

(No Model.)

H. & W. F. HOLDING.
BURGLAR ALARM.

No. 547,013.

Patented Oct. 1, 1895.

Fig. 1.

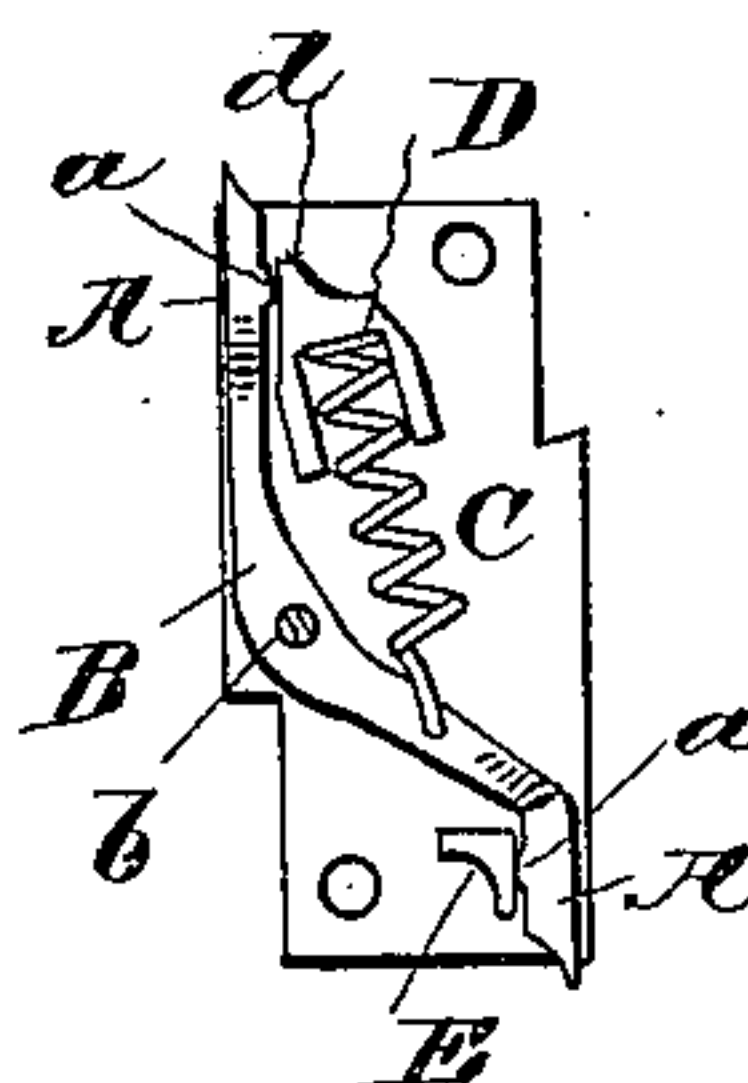
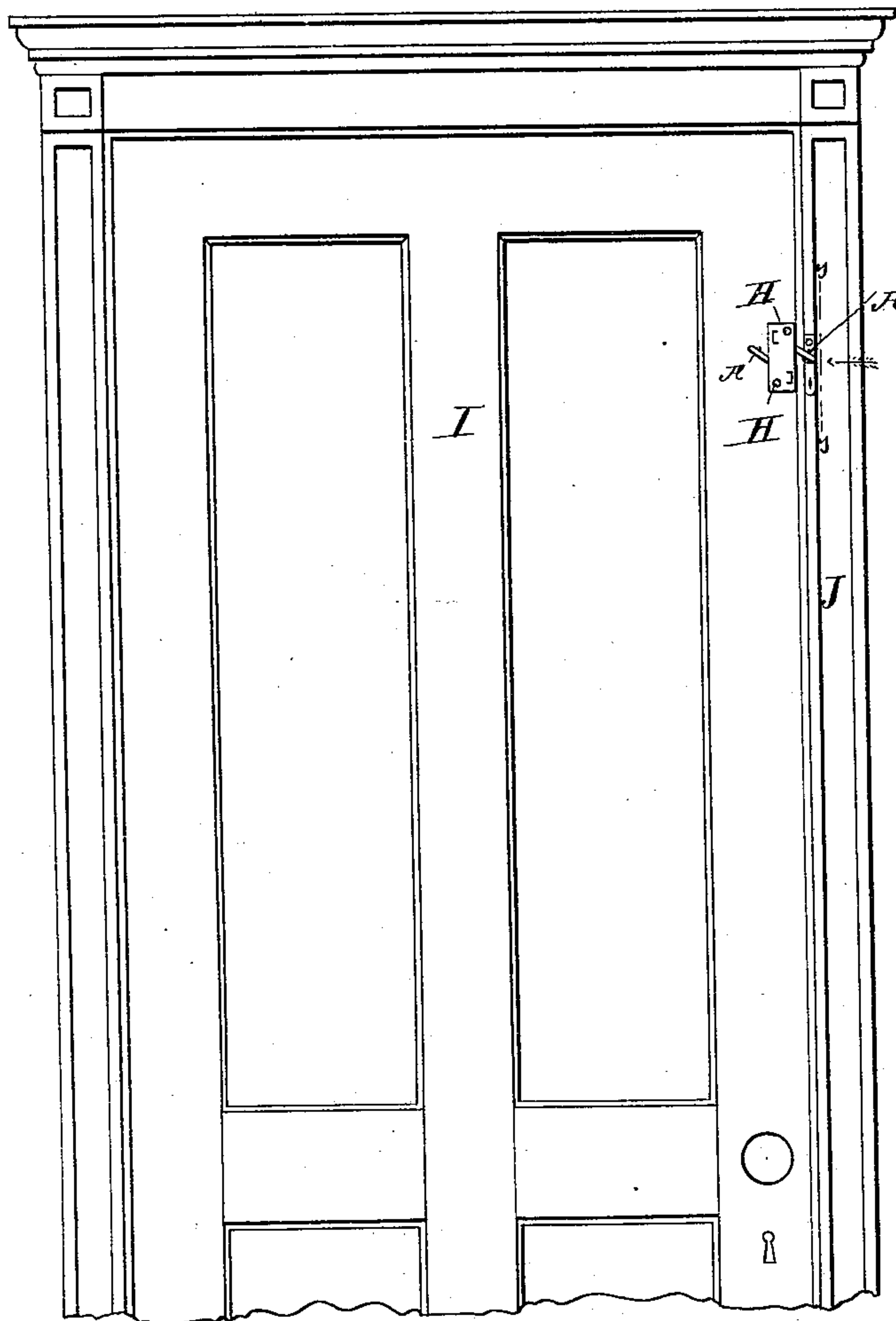


