

H. BRIGHTMANN.
WEATHER-STRIPS.

No. 187,997.

Patented March 6, 1877.

Fig. 1.

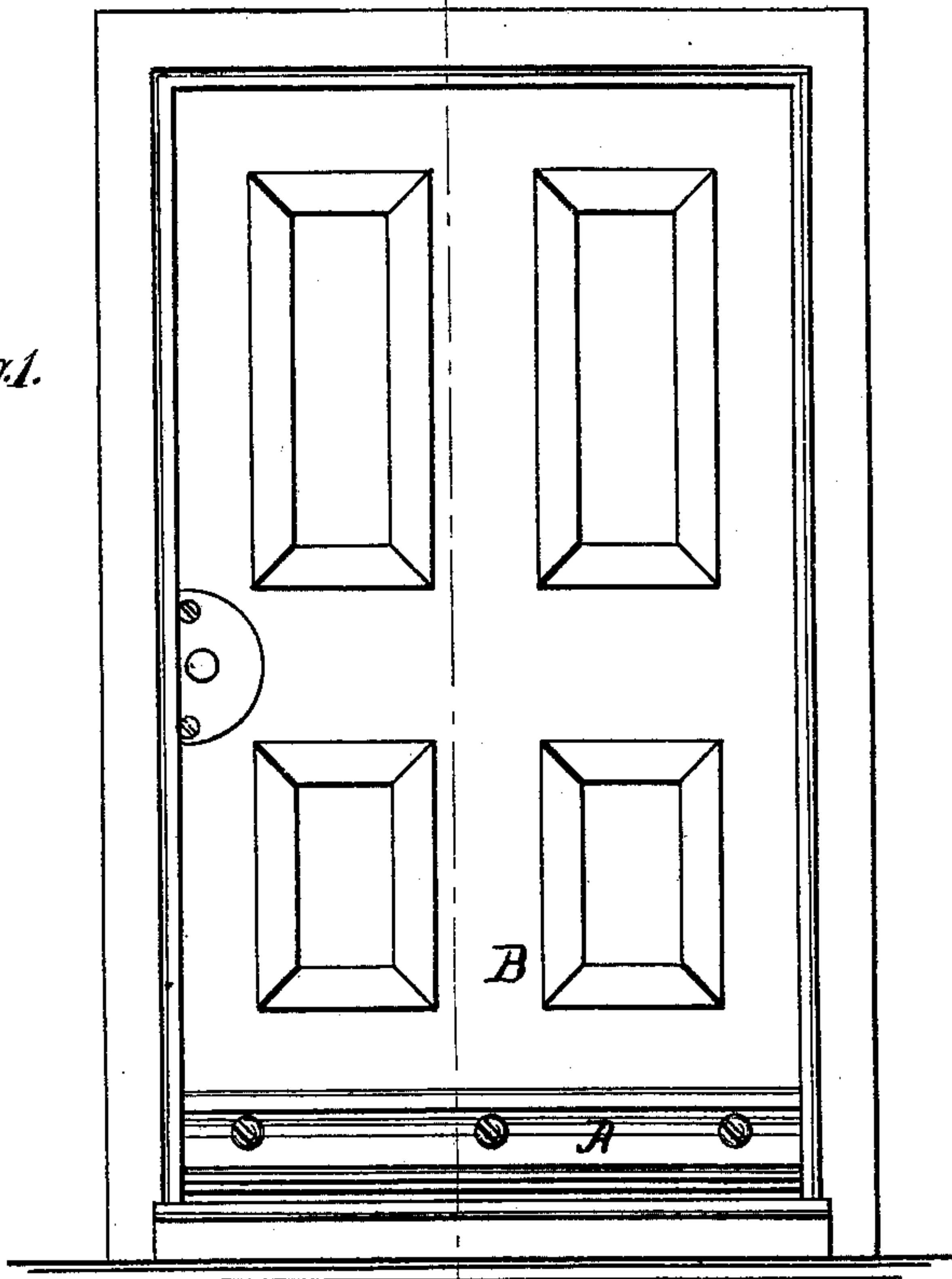


Fig. 2.

