

E. E. LUNDBERG.
ALARM ATTACHMENT FOR DOOR LOCKS.
APPLICATION FILED MAY 6, 1909.

937,080.

Patented Oct. 19, 1909.

Fig. 1

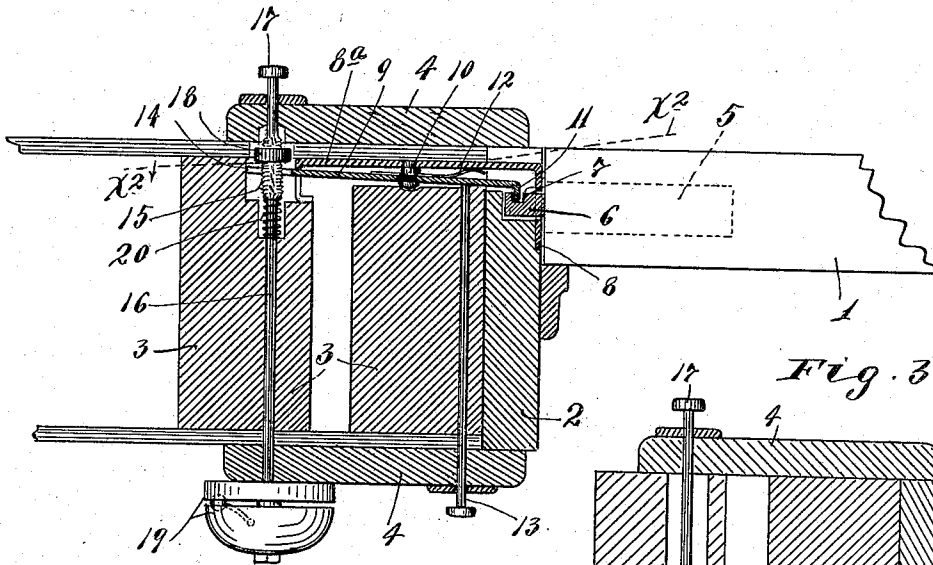


Fig. 2

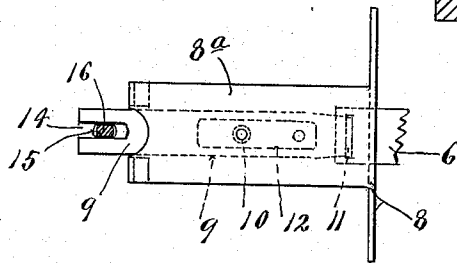
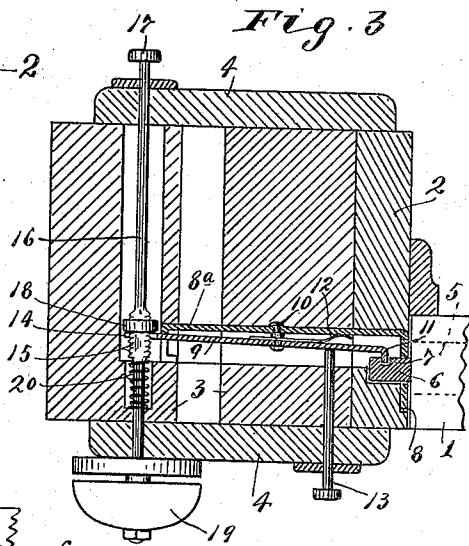


Fig. 3



Witnesses.
A. H. Osahl.
Alice J. Swanson.

Inventor.
Emil E. Lundberg.
By his Attorneys.
Williamson Merchant

UNITED STATES PATENT OFFICE.

EMIL E. LUNDBERG, OF MINNEAPOLIS, MINNESOTA.

ALARM ATTACHMENT FOR DOOR-LOCKS.

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To all whom it may concern:

Be it known that I, EMIL E. LUNDBERG, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Alarm Attachments for Door-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 appertains to make and use the same.

My invention has for its object to provide a simple and efficient burglar alarm attachment for door locks, and to this end, it consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

In the accompanying drawings which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings: Figure 1 is a view chiefly in horizontal section, but partly in plan, showing my improved alarm device applied in working position; and Fig. 2 is a detail partly in section on the line $x^2 x^2$ of Fig. 1, with some parts broken away, and with other parts removed; and Fig. 3 is a view corresponding to Fig. 1, but showing the device applied to a door arranged to swing inward instead of outward as shown in Fig. 1.

The numeral 1 indicates a door and the numeral 2 an ordinary door frame, which latter is applied in the usual way to frame studs 3.

