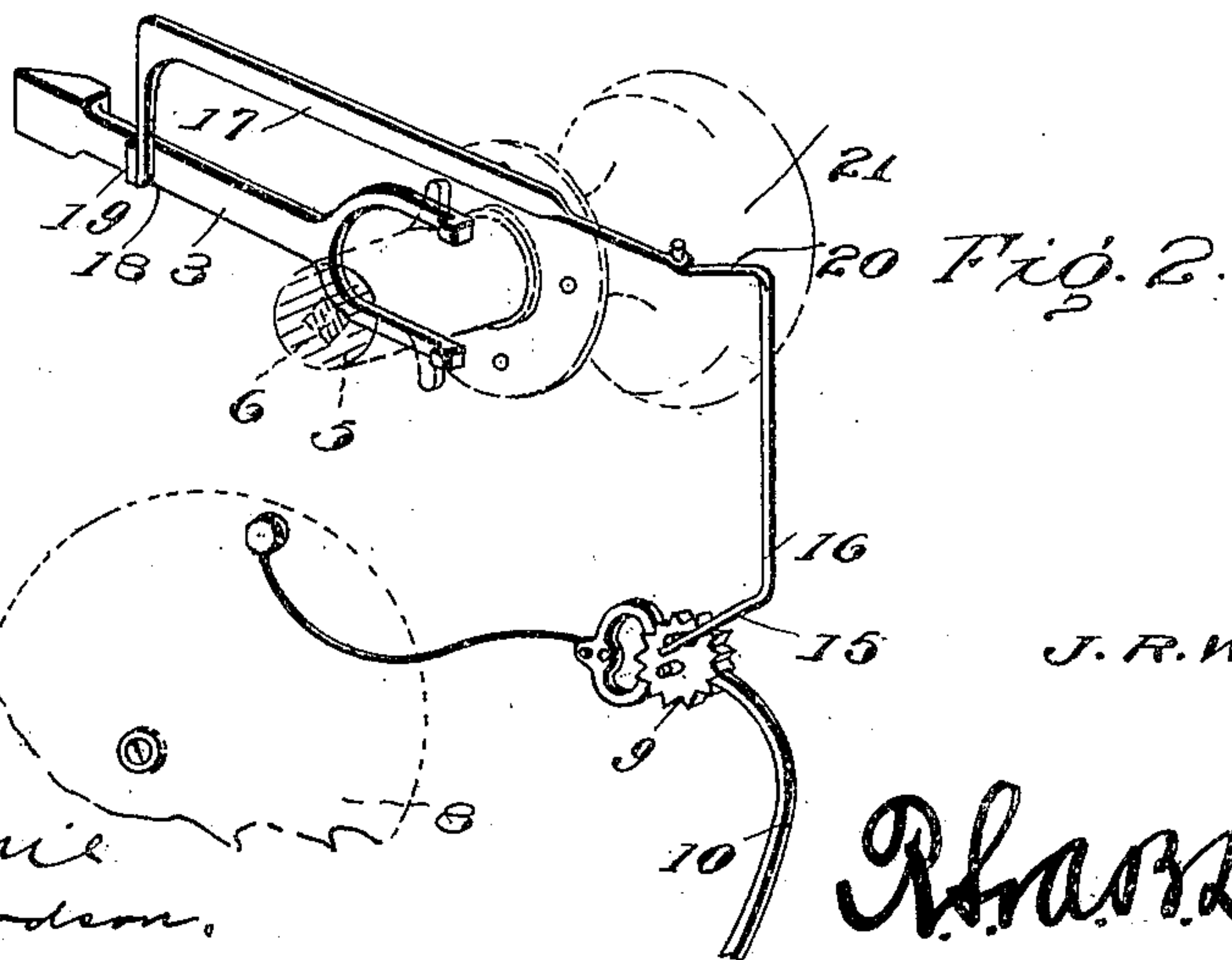
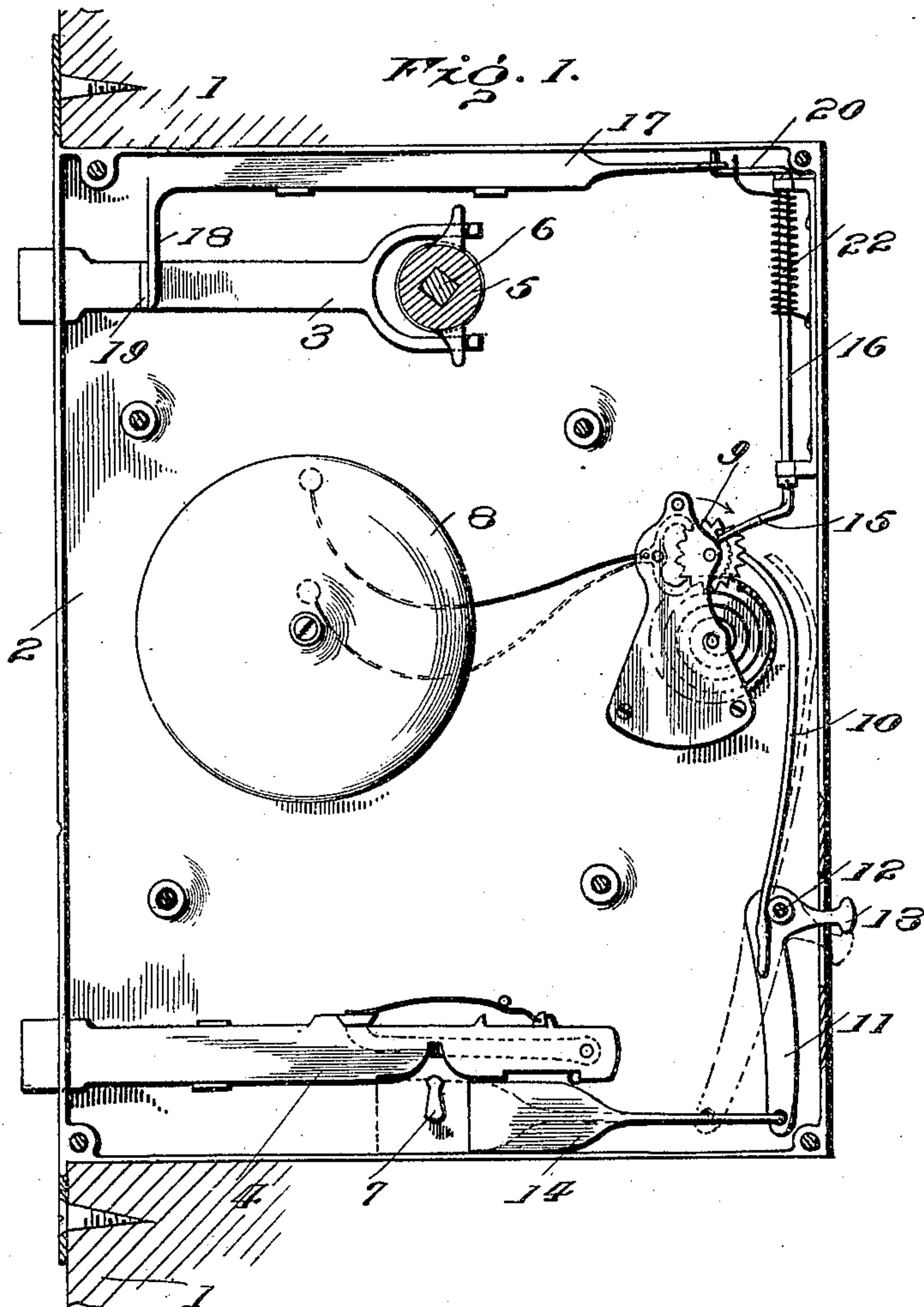


