

No. 752,767.

PATENTED FEB. 23, 1904.

J. H. FOOTE.  
WEATHER STRIP.

APPLICATION FILED DEC. 6, 1901.

NO MODEL.

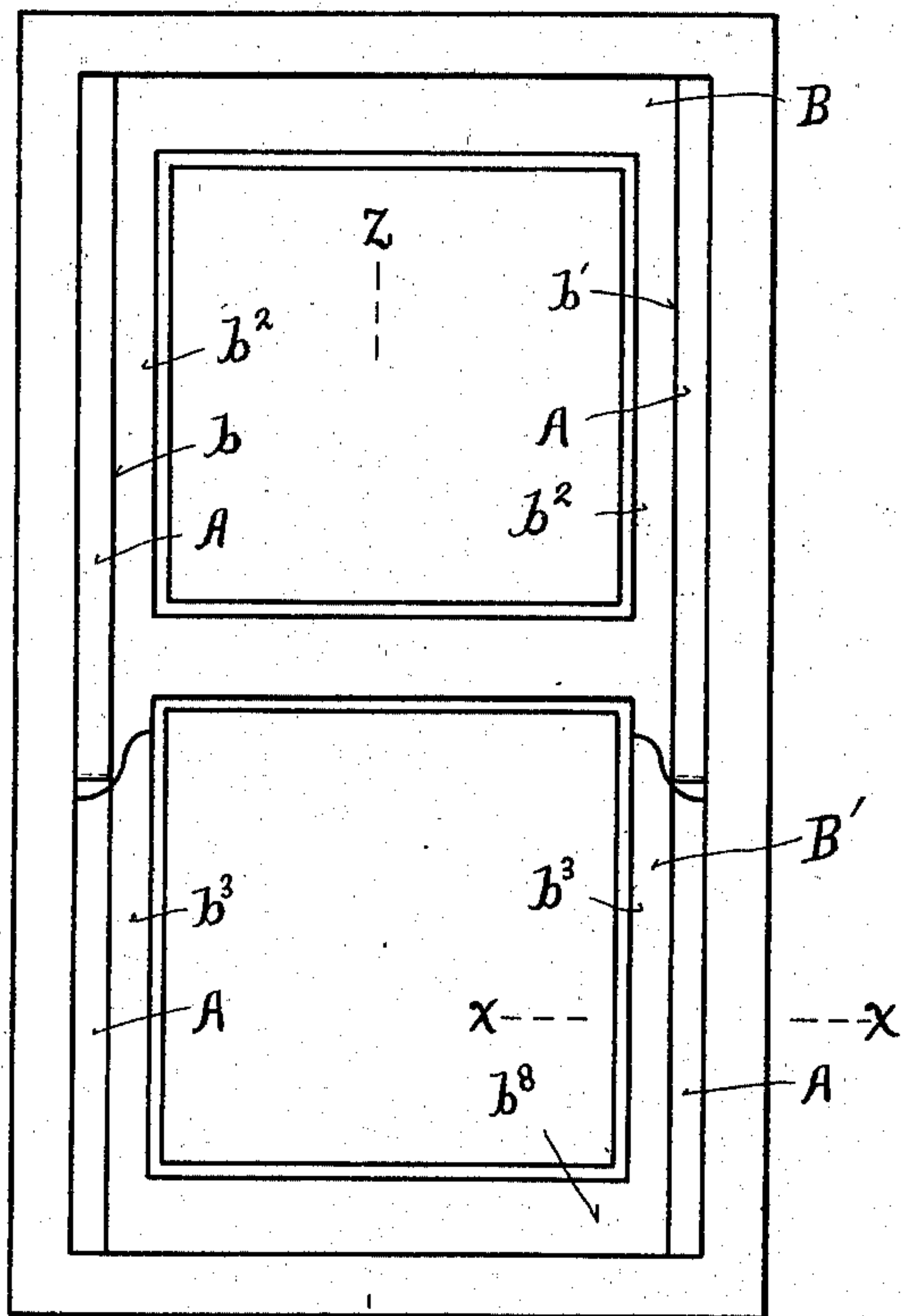


Fig. 1.

