

*R. Bunker,
Alarm Lock.*

N^o 62,604.

Patented Mar. 5, 1867.

Fig. 1.

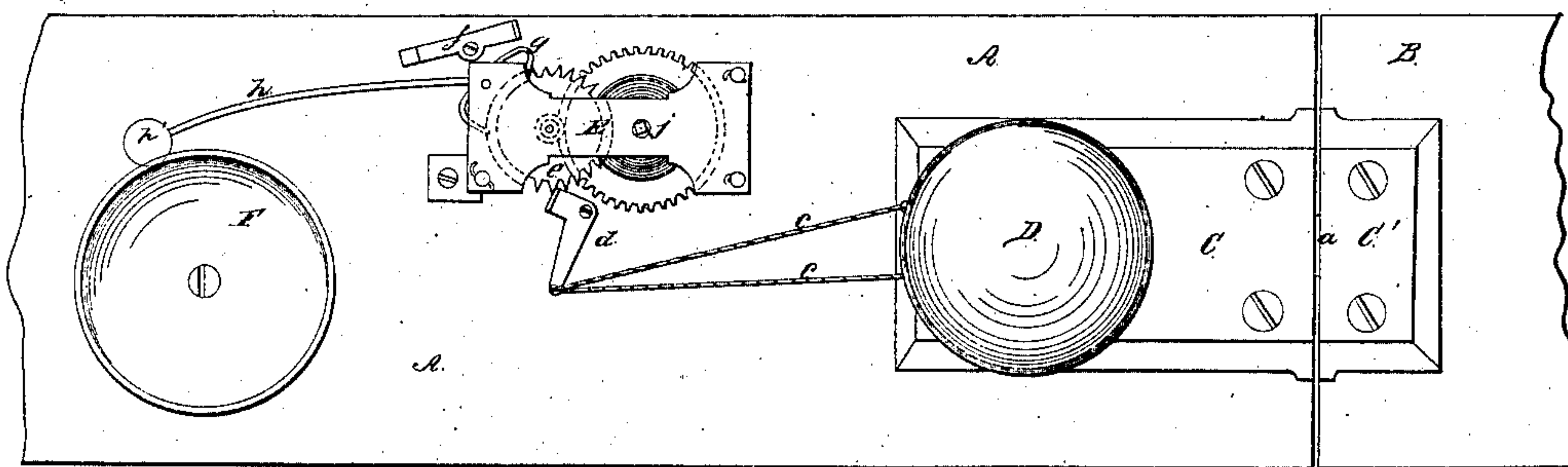


Fig. 2.

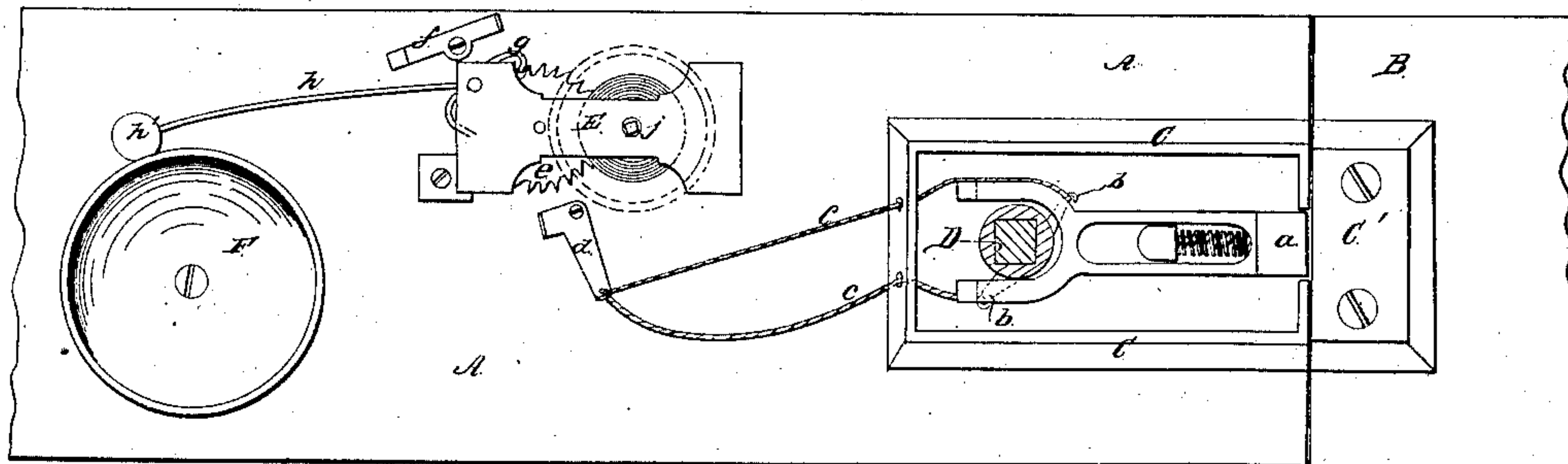
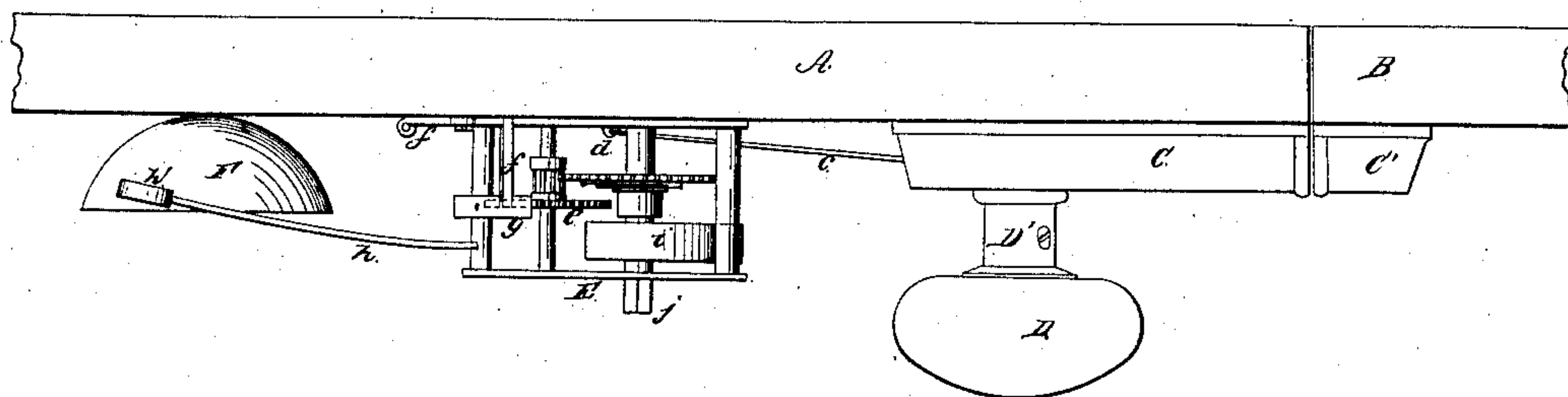