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PATENTED DEC. 19, 1905.

J. R. WELLETTE.
ALARM MECHANISM FOR LOCKS.
APPLICATION FILED AUG. 29, 1904.



Witnesses

Wm. H. Woodson.

Inventor

J. R. Wellette.

by,

Phar. B. Lacy, Attorneys

UNITED STATES PATENT OFFICE.

JIM RANDOL WELLETTE, OF ASSUMPTION, ILLINOIS.

ALARM MECHANISM FOR LOCKS.

No. 807,704.

Specification of Letters Patent.

Patented Dec. 19, 1905.

Application filed August 29, 1904. Serial No. 222,643.

To all whom it may concern:

Be it known that I, JIM RANDOL WELLETTE, a citizen of the United States, residing at Assumption, in the county of Christian and State of Illinois, have invented certain new and useful Improvements in Alarm Mechanism for Locks, of which the following is a specification.

This invention comprises an alarm mechanism especially adapted for use in connection with locks for doors and the like; and the invention includes, essentially, peculiar detent means operable by movement of the knob-spindle for setting the alarm mechanism, preferably a bell or similar device, off.

The invention also embodies a peculiar guard member for the key-opening of the lock, which initially governs the operation of the alarm, so as to throw the latter into and out of action.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the same for effecting the result reference is to be had to the following description and accompanying drawings.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a vertical sectional view, partially broken away, of the lock, bringing out clearly the arrangement of the various operating parts which comprise the invention. Fig. 2 is a perspective view, partially broken away, of the latch-bolt and adjacent cooperating parts.

In the drawings, Fig. 1 shows a door 1, broken away, the lock-casing 2 being attached thereto in any suitable manner.

The invention is applicable to mortise, surface, or any analogous construction of locks, and the mechanism utilized is preferably composed of the usual latch and lock bolts 3 and 4, respectively.

The latch-bolt 3 is mounted in the upper portion of the casing 2, whereas the lock-bolt 4 is located in the lower portion, the alarm mechanism being situated at a point between the two bolts in order to economize space and afford compact arrangement of parts. The latch-bolt 3 is operated by a tumbler 5, mounted upon the knob-spindle 6, said parts 3, 5, and 6 being of any approved construction.

