No. 626,650.

Patented June 6, 1899.

C. H. CONNOLLY.

SEAL LOCK.

(Application filed Apr. 21, 1898.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

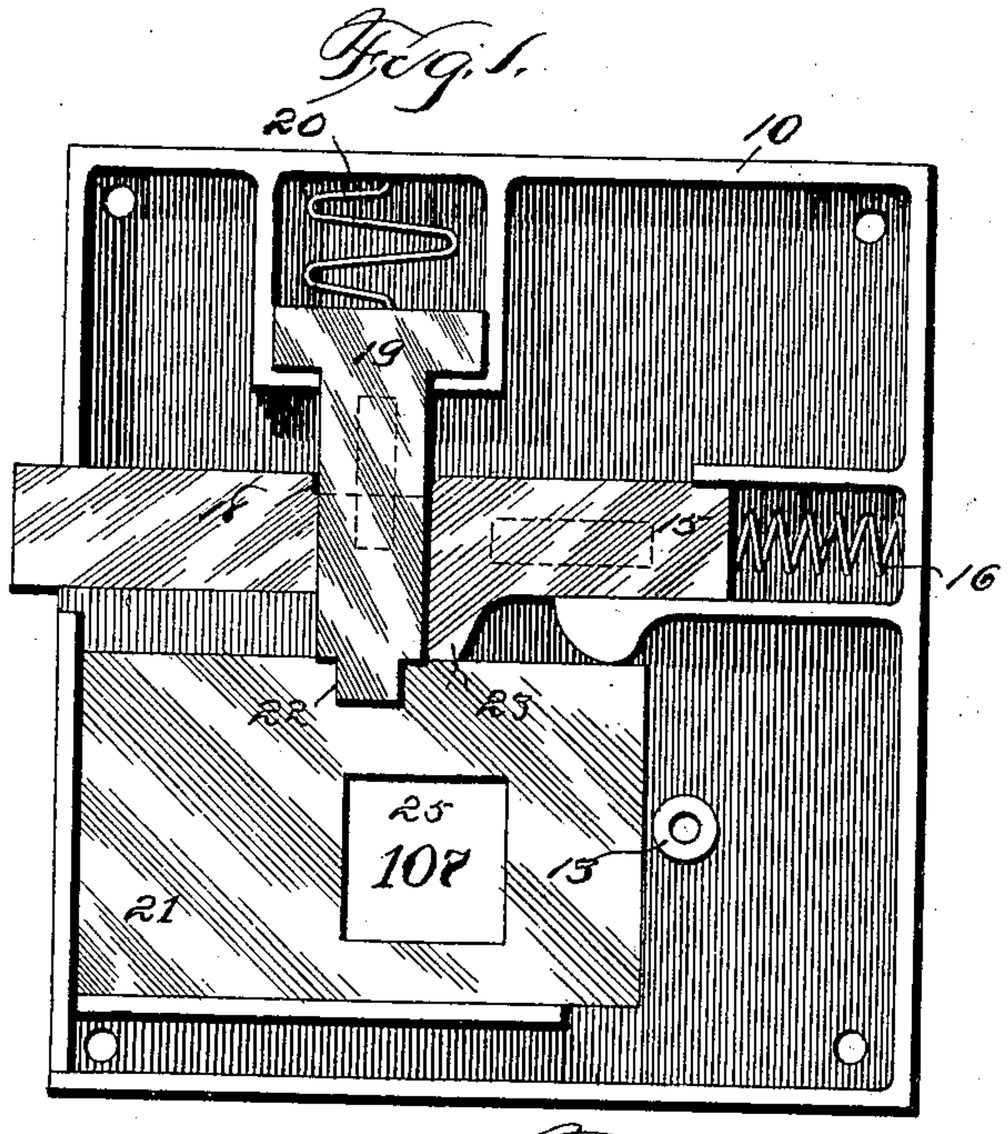

Fig. 4.

