

950,762.

Patented Mar. 1, 1910.

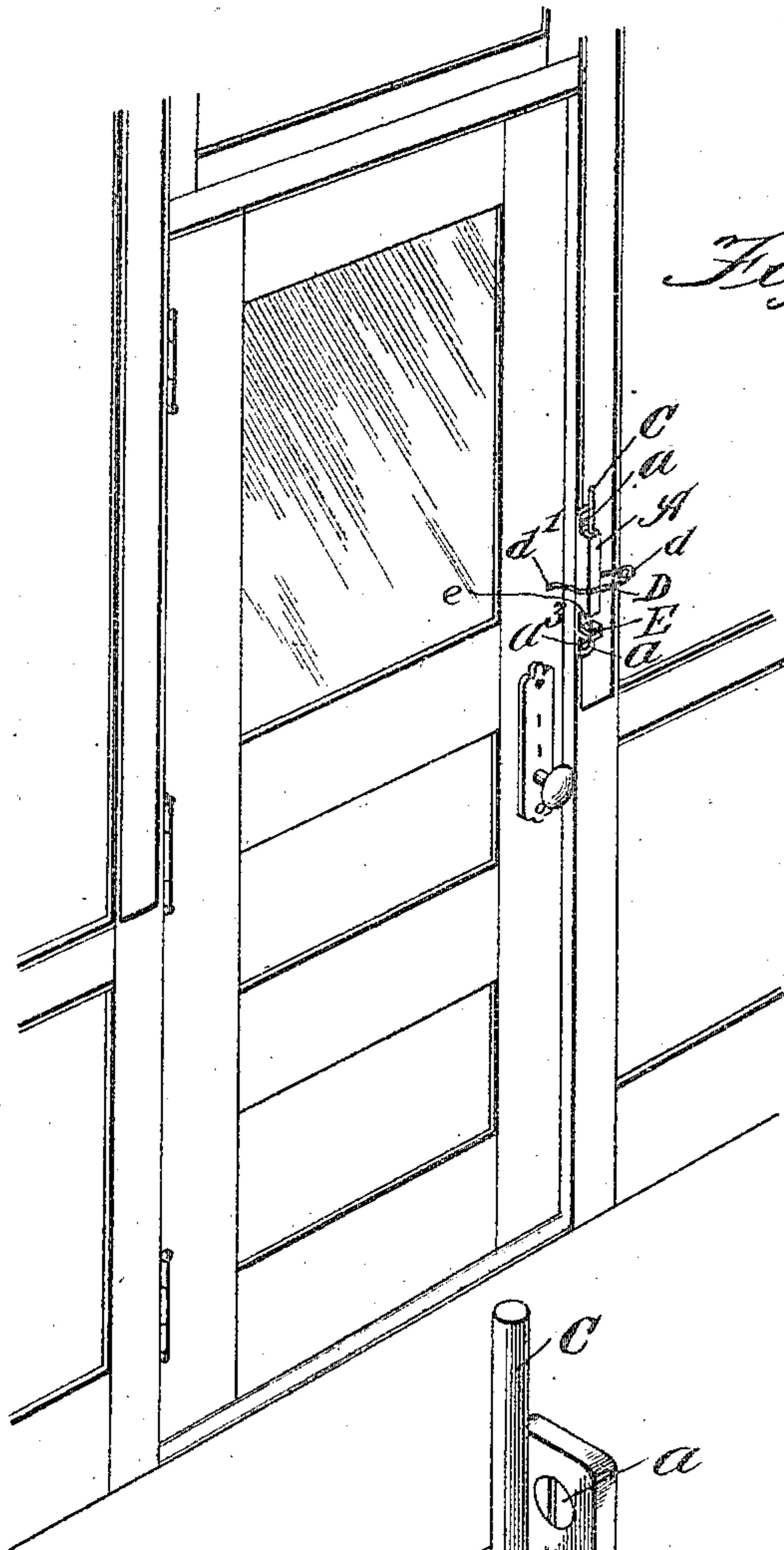


Fig. 1.

