

(No Model.)

W. G. BENNETT.

ALARM LOCK.

No. 344,806.

Patented July 6, 1886.

Fig. 1

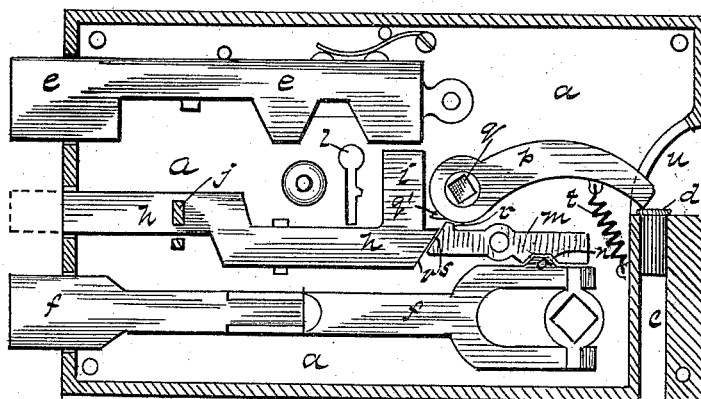


Fig. 2.

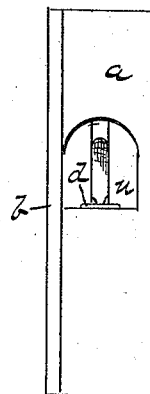


Fig. 3.

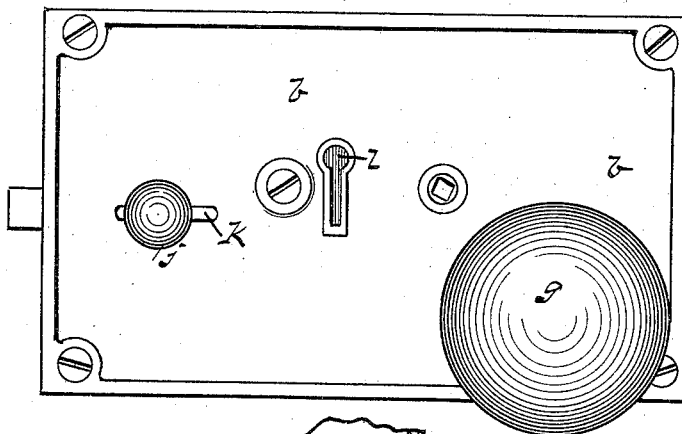
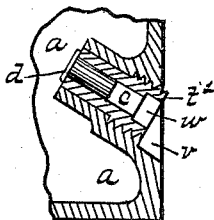


Fig. 4.



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ALARM-LOCK.

SPECIFICATION forming part of Letters Patent No. 344,806, dated July 6, 1886.

Application filed March 20, 1886. Serial No. 196,032. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM GORDON BENNETT, a citizen of the United States, residing at Sharpsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Alarm-Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improvement in burglar-alarm door-locks, the object being to provide a door-lock having a burglar-alarm arranged inside the shell in a manner that the door to which the lock is attached cannot be opened or the lock tampered with without sounding an alarm and thereby giving a warning to the inmates of the house; and with this end in view my invention consists in certain details of construction and combination of parts, as will be more fully set forth hereinafter.

In the accompanying drawings, Figure 1 is a front sectional elevation of a door-lock provided with my improved burglar-alarm constructed in accordance with my invention. Fig. 2 is an end elevation of the same, wherein the recess at the rear of the lock is shown, which provides a means for introducing the cap or cartridge in position. Fig. 3 is an exterior front view showing the position of the knobs and key-holes. Fig. 4 is a sectional elevation of another means for securing the cap or cartridge in position.

