

No. 656,586.

Patented Aug. 21, 1900.

W. H. REIFF.

BURGLAR ALARM AND DOOR CHECK.

(Application filed Jan. 3, 1900.)

(No Model.)

Fig. 1.

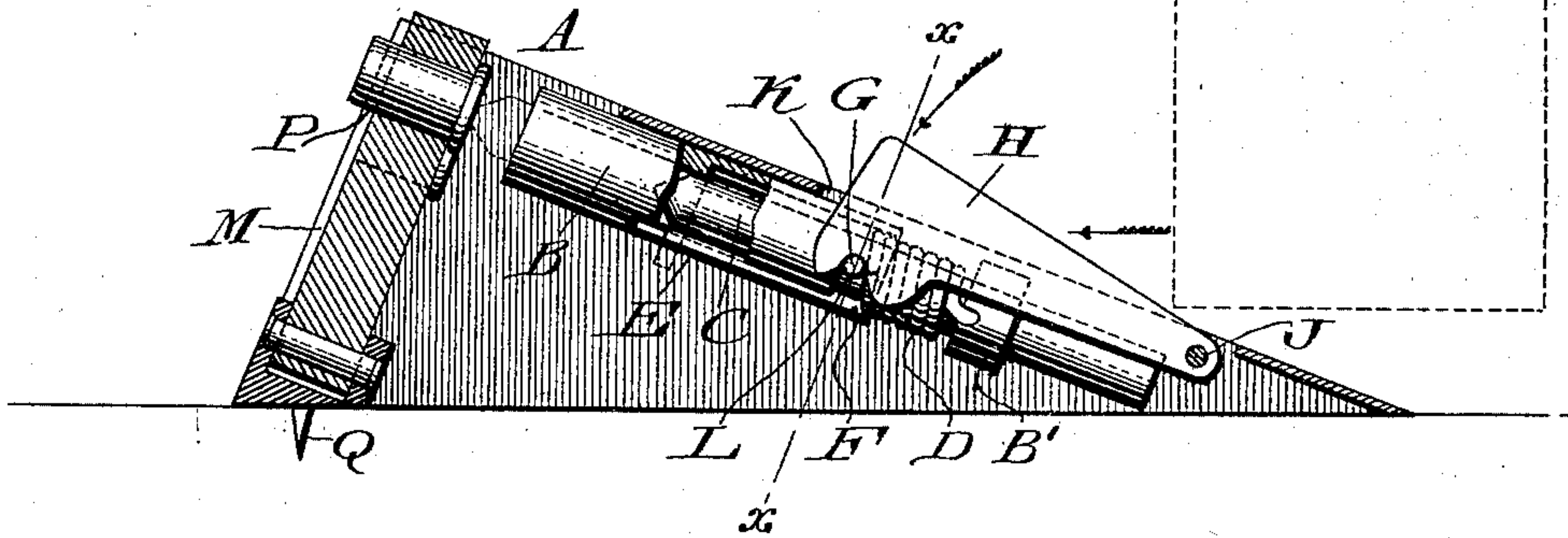


Fig. 2.