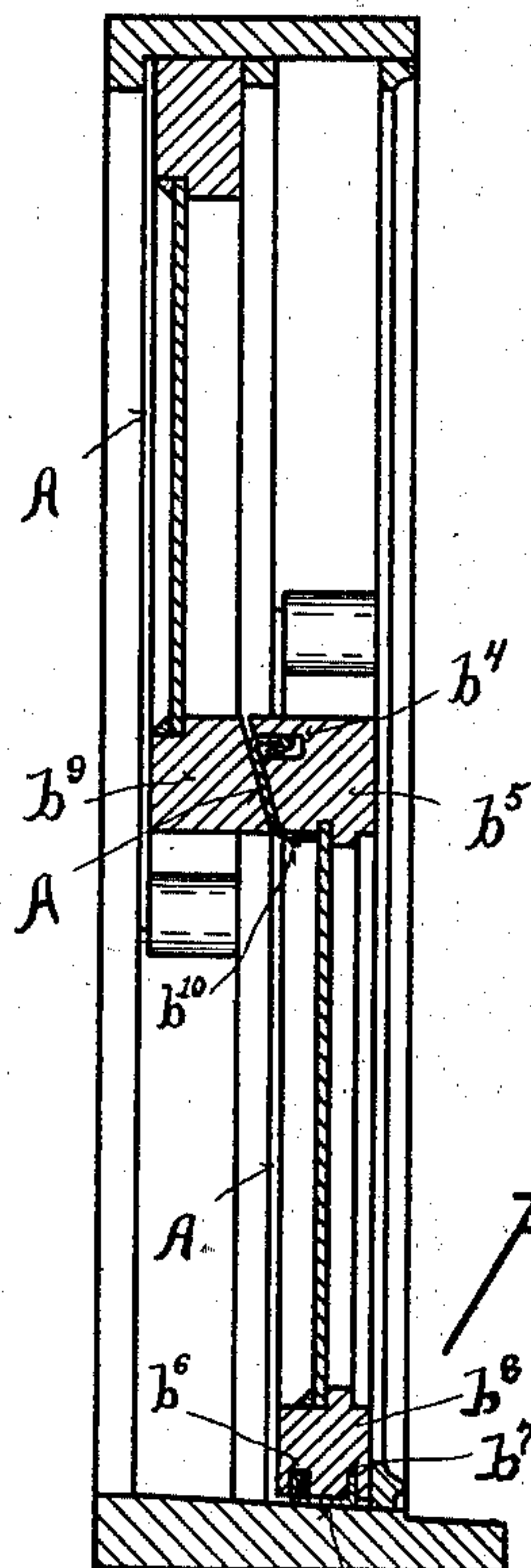


Fig. 2.