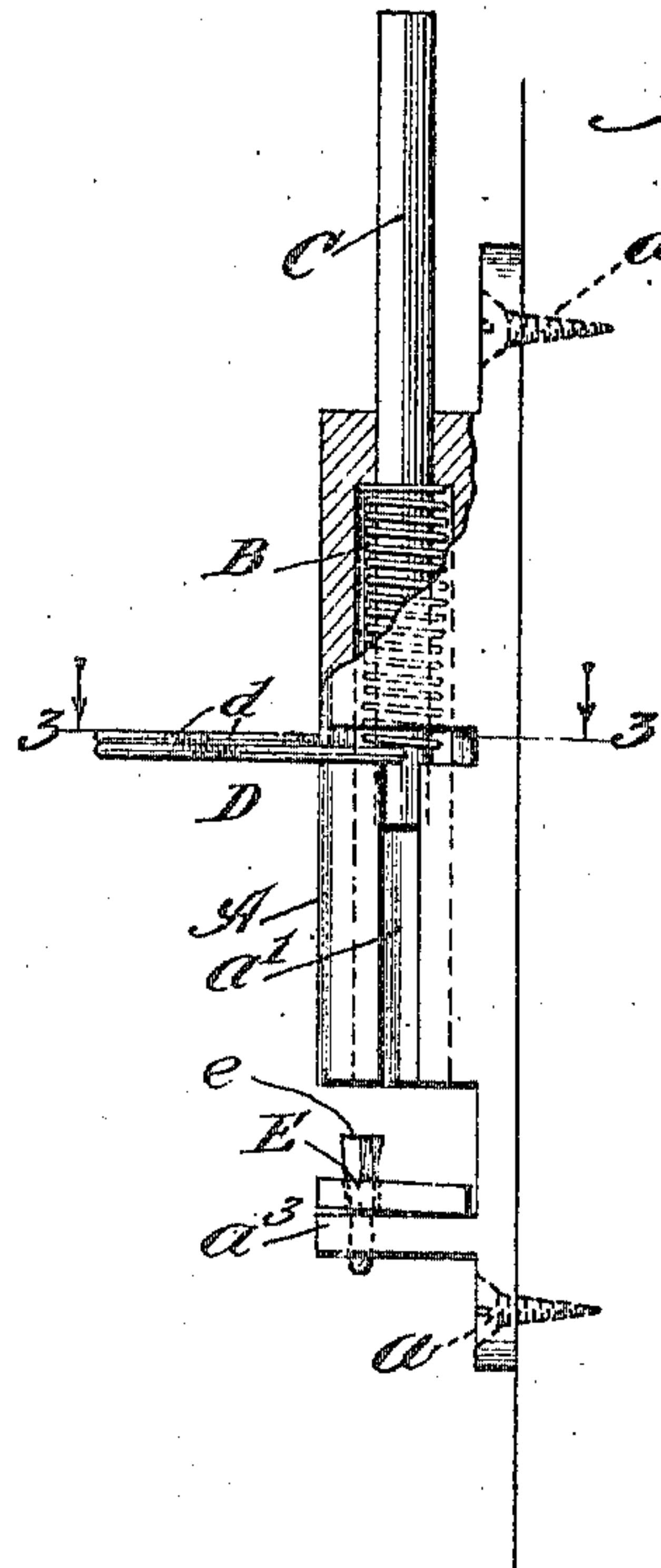


Fig. 2.