The numeral 4 indicates the door casings.

The door 1 is provided with a door lock 5, which may be of any suitable construction provided with a key actuated lock bolt 6, which, in accordance with my invention, is provided with a detent or lock notch 7.

The lock bolt 6 works through a suitable passage in a latch plate 8 secured to the door frame, and provided on the outer side of the door frame, but inside of the outer casing 4, with an extension plate 8^a. For coöperation with the detent 7 of the lock bolt 6, I provide a bolt lock preferably in the form of a lever 9, intermediately pivoted at 10 to the extension 8^a of the latch plate 8. At its outwardly extended end, this lock lever 9 is bent laterally to form a detent 11 adapted to engage the detent or notch 7 of said lock bolt. A light leaf spring 12 applied to the lock lever 9, engages the plate extension 8^a

and tends to hold the detents 7 and 11 of said lock bolt and lever engaged. A lever releasing plunger or rod 13 is slidably mounted as shown, in the inner casing 4 and in one of the studs 3, and when pressed against said lever, will force the detent thereof out of engagement with the detent of said lock bolt 6.

The inner end of the lock lever 9 is shown as provided with a longitudinal slot 14, through which the flattened threaded portion 15 of a lever releasing plunger or rod 16 is arranged to work freely. This releasing plunger or rod 16 extends through one of the studs 3, and through both the inner and outer casings 4, and it is provided with a head or finger piece 17 at that end thereof which projects at the outer side of the door frame, and which it should be assumed, is located at the exterior of the building. On the threaded section 15 is an adjustable nut 18 that is adapted to engage the end of the lever 9 when said releasing rod 16 is pressed inward. An ordinary mechanically actuated bell or gong 19 is applied to the inner casing 4, and is arranged to be operated by movements of the releasing rod 16 which is necessary in order to cause the latter to force the lock lever 9 into its releasing position.

The numeral 20 indicates a light coiled spring, shown as seated in one of the studs 3, and reacting against a shoulder of the threaded rod section 15 and exerting a force which normally holds the rod 16 in its outwardly projected position, as shown in Fig. 1.

As is evident, a person at the inner side of the door may release the lock lever 9 from the bolt 6 without sounding the gong 19, simply by pressing on the head of the releasing rod 13. When, however, the lever 9 is released from the outer side of the door by pressing inward on the releasing rod 16, and thereby forcing the nut 18 into engagement with said lever, the gong 19 will be sounded, thereby giving an alarm which indicates that the door lock is being tampered with.

The construction illustrated in Fig. 3 is identical with that shown in Fig. 1, except that the rod 13 is shorter; that the threaded section 15 is located near to the inner end of the rod 16; and that the parts 8^a and 9 are mounted closer to the inner casing 4, so as to position the lock lever 9 for action on the

lock bolt 6, which latter, when the door is arranged to swing inward as shown in said Fig. 3, is located close to the inner casing 4.

The device above described is of simple construction, may be easily applied, and is efficient for the purposes had in view.

What I claim is:

1. The combination with a door lock having a lock bolt, of a lock for said lock bolt, an alarm device, a connection for releasing said lock bolt from the inner side thereof without actuating the said alarm, and a connection for releasing said lock bolt from the outer side thereof arranged to actuate said alarm.

2. The combination with a door and frame, of a lock mounted in said door and provided with a lock bolt insertible into a seat in said door frame, a lock lever pivotally mounted in said door frame and operating to lock said bolt in an operative position, a releasing rod for said bolt lock extending to the inner side of said door frame, an alarm bell at the inner side of said door frame, and a releasing rod for said lock lever extending to the outer side of said door frame, and arranged to operate

said bell when moved to release said lock lever from said lock bolt, substantially as described.

3. The combination with a door and a door frame, of a lock mounted in said door and provided with a lock bolt formed with a lock depression, a spring pressed lock lever pivotally mounted in said door frame and provided with a detent at one end engageable with the depression of said lock bolt, a releasing rod for said lock lever extending therefrom to the inner side of said door frame, a second releasing rod for said lock lever extending through said door frame to the outer side thereof, and provided with a nut or shoulder operative on the inner end of said lock lever to release the same, and an alarm bell arranged to be operated by movement of said second releasing rod, required to release said lever from said lock bolt.

In testimony whereof I affix my signature in presence of two witnesses.

EMIL E. LUNDBERG.

Witnesses:

E. WICKSTROM,
F. D. MERCHANT.