Fig. 2.

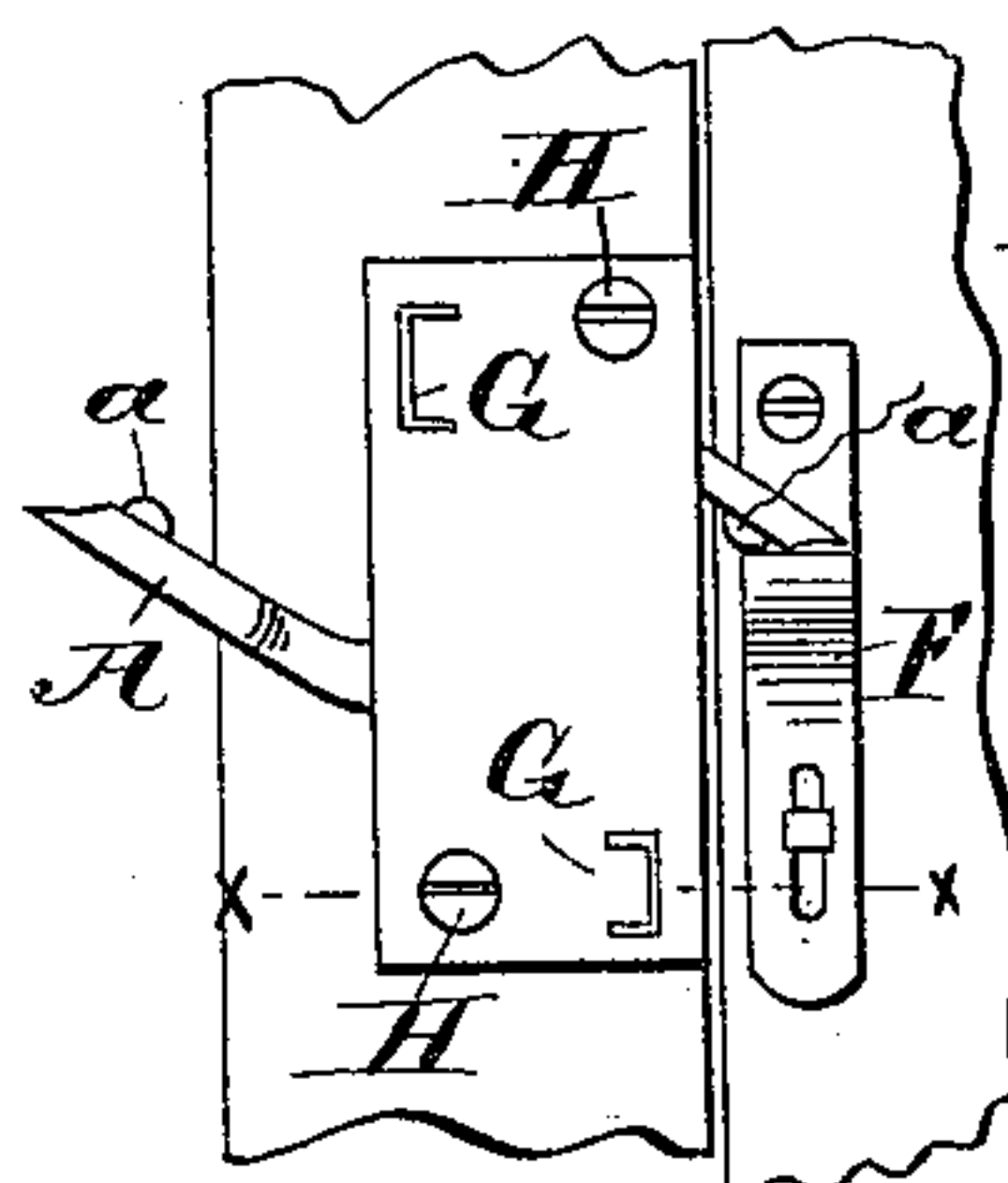


Fig. 4.

