J. H. P. INSLEE.

ALARM-LOCKS.

No. 195,608. Patented Sept. 25, 1877.

Fig. 1.

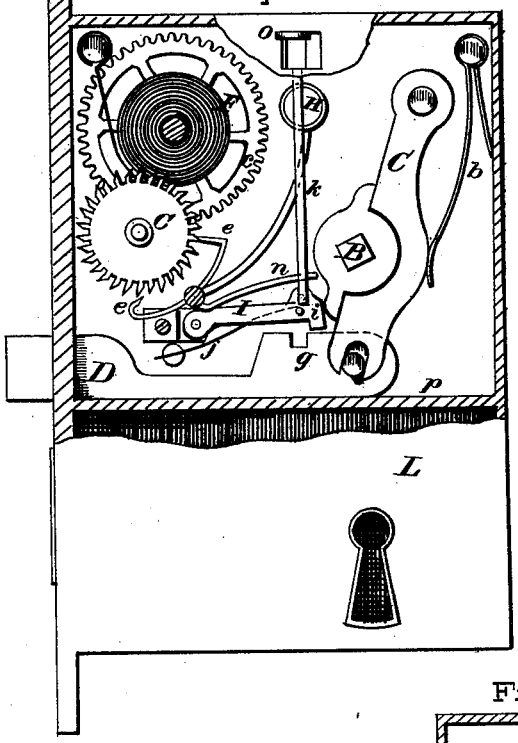


Fig. 2.

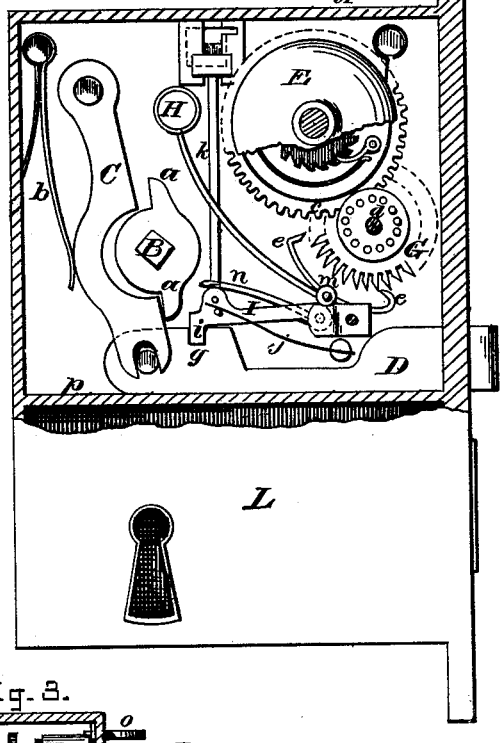
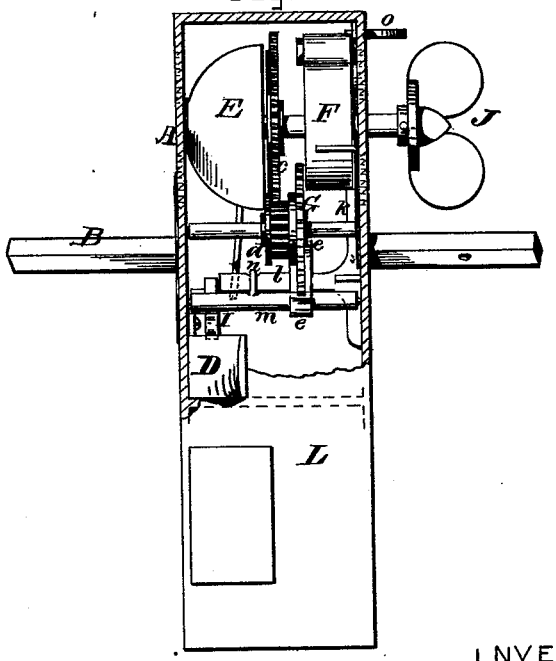


Fig. 3.



ATTEST=

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UNITED STATES PATENT OFFICE.

JOSEPH H. P. INSLEE, OF MOUNT VERNON, ASSIGNOR OF ONE-THIRD HIS RIGHT TO ROBERT RUSSELL, OF NEW YORK, N. Y.

IMPROVEMENT IN ALARM-LOCKS.

Specification forming part of Letters Patent No. **195,608**, dated September 25, 1877; application filed June 12, 1877.