Fig. 3.



*Witnesses:
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United States Patent Office.

RUSSELL BUNKER, OF HUDSON, WISCONSIN.

Letters Patent No. 62,604, dated March 5, 1867.

IMPROVED BURGLAR ALARM.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, RUSSELL BUNKER, of Hudson, in the county of St. Croix, and State of Wisconsin, have invented a new and improved Burglar Alarm; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a view of the inside of a portion of a door showing the alarm applied to the door-latch.

Figure 2 is a similar view, showing the manner of connecting the releasing pawl of the alarm to the tumbler on the stem of the door-knob.

Figure 3 is a top view of fig. 2.

Similar letters of reference indicate corresponding parts in the three figures.

This invention is designed to afford a simple and efficient safeguard against the entrance of thieves into a house or room through the door thereof, by applying to the inside of a door a train of wheel-work, which is acted upon by a spring, similar to a clock spring, for ringing a bell; such contrivance being connected to the latch of the door in such manner that the slightest movement of the door-knob will cause an alarm to be struck, said mechanism being provided with a pawl, which can be set so as to stop the movement of the wheel-work when the alarm is not required to act, all as will be hereinafter described.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

In the accompanying drawings, A represents a portion of a door to which my invention is applied; B is the jamb or frame of this door, and C is a latch-plate containing a common sliding spring-latch, *a*, which catches in the latch-guard C' on the door-frame B. D is the door-knob, and D' its stem, which oscillates the two tumblers *b b*, shown in fig. 2; and thus moves the latch back, whether the knob be moved toward the right or the left. Two cords, *c c*, are connected to the ends of the tumblers *b b*, pass through holes which are made through the latch-plate C, and connected to the long arm of a pawl or trigger, *d*, as shown in figs. 1 and 2. This trigger *d* is pivoted to the door A at a suitable distance behind the latch-plate, and in such relation to the scape-wheel *e* of a train of wheel-work, that this trigger can be set so as to arrest the movement of said wheel when the wheel-work spring *i* is wound up, as represented in fig. 1. When the door-knob D is turned very slightly, the tumblers, one or the other, will act upon the trigger *d* through the medium of the cords *c*, and move this trigger so as to release the scape-wheel *e*. The bell, F, is secured fast to the door A, and struck by means of a hammer, *h'*, the rod *h* of which is secured firmly to the oscillating staff of the pallets *g*, so that when the scape-wheel is free to turn, and is actuated by the spring *i*, the hammer *h'* will continue to strike the bell until the force of said spring becomes exhausted. The wheel-work which I have represented is like the striking-works of a clock; its frame, E, is firmly secured to the door A, and its spring can be wound up by applying a key to the staff *j*, around which said spring is wound. Above the escapement wheel *e* and pallets *g*, is a stop, *f*, which is a short bent strip pivoted to the door, and intended for preventing the portion *g* from vibrating and releasing the scape-wheel when the spring *i* is wound up, and the trigger *d* is released from this scape-wheel. Therefore, when the spring *i* is wound up, and it is desirable to keep it thus, and the stop *f* is down upon the portion *g*, the knob of the door can be used freely without striking the alarm. When it is desired to have the alarm struck, by a movement of the knob D the stop *f* is moved from the portion *g*, as shown in figs. 1 and 2, and the trigger *d* is set, so as to arrest the escapement wheel *e*, as shown in fig. 1. With the parts adjusted as indicated in fig. 2, the hammer *h'* will strike the bell until the spring *i* ceases to act. When the trigger *d* is thus released from its wheel *e*, no movement of the knob D will bring it back again to its former position, as both cords, *c c*, connecting it with the tumblers *b b*, are attached to its long arm, as shown. It will be seen from the above description that the alarm contrivances are very simple and not liable to derangement nor failure, and that they can be conveniently applied to the latch-knob of almost every door.

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

Combining an alarm mechanism, substantially as described, with a door-latch, in such manner that by moving such latch the cord *c* will release the trigger *d* from the scape-wheel, and cause the alarm to strike, substantially as herein set forth.

RUSSELL BUNKER.

Witnesses:

RESWELL HOLMES,

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