

No. 843,614.

PATENTED FEB. 12, 1907.

C. W. KUEN.
BURGLAR ALARM.
APPLICATION FILED OCT. 12, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

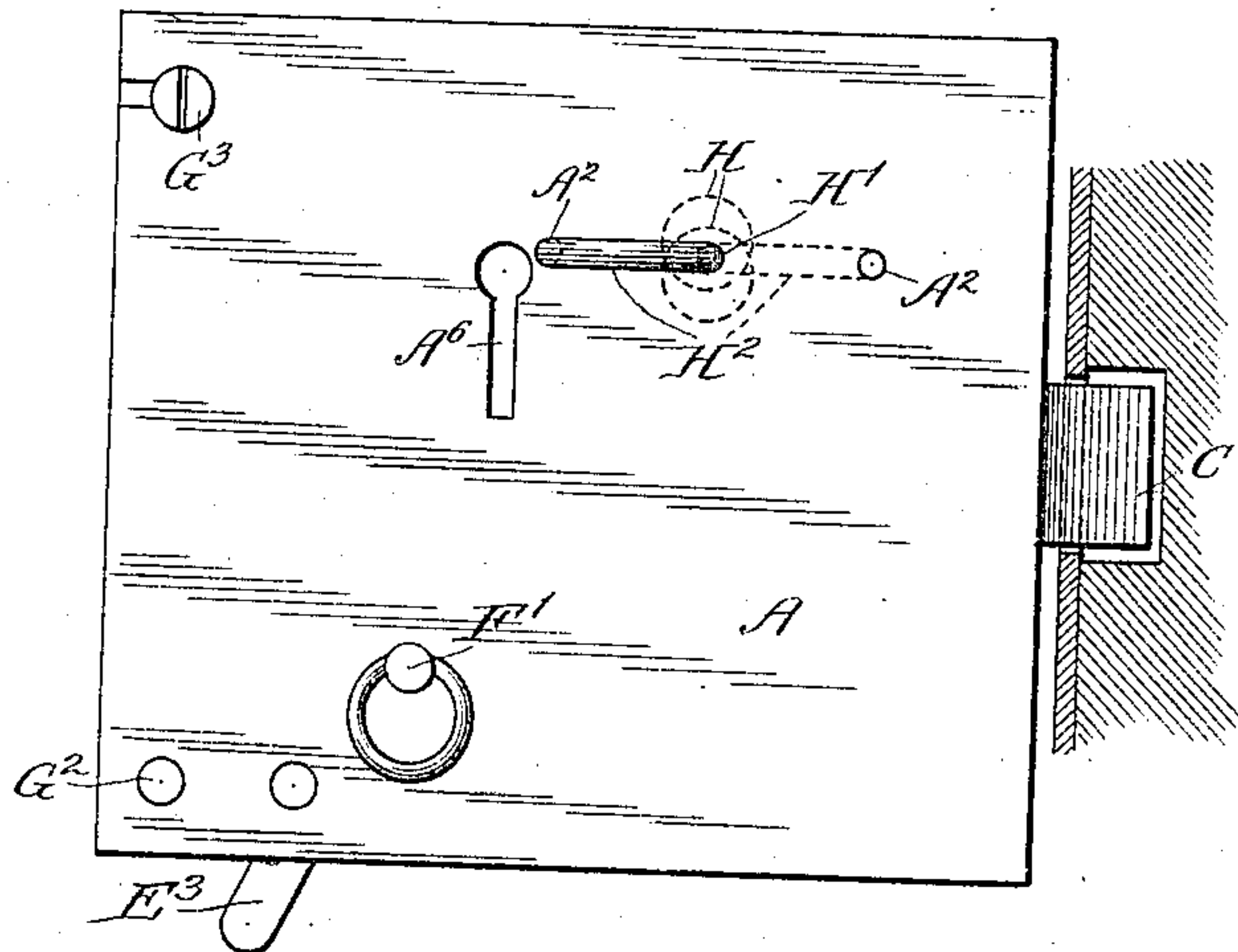


Fig. 5.

