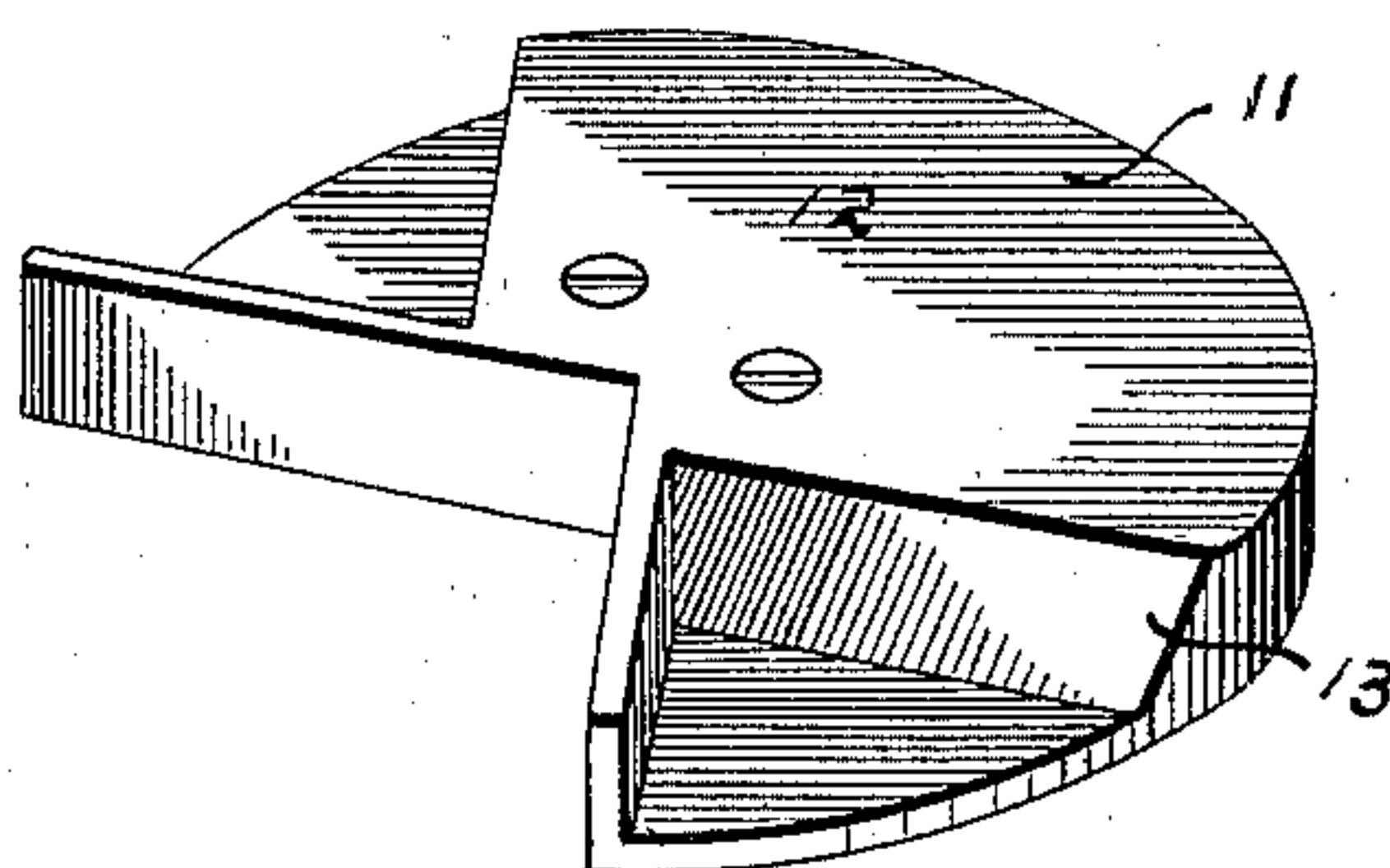
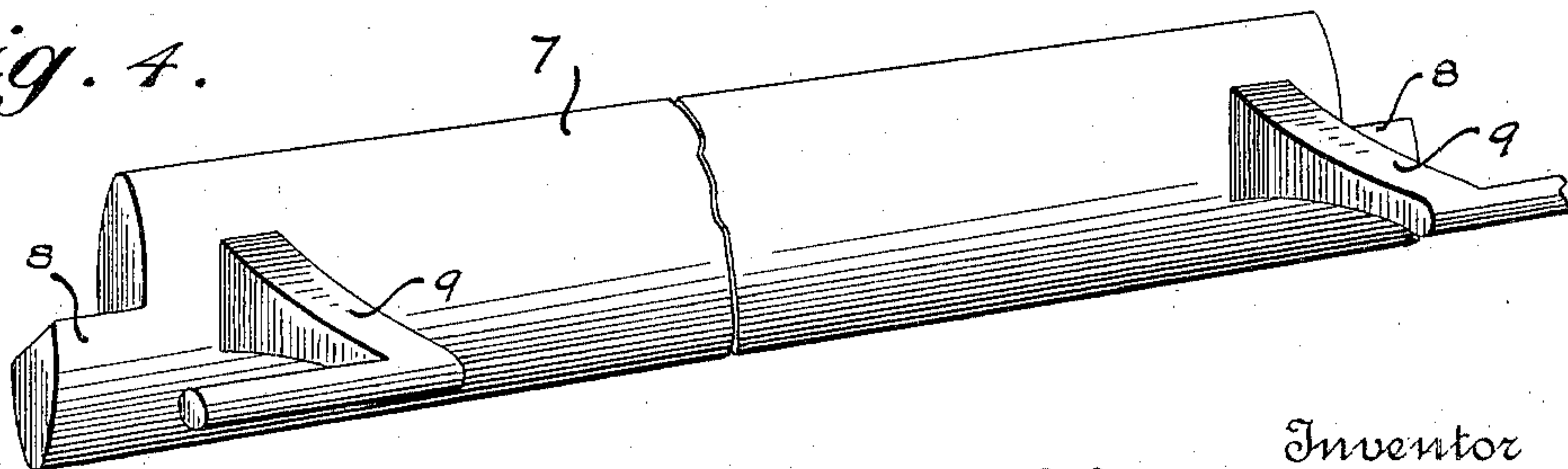