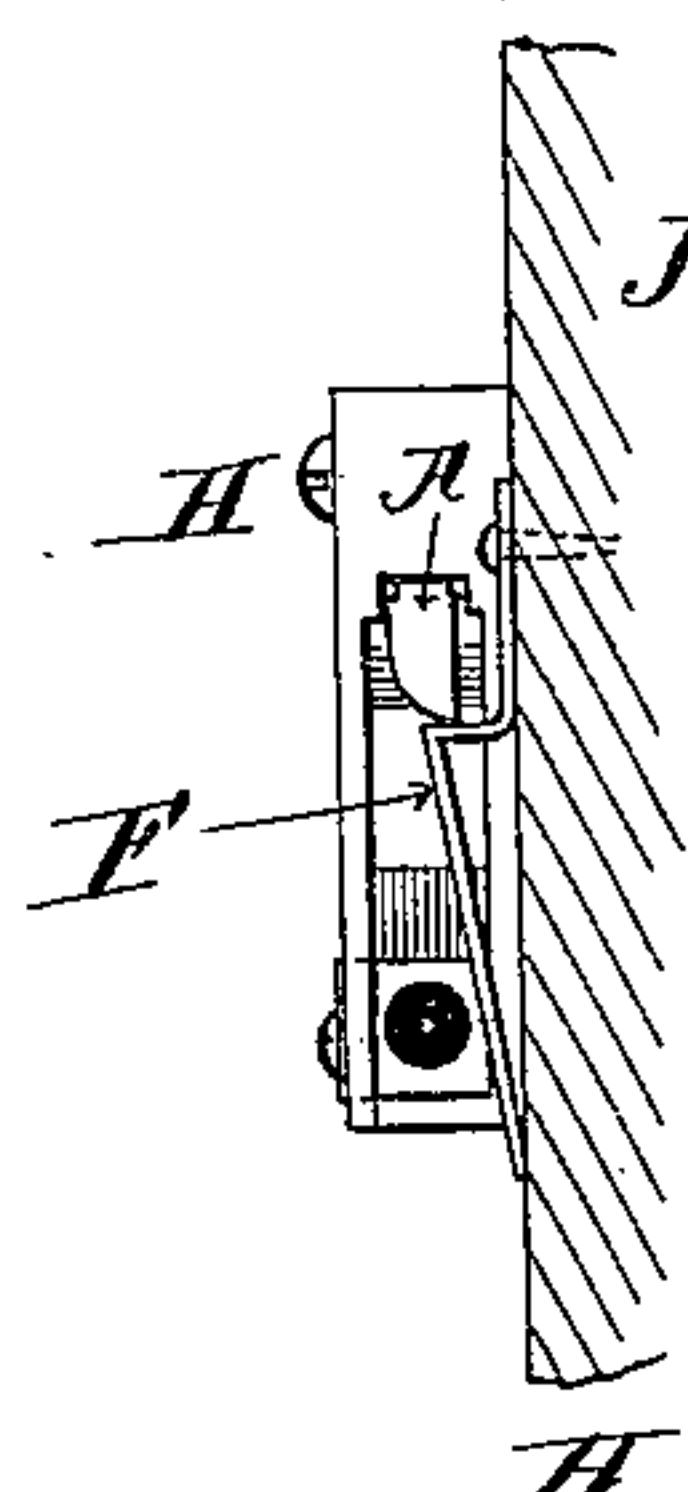


Fig. 3.