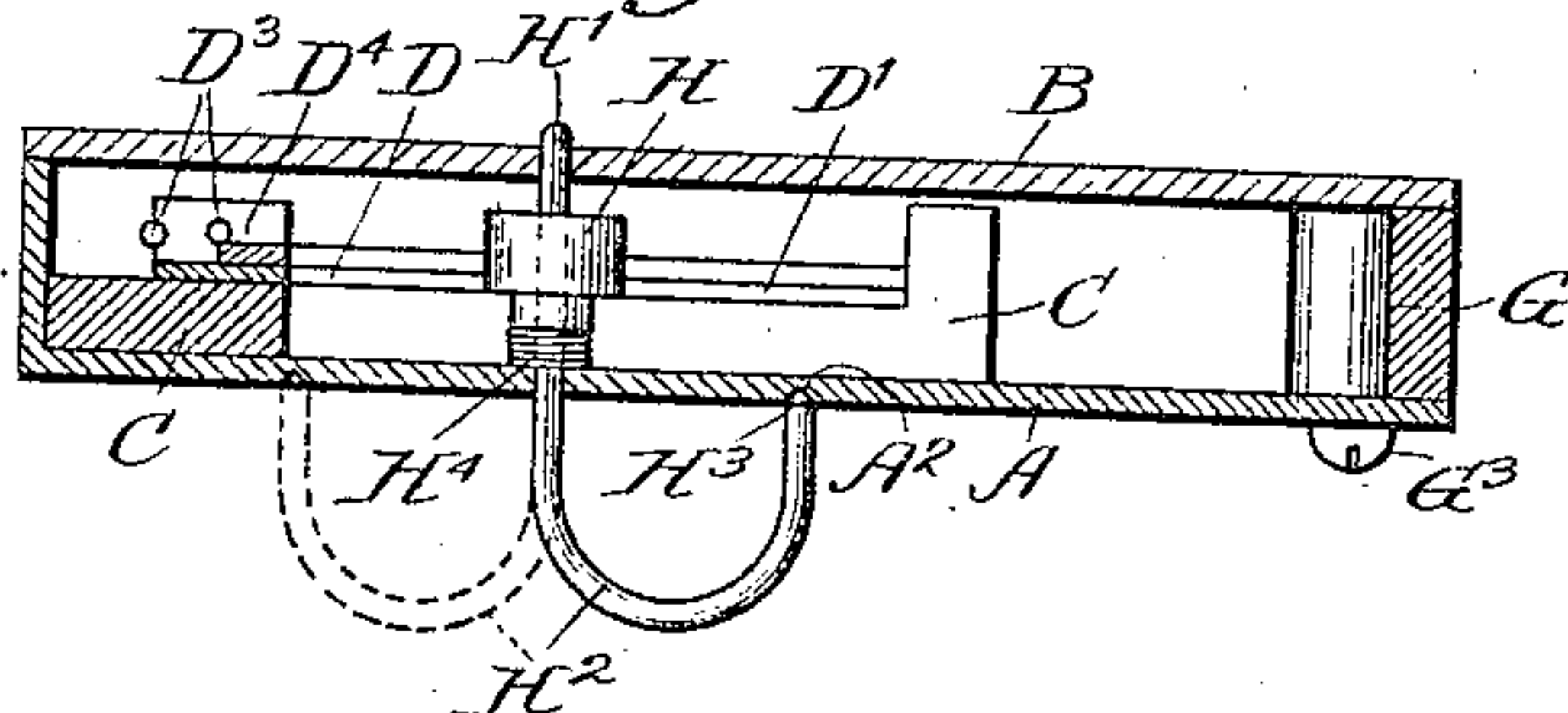


Fig. 6.

