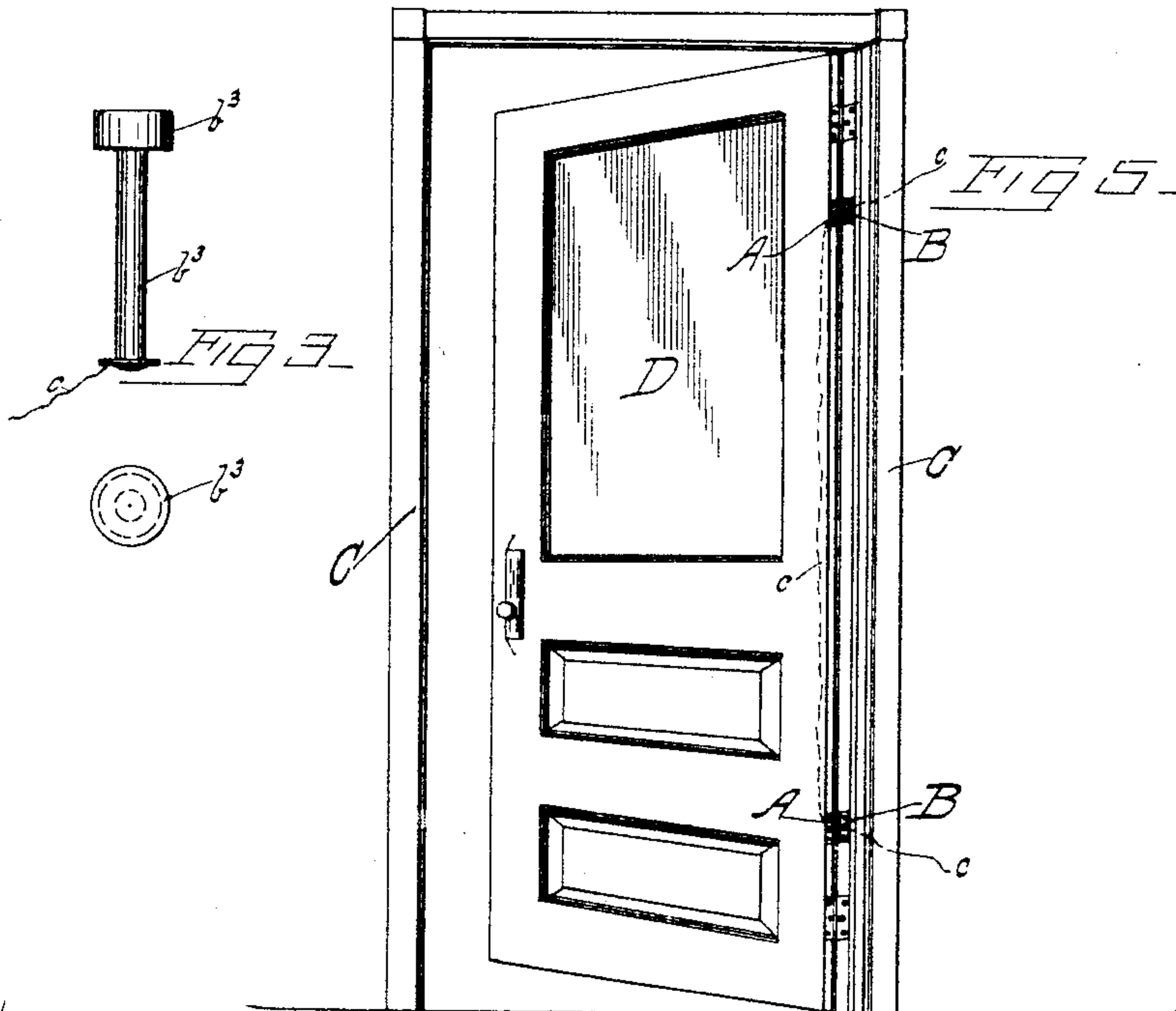