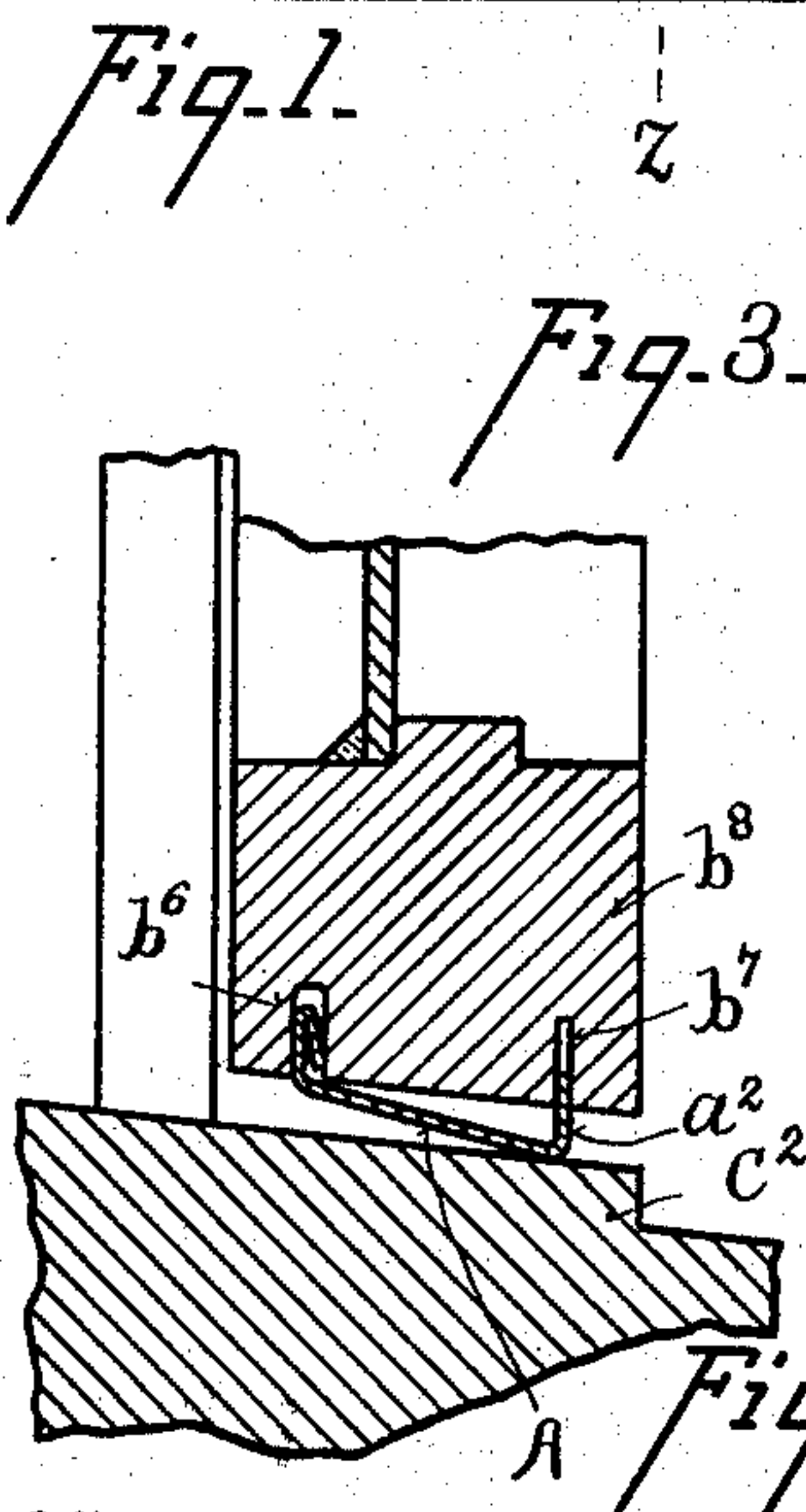


Fig. 3.