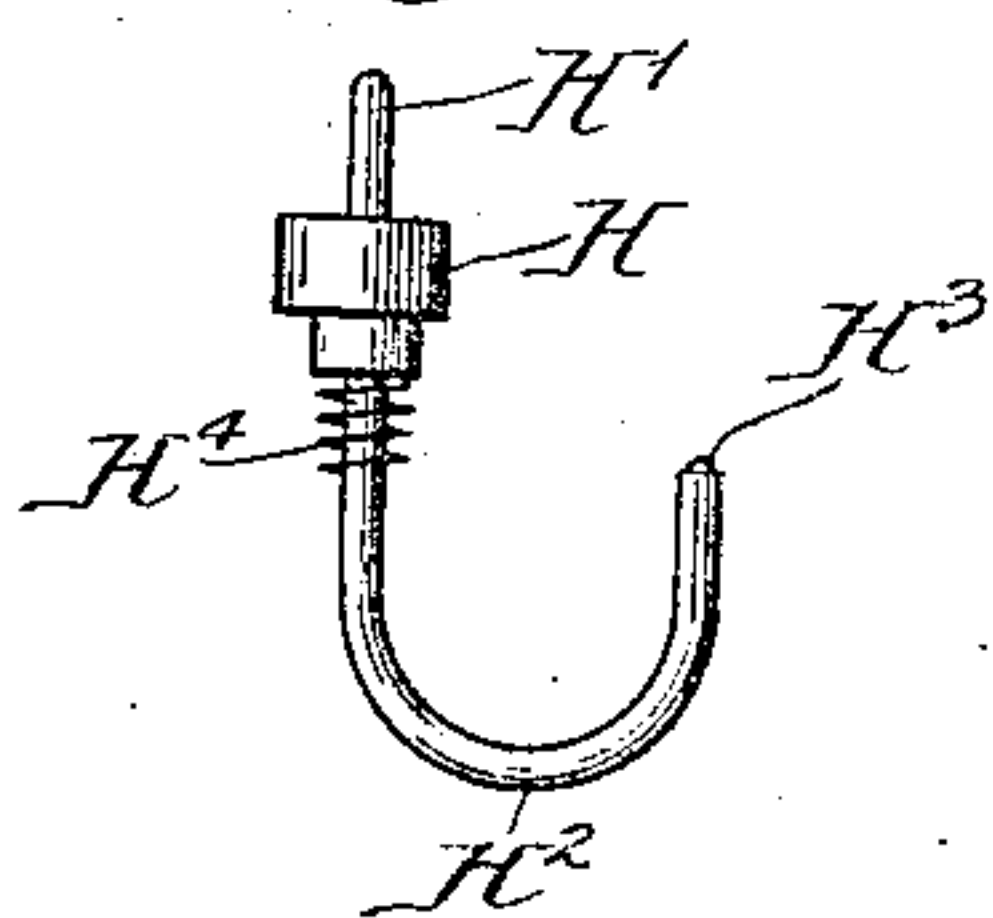


Fig. 7.

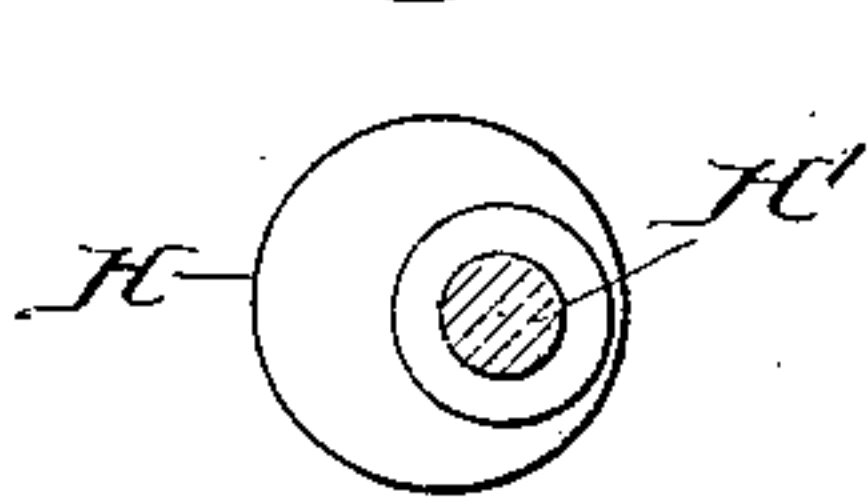


Fig. 8.

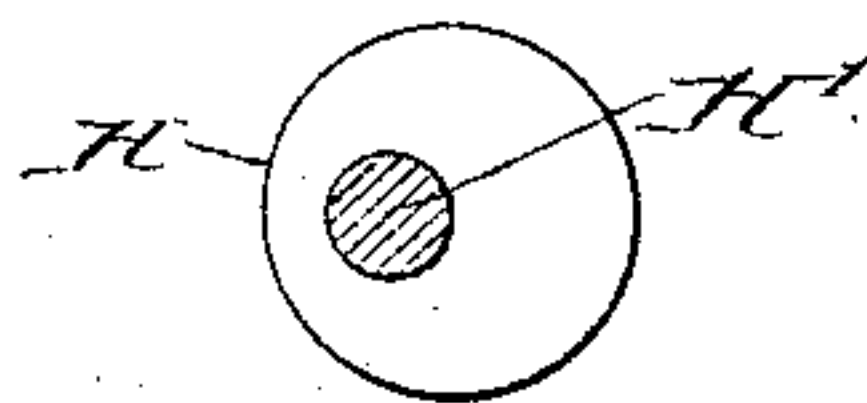


Fig. 10.

