

(No Model.)

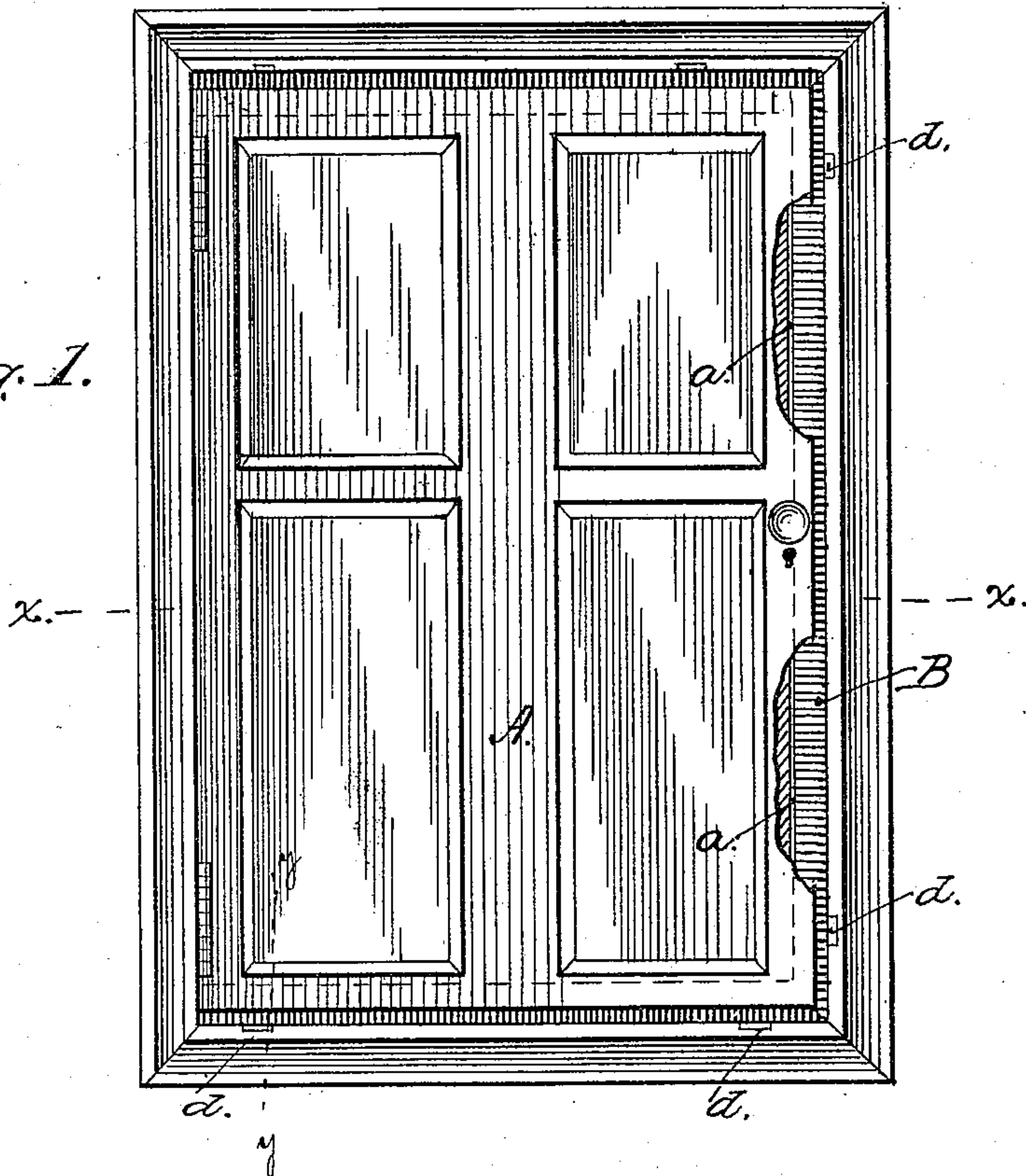
A. J. DAVIS.