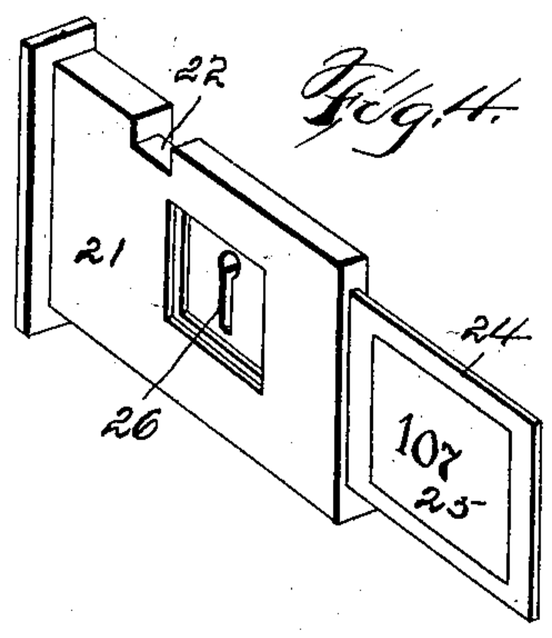

Fig. 5.

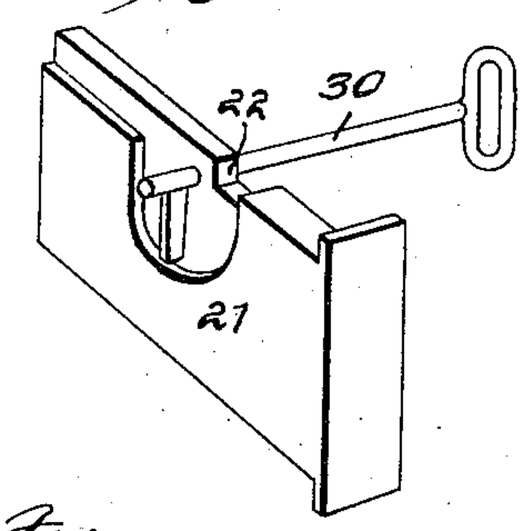

Fig. 6.

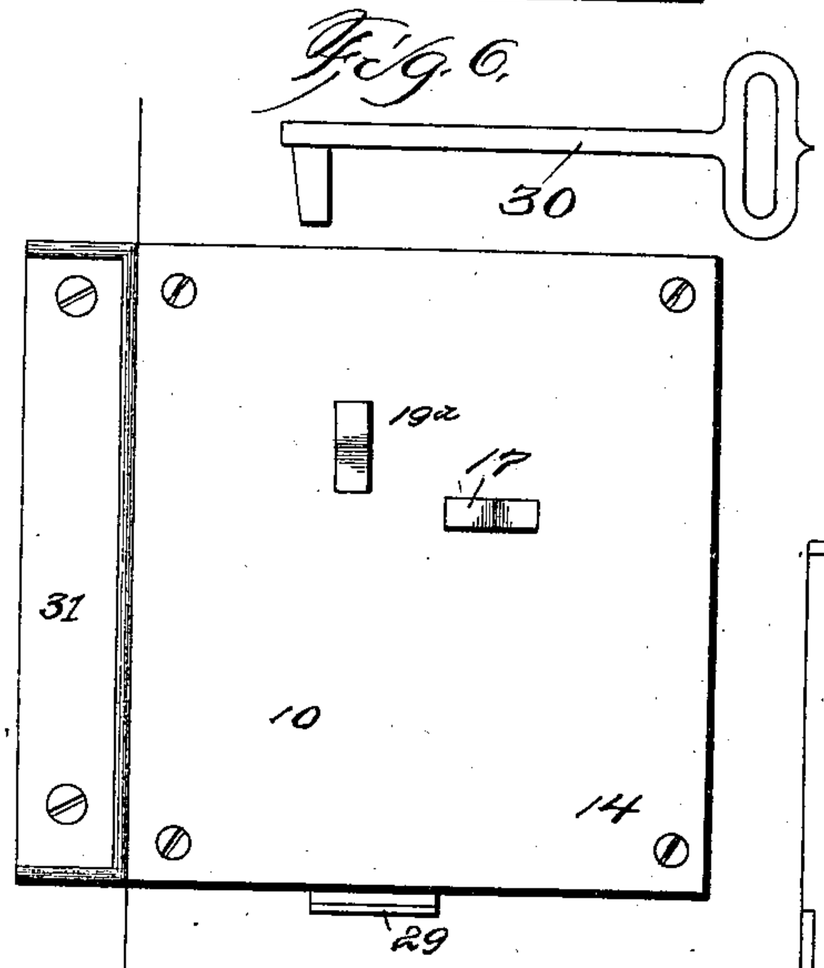

Fig 3.