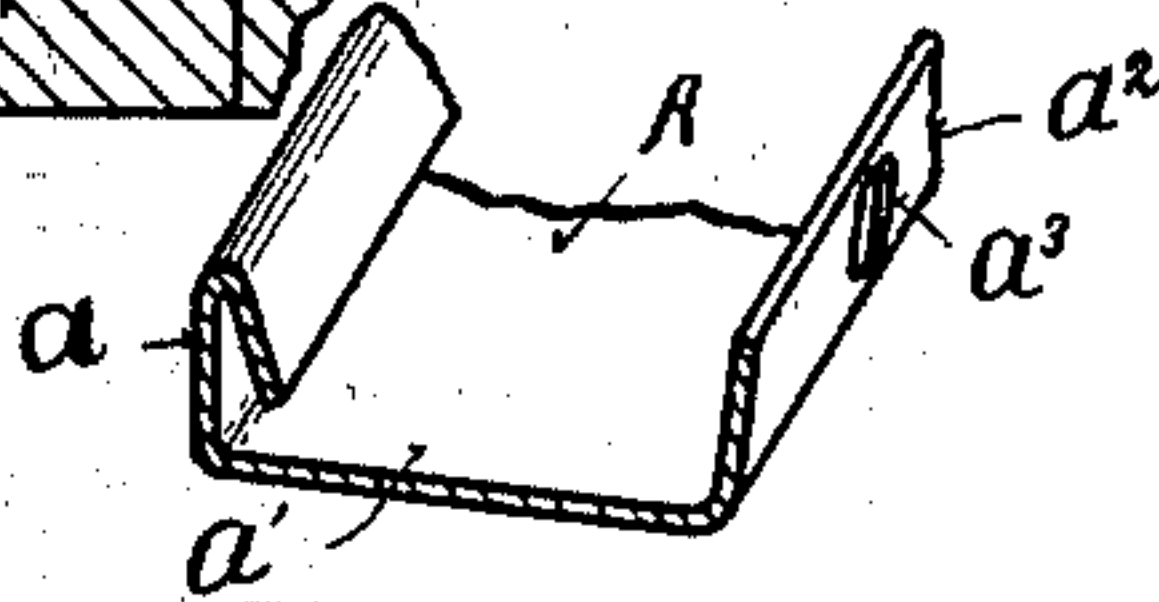
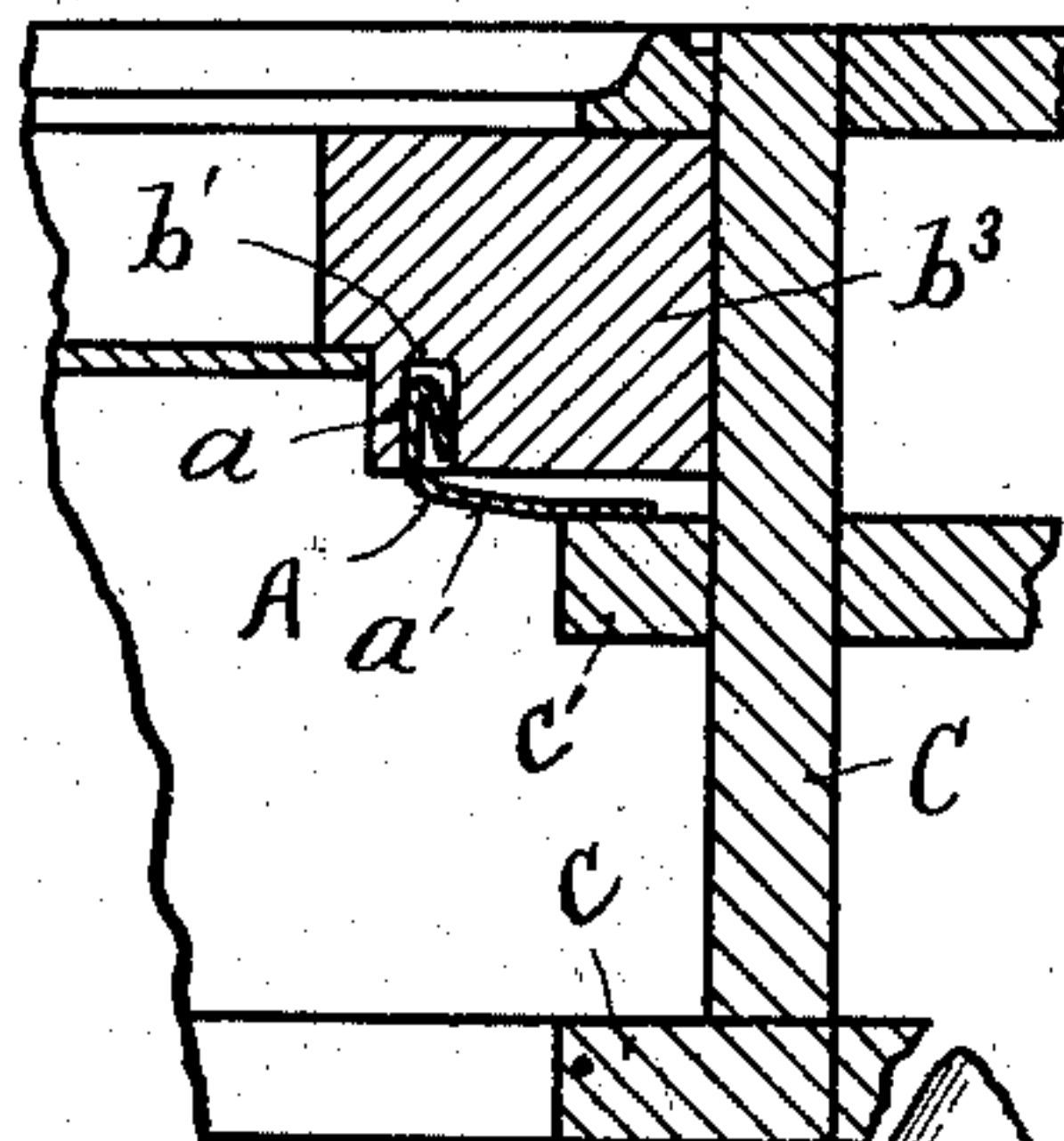


Fig. 5.

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# UNITED STATES PATENT OFFICE.

JAMES H. FOOTE, OF CINCINNATI, OHIO.

## WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 752,767, dated February 23, 1904.

Application filed December 6, 1901. Serial No. 84,873. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES H. FOOTE, a citizen of the United States of America, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Weather-Strips, of which the following is a specification.

The object of my invention is a weather-strip which may be attached to a window-sash, window-frame, door, or door-frame without marring them and which forms an efficient means for preventing the entrance of cold air, rain, dust, &c., and for overcoming rattling.