WEATHER STRIP FOR DOORS.

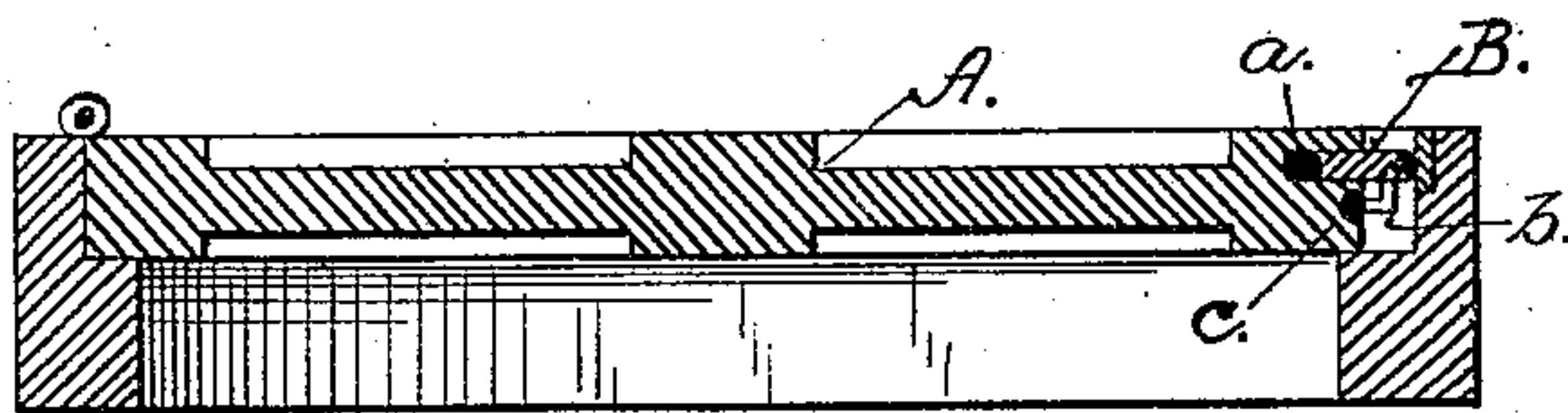
No. 337,250.

Patented Mar. 2, 1886.