The lock-bolt 4 is adapted for actuation by a

key inserted through the key-opening 7, formed in the lock-casing.

The alarm means utilized consists of a bell 8, operated by a suitable spring-motor in the ordinary manner. A ratchet-wheel 9, such as is commonly employed in spring-operating bells, is engaged by a pawl 10, the latter being used so as to normally hold the alarm mechanism out of operation. The pawl 10 is carried by an elbow-lever 11, pivoted in the lower portion of the casing, as shown at 12, and said lever 11 has one of the arms thereof extended out of the casing and provided with a finger-piece 13, whereby said lever may be readily operated. The other arm of the lever is connected with a slidable plate 14, mounted beneath lock-bolt and adapted by slidable movement to cover and uncover the key-opening 7. The plate 14 is utilized as a guard both to prevent insertion of the key into the lock and to prevent passage of any fraudulent means through said opening 7. When the guard-plate 14 is over the opening 7, the alarm mechanism is adapted for operation, the pawl 10 having been disengaged therefrom by previous movement of the lever 11. The alarm mechanism, however, is also held out of action by means of the detent-arm 15, projected from a shaft 16, mounted in the casing 2. The shaft 16 is operably connected with the latch-bolt 3, and slide 17 has a rigid arm 18 projected therefrom at one end, said arm 18 being engaged by a lug 19 upon the latch-bolt 3 in the movement of said latch-bolt. The other end of the slide 17 is connected with a crank-arm 20, extending from the shaft 16, so that if the knob (shown in dotted lines in Fig. 2 and indicated at 21) is turned the lug 19 will engage the arm 18 of the slide 17 and actuate the shaft 16. This movement will throw the detent 15 away from the wheel 9, and the latter will be set off in a manner which will be readily seen. The detent 15 is normally held in engagement with the wheel 9 by coil-spring 22, mounted upon the shaft 16, said spring positively bearing against the crank 20 and accomplishing the above function. In actual use during the day the guard-plate 14 is preferably disposed so as to uncover the opening 7, the pawl 10 normally engaging the wheel 9 to prevent operation of the alarm mechanism, even though the knob-spindle 6 is actuated. In locking the door, however, the lock-bolt 4 is operated as usual, after which the elbow-lever 11 is actuated so

as to force the guard-plate 14 over the key-opening 7. The pawl 10 is thereby disengaged from the wheel 9, and should a burglar or other person with fraudulent intentions attempt to open the door by operating the knob 21 the alarm mechanism will immediately be thrown into action, thereby effectively frustrating any such attempt.

Having thus described the invention, what is claimed as new is—

1. In an alarm of the class described, the combination of a lock embodying a casing having a key-opening therein, a guard for the key-opening, a bolt operating in the casing, an alarm device adapted to be set off by the bolt, an actuating member mounted in the casing and projecting out of the same, and an engaging member carried by the actuating member aforesaid and adapted to engage the alarm device to prevent setting off thereof under certain conditions of service.

2. In alarm mechanism for locks, the combination of a suitable casing, a latch-bolt, a slide operable by the latch-bolt, an alarm device, a ratchet-wheel governing the action of said alarm device, a shaft mounted in said casing, a crank extending from said shaft and connected with the slide, a detent projecting from said shaft and engaging the ratchet-wheel, and a spring normally holding the detent in engagement with the ratchet-wheel.

3. In alarm mechanism for locks, the combination of a suitable casing, a latch-bolt, a lock-bolt, said casing being provided with a key-opening, a guard-plate for said key-opening, an alarm device, a ratchet-wheel governing the action of said alarm device, a pawl engaging said ratchet-wheel and connected with the guard-plate aforesaid, a detent also engag-

ing the ratchet-wheel, and operable connections between the detent and the latch-bolt.

4. In alarm mechanism for locks, the combination of a suitable casing, a latch-bolt, a lock-bolt, said casing being provided with a key-opening, a guard-plate for said key-opening, an alarm device, a ratchet-wheel governing the action of said alarm device, a pawl engaging said ratchet-wheel and connected with the guard-plate aforesaid, a detent also engaging the ratchet-wheel, a shaft mounted in the casing and actuating the detent, a slide operable by the latch-bolt and connected with the shaft aforesaid, and a spring coöperating with said shaft to hold the detent in engagement with the ratchet-wheel.

5. In alarm mechanism for locks, the combination of a suitable casing, a latch-bolt, a lock-bolt, said casing being provided with a key-opening, an alarm device, a ratchet-wheel governing the action of said alarm device, a slidable guard-plate for the key-opening, an elbow-lever connected with said guard-plate, a pawl carried by said lever and engaging the ratchet-wheel, a slide mounted in the casing and operable by the latch-bolt, a shaft, a crank arm extended from said shaft and connected with the slide, a detent projected from the shaft and engaging the ratchet-wheel, and a spring mounted upon the shaft and normally holding the detent in engagement with said ratchet-wheel.

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

JIM RANDOL WELLETTE. [L. s.]

Witnesses:

CHARLES A. SPENCE,
J. T. WATSON.