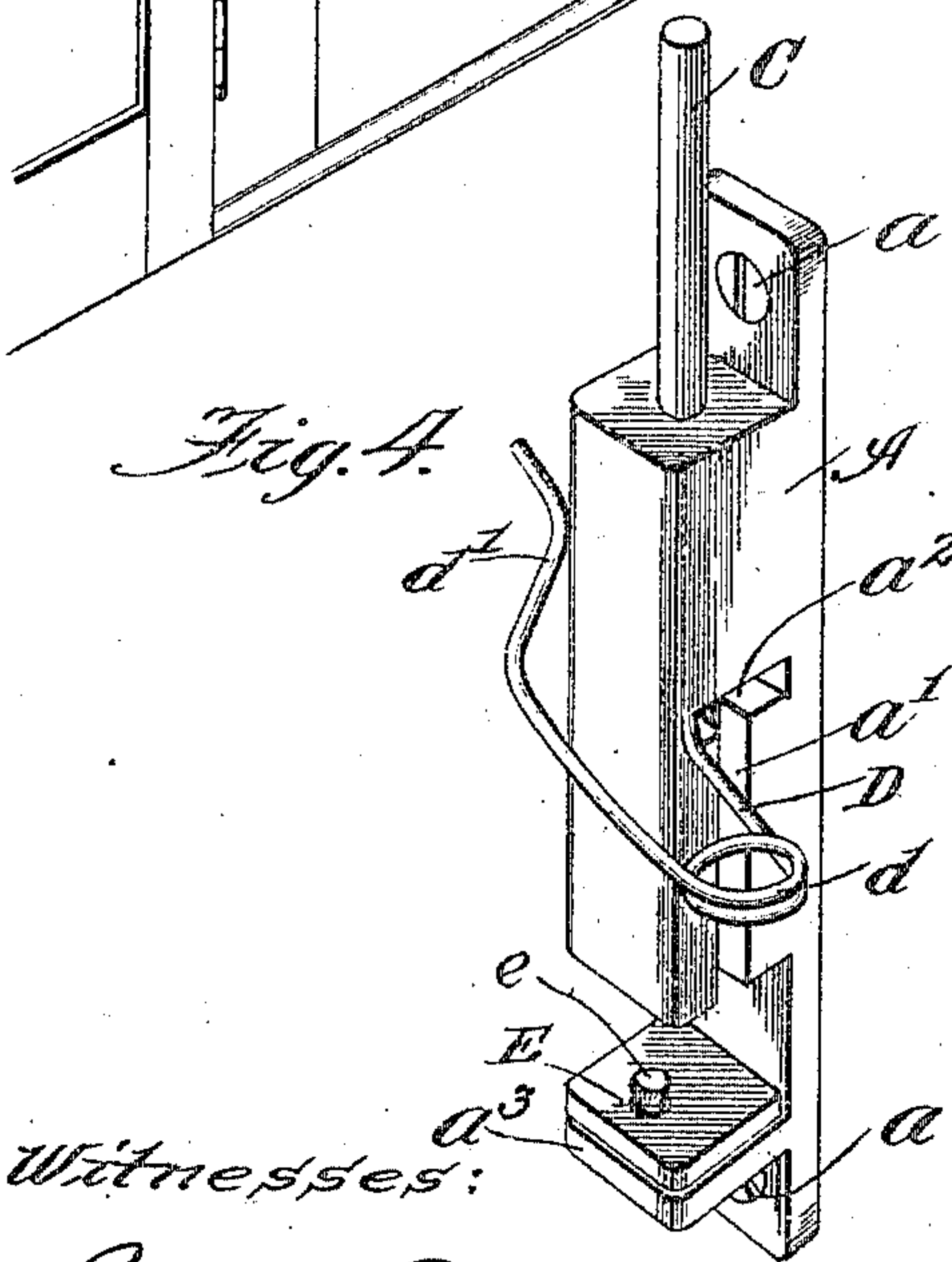


Fig. 4.