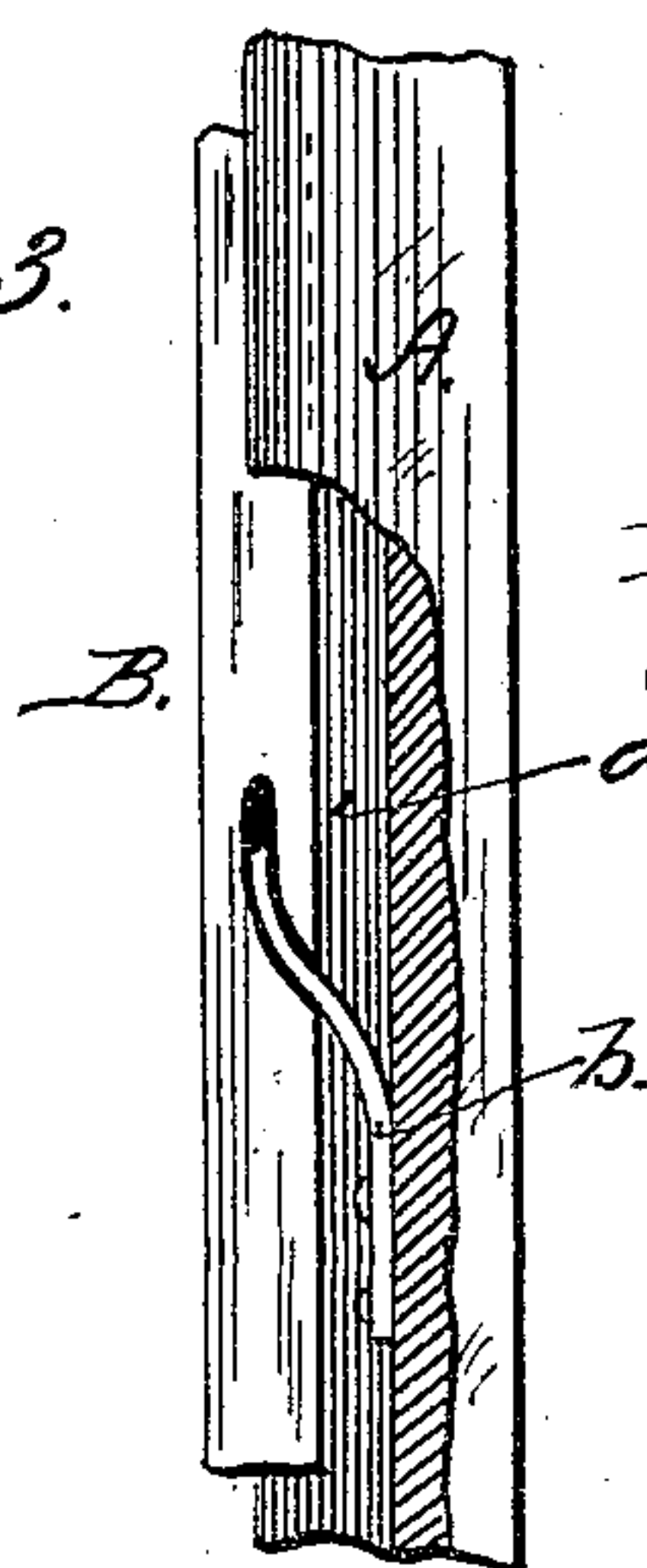
*Fig. 1.*



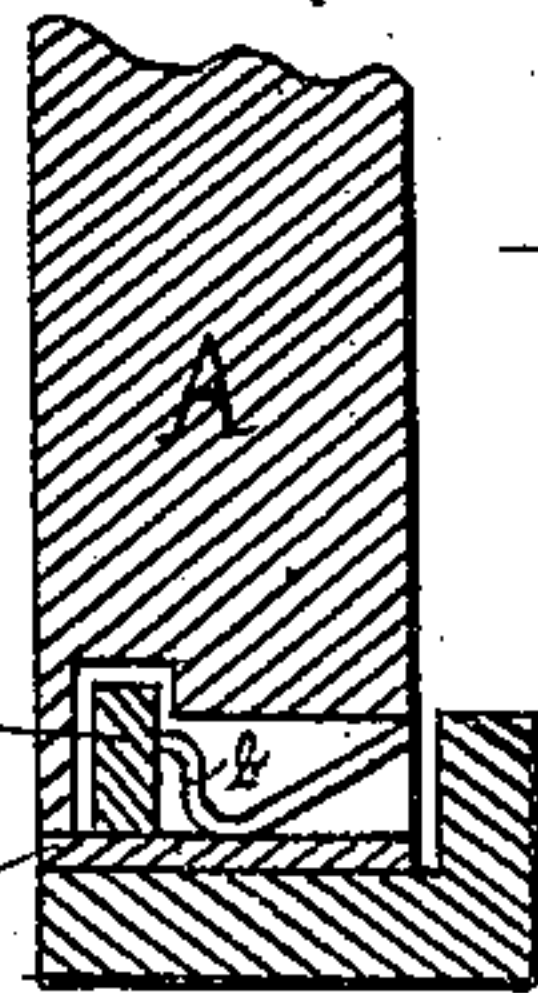
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses:

L. Fred. Heller.

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Inventor:

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att'y.



# UNITED STATES PATENT OFFICE.

ANDREW J. DAVIS, OF HARTFORD, MICHIGAN.