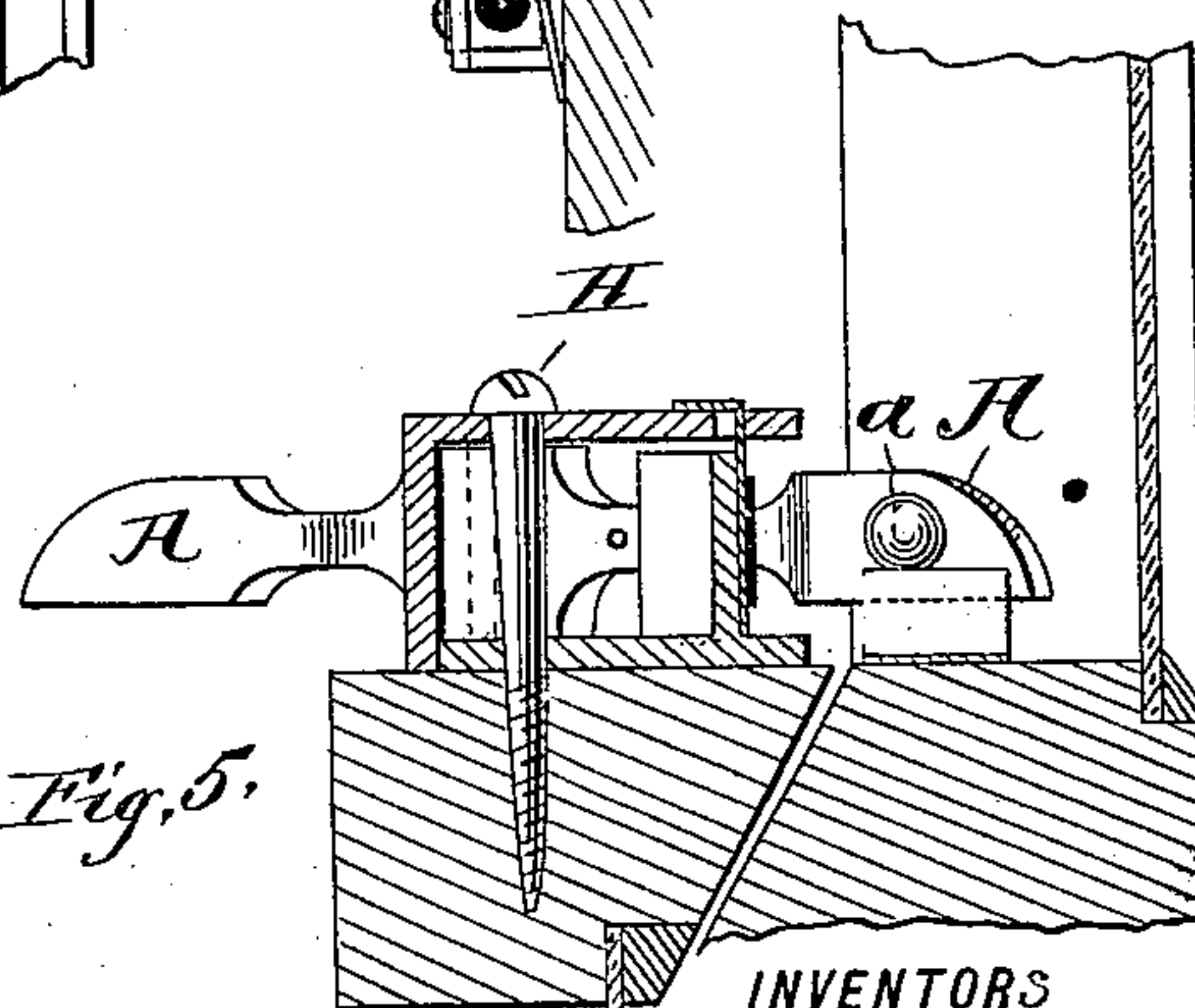