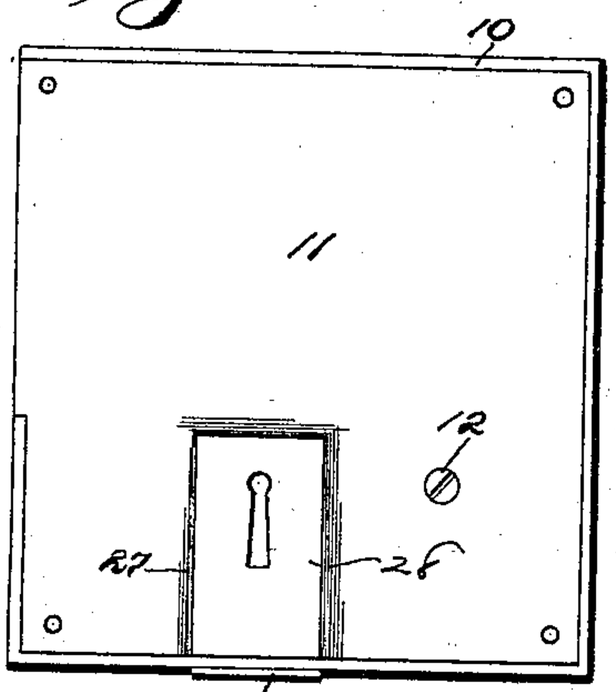

Fig. 2.

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No. 626,650.

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C. H. CONNOLLY.

SEAL LOCK.

(Application filed Apr. 21, 1898.)

(No Model.)

2 Sheets—Sheet 2.

Fig. 7.

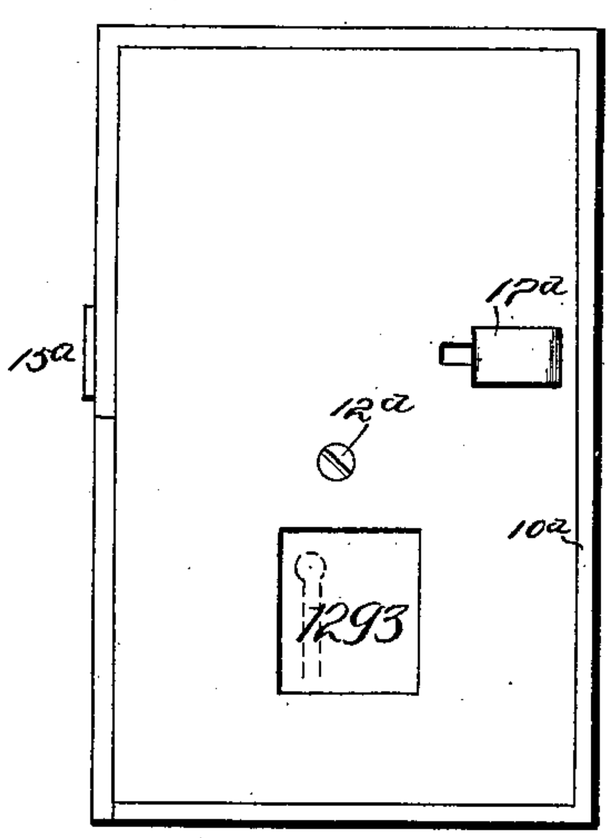


Fig. 8.

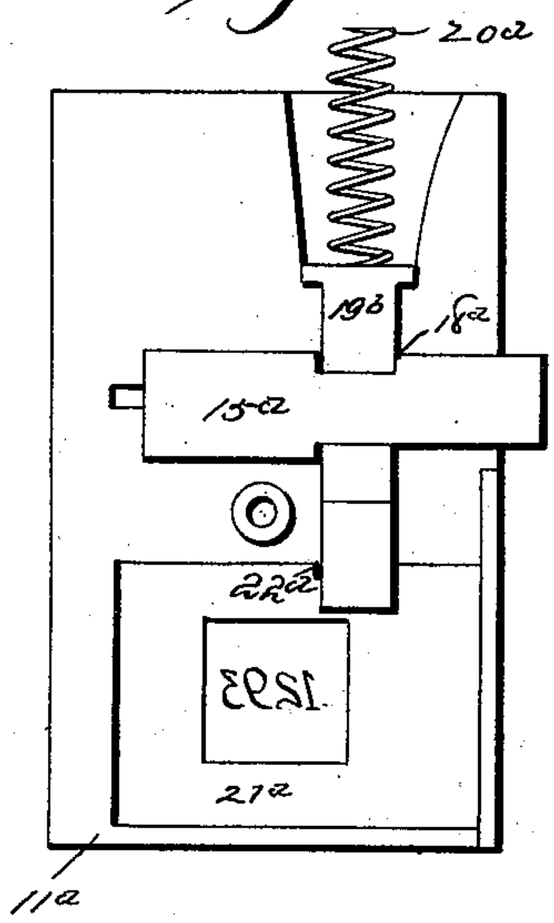


Fig. 9.