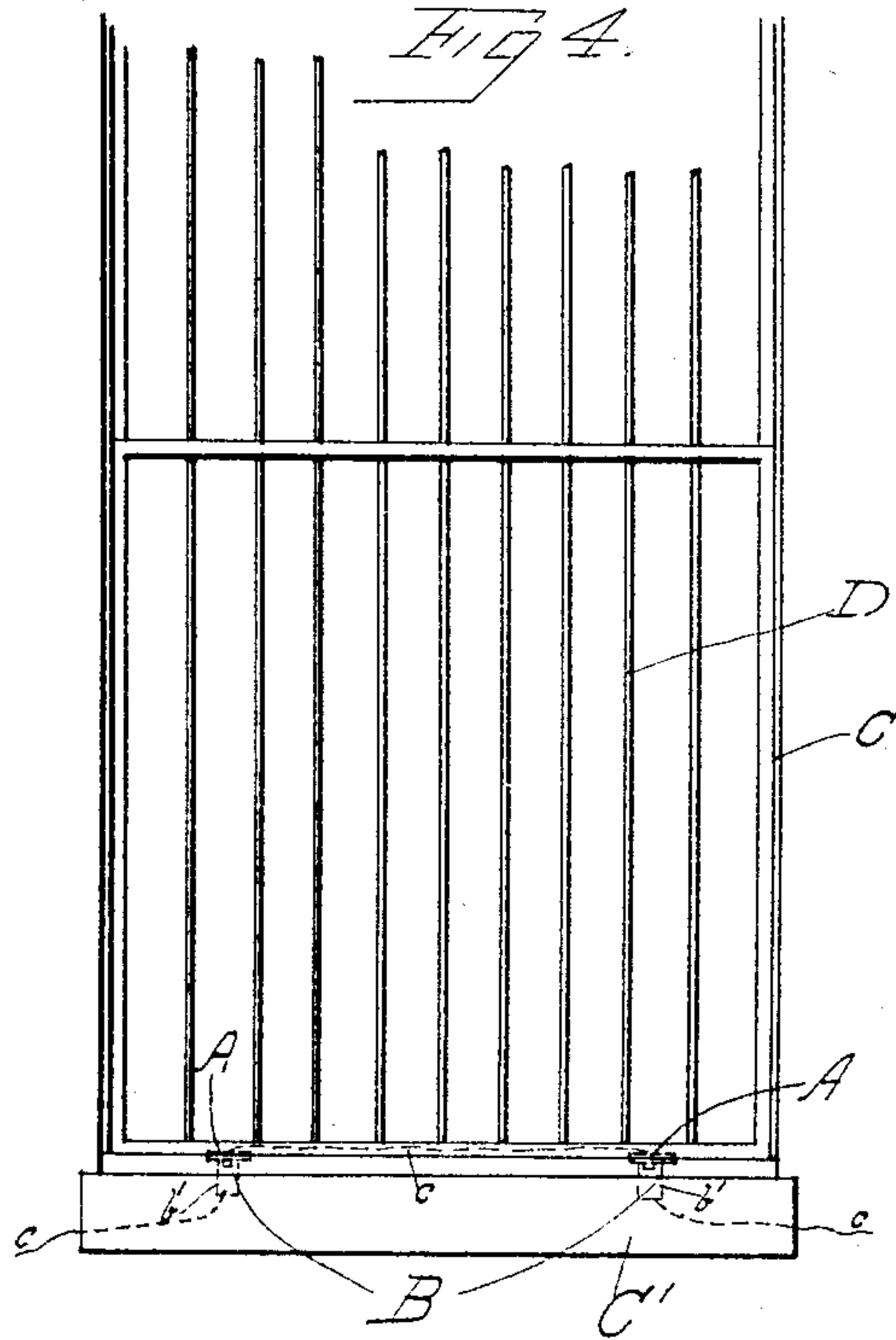