## WEATHER-STRIP FOR DOORS.

SPECIFICATION forming part of Letters Patent No. 337,250, dated March 2, 1886.

Application filed January 26, 1885. Renewed September 29, 1885. Serial No. 178,553. (No model.)

*To all whom it may concern:*

Be it known that I, ANDREW J. DAVIS, a citizen of the United States, residing at Hartford, in the county of Van Buren and State of Michigan, have invented certain new and useful Improvements in Weather-Strips for Doors; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has for its object to provide an improved and simplified weather-strip, as also the novel method of its attachment to doors or windows, whereby the weather-strip is adapted to operate automatically to exclude wind, rain, cold, or dust, as also to adapt itself to the shrinking or swelling of the door or window, and my improvements consist, essentially, of the details of construction and general arrangement of parts, all as will be hereinafter fully described, and specifically designated in the claim.

In the accompanying drawings, Figure 1 represents a front elevation of a door with my improved weather-strip applied thereto, parts being broken away to more fully show the construction; Fig. 2, a sectional view thereof, taken on the line *xx* of Fig. 1; Fig. 3, a detail view of a modification; and Fig. 4 is a vertical section of the door and casing on the line *yy* of Fig. 1, showing the construction of the spring and the mode of its attachment.

Similar letters of reference occurring on the several figures indicate like parts.

In carrying out my invention a groove or furrow, *a*, is first formed in the top, bottom, and side edges of the door *A*, of a depth sufficient to receive the weather-strips *B*, and of a width sufficient to allow of a free movement of the same. The weather-strips *B* are preferably formed of wood, and have their projecting edges of a bevel shape provided with a thin strip of rubber, as shown, the said weather-strips being held within the groove or furrow *a* by means of the springs *b*, one end of which is rigidly secured to the door while the free or opposite end engages

with the weather-strip to hold it within the groove or furrow, but at the same time allow of a free lateral movement of the strip. The springs *b* may be of any desired shape and are adapted to keep the edges of the weather-strips projecting a suitable distance out of the grooves or furrows *a* as to tightly close any space between the edges of the door and its frame when closed together, small grooves *c* being provided in the edges of the door for the springs *b* to rest in when compressed by the closing of the door.

The ends of the weather-strips *B* are preferably cut at an angle to each other, so as to allow of a free and simultaneous movement of the same consequent upon the opening or closing of the door.

A modification of the springs *b* is shown in Fig. 3, in which the spring is fitted within the groove or furrow *a* beneath the weather-strip, yet adapted to engage with the said strips to hold it in place within the groove or furrow, while allowing of a free lateral movement of the weather-strip.

It will be observed that the beveled edges of the weather-strips *B* permit of the door being easily closed, and the springs *b* serving to project the strips a sufficient distance outward from the grooves *a*, so as to effectually close any space between the edges of the door and its frame.

Should the door or its frame shrink or swell by the action of the weather, the springs *b*, acting upon the strips *B*, will automatically compensate for such shrinking or swelling. Metallic strips or plates *d* may be affixed to the door-frame at those points where the springs *b* impinge against the frame or casing, if deemed desirable, to take up any wear or friction of the edges of the springs *b*.

I do not wish to confine myself to the specific shape of the springs herein shown, or in the manner of their attachment to the door and weather-strips, as it is obvious that the same is capable of various changes or modifications without departing from the spirit of my invention, and such changes or modifications are hereby contemplated by me.

Having thus described my invention, I claim as new and useful—

The door *A*, having recesses *a*, strips *B*, adapted to fit therein, and springs *b*, attached at

one end to the door upon the edges of said recesses and at the other to the strips, whereby to maintain the same in position, in combination with the door-frame having plates *d*, affixed thereto at those points where the springs *b* come in contact with said frame, for the purpose shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

ANDREW J. DAVIS.

Witnesses:

BENJAMIN F. SWEET,  
ALBERT H. TUTTLE.