Fig. 4.



Witnesses
C. W. Bradway.
Victor J. Evans.

Inventor
Thomas A. Watson,
by John Wedderburn
Attorney

UNITED STATES PATENT OFFICE.

THOMAS A. WATSON, OF BENTONVILLE, ARKANSAS.

WEATHER-STRIP FOR DOORS.

SPECIFICATION forming part of Letters Patent No. 610,113, dated August 30, 1898.

Application filed June 12, 1897. Serial No. 640,467. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. WATSON, of Bentonville, in the county of Benton and State of Arkansas, have invented certain new and useful Improvements in Weather-Strips for Doors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in weather-strips for doors, the object of the same being to provide a strip that will effectually close the opening between the door and sill and when the door is opened will be automatically moved within the door, so as not to ride upon the carpet.

With these ends in view the invention consists in providing a vertically-movable strip having a play within a recess in the lower end of the door and spring-actuated to be pressed against the front wall of the recess as it is projected beyond the lower edge of the door in engaging the sill, in connection with a circular track secured to the sill at the inner end of the door, and upon this track said strip is adapted to ride, being raised when the door is opened, the said door being cut away at its forward end to permit the strip to drop upon the sill and completely close the opening which is usually left at this point.

In the following specification I have entered into a detailed description of my invention, reference being had to the accompanying drawings and to numerals thereon, which designate the different parts, and what I consider to be the novel features of construction are specifically set forth in the appended claims.

In the drawings forming part of this specification, Figure 1 is an elevation showing the application of my invention. Fig. 2 is an edge view of the door with the strip applied thereto. Fig. 3 is a vertical sectional view through the lower end of the door. Fig. 4 is a detail view of the weather-strip. Fig. 5 is a detail view of the track.