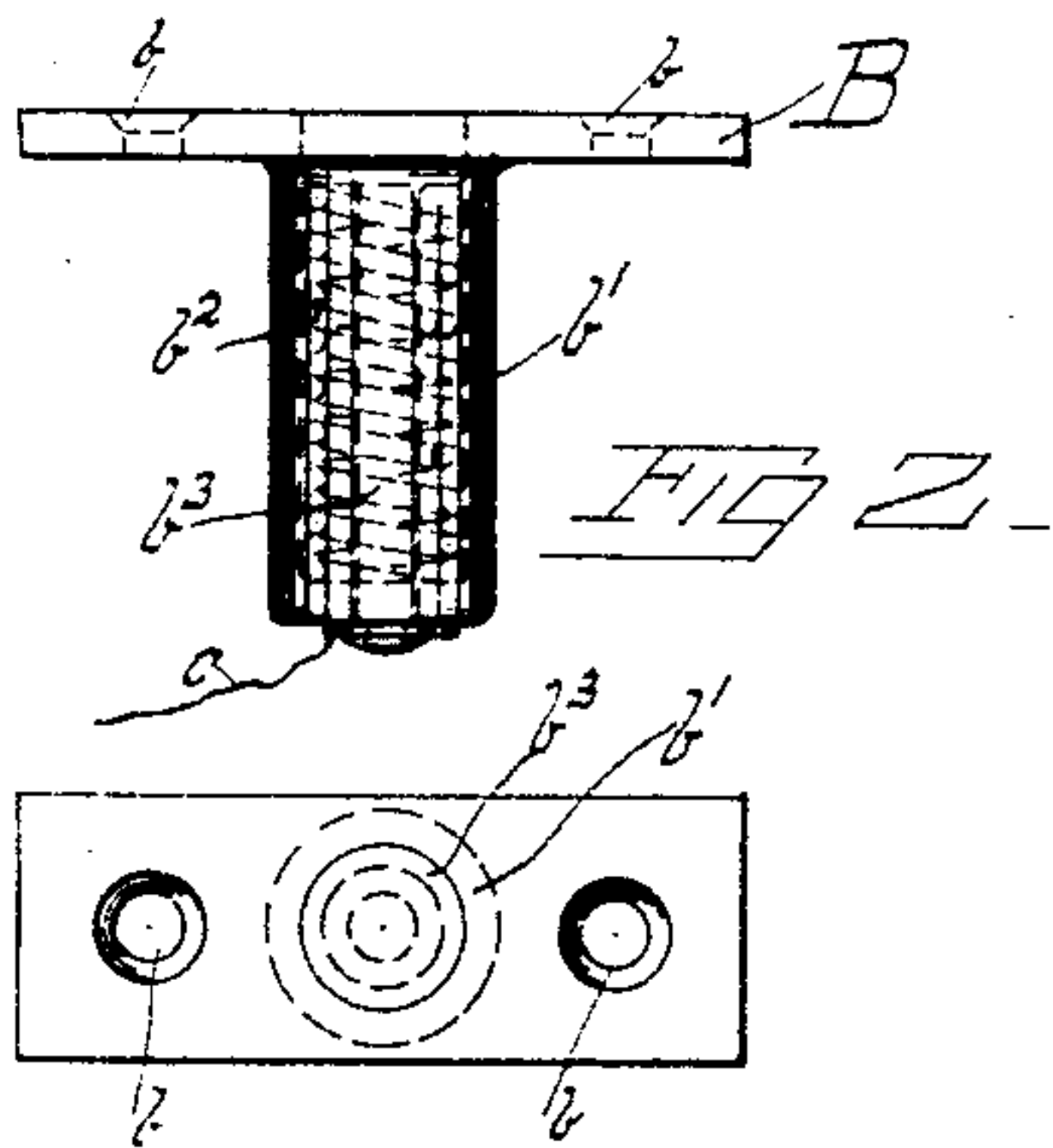