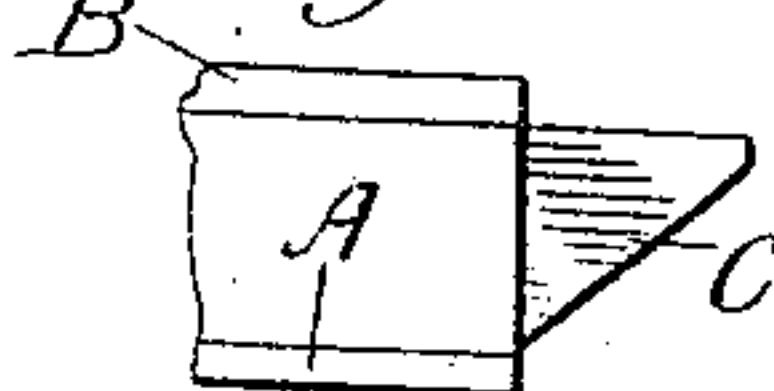
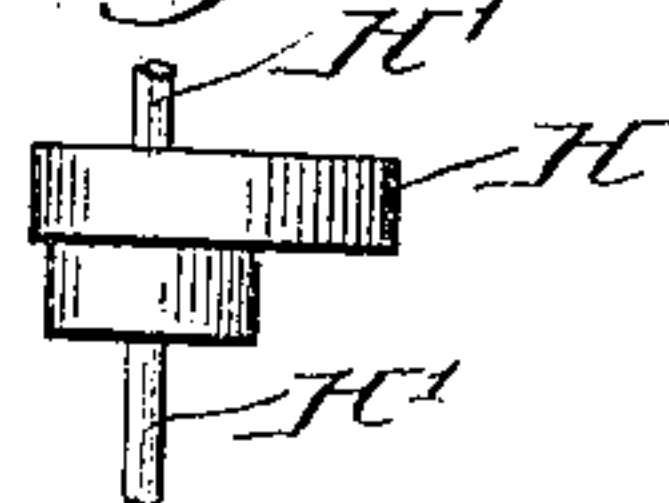


Fig. 9.