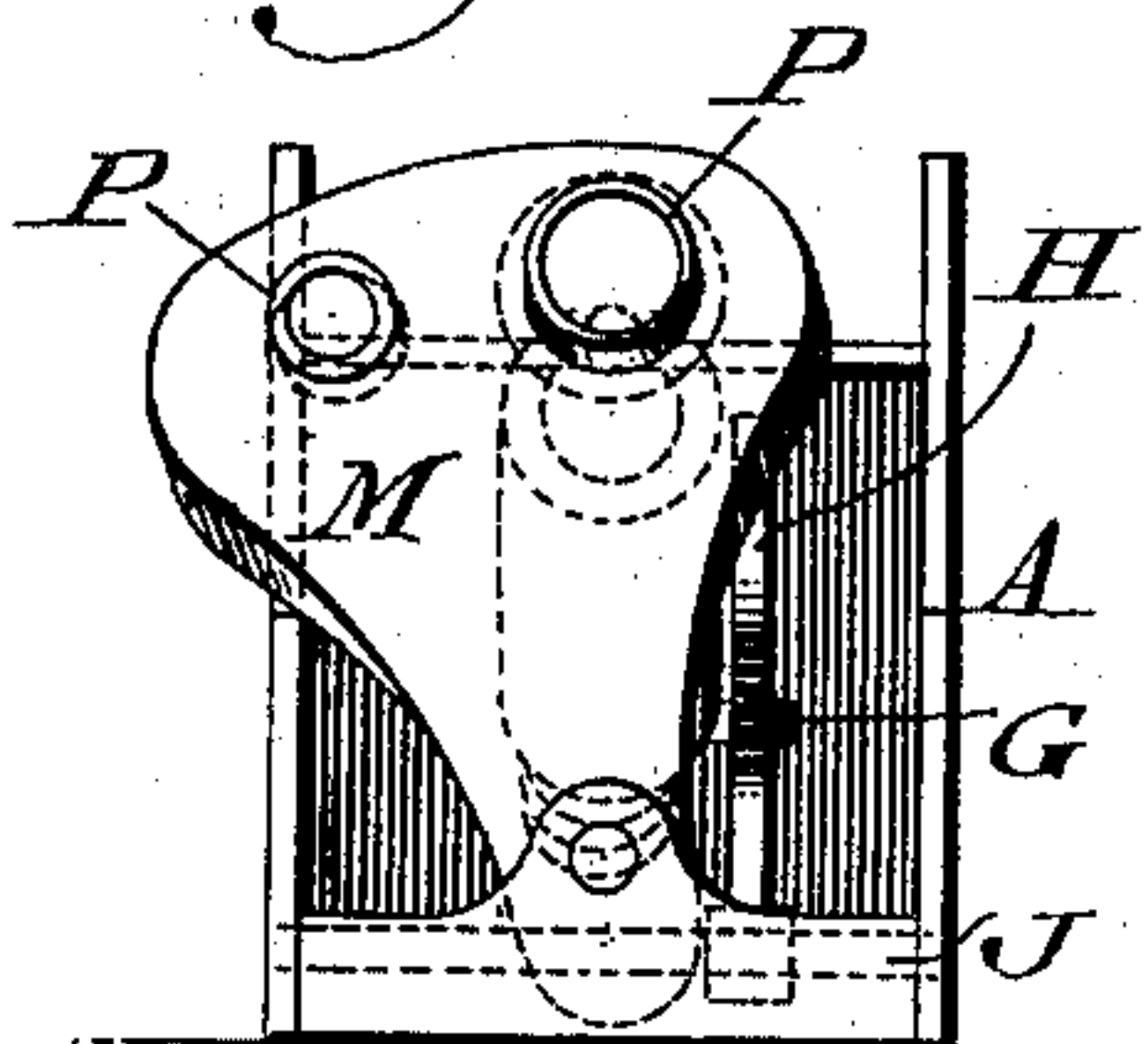


Fig. 3.