To all whom it may concern:

Be it known that I, JOSEPH H. P. INSLEE, of Mount Vernon, in the county of Westchester and State of New York, have invented certain Improvements in Burglar-Alarms, of which the following is a specification:

This invention relates to that class of alarms which are actuated and operated in connection with an ordinary door-latch, the object being to lock fast the latch at the same time that the alarm is sounded.

The invention consists, essentially, in the combination of an alarm mechanism with an ordinary latch, the same being arranged in such a manner that when properly set any attempt to draw the latch will lock the same fast and sound the alarm.

It also consists in the various details and combinations of the mechanism, as will be more fully hereinafter described.

In the drawings, Figure 1 shows the interior mechanism of a latch embodying my improvements. Fig. 2 is a view of the same taken from the opposite side. Fig. 3 is a front view of the same.

Let A represent a latch-case, inclosing the usual parts which go to make up a latch. B is a knob-spindle, provided with lugs *a a*. C is a latch-lever, D a latch, and *b* a latch-spring. These parts are, or may be, arranged in the usual manner.

Within the case containing the latch mechanism are the gong E, driving-spring F, gear-wheels *c d*, scape-wheel G, pallets *e e*, and hammer H, of an ordinary alarm mechanism.

In the latch D is a notch, *g*, and on a lever, I, is a tooth, *i*, arranged, under certain conditions, to engage said notch *g* and form a detent. The lever I may fall of its own weight, or be habitually thrown down by a spring, *j*. Any form of detent whereby the lever I will arrest the endwise motion of the latch D may serve the purpose as an equivalent for that shown. A rod, *k*, arranged to play up and down the wall of the latch-case, has a cross-arm, *l*, which takes hold of the lever I. To the upper end of the rod *k* is secured a lip or thumb-piece, *o*, which projects through an opening in the case.

It will be seen that by lifting on the lip *o* the free end of the lever I is lifted, and any simple device which will enable the operator to lift the said lever from the outside of the case may serve the purpose as an equivalent of the precise construction shown.

From a cross-shaft, *m*, (which bears the pallets *e e* and the hammer H,) projects a rod or wire, *n*, which rests upon the cross-arm *l*, or it may rest upon any projecting part of the rod *k* or the lever I and operate equally well, as will be understood when its function comes to be described.

The operation of the mechanism is as follows: The spring which actuates the alarm is wound up by means of a wing-key or crank, J, the ordinary ratchet mechanism being provided, and the projecting lip *o* is pushed sidewise into a notch at the upper part of the aperture in the case. This holds the tooth *i* up out of the notch *g* in the latch, and permits the latter to move freely. It also lifts the free end of the rod *n*, and causes the upper pallet *e* to engage the teeth of the scape-wheel and serve as a detent, thus effectually preventing any movement of the alarm mechanism. This position of the parts, which is shown in Fig. 1, is maintained ordinarily during the day. At night the lip *o* is pushed out of its retaining-notch, and the projection *i* then falls and rests upon the top of the latch, from which it before stood clear, back of the notch *g*. The alarm is now set, and the first movement of the latch causes the tooth *i* to drop into the notch in the same. This effectually prevents any movement of the latch in either direction, and at the same time it disengages the pallet from the scape-wheel and permits the alarm to sound until the spring runs down.

The action of the scape-wheel on the pallets causes the hammer to strike the bell very rapidly.

The latch-case may be perforated on one or both sides, to avoid muffling the sound of the bell.

The lower part L forms a continuation of the latch-case, for the reception of a bolt, to be shot by a key.

The bolt and key form no part of my present invention, and, indeed, may be of the ordinary kind; but the part L which contains them is separated from the cavity which contains the latch by a partition, *p*, upon which the latch

D rests and slides. This partition serves to prevent any one from tampering with the latch mechanism by inserting a tool at the key-hole.

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

1. In a burglar-alarm, an alarm mechanism inclosed within the latch-case, a latch and its operative mechanism, and a detent device arranged to act at the same time upon both alarm and latch, the whole being so arranged that an attempt to draw the latch locks it fast and also sets the alarm going at the same time, substantially as set forth.

2. The combination of a latch, D, provided with a notch, *g*, or its equivalent, a lever, I, provided with a tooth, *i*, to engage said notch *g* and form a detent, and a suitable alarm mechanism, when the said alarm is arranged to be set going by the dropping of the tooth into the notch, substantially as set forth.

3. The combination of a spring-actuated alarm, substantially as shown, with the lever I, latch D, rod *n*, or its substantial equivalent, and the rod *k*, all arranged substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

J. H. P. INSLEE.

Witnesses:

ARTHUR C. FRASER,

SAM. TRO. SMITH.