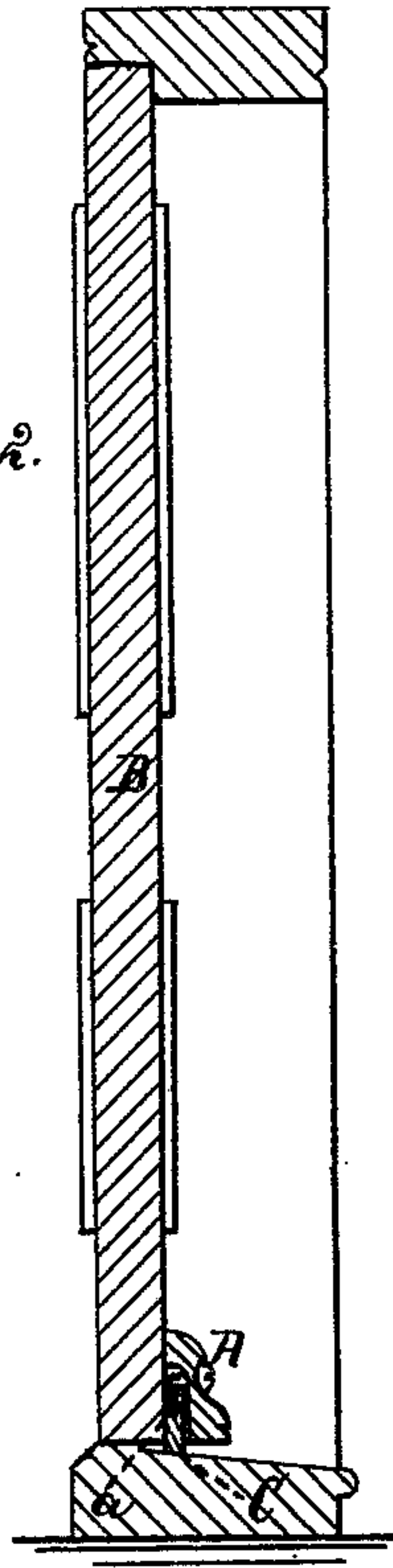


Fig. 3.

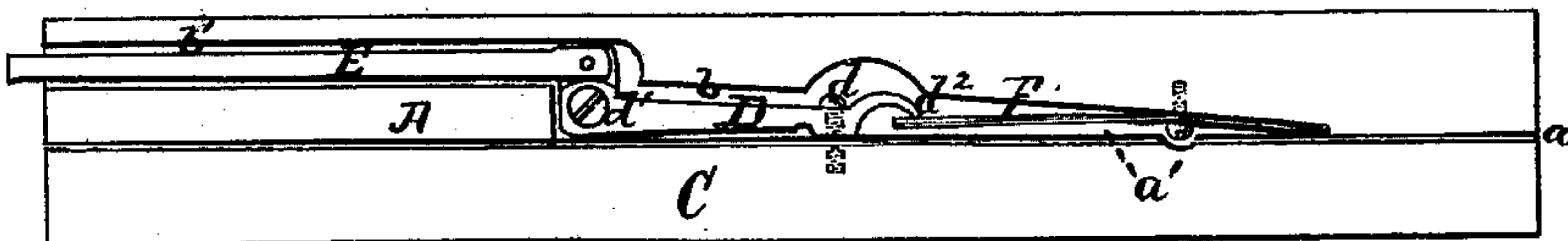
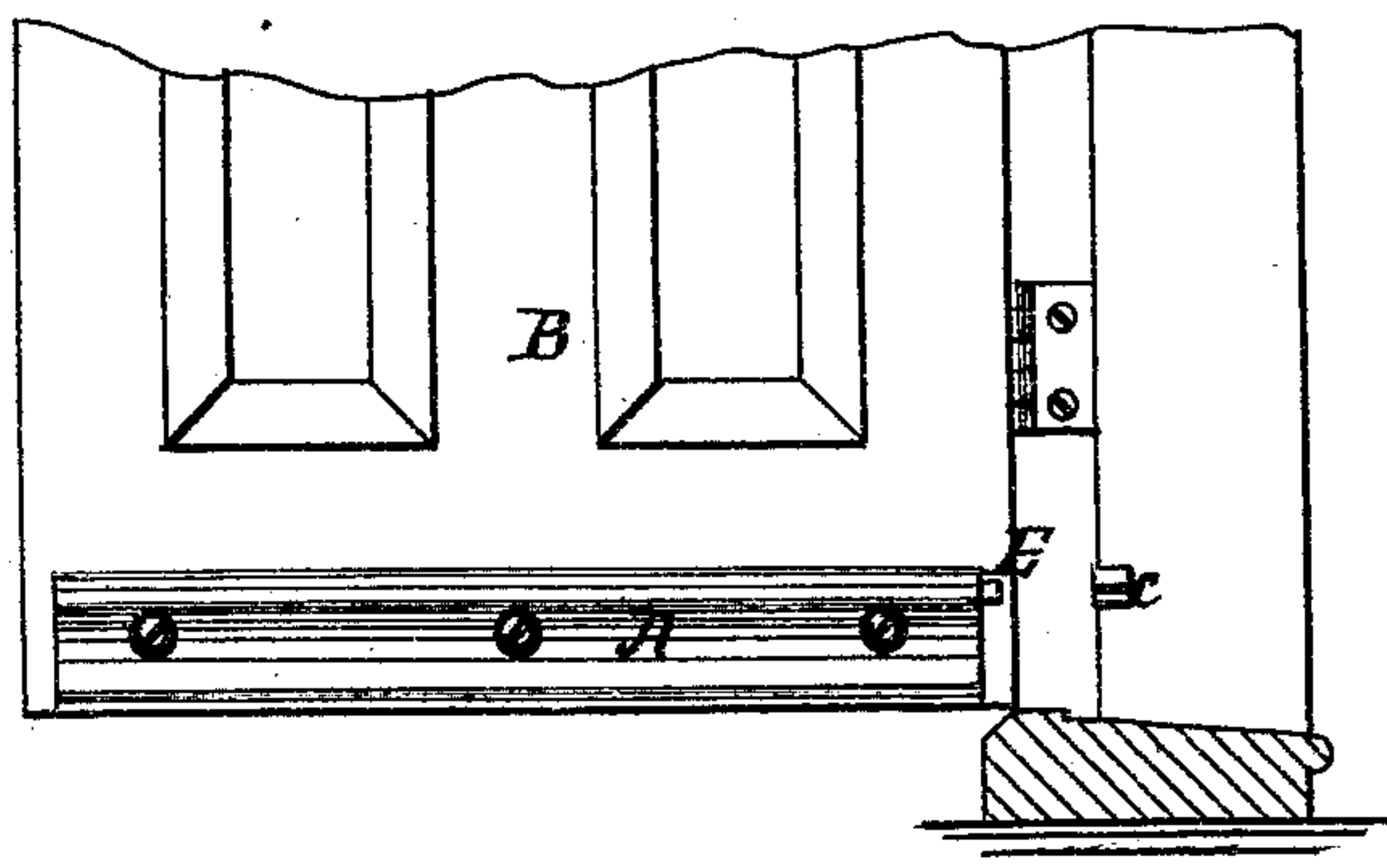


