

W. H. CLINE.  
ALARM LOCK.

No. 186,111.

Patented Jan. 9, 1877.

Fig. 1.

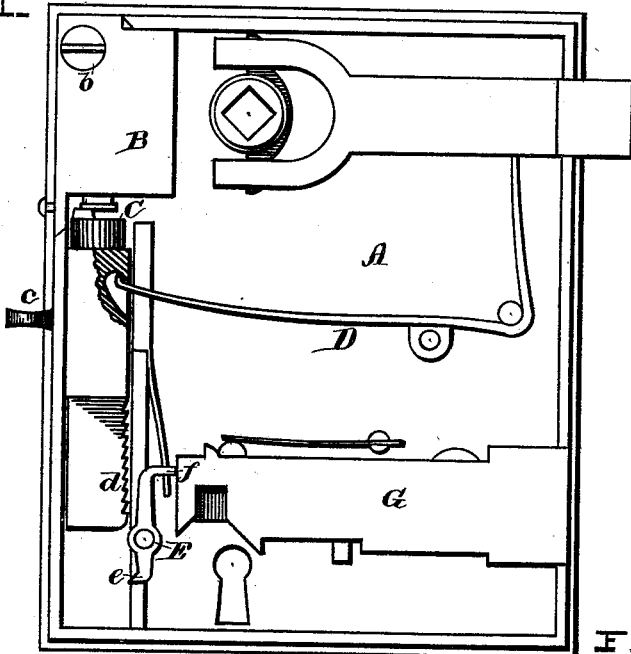


Fig. 2.

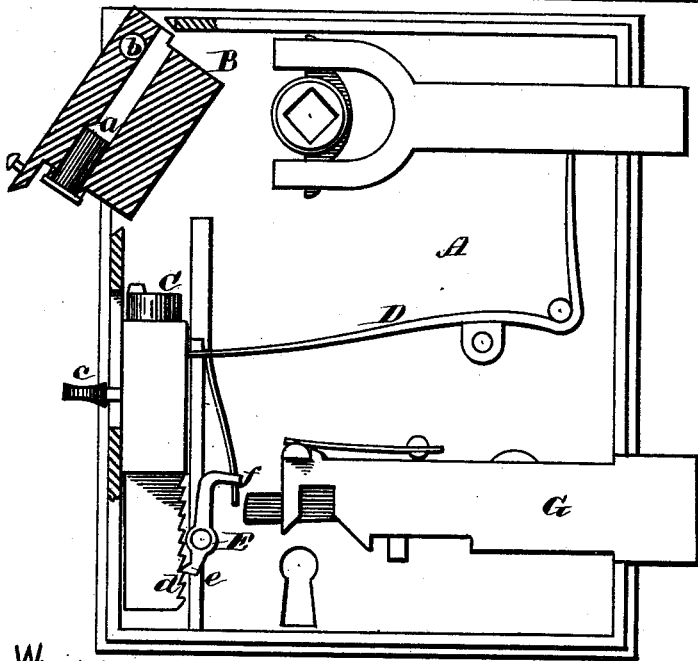


Fig. 3.



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Fig. 4.

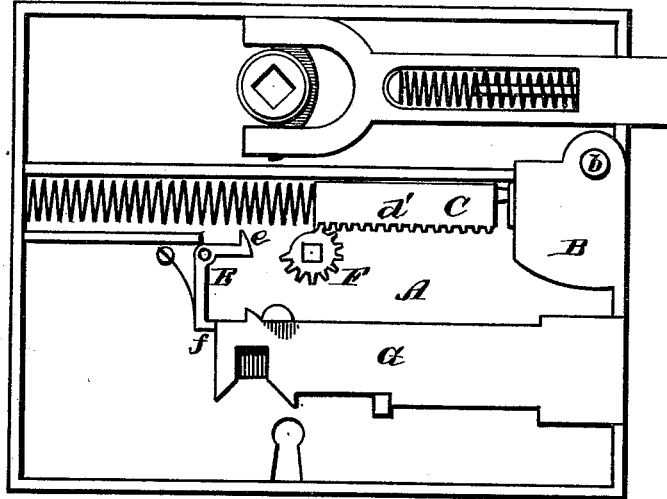


Fig. 5.