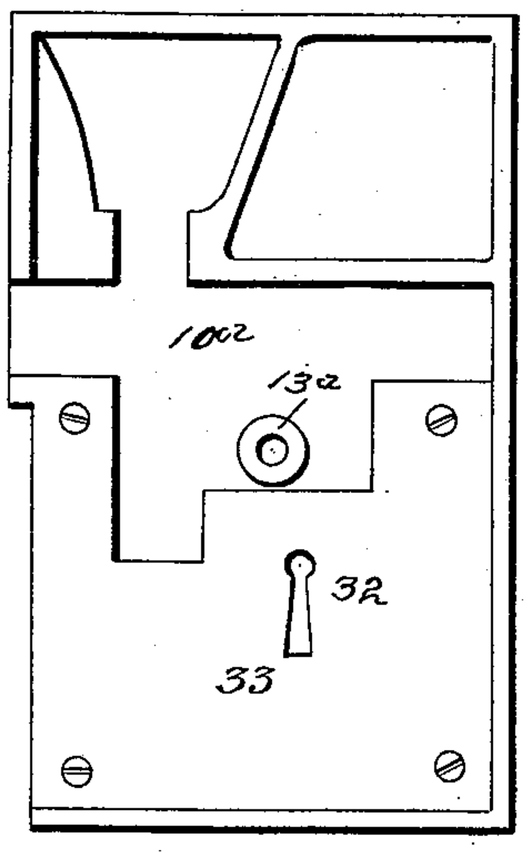
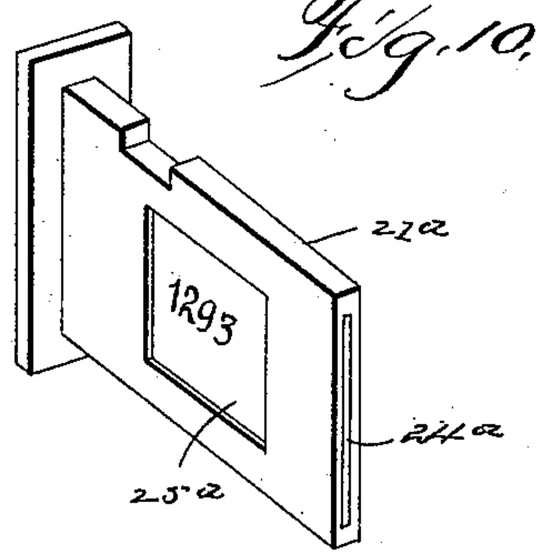


Fig. 10.



Witnesses:
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By Thomas G. Orwig, Attorney.

UNITED STATES PATENT OFFICE.

CHARLES H. CONNOLLY, OF MOUNT AYR, IOWA.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 626,650, dated June 6, 1899.

Application filed April 21, 1898. Serial No. 678,355. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. CONNOLLY, a citizen of the United States, residing at Mount Ayr, in the county of Ringgold and State of Iowa, have invented a new and useful Lock and Seal Combined, of which the following is a specification.

The object of this invention is to provide means for covering the keyhole of a lock in such manner that when a key is inserted in said lock the covering will be permanently and immediately destroyed, thus rendering it possible to detect efforts to tamper with locks or fit keys thereto.

My invention consists in the construction, arrangement, and combination of elements hereinafter set forth, pointed out in my claims, and illustrated by the accompanying drawings, in which—

Figure 1 is an elevation of a lock the rear plate of which is removed. Fig. 2 is a front elevation of a lock with the strike and bolt located in juxtaposition thereto. Fig. 3 is a rear elevation of the lock with means attached for temporarily effectually closing the keyhole. Figs. 4 and 5 are perspectives in detail, illustrating the keyhole-covering attachment for the lock. Fig. 6 is an elevation of a key arranged and constructed to be employed with the lock. Figs. 7, 8, 9, and 10 are detail views illustrating a modified construction of my lock.