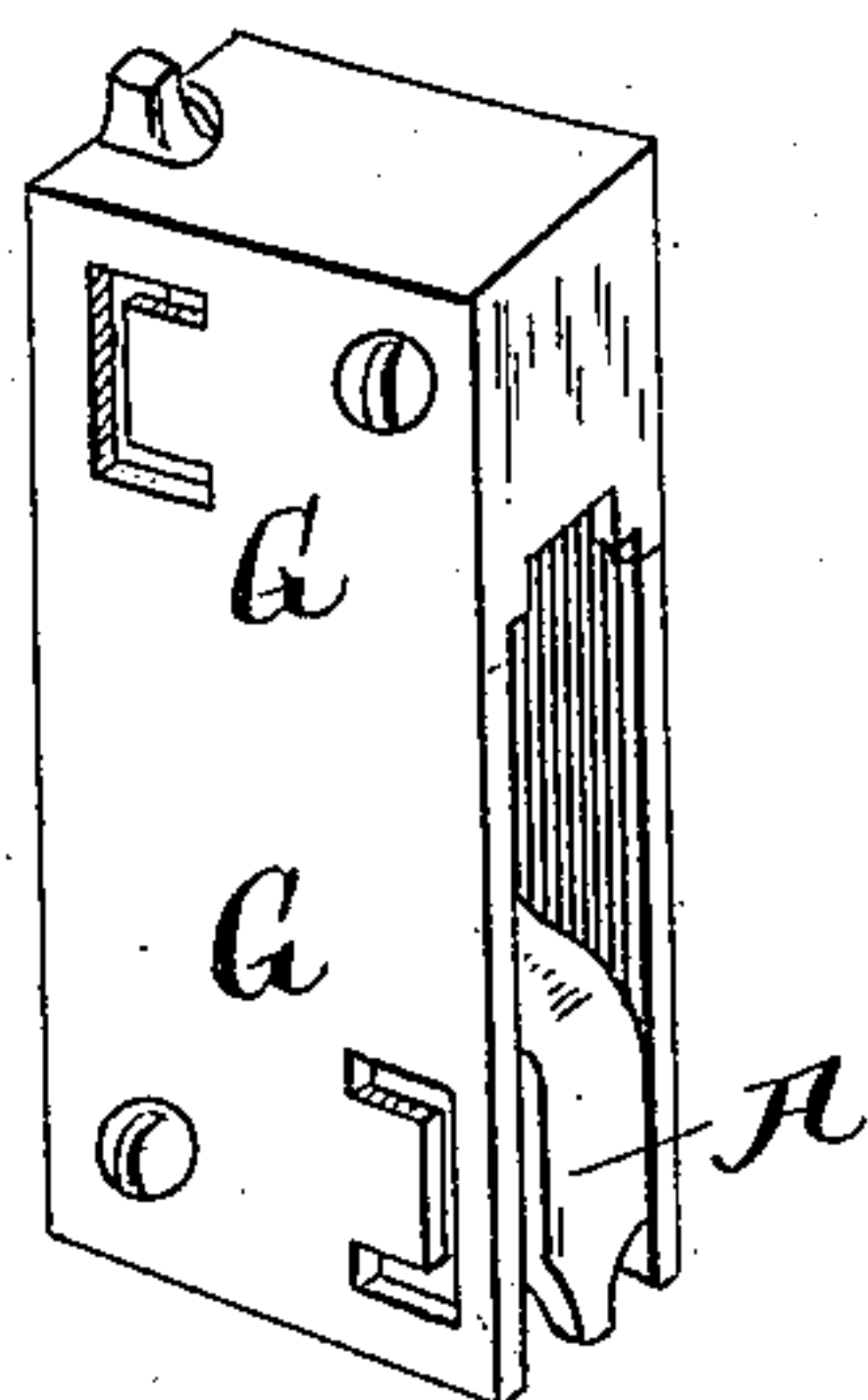


Fig. 5.