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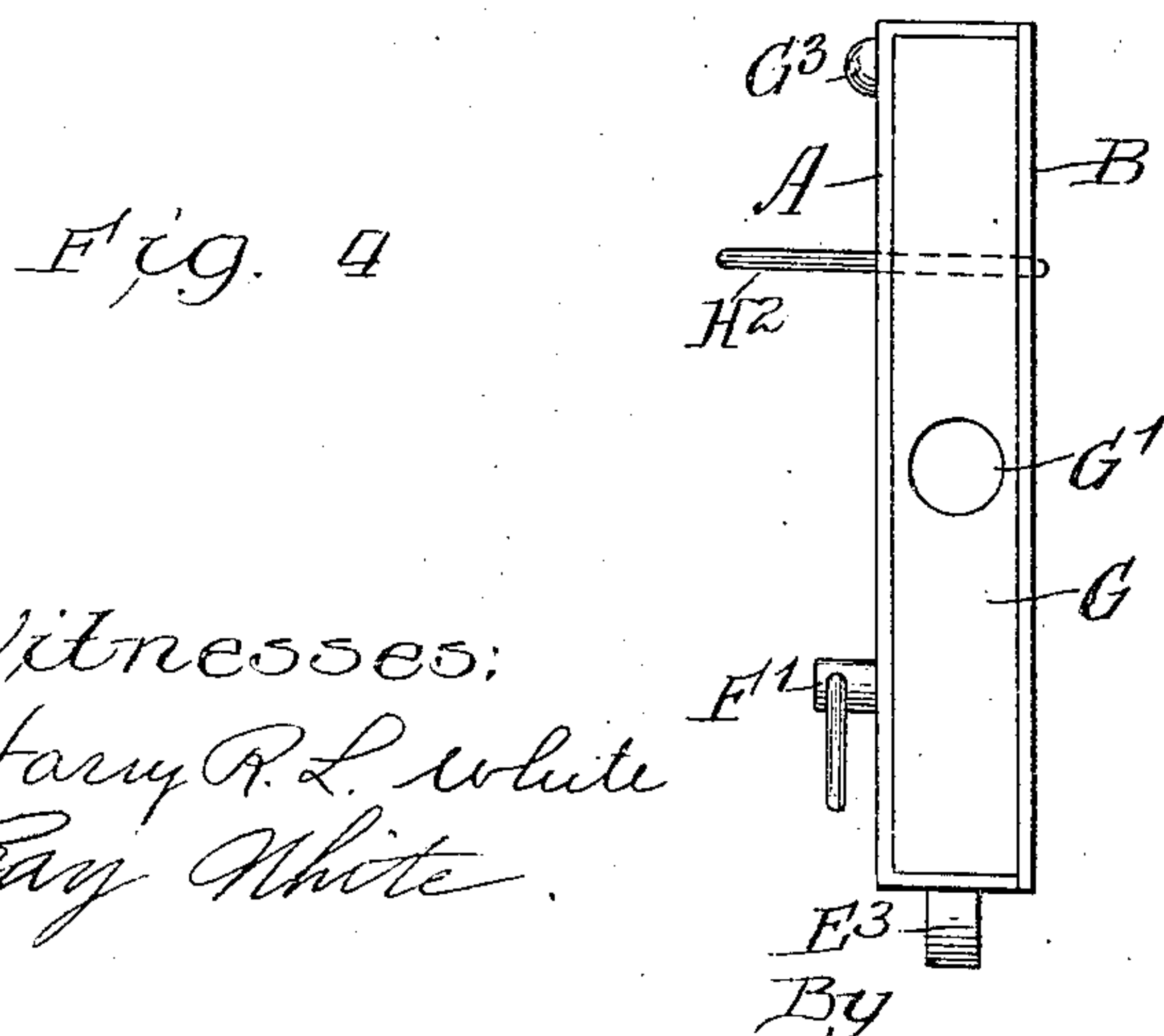
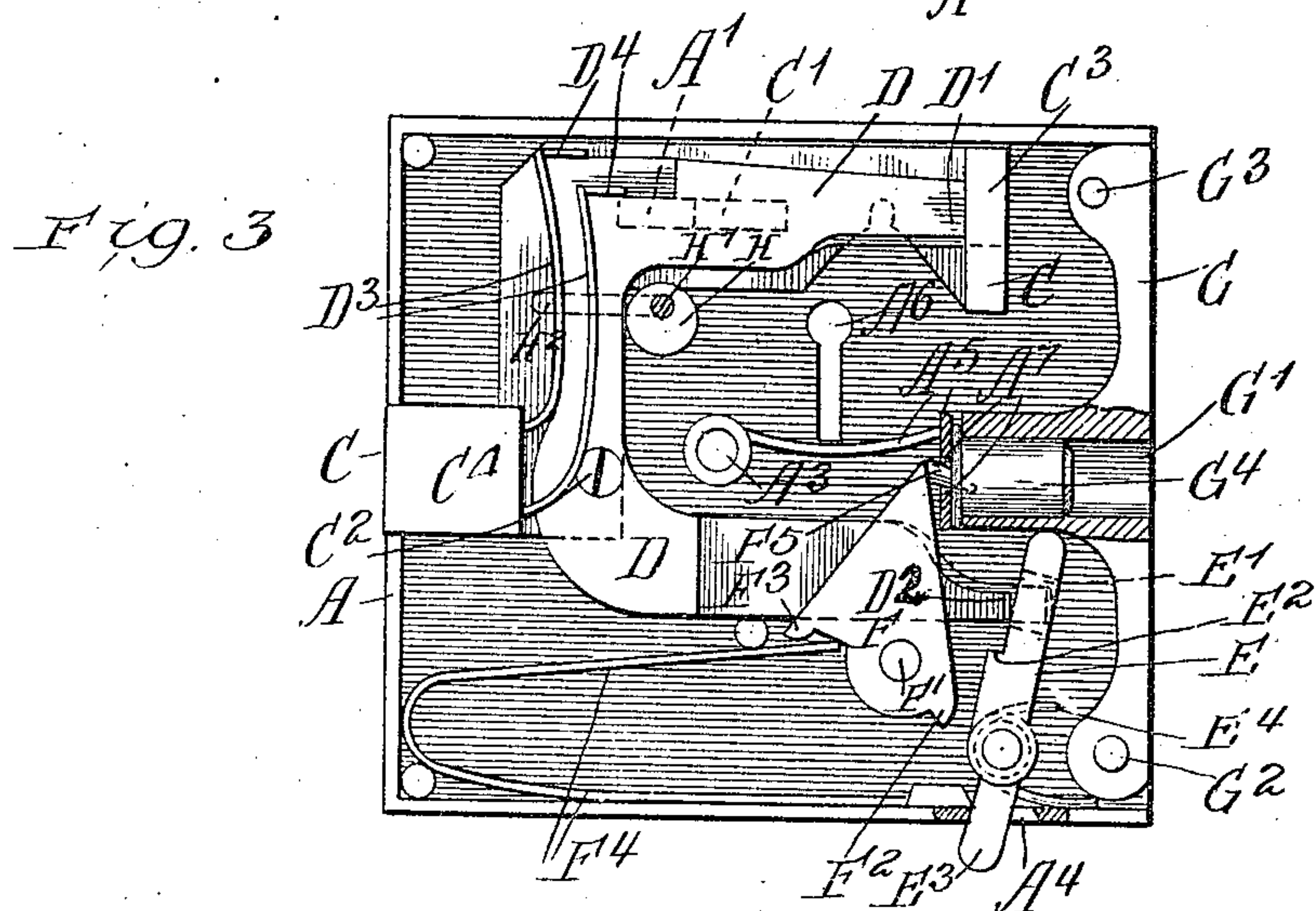