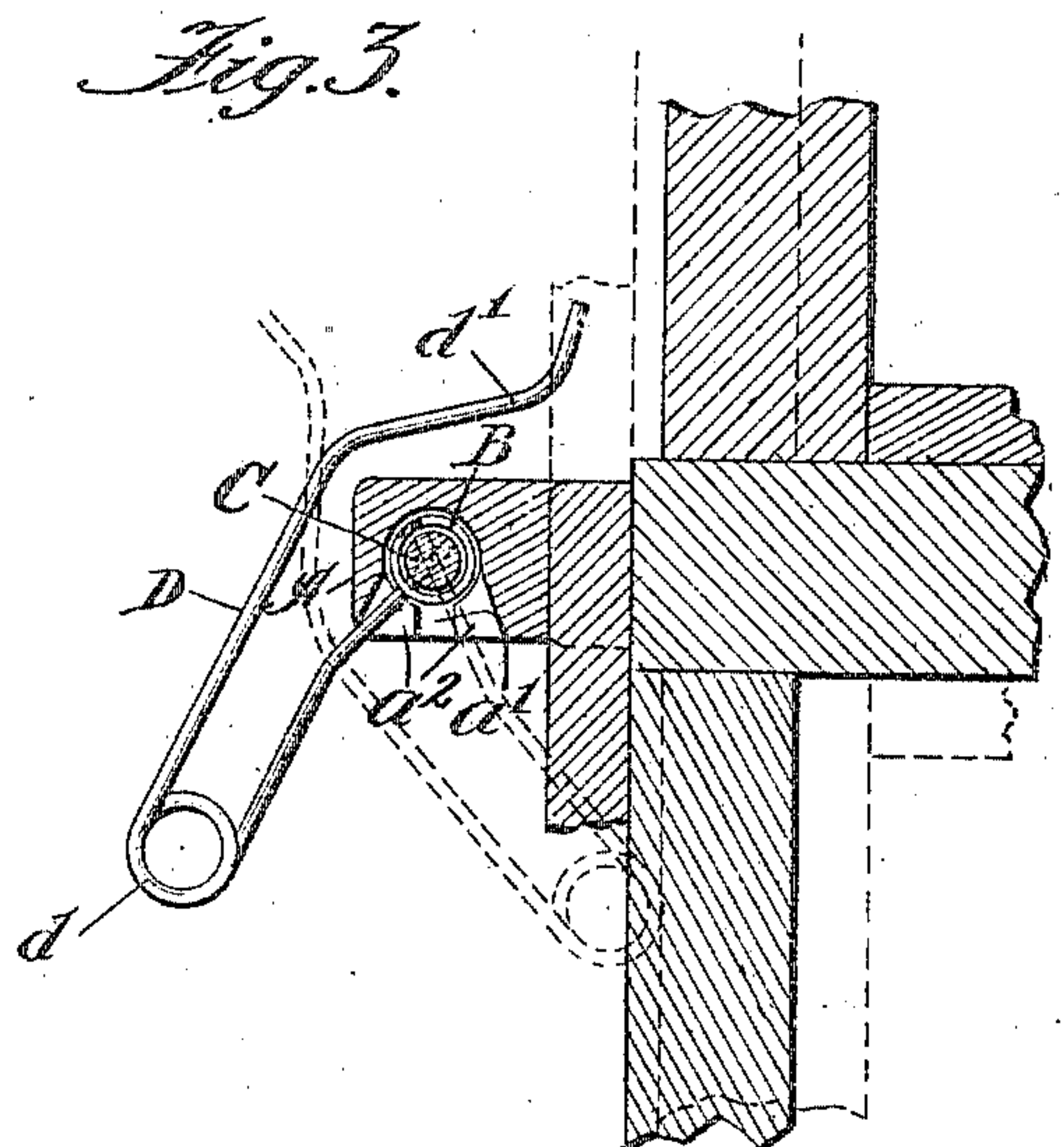


Fig. 3.

Witnesses:

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# UNITED STATES PATENT OFFICE.

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## BURGLAR-ALARM.

950,762.

Specification of Letters Patent.

Patented Mar. 1, 1910.

Application filed November 18, 1908. Serial No. 463,159.

*To all whom it may concern:*

Be it known that I, ORVILLE J. BURST, a citizen of the United States of America, and resident of Grand Rapids, Kent county, Michigan, have invented a certain new and useful Improvement in Burglar-Alarms, of which the following is a specification.

My invention contemplates a novel and highly efficient burglar alarm.

The object of my invention is the provision of a simple and inexpensive burglar alarm of such character that it may be used in connection with doors and windows of different kinds, either inside or out, depending upon the manner in which the door or window is arranged to open, and of such nature that it may be economically manufactured, easily retained in condition for use, conveniently reset after operation, and adapted to operate with certainty to give the required alarm when the door or window is opened.

To the foregoing and other useful ends, my invention consists in matters herein-after set forth and claimed.

In the accompanying drawings, Figure 1 shows an ordinary door equipped with a burglar alarm embodying the principles of my invention. Fig. 2 is an enlarged elevation of the said burglar alarm, showing the same partly in vertical section. Fig. 3 is a cross section on line 3—3 in Fig. 2. Fig. 4 is a perspective of the said burglar alarm.