I have illustrated my invention as applied to window-sashes in the accompanying drawings, in which—

Figure 1 is a rear elevation of a window frame and sash, showing the sash provided with a weather-strip embodying my invention. Fig. 2 is a central vertical sectional view of the same, taken upon line  $z z$  of Fig. 1. Fig. 3 is a horizontal sectional view upon an enlarged scale, taken upon line  $x x$ , Fig. 1. Fig. 4 is a detail perspective view of the strip used upon the meeting-rail of a window-sash. Fig. 5 is a detail vertical sectional view, upon an enlarged scale, of a slightly-modified form of strip for the meeting-rails. Fig. 6 is an enlarged detail vertical sectional view of the strip secured to the lower rail of the bottom sash.

Referring to the drawings, a strip A, of resilient metal, is bent inward along a line parallel to its edges, forming a narrow flange  $a$  and a broad flange  $a'$ , which stand at an angle to each other. In the preferred form flange  $a$  is again doubled upon itself.

In applying strip A to a window straight vertical grooves  $b b'$  are formed upon the outer surfaces of the side rails  $b^2 b^3$  of the upper and lower sashes B and B', a horizontal groove  $b^4$  is formed in the meeting-rail  $b^5$  of the lower sash, and longitudinal grooves  $b^6$  and  $b^7$  are cut upward into the lower rail  $b^8$  of the lower sash. Into grooves  $b, b', b^4$ , and  $b^6$  flanges  $a$  of strips A are then inserted and may be held therein by any suitable means. In the pre-

ferred form flange  $a$  will by reason of being doubled upon itself spread apart after being inserted within the groove, and thereby hold itself in place. In the side rails of the upper sash the outer free end or flange  $a'$  bears outward against the outer member  $c$  of the window-frame C and in the lower sash flange  $a'$  bears outward against parting-strip  $c'$  of the frame.

Flange  $a'$  of strip A, secured to the meeting-rail  $b^5$  of the lower sash, bears outward against meeting-rail  $b^9$  of the upper sash. I prefer to carry flange  $a'$  down below and bend it back beneath the edge of the meeting-rail  $b^5$  in a flange  $a^2$ , which has a series of slots  $a^3$  to engage pins  $b^{10}$  in said rail to prevent flange  $a'$  from being bent outward by careless use, so that it catches against the upper face of meeting-rail  $b^9$ ; but for ordinary purposes flange  $a'$  need only be turned in slightly at its outer edge, as shown in Fig. 5.

In the lower rail  $b^8$  flange  $a'$  bears against sill  $c^2$  of the window-frame and has a flange  $a^2$  similar to the preferred form used upon the meeting-rail, except that it is not slotted. Flange  $a^2$  projects into groove  $b^7$ . This form is one which may be easily applied to a door, in which case grooves  $b^6 b^7$  would be formed in the edges of the door and flange  $a'$  would bear against the door-frame.

In use the angle between flanges  $a$  and  $a'$ , strip A being resilient, tends to maintain itself in its primitive degree, and this tendency always keeps flange  $a'$  in firm contact with the surface opposite it, but does not press with a force such as to render the movement of the window or door stiff, while at the same time it forms an effective barrier to the entrance of dust, wind, &c. It is readily seen that a window or door of the forms in common use need not be changed in order to be fitted with my weather-strip, so that the efficiency of the window or door itself in excluding dust and the wind and rain is not lessened nor its strength impaired by the cutting away any of its bearing-surface. The strip is, moreover, readily applied to old buildings, the only step necessary in fitting them in place being to form the aforementioned straight grooves,



which, as an examination will show, always come at parts of the window or door which are readily accessible.

It is obvious that in place of fitting strip A  
5 in the sash and door it might be placed in the frames, which would be grooved to receive flange  $\alpha$ , and flange  $\alpha'$  would then bear against the sash or door.

What I claim is—

- 10 1. A window or door the sash or door of which has straight grooves formed therein near its edge, in combination with a strip of metal bent inward forming flanges which stand at an angle to each other one flange being bent  
15 again and inserted into one of the grooves in which it holds itself the other or free end

bearing outward against an adjacent surface, substantially as shown and described.

2. A window the side rails of the sashes of which have vertical grooves in their front or rear faces, in combination with a strip of metal bent parallel to its edges into two flanges one of which is inserted in one of the grooves and the other of which bears outward against the parting-strip or outer strip of the frame  
25 of the window, substantially as shown and described.

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Witnesses:

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