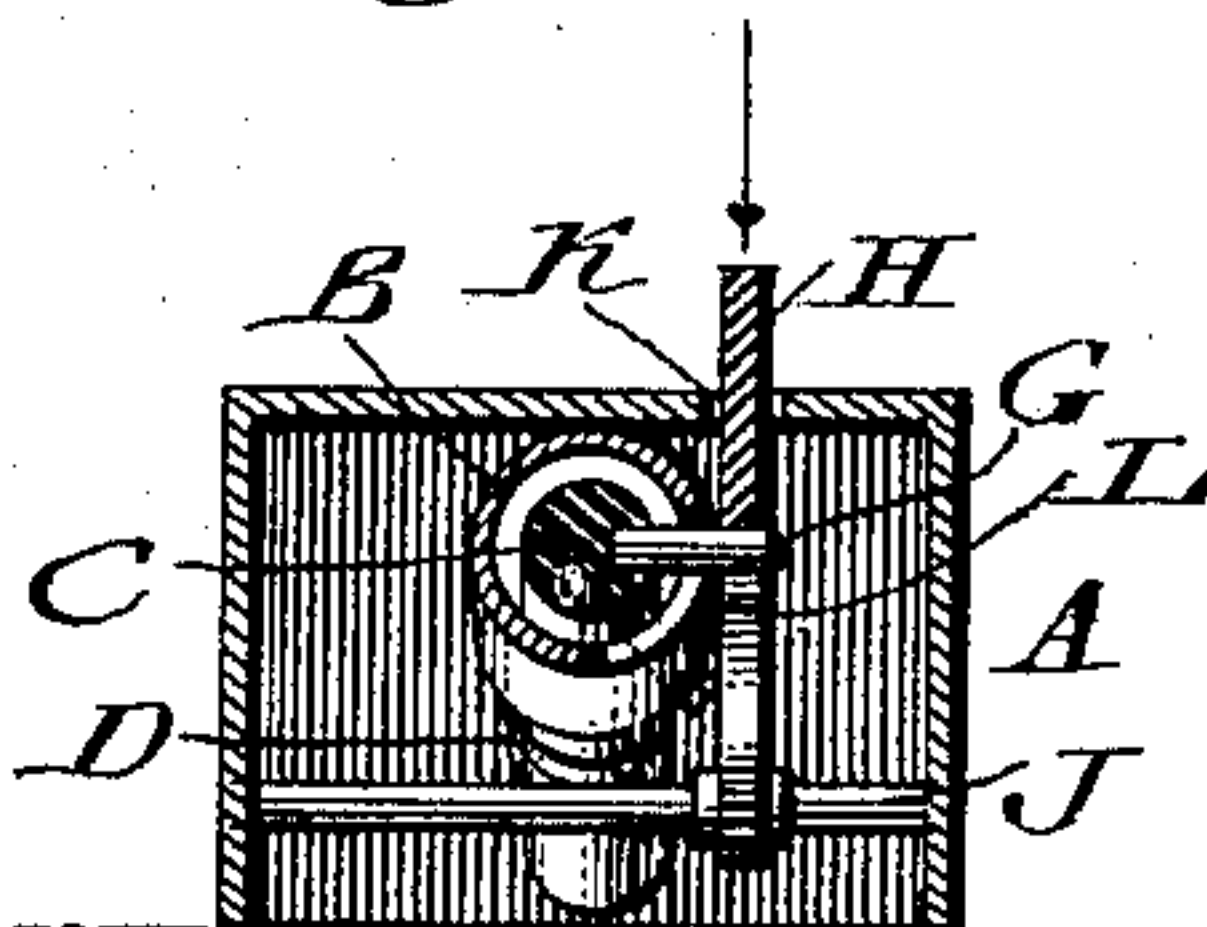
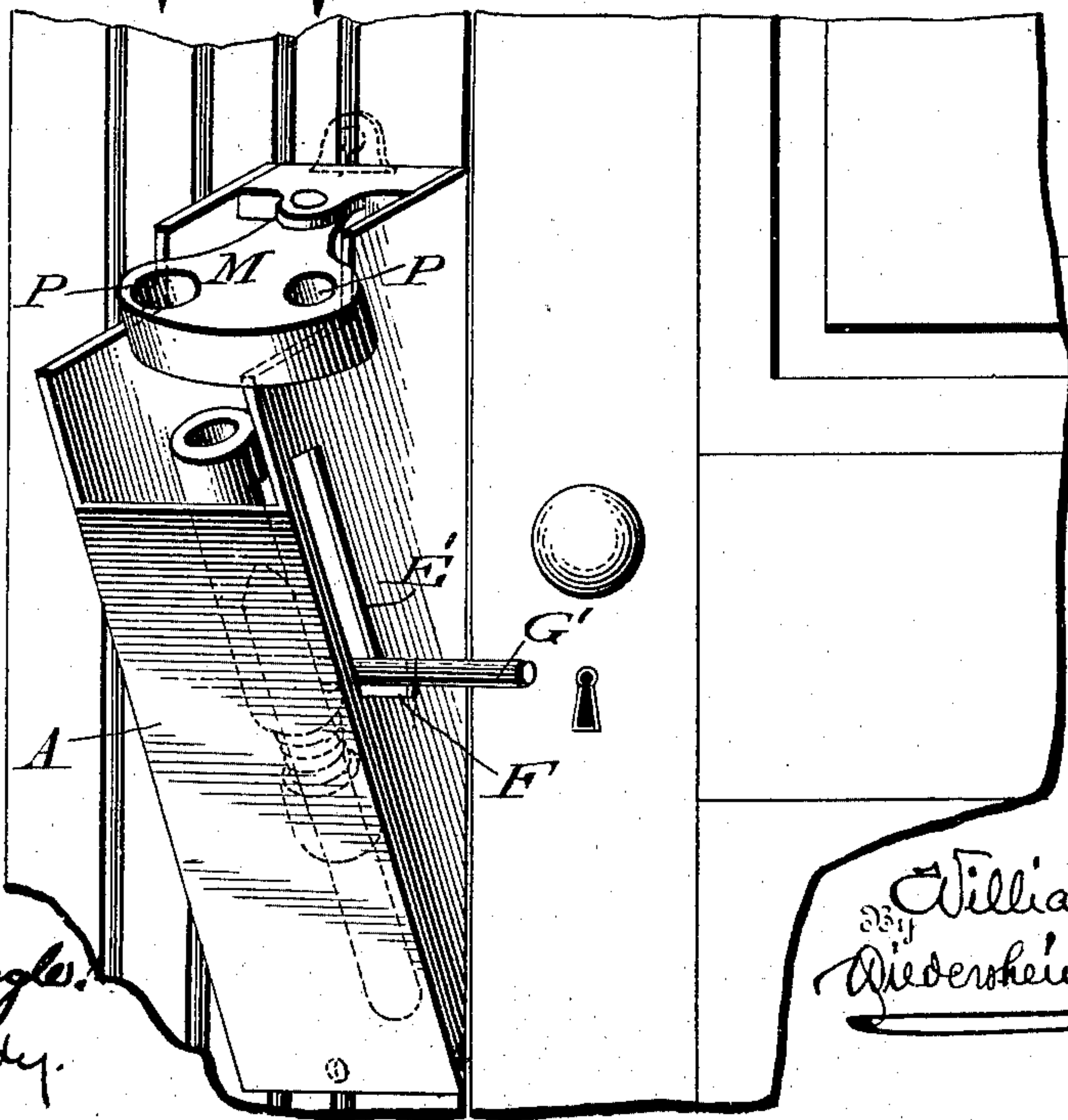