As thus illustrated, the body A of the device is preferably provided with upper and lower portions  $a$  by which the same is attached to a door or window frame. The said body is hollow and contains a coil spring B, and the side of the body is provided with a vertical slot  $a'$  extending from the bottom half way to the top and terminating in a cross slot  $a^2$ , as shown more clearly in Fig. 4. A plunger C slides up and down in the said body, through an opening in the top thereof, and is surrounded by the said coil spring. This spring is adapted to be compressed between the upper end of the body A and the arm or finger D that is inserted through the lower end of the plunger, and which is adapted to move up and down in the slot  $a'$  or swing horizontally in the cross slot  $a^2$ . At the lower end of the body A there is provided a shelf or anvil  $a^3$  upon which rests a movably mounted cover E, the same being held in place by a pin  $e$ , as illustrated, which pin is fixed in the shelf

and made large enough at its head to prevent the complete removal of the said cover. A percussion cap may be placed upon the shelf or anvil  $a^3$ , after the cover or movable portion E is elevated, and when the latter is lowered, the said cap is in condition to be fired or exploded.

In use, the finger D, which is preferably in the form of a wire coiled at  $d$  and provided with an outer end portion  $d'$ , is raised in the slot  $a'$  and then swung to either side in the slot  $a^2$ , depending upon the direction in which the door opens. Some doors open to the left, and other doors open to the right; and my device will operate with either kind. As shown in Fig. 1, the device is fixed to the door frame in such manner that the end portion  $d'$  will be engaged by the door when the latter is opened. The opening of the door swings the arm or finger D out of the slot  $a^2$  and into the slot  $a'$ , and the spring B then brings the plunger C downwardly with sufficient force to cause its lower end to strike the cover or loose member E, thereby firing or exploding the percussion cap. If the device is to be used on a door that opens in the other direction, that is, which is hinged at the other side then the arm or finger D is swung to the other end of the horizontal slot  $a^2$ , so that when the door is opened it will strike the coiled portion  $d$  and thereby move the said arm or finger into the vertical slot  $a'$ , thus giving the alarm as above described.

From the foregoing, it will be seen that my improved burglar alarm is simple and efficient and of a character to be used in connection with doors and windows of different kinds and descriptions.

What I claim as my invention is:

1. In a burglar alarm, a spring-pressed plunger, means for holding a percussion cap in position to be exploded by said plunger, a spring arm secured to the lower end of said plunger and adapted to turn with the plunger about an axis longitudinal thereof, said arm coiled between its ends to provide two engaging portions, and means for releasably holding said arm in different positions to be struck by a door or window, to release the plunger to explode the said percussion cap.

2. In a burglar alarm, a hollow body portion, a plunger therein, a spring for said plunger, said body portion provided with a longitudinal slot terminating at its upper



end in a cross slot, an arm secured to said plunger below the spring and provided with two engaging portions, one at each side of the body, said arm adapted to be swung to  
5 either end of the cross slot to hold the plunger in position to be released by contact of a door or window with either engaging portion thereof, and means for holding a percussion cap in position to be exploded by  
10 the release of said plunger, said arm movable up and down in said vertical slot.

3. In a burglar alarm, means for holding a percussion cap, a spring-pressed plunger disposed in position to explode the said per-  
15 cussion cap, and means consisting of an arm of wire bent around to project at opposite sides of the body, as set forth, for releasing the plunger by rotary motion thereof in either direction, there being shoulders for  
20 holding the said portions in different positions.

4. In a burglar alarm, means for exploding a percussion cap, and a device for causing the operation of said means, said de-  
25 vice provided with a plurality of engaging portions  $d$  and  $d'$ , as illustrated, adapted to contact with a door or window, when the same is opened, and each said portion adapted to rotate the said device when engaged by a

door or window, there being shoulders for 30 holding the said portions in different positions.

5. In a burglar alarm, means for exploding a percussion cap, said means involving an endwise movable plunger, and means 35 consisting of an arm or trigger of wire bent or doubled upon itself to provide two engaging portions, one portion double and the other portion single, as set forth, for releasing said plunger by rotation thereof in either 40 direction, there being shoulders for holding the said portions in different positions.

6. The improved burglar alarm, substantially as shown and described, having a body with a lower vertical and an upper cross slot 45 in one side thereof, and a plunger releasing trigger working in said slots and bent around to the other side of the body, to provide two engaging portions, said trigger movable up and down in the vertical slot, 50 adapted to be retained in different positions in the cross slot, for the purpose set forth.

Signed by me at Jacksonville, Illinois this 12th day of Nov. 1908.

ORVILLE J. BURST

Witnesses:

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J. M. KELLY.