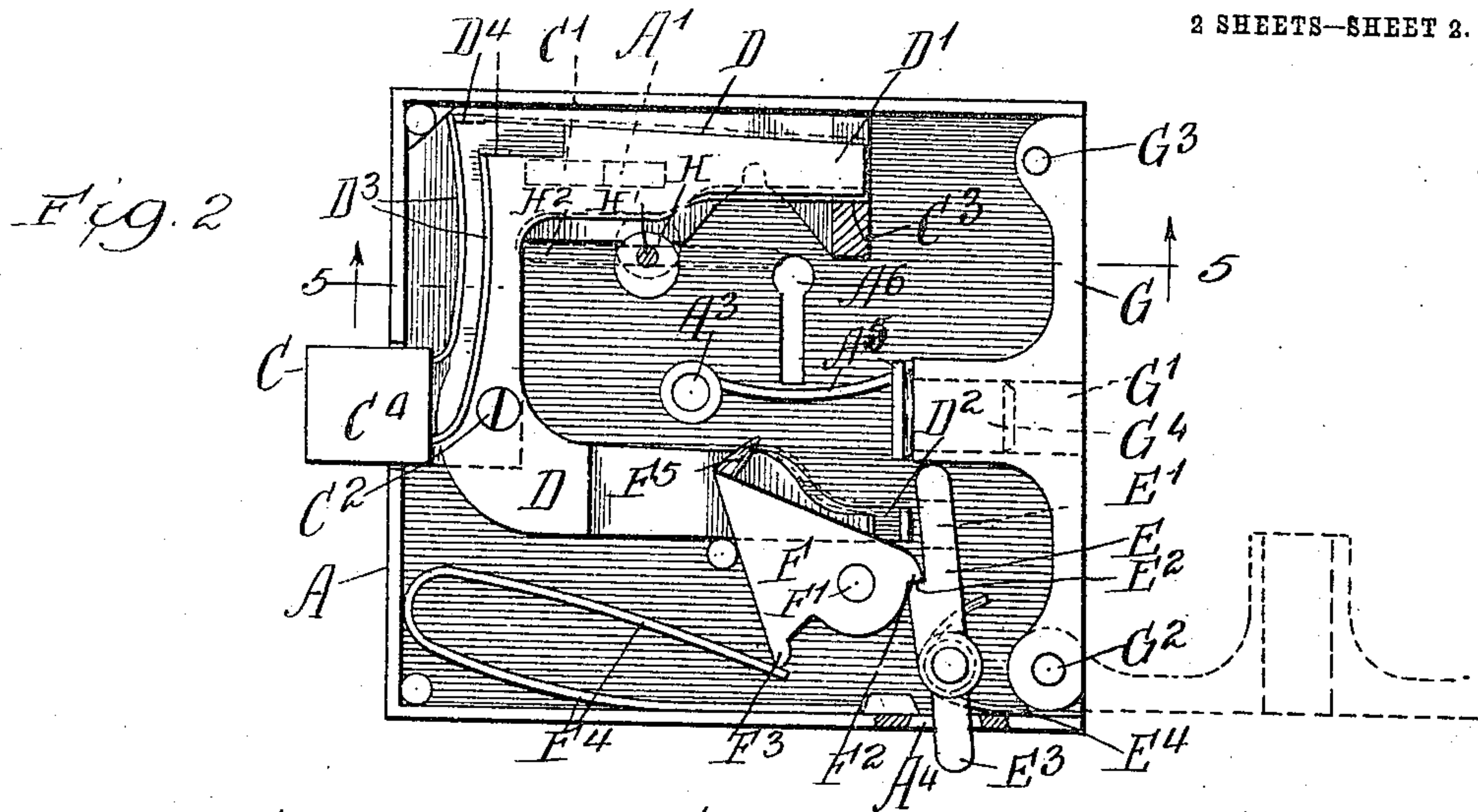
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