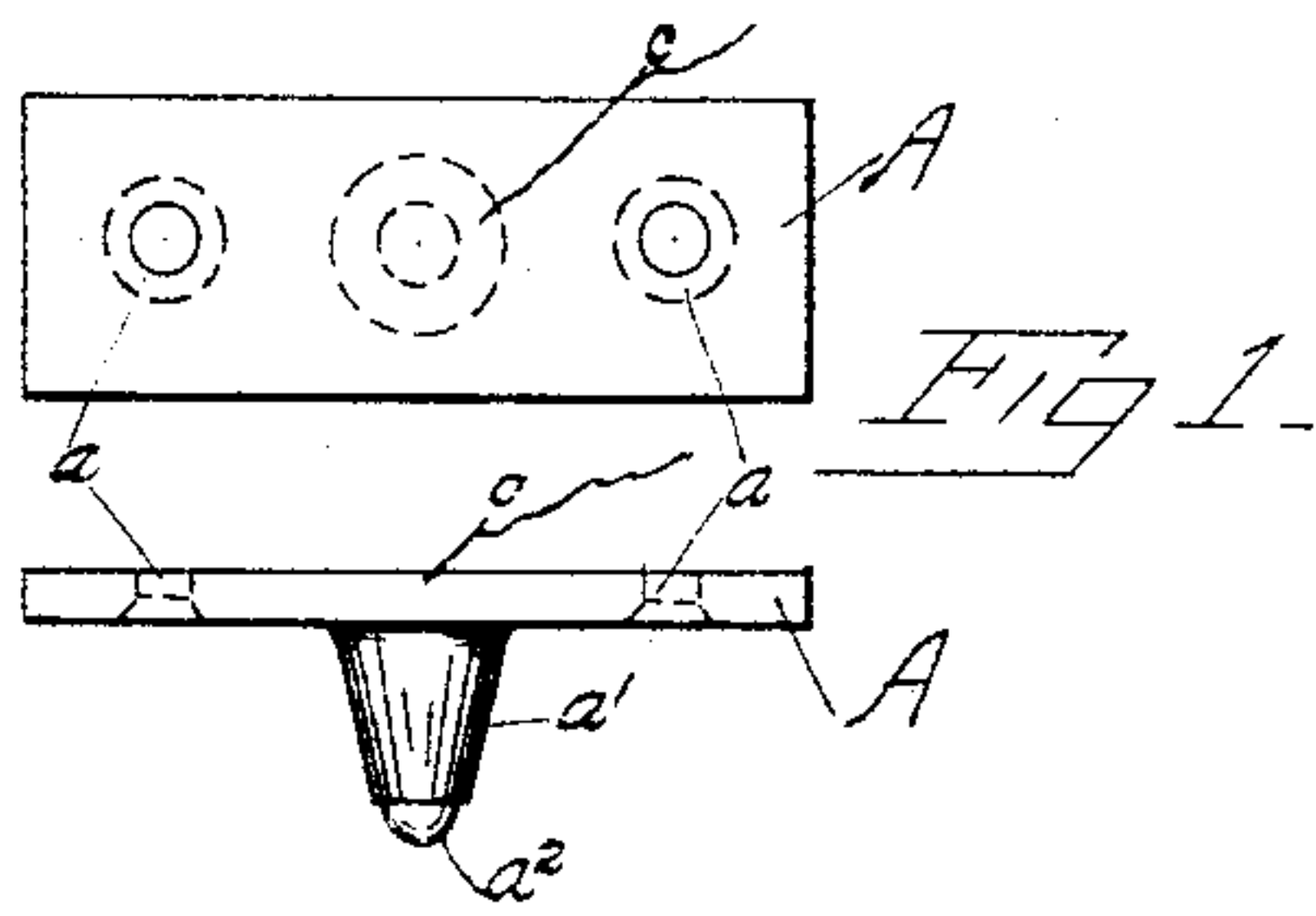