To put my invention into practice, I provide a shell, *a*, and cover *b*, which differs in no essential feature from those now in common use, except at the rear, where I form a receptacle, *c*, for the cap or cartridge *d*. I now provide two bolts, *e f*, the one operated by a key and the other by a large knob, *g*, similar to those of the ordinary lock. Between these bolts *e f*, I place another, *h*, having a vertical extension, *i*, at one end, which, when the bolt *h* is pushed forward into the keeper by means of a small knob, *j*, working in a slot, *k*, on the outside of the lock, covers or closes the key-hole *l*, which prevents the lock from being opened by a key from the outside of the door.

At the rear of this bolt *h*, I place a horizontal bar, *m*, pivoted at or near the middle, the one end nearest the bolt *h* being beveled or inclined, which works against a similar bevel or incline formed on the end of the bolt *h*, as will be more fully described hereinafter. On the under side of this horizontal bar *m* is formed an open slot or recess, *n*, having inclined sides, which fits neatly about a projection, *o*, on the bolt *f*, placed below. Above this bar *m*, I pivot a hammer, *p*, having a square opening, *q*, formed in the pivot, which provides a means for operating the hammer *p* from the outside of the lock, by means of a key constructed for that purpose. A small projection, *q'*, on the pivotal end of the hammer *p*, in conjunction with another, *r*, on the inclined surface *s* of the bar *m*, provides a means for suspending the hammer *p* in a vertical position. A strong spiral spring, *t*, secured to the hammer *p* and side of the lock-case, forces the hammer *p* down with sufficient force to explode the cap or cartridge *d* when released from the projection *r* on the bar *m*. A cylindrical receptacle, *c*, formed in one end of the lock, within reach of the hammer *p*, provides a holder for the cap or cartridge *d*, which may be placed in position from the outside through the recess *u*, formed in the rear of the lock. The cartridge *d* may be set in a thimble, *v*, and screwed into a recess, *v*, formed in the rear of the lock, (see Fig. 4,) with the same square-pointed key used for revolving or setting the hammer *p*.

The operation is as follows: The door to which the lock is attached is closed and locked from the inside by means of a key in the same manner as in a common lock. The central bolt, *h*, is now pushed forward into the keeper by means of the small knob *j*, which operation brings the vertical projection *i* on the bolt *h* across the key-hole *l*, thereby preventing a key from being placed in the lock from the outside of the door. A key is now placed in the square opening *q*, formed in the pivot of the hammer *p*, and turned or revolved until the small projection *q'* on the hammer *p* is caught by the projection *r* on the bar *m*, which secures the hammer *p* above the cap or cartridge *d*. Should the knob *g* of the lock be turned or otherwise disturbed the projection *o* on the bolt *f*, working in the recess *n*, formed

in the bar *m*, releases the hammer *p*, and, descending with force, explodes the cap or cartridge *d*. Should the central bolt, *h*, be moved back from the keeper, the inclined face *v'* on the bolt *h*, engaging with that of the bar *m*, releases the hammer *p* from the projection *r* and gives an alarm, as before described.

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

1. In a combined door-lock and burglar-alarm, the combination, consisting of the shell *a* and bolts *e f*, operated as described, the hammer *p*, actuated by the spring *t*, and a means for setting or securing the same above the receptacle *c* for the cap or cartridge *d*, the receptacle *c*, formed at the rear of the lock, and recess communicating with the receptacle *c* from the outside of the lock, the vertical projection *i* on the bolt *h*, for closing the key-hole, the inclined surfaces *s r* on the bar *m*, and

bolt *h*, for releasing the hammer *p*, the projection *o* on the bolt *f*, and corresponding depression, *n*, in the bar *m*, as a means for releasing the hammer *p* when the bolt *f* is disturbed, substantially as set forth and described. 25

2. In combination with a combined door-lock and burglar-alarm provided with a hammer, *p*, and spring *t*, and a means for operating the same by the action of the lock, a thimble, *t'*, provided with a screw-thread, in which the cap or cartridge *d* is placed, and a recess, *v*, formed in the rear of the lock, provided with a corresponding screw-thread for securing the thimble *t'* therein, as and for the purpose set forth. 30 35

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Witnesses:

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