

A. B. CRANE.

Improvement in Alarm-Locks.

No. 129,213.

Patented July 16, 1872.

Fig. 1.

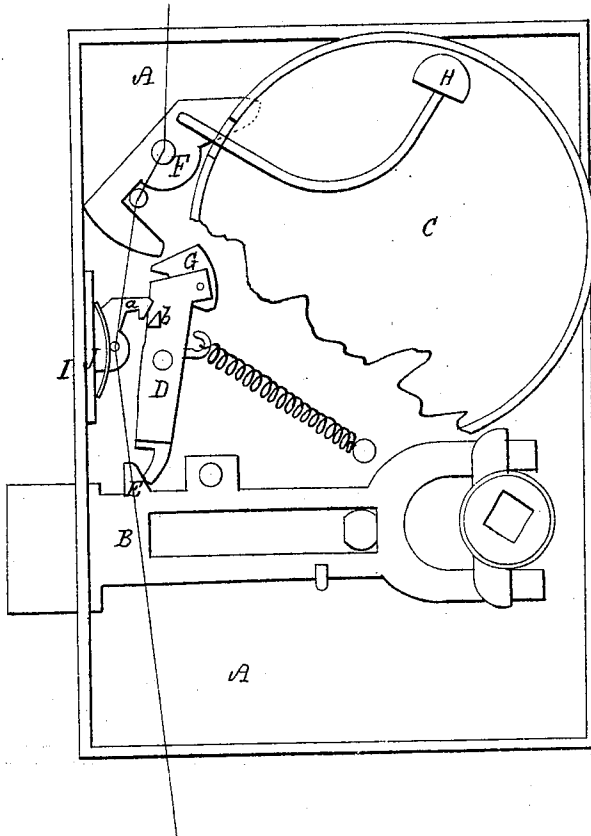
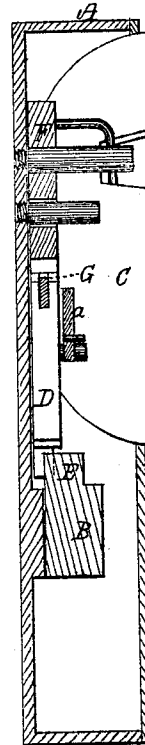


Fig. 2.
on line a.b. of Fig. 1.



Witnesses.
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IMPROVEMENT IN ALARM-LOCKS.

Specification forming part of Letters Patent No. 129,213, dated July 16, 1872.

Specification describing certain Improvements in Burglar-Alarms, or Alarm-Bell Mechanism, invented by AMAZIAH B. CRANE, of Newton, Middlesex county, Massachusetts.

These improvements relate to alarm bells or gongs when applied to money-drawers, or the doors or windows of houses or other objects; and consist in the combination, with the lock-bolt or latch and alarm mechanism, operated by the retraction of said bolt, of the means hereinafter described, whereby said mechanism may at pleasure be engaged with or disengaged from the bolt.

In the present instance I have represented my invention as applied to a door-lock, the case of the lock containing the entire apparatus.

The drawing accompanying this specification represents, in Figure 1, a face view, and in Fig. 2, a section of a door-lock containing my improvements.

A is the case of a door-lock, and B the sliding latch of the same, such elementary parts being of ordinary construction.

In carrying out my invention I dispose within a suitable part of the case A, preferably the upper, an alarm bell or gong, C, and I employ a connecting mechanism between the bell and latch composed as follows: Over the latch B and at the front of the lock-case I pivot at about its center an upright bar, D, and I attach to the adjacent part of the latch a rigid spur or tooth, E, so situated with respect to the lower end of the bar as to abut against and retract its lower end when the latch is retracted. Immediately over the bar D I dispose a bent lever, F, which is pivoted at its elbow to the lock-plate, and provided with a stop-pin and spring, in the usual manner. The swinging bar D carries at its upper end the ordinary tripper G, and is so disposed with respect to

the lever F that, when the latch B is retracted, its spur E impinges against and swings the bar upon its pivot, and the bar in its turn, by means of its tripper, which is rigid in this direction, strikes against and rocks the lever F upon its fulcrum until it passes by the latter and allows its hammer H to strike and sound the bell. As the latch is returned to place the bar D settles back to its normal position; its tripper slides over without actuating the lever F.

In order to readily disconnect the alarm mechanism from the latch at such times as may be desirable so to do, I apply to the inner face of the front plate I of the lock-case a sliding plate, J, bearing an inwardly-projecting hook, *a*, to hook over or seize hold of a stud, *b*, projecting laterally from the upper part of the bar D, the said plate J being formed with a thumb-piece or knob which extends into and through an upright slot cut in the lock-plate I, by which means the connecting or disconnecting of the alarm mechanism and bell may be instantly effected from the exterior of the lock or of the door, drawer, or other object to which said lock is applied.

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

The combination, with the bolt or latch B and bar D, operating together, as specified, of the slide J, arranged on the lock-plate and provided with hook *a* for engaging the stud *b* on bar D, said parts being constructed and arranged for joint operation, as herein shown and set forth.

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Witnesses:

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