Fig. 6.  
B'



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# UNITED STATES PATENT OFFICE.

WILLIAM H. CLINE, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO GEORGE S. CLEMENTS AND MARTIN H. METTE.

## IMPROVEMENT IN ALARM-LOCKS.

Specification forming part of Letters Patent No. 186,111, dated January 9, 1877; application filed November 21, 1876.

*To all whom it may concern:*

Be it known that I, WILLIAM H. CLINE, of Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Burglar-Alarm Locks; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is an elevation of the inside works of a rim-lock, having my attachment applied and shown in its released position. Fig. 2 is a similar view, showing the attachment "set," but the anvil or cartridge chamber swung out, so as to illustrate the manner in which it may be charged. Fig. 3 is a rear edge view of the lock. Fig. 4 is an interior elevation of a mortise-lock, showing the necessary modification of the attachment to adapt it to such locks. Fig. 5 is a face or edge view of such lock. Fig. 6 is a side view of a cap-anvil for use instead of a cartridge-chamber.

This invention is in the nature of an attachment for locks for exploding a cartridge or cap or other detonant, for the purpose of giving an alarm at any improper manipulation of the lock, as by burglars.

The letter A designates the case of an ordinary rim-lock, one corner of which is cut away, and in it is placed a block, B, swung on a pivot, *b*. In this block is made a cartridge-chamber, *a*, or instead thereof a cap-anvil, *B'*, Fig. 6, may be provided. The block is hung on a pivot, *b*, in order that it may be swung outward (see Fig. 2) to be charged with cartridge, cap, or other detonant.

In a suitable compartment below this block is arranged a hammer, C, which is adapted to explode caps, cartridges, &c., by means of the driving or retracting power of a spring, D, connected therewith. This spring may be straight and flat, as shown in Fig. 1, or spiral and arranged as in Fig. 4. The hammer is

held in a retracted position by means of a dog, E, pivoted centrally, whose nose *e* engages with notches *d* in the hammer, said dog being pressed against the hammer by a suitable spring, so as to readily catch into its notches.

By drawing the hammer downward by its knob *c*, when the bolt G is thrown out into the locked position, the dog engages said hammer and retains it in such position, (see Fig. 2,) and when the bolt is retracted to unlock the door, &c., as in Fig. 1, the heel thereof, coming in contact with the tail-piece *f* of the dog, draws the dogs nose *e* out of the notch *d*, and the hammer being thereby unconfined, its spring forces or drives it up, and causes it to explode the charge in the block B, thereby giving an alarm.

In order to adapt my attachment to mortise-locks (see Fig. 4) the block B is hinged in the front edge thereof, the hammer made to travel in a tube or compartment in the rear of the block, and a spring suitably connected therewith.

Instead of a knob for drawing the hammer down, a rack, *d'*, is provided into which a pinion, F, meshes. This pinion is operated from the outside by a key or knob, or other device.

A dog, *e'*, of appropriately modified construction is used to engage with the rack *d'*, for the purpose of holding the hammer in the retracted position, and said dog is released by the retraction of the locking-bolt, as before set forth.

I have specified only two classes of locks to which my attachment may be applied; but obvious mechanical changes are all that is necessary in order to adapt it to various other classes.

What I claim is—

1. The notched spring-hammer C, provided with a knob, *c*, in combination with the spring-dog E, having nose *e* and tail-piece *f* and case A, all arranged and operating to catch and hold the hammer in any one of the notches, substantially as shown.

2. In an alarm-lock the pivoted block B,

substantially as described, adapted to be swung outward for the purpose of receiving a cartridge, as set forth.

3. In an alarm-lock the combination of the pivoted block B, notched spring-hammer C, spring-dog E, provided with nose *e*, and tail-piece *f*, the bolt G, and case A, substantially as shown and described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

WILLIAM H. CLINE.

Witnesses:

G. H. VOSS,

WILLIAM M. DAVIS.