CHARLES W. KUEN, OF CHICAGO, ILLINOIS.

BURGLAR-ALARM.

No. 843,614.

Specification of Letters Patent.

Patented Feb. 12, 1907.

Application filed October 12, 1905. Serial No. 282,461.

To all whom it may concern:

Be it known that I, CHARLES W. KUEN, a citizen of the United States, residing at 3101 State street, in the city of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Burglar-Alarms, of which the following is a specification.

My invention relates to that class of alarms used as an attachment on doors, windows, and other structures which are opened and closed for the purpose of giving an alarm when the parts with which the alarm is attached or connected are opened or moved.

The object of my invention is to construct an alarm similar to a lock which while it can be opened and closed with a proper key when set for an alarm will explode a cartridge if the parts are otherwise moved by a wrong key or other instrument or by the opening of the structure to which it is attached or connected and that can be loaded or unloaded, set or unset, without removal from the place to which it is attached.

The manner in which I accomplish my object is explained in the following specifications and illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of the alarm set for the explosion and section of latch-plate and door-jamb. Fig. 2 is an inside view showing the mechanism in position to make the alarm. Fig. 3 is an inside view showing the several parts in position after the alarm has been given. Fig. 4 is a right end view showing the back of the cartridge-holder. Fig. 5 is a sectional view through the line 5 5, Fig. 2. Figs. 6, 7, 8, and 9 are detail views of the eccentric mechanism. Fig. 10 is a detail view of part of the side of the case, showing the beveled head of the latch projecting therefrom.

In the drawings the main body A and the back plate B form a case in which the mechanism is arranged. This case may be made of any suitable material and size. In this case is a sliding latch C, which is guided in its movements by a lug A', which projects from the case, of which it forms a part, into an oblong slot C' in the latch C. This latch is adapted to be moved by a key and by contact with the latch-plate on the door-jamb. Pivotaly attached to the latch by its stud C² are two double-ended levers D, which are adapted to be moved by a key. The key end D' of these levers rest in an aperture C³

in the end of the latch, as shown in Figs. 2 and 3. The trigger ends D² of the levers are adapted to either engage the trigger E or to pass through a slot E' in the trigger when the levers and the latch are moved. The levers are held in position to engage the trigger by springs D³, which are held in the head of the latch, and by the lugs D⁴ on the levers. The trigger E, which is pivotally attached to the case, has a shoulder E², a thumb-piece E³, and is controlled by the pressure of a spring E⁴. Adjacent to this trigger is a hammer F, having a shaft F'. One end of this shaft extends through the case and is provided with a ring, as shown in Figs. 1 and 4. This hammer has a lip F², which is adapted to engage the shoulder E² of the trigger, arm F³, engaged by a spring F⁴, and a head F⁵, adapted to pierce the center of a cartridge, as shown in Fig. 3.

In the back end of the case is a cartridge-holder G, having a barrel G', a pivotal stud G², engaged in the case, and a lock-screw G³. The barrel G' is adapted to hold a cartridge G⁴. An eccentric H is supported on a shaft H', which extends through the case and forms a handle H², having a point H³, adapted to be engaged in the depressions A² in the case and held therein under the pressure of a spring H⁴.