Fig. 4.



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ONE-HALF TO HARRY C. RADCLIFFE, OF SAME PLACE.

BURGLAR-ALARM AND DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 656,586, dated August 21, 1900.

Application filed January 3, 1900. Serial No. 226. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. REIFF, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Burglar-Alarms and Door-Checks, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a burglar-alarm and door-check employing a shoe, a member adapted to be operated by the motion of a door, means for primarily controlling said member, a firing-pin in connection with said member, and a cartridge-holder, the novel features of the same being pointed out in the claims that follow the specification.

It also consists of adapting the cartridge-holder to cartridges of different sizes, according to the degree of explosive sound required.

Figure 1 represents a partial side elevation and partial vertical section of a burglar-alarm and door-check embodying my invention. Fig. 2 represents an end view thereof. Fig. 3 represents a transverse vertical section thereof on line *x x*, Fig. 1. Fig. 4 represents a perspective view of another form of my invention.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a hollow or chambered shoe which is adapted to be placed on a floor and made wedge-shaped, so that its front end may be inserted under a door.

Within the shoe is secured the barrel B, the latter containing the firing-pin C, to which is attached one end of the spring D, whose other end is connected with the guide B' or other fixed point, so that when said pin is retracted said spring will be contracted.

In the barrel B and the adjacent guide B' is a longitudinally-extending slot E, the forward end of which has the laterally-extending slot F, forming together somewhat of an L shape, in which may play the arm G, which projects outwardly and laterally from the firing-pin.