Fig. 4.



Witnesses:

Theodore Heister.

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UNITED STATES PATENT OFFICE

HENRY BRIGHTMANN, OF TAUNTON, MASSACHUSETTS.

IMPROVEMENT IN WEATHER-STRIPS.

Specification forming part of Letters Patent No. **187,997**, dated March 6, 1877; application filed August 25, 1876.

To all whom it may concern:

Be it known that I, HENRY BRIGHTMANN, of Taunton, county of Bristol, in the State of Massachusetts, have invented an Improvement in Weather-Strips for Doors, of which the following is a full, clear, and accurate description, reference being had to the accompanying drawings, forming part of this specification.

My invention consists in a molding or strip of wood or other material, on the inner face, at the lower edge, of which, in a suitable channel, is arranged a movable strip, which is operated to be extended beyond the lower edge of the molding by a crank-lever, to which said strip is attached, said lever being pivoted to said molding in a suitable channel, and actuated by a rod extending beyond the end of said molding, and arranged, when the device is placed across the face of a door, at the lower edge thereof, to engage a pin set in the casing of the door when the door is closed, and thus depress the movable strip to and against the threshold, the said lever being provided with a spring, which operates to raise the movable strip to the line of the lower edge of the door when the door is swung open, as hereinafter particularly set forth and described, and for the purpose specified.

Figure 1 is a front elevation of a door having my device in position on its lower face. Fig. 2 is a longitudinal sectional view of the same on the line *x x*, Fig. 1. Fig. 3 is an inner or rear face view of my improved door-strip; and Fig. 4 is an elevation, showing the position of the strip when the door is swung open.

A is the molding-strip. This is preferably made of wood, and is of such a length that it will be adapted to extend across the face of the desired door, B, at the lower edge thereof, as shown. Upon the lower edge of this molding, on its rear side, is formed the channel *a*, adapted to receive the movable strip C, which extends the length of the molding, as shown, and lies wholly within said channel. To this movable strip is attached the crank-lever D by means of a screw or bolt, *d*, passing into the strip at its upper edge. The face of the molding is further channeled

out at *b* to receive this lever, and said lever is pivoted at *d*¹ in said channel to the molding, as shown.

To the crank-arm of the lever is hinged or pivoted the rod E, which extends along the molding in a further suitable channel, *b'*, to and beyond the end of the molding, as shown.

The end of the lever D is formed, beyond its point of attachment to the movable strip, with a suitable projection, *d*², which engages a spring, F, fixed in the molding in a further channel, *a'* as shown. The mechanism of the strip, by means of the channels *a a' b b'*, is thus wholly below the surface of the inner face of the molding, as is desirable, to enable the strip to be operative when secured to a door.

Now, it is evident that when the molding, carrying these described parts, is secured upon the face of a door, B, at the lower edge thereof, as shown in the drawings, the protruding end of the rod E, when the door is closed, will strike against a suitable pin, *c*, fixed in the casing of the door, as shown, and, being thus pushed inward, the rod will turn the lever D upon its pivot, which will cause the movable strip C to be depressed below the lower edge of the door to and fit snugly against the surface of the threshold; and when the door is swung open, the rod being released, the spring F will throw the lever upward, and thus bring the strip C again to the line of the lower edge of the door. By this means, when the door is closed, the strip C will exclude all dust and air, and prevent their passage between the door and the threshold, while the free motion of opening and closing the door is not in any way impeded.

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

The combination of the molding A, channeled at *a a' b b'*, the movable strip C, crank-lever D, rod E, and spring F, together with the stud or pin *c*, arranged to operate as and for the purpose specified.

HENRY BRIGHTMANN.

Witnesses:

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