In the construction of the lock as shown in Figs. 1, 2, 3, 4, and 5 the numeral 10 designates one member or casing, and 11 a face-plate therefor. The face-plate 11 is mounted on the casing 10 and within the flanges thereof and held by a screw 12; seated in an interiorly-screw-threaded stud 13 on the casing 10 and traversing the plate 11. The combined casing and plate is mounted on the face of a door by means of screws 14, traversing apertures in the corners thereof and seated in said door. A latch-bolt 15 is mounted in slide-bearings formed in the casing 10 and extends through the flange at the forward edge of said casing, as clearly shown in Fig. 1. An expansive coil-spring 16 is mounted at the rear of and impinges the latch-bolt 15 and abuts the flange at the rear edge of the casing 10, thus tending to hold the latch-bolt at its outward limit of movement normally. A thumb-piece 17 is fixed to the rear end portion of the latch-bolt 15 and extends through the casing for engagement by the thumb of the operator within a room, as clearly illustrated in Fig. 2. An aperture or seat 18 is formed in the upper edge of the central portion of the latch-bolt 15, and a lock-bolt 19 is mounted for vertical reciprocation in slide-bearings formed in the casing 10 and traverses the rear face of the latch-bolt, which lock-bolt is formed with a shoulder extending forwardly therefrom and arranged for engagement in the said seat of the latch-bolt. An expansive spring 20 is interposed between and impinges the upper end of the lock-bolt 19 and the flange at the upper edge of the casing 10. A seal-box 21 is provided and mounted within the casing 10 by movement longitudinally thereof, between the slide-bearings thereof, through an aperture formed in the flange at the forward edge of said casing. The seal-box 21 is provided with a notch or seat 22 in the central portion of its upper edge. The lock-bolt 19 extends across the latch-bolt 15 and has a reduced lower end portion extending and seating within the notch 22 in the seal-box 21. A stud, tip, or tongue 23 is formed on and extends downwardly from the latch-bolt 15 adjacent to the lower end of the lock-bolt 19. The seal-box 21 is hollow, and a seal-slide 24 is mounted therein by movement longitudinally thereof and is removed and replaced through an opening in the inner end of said seal-box, which opening is obstructed by the stud 13 of the casing when the seal-box is positioned for use, as shown in Fig. 1. The seal-slide 24 carries a numbered seal 25, made of paper, glass, or other fragile or frangible substance. An aperture is formed in the seal-box 21 immediately below and at the rear of the lock-bolt 19 when the parts are assembled for use, as shown in Fig. 1, and affords communication between the space within which the seal-slide 24 is mounted and the rear face of the seal-box. A keyhole 26 is formed in the seal-box at the front of the space containing the seal-slide and opposite the rear aperture in the seal-box, and the seal-box is notched in front of the keyhole.

Slide-bearings 27 28 are formed on the rear plate 11, and a shield or gate 29 is mounted by vertical reciprocation in said bearings

and covers, incloses, and guards the keyhole against the insertion of a key from the exterior of the room.

When the parts are assembled as shown, a key 30, Figs. 5 and 6, may be inserted through the door to break and traverse the numbered seal 25 and traverse the keyhole 26 into the forward notch of the seal-box. The key may then be rotated, first to lift the lock-bolt 19 against the resilience of the spring 20 and then to move the latch-bolt 15 rearwardly against the resilience of the spring 16, thus releasing the latch-bolt from the strike or socket 31 and permitting the opening of the door. Upon the release of the key the spring 16 will move the latch-bolt outwardly and the lock-bolt will reseat, as shown, and lock the latch-bolt and the seal-box within the casing. The lock-bolt 19 is provided with a thumb-piece 19^a, Fig. 2, whereby said lock-bolt may be reciprocated by engagement of the thumb of the operator within the room at right angles to the line of reciprocation of the latch-bolt 15.

In the operation of the lock-bolt 19 out of engagement with the seal-box 21 the said seal-box is released and may be withdrawn from the casing 10 for the purpose of supplying the same with a new seal-frame carrying an imperforate or unbroken seal with a new and different number or designating-symbol thereon.

In the construction of the device as illustrated in Figs. 7, 8, 9, and 10 the numeral 10^a designates a casing having a front plate 11^a mounted thereon and secured by means of a screw 12^a in a common manner. A latch-bolt 15^a is mounted for reciprocation between the casing 10^a and plate 11^a and is provided with a thumb-piece 17^a, extended through said front plate. A lock-bolt 19^b is mounted for reciprocation transversely of the latch-bolt 15^a and is held by an expansive coil-spring 20^a normally in its downward limit of movement. A shoulder is formed on the lock-bolt 19^b, normally engaging with a recess or seat 18^a in the center of the upper edge of the latch-bolt 15^a. A seal-box 21^a, formed hollow and apertured transversely entirely through its central portion, is