H designates a swinging lever or rider which is mounted at one end on the bearing J within the shoe, the same being guided in

the slot K in the upper face of the foot A and being partly above and partly below said face and having in its under side a recess L, into which enters the arm G, said rider being at the side of the barrel B.

M designates a cartridge-holder which occupies the wide end of the shoe and consists of a plate which is mounted on the axis N, so that it may be swung to the right and left, it being noticed that the body of said holder is provided with openings P of different diameters, so as to receive cartridges of different sizes, either of which may be placed in line with the head of the firing-pin, so as to be struck by the latter.

The operation is as follows: The rider is raised from the arm G and the firing-pin drawn back by means of said arm to full extent toward the point of the shoe. When said arm reaches the portion F of the slot of the barrel, the pin is turned by means of said arm, and the latter is seated in the slot F and held on the contiguous wall thereof by the pressure of the spring D, which has been contracted. As the device is now set, it may be located on the floor under a door, as has been stated, it being prevented from sliding motion or displacement by means of the spur Q or other means on the shoe. Should the door be opened, it will depress the rider H, and thus lower the arm G, the latter turning as it descends and so rotating the firing-pin. As soon as said arm has passed through the slot F it registers with the slot E and is then practically stripped of the slot of the rider. Then the spring D by its expansion forcibly impels the pin C toward the head M, the arm G moving through the slot E, whereby the cartridge is struck and exploded, the noise of the same directing attention to the attempted entrance at the door.

In Fig. 4 the side of the shoe A' has an L-shaped slot E' F' therein to receive the arm G', which extends from the barrel through the slot therein and made of such length as to protrude through said slot E' F' beyond the side of the shoe. In this case the device is attached to a door-frame, and the arm G' is so disposed that it is in the path of a door, so that when the latter is opened it presses against said arm G' and removes it from the

slot F' and places it in register with the slot E', so that the firing-pin is no longer controlled by said arm the spring then acting to drive the pin to the cartridge, when the explosion is created as before.

The device may be used as a check by being placed under the door to hold the same in open position to any required extent without regard to the alarm mechanism.

In the use of the term "cartridge" I include any detonating device or article.

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

1. In a burglar-alarm, a shoe, a firing-pin, a guide therefor on said shoe, a projecting member on said pin, a lever adapted to be brought into engagement with said projection, whereby said pin is rotated, and means on said guide for the play of said projecting member, said lever being pivoted at one end on said shoe and guided on the upper wall thereof and having a recessed nose in which said projecting member is freely seated.

2. A shoe, a rising-and-falling lever mounted thereon, a firing-pin having a member adapted to be engaged by said lever, a guide for said pin, and a spring for impelling said pin, said guide having a deflected slot for the passage therein of said member of said pin.

3. A burglar-alarm having a wedge-shaped shoe, a firing-pin, a guide with means for primarily engaging said pin, a rising-and-falling lever adjacent to said pin adapted to rotate the same, and means for impelling said pin when released of said engaging means,

said shoe having a slot therein, and said lever freely occupying the same.

4. In a burglar-alarm, a firing-pin with a projecting member thereon, a guide for said pin provided with a deflected slot, in either limb of which said member may be disposed, a shoe carrying said parts and a rising-and-falling lever mounted on said shoe for removing said member from one of said limbs to the other, whereby the pin is free to be impelled against a detonating device.

5. In a burglar-alarm, a shoe, a movable plate mounted on said shoe and having cartridge-receiving openings of different sizes, and constructed to place either opening in the path of the firing-pin of the alarm.

6. In a burglar-alarm, a shoe, a firing-pin, a guide for said pin on said shoe, means for retaining and releasing said pin, and a plate opposite to the head end of said pin provided with cartridge-receiving openings of different sizes, said plate being movably mounted on said shoe.

7. A burglar-alarm consisting of a shoe, a firing-pin, a slotted guide for said pin, a projection on said pin adapted to play in the slot of said guide, a lever pivotally mounted on one end of said shoe and engaging said projection, and a movable cartridge-holder with different-sized openings therein on the other end of the shoe.

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