(No Model.)

W. RITZMANN.  
BURGLAR ALARM.

No. 516,771.

Patented Mar. 20, 1894.



WITNESSES.

*Fred Syer.*  
*Annie M. Adams.*

INVENTOR-

*William Ritzmann*  
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*att'y*



# UNITED STATES PATENT OFFICE.

WILLIAM RITZMANN, OF CHICAGO, ILLINOIS.

## BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 516,771, dated March 20, 1894.

Application filed June 12, 1893. Renewed January 27, 1894. Serial No. 498,263. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM RITZMANN, of Chicago, in the State of Illinois, have invented certain new and useful Improvements in Burglar-Alarm Systems, of which the following is a specification.

My invention relates to burglar alarm systems in which a main electric circuit is connected with the windows and doors of houses or other structures, in such manner that the circuit will be broken in case a window or door is disturbed or moved, this result being effected by a projecting, metallic, spring contact set in the window casing or stationary part of the structure and having such relation to the window, door or movable screen, through which the main circuit is extended, that the contact will be pressed so as to close the circuit when window, door or screen is closed. Systems thus constructed are defective in that the projection of the metallic spring contact from the stationary part of the structure affords means for making a connection therewith by which that portion of the circuit which passes through the window, door or screen may be cut out of the main circuit so that the window, door or screen can be opened without giving the alarm.

It is the object of my improvement to obviate this difficulty and make the spring contact inaccessible to an intruder for this purpose. I attain this object by the means illustrated in the accompanying drawings in which—

Figure 1 represents a front and an edge view of a plate designed to be attached to the window, door or screen, or movable part of the structure, and having a projection for operating the push-button. Fig. 2 shows an edge and a top view of a companion plate provided with a barrel-spring designed to be attached to the casing or stationary part of the structure, in which the spring contact is set, so as to be flush with the plate and so as to be depressed by the projection of the plate, shown in Fig. 1, into the barrel below the surface of said plate when the window is closed. Fig. 3 is a detail showing a side elevation and an end view of the spring contact detached. Fig. 4 represents a fragment of a window casing and screen and shows the application of the parts shown in Figs. 1 and 2, to the bottom of the screen and window sill.

Fig. 5 is a side elevation of a door with its casing showing said parts applied to the rear edge of the door and door jamb.

In the drawings, A designates the plate to be attached to the movable part of the structure, as the door, screen or window sash. Said plate is made of metal and provided with screw holes *a* and a projection *a'* made of glass, hard rubber or other non conducting material, and with a rounded metallic point *a<sup>2</sup>* extended through the said projection *a'* and connecting with said plate, which is thereby adapted to be screwed to the edge of the window by being set in so that the plate will be flush with its outer surface and have a non conducting projection *a'* and a metallic contact point *a<sup>2</sup>* extended therefrom.

B designates the companion plate designed to be secured to the stationary part of the structure and provided with screw-holes *b* and a barrel *b'* in which the spring *b<sup>2</sup>* and spring contact *b<sup>3</sup>*, are placed, the spring being arranged to hold the spring contact normally flush with the top of said companion plate. Said companion plate is set in the stationary part of the structure opposite to the plate A so that the point *a<sup>2</sup>* will strike the center of the spring contact and the projection *a'* will follow it into the barrel as the window, or door or screen is closed, thereby depressing the spring contact into the barrel so as to be wholly inaccessible to an intruder by any means whatever while the window remains closed.

C designates the casing of the door or window, C' the sill, and D the door or screen; *c* shows fragments of the main electric circuit wires which are connected with the plates A and B, the plates A being connected by a portion of the circuit wire extended through the movable part of the structure to which said plates are connected, and the companion plates B being connected with the other parts of the circuit wire leading through the stationary part of the structure to the battery so as to form a complete electric circuit when the window, door or screen is closed so as to bring the projections of the plate A into contact with the spring contacts of the plate B, which circuit may be broken by any disturbance of the door, window or screen which brings the points *a<sup>2</sup>* out of contact with the spring contact. In the operation when the



window or screen is raised or the door is swung open the projection  $a'$  is lifted out of the barrel and out of contact with the spring contact so that the circuit will be broken.

5 The spring contact, of course, will be raised by the spring, but it will be stopped before rising above the surface of the companion plate and, hence no opportunity will be afforded for making an electrical connection  
10 therewith, nor to cut the door, window or screen out of the circuit, before the alarm is given.

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

15 In an alarm system, the combination of a plate A provided with a projection  $a'$  having

a rounded metallic contact point, attached to the movable part of the structure, and a companion plate B provided with a barrel spring and a metallic spring contact, held normally flush with or below the surface of said companion plate, attached to the stationary part of the structure, the main circuit wires being connected with said plate A and the spring contact, whereby the circuit will be closed or broken as the movable part of the structure is closed or opened, and the spring contact will be wholly inaccessible to an intruder at all times, as specified.

WILLIAM RITZMANN.

Witnesses:

ANNIE M. ADAMS,  
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