Referring to the drawings by numerals, 1 designates the sill, 2 2 the jambs, and 3 the door. In applying my invention the lower edge of the door is plowed or otherwise formed with a recess, the ends of which are

covered by plates*4, said plates having open-ended slots 5 on a line with the front wall of the recess in the door. The plates or corner-brackets, which close the ends of the recess, are secured in place by retaining-screws, which pass into the edges of the door and into the under side in the rear of the recess, and in addition to the open-ended slots the said brackets are provided with openings 6, forming bearings for the purpose hereinafter specified.

7 designates the weather-strip, the front and rear sides of which are curved outwardly or convex, presenting thin upper and lower edges, which are slightly rounded. Each end of the strip is extended, as shown at 8, to play within the open-ended slots of the corner-brackets, and near each end of this strip is rigidly attached or formed integral a rearwardly-projecting arm 9, the end of which is turned outward to bear within the openings 6 of the brackets. When positioned within the recess, this strip bears against the forward wall of the recess, and the front side thereof is curved in the arc of a circle, the center of which is the bearing-point of the arm, thus keeping the strip at all times in proper contact with the front wall of the recess. It will be noted that there is a slight play in the bearings for the arms of the strip, and in connection therewith a spring-wire 10 is secured within the recess at one end and bears at its other end upon the rear side of the strip, being bent over the upper edge thereof. This spring acts to not only force the strip beyond the lower edge of the door, but also to press it into proper engagement with the wall of the recess.

Mounted upon the door-sill 1 below the inner end of the door 3 is a circular track 11, consisting of a block cut away at one side to form angular edges, which engage the sides of the door-jamb, being secured to the sill by the wood-screws 12. This circular track is cut away at its forward end, as shown, presenting an inclined edge 13, upon which the strip rides as the door is opened and closed. The raised portion of the track is of a height to lift the weather-strip entirely within the lower end of the door when the said door is opened, the tracks extending within the room a sufficient distance to hold the strip elevated

when the door is opened to its greatest extent. In order that this track may be placed at either side of the doorway to accommodate the particular side on which the door is hinged, both ends are recessed, though it is obvious that the inner end of the track could be cut off at right angles with the door-jamb and the track furnished according to the side of the doorway to which it is to be applied.

From the foregoing description, in connection with the accompanying drawings, it will be seen that I provide a weather-strip for doors which will entirely close the opening at the lower end of the same to prevent weather or dust from finding its way beneath the door, the disposition of the parts being such as to form a close-fitting strip and one that is automatic in its operation. It is also obvious that besides being effective in operation the weather-strip attachment can be cheaply applied to a door by simply forming a recess in the lower end thereof, attaching the brackets which carry the weather-strip and spring which bears upon the latter, and also securing the block or track in its proper position.

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

1. In a weather-strip for doors, the combination with a door having a recess in its lower end, a weather-strip having projecting arms by which it is pivoted within the recess, a spring for projecting the strip, and a track for elevating the strip against the action of the spring, substantially as shown and for the purpose set forth.

2. In a weather-strip for doors, the combination with the door having a recess in its lower end, of a strip provided with projecting arms turned at their ends to form bear-

ings, the front side of the strip being curved in the arc of a circle, and a block or circular track upon which the strip rides when the door is opened, substantially as shown and for the purpose set forth.

3. In a weather-strip for doors, the combination with the door having a recess in its lower end, corner-brackets covering the ends of the recess and forming bearings, a weather-strip provided with projecting arms turned at their ends to bear within the brackets, the front side of said strip being curved, a spring bearing upon the strip, and a circular track upon which the weather-strip rides when the door is opened, substantially as shown and for the purpose set forth.

4. In a weather-strip for doors, the combination with the door having a recess in its lower end, brackets closing the ends of the recess, said brackets being provided with open-ended slots and adjoining openings forming bearings, a weather-strip having a curved front wall and rearwardly-projecting arms turned at their ends to form bearings or pintles which bear in the brackets, a spring located within the recess and bearing upon the strip, the ends of the latter being extended, as shown, to play within the slots of the brackets; together with a circular track secured upon the door-sill and cut away at its forward end, substantially as shown and for the purpose set forth.

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

THOMAS A. WATSON.

Witnesses:

B. C. CARROLL,
W. L. MARLEY.