To load and set the alarm, the cartridge-holder is released by unscrewing the lock-screw G³ and swinging the cartridge-holder out and down to the position shown by the dotted lines in Fig. 2. The cartridge is then placed in the barrel and the holder placed back in position and secured by the lock-screw. In that position the head of the cartridge is pressed against the wall A⁵. The hammer is turned back by the aid of the ring in the shaft till the lip passes the shoulder of the trigger, by which it is held. In Fig. 2 all the parts are shown in their normal positions when set ready for the explosion of the cartridge, the handle H² of the eccentric being in the position shown by the solid lines in Figs. 1 and 5, in which position the eccentric H is out of contact with the levers D. With the parts thus set a movement of the latch either by the sliding contact of the bevel-face of the head with the striking-plate on the jamb caused by the opening of the door or other structure on which the alarm is attached or by a wrong key or other instrument introduced into the case through the keyhole A⁶, which fails to lift the levers

to the proper position and moves the latch inward, will force the end of one or the other of the levers against the trigger and release the hammer which, actuated by the spring F⁴, strikes the cartridge in the center through the hole A⁷ in the wall A⁵, causing the cartridge to explode. The wall A⁵ receives part of the shock of the explosion and prevents any part of the cartridge from entering the case and clogging the parts therein. The extension of the wall below the keyhole also prevents the introduction into the case through the keyhole of any instrument or material to interfere with the action of the hammer. With a proper key the levers and latch can be moved so that the ends of the levers pass through the slot E' in the trigger without moving it. When it is desirable to set the alarm, so that the cartridge will be exploded by any inward movement of the latch, either by its contact with the striking-plate, by the opening of the door, or by the insertion of the proper or an improper key, or by any other means, then in that case the handle H² of the eccentric H is turned toward the head of the latch, as shown by the dotted lines in Figs. 1 and 5. This brings the eccentric H into engagement with the levers D and holds the key ends D' of the levers above the reach of the key and moves the trigger ends D² of the levers into position to strike the trigger E and to thereby release it from the hammer F and explode the cartridge.

What I claim, and desire to secure by Letters Patent, is—

1. In a device of the kind described the combination of a case consisting of a main body and a back plate, said main body having an interior wall adapted to engage and support the head of a cartridge; with a latch slidable in said case and adapted to be moved therein by a key and by a striking-plate; a pair of double-ended levers pivotally supported on said latch and movable therewith; a key insertible in said case adapted to move said latch and levers; an eccentric pivotally supported in said case and adapted to engage and raise said levers; a spring-pressed trigger pivotally supported in said case, said trigger being adapted to be engaged and moved by one or both of said levers; a hammer pivotally supported in said case, said hammer having a spring-pressed arm, a lip adapted to be engaged by said trigger and a head adapted to strike and explode a cartridge; a cartridge-holder pivotally supported in said case and having a barrel adapted for the support of said cartridge in contact with said wall in said case and thereby adapted to be exploded by said hammer as described.

2. In a device of the kind described the

combination of parts consisting of a main body and back plate forming a case; an interior wall in said main body; a latch supported in said case and slidable therein as described; a double-ended lever pivotally supported on said latch; a key adapted to move said lever and latch; an eccentric supported in said case adapted to be moved and to engage and raise said lever; a spring-pressed trigger pivotally supported in said case and adapted to be moved by said lever; a hammer pivotally supported in said case having a spring-pressed arm, a lip adapted for engagement with said trigger and a head adapted to extend through said wall in said case and to thereby strike and explode a cartridge; a cartridge-holder pivotally supported in said case adapted to hold said cartridge in contact with the said wall in said case and thereby adapted to be exploded by said hammer as described.

3. In a device of the kind described the combination consisting of a case having an interior wall; a latch slidably supported in said case; a plurality of double-ended levers pivotally supported on said latch; a striking-plate adapted to move said latch; a key adapted to move said levers and said latch; a spring-pressed trigger supported in said case adapted to be moved by one or more of said levers; a spring-pressed hammer pivoted in said case, said hammer having a lip adapted to be engaged by said trigger and a head adapted to strike a cartridge in contact with said wall in said case; a cartridge-holder pivotally supported in said case and adapted to hold said cartridge in contact with said wall.

4. In a device of the kind described, the combination comprising a case having an internal wall adapted to engage the head of a cartridge and to resist its movement when it is exploded in said case against said wall; a latch slidably supported in said case and a double-ended lever or levers pivotally supported on said latch and movable with it, said latch and lever or levers being adapted to be moved in said case by a striking-plate affixed on the frame of a door and adapted to engage said latch, and by a key insertible in said case; a striking-plate and a key as described; a spring-pressed trigger movable by said lever or levers; a spring-pressed hammer in said case adapted to be held and released by said trigger and to strike and explode a cartridge in contact with said wall in said case; means for holding a cartridge against said wall, as and for the purposes described.

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