Fig. 6.



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BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 547,013, dated October 1, 1895.

Application filed May 8, 1895. Serial No. 548,617. (No model.)

To all whom it may concern:

Be it known that we, HENRY HOLDING and WILLIAM F. HOLDING, of the city of New York, in the county and State of New York, have invented a certain new and useful Improvement in Burglar-Alarms, of which the following is a specification.

We will describe the improvement in detail, and then point out the novel features in claims.

In the accompanying drawings, Figure 1 is a view showing a burglar-alarm embodying our improvement attached to a door. Fig. 2 is a face view of a burglar-alarm embodying our improvement with one of the plates removed. Fig. 3 is a partial section taken on the plane of the dotted line *yy*, Fig. 1. Fig. 4 is a plan view showing the burglar-alarm attached to a window. Fig. 5 is a sectional view taken on the plane of the dotted line *xx*, Fig. 4; and Fig. 6 is a perspective view of the burglar-alarm when not set for use.

Similar letters of reference designate corresponding parts in all the figures.

A A designate hammers formed at either end of an arm B, which is shown as fulcrumed at *b*. These hammers A A may be formed by simply flattening out either end of the arm B, or they may be projections, as *a*, Fig. 4, cast or otherwise formed on or secured to said arm B. A coiled spring C is shown as attached at one end to the arm B, while its other end is shown as resting within a guide or groove D. The guide or grooved piece D may be flattened out, as at *d*.

E designates a post so located as to be within reach of one of the hammers A.

F designates a clip-spring intended to retain the arm B in the position indicated in Fig. 4 when the alarm is "set." This spring may be made of any appropriate shape desired so long as it holds the arm B in proper position when the alarm is set, and in fact we might, if desired, dispense with the use of such spring altogether and simply use a pin to lock the arm B in proper position.

G designates slits formed in the upper plate of the burglar-alarm, and through these slits explosive caps may be inserted.

We prefer to make the opposite ends of the arm B tapered, so as the more to readily grasp

either end of the arm for the purpose of setting the burglar-alarm.

We will now describe the operation of the burglar-alarm. The burglar-alarm is shown in Fig. 1 as fastened by the screws H H to the door I. The arm B is drawn down until it reaches the position illustrated in Fig. 1. This operation will cause the spring C to be compressed within the guide or groove D. When the arm B has been drawn down sufficiently far, it will be held in position by the spring F or other means placed on the casing J for the purpose of holding it in position. Caps are then inserted through the slits G, and one of these caps will rest against the part *d* of the guide or grooved piece D and the other cap will rest against the post E. The burglar-alarm is then set. If an intruder attempts to open the door, the very act of opening the door will cause the arm B to be drawn away from the spring F, and the spring C will press that part of the arm B to which it is attached downward, thereby forcing one of the hammers A A against the post E and the other of said hammers against the part *d* and causing the caps to explode. In this manner alarm will be given of the attempt to effect entrance.

It will be readily understood that the burglar-alarm may be used to guard a window in the same way, and in Fig. 4 we have shown the burglar-alarm so applied. The moment one sash is raised or the other lowered the arm B will be released, thus causing the explosion of the caps and thereby giving an alarm.

It will be seen that by our improvement we produce a burglar-alarm at once simple, cheap, and effective.

Of course it will be readily understood that suitable openings or holes might be placed in the post E and part *d*, in which cartridges or other explosive might be placed in lieu of the caps before mentioned. We may also so shape the upper end of the arm B that said arm will fit almost entirely within the casing which incloses the device when the burglar-alarm is not set, only enough of the arm projecting beyond the case to enable the arm to be readily reached for the purpose of drawing it down. In that case it will be desirable

to use projections cast or otherwise formed on or secured to the opposite ends of the arm B, as shown in Fig. 4, for the purpose of acting as hammers to cause the explosion.

5 What we claim as our invention, and desire to secure by Letters Patent, is—

1. In an alarm device the combination of a pivoted arm a spring for operating said arm, hammers at opposite ends of said arm, and
10 means for holding an explosive within reach of said hammers, substantially as specified.
2. In an alarm device the combination of a

pivoted arm, a spring for operating the same, hammers at opposite ends of said arm, means for holding an explosive within reach of said 15 hammers, and a device for holding said hammers away from said means for holding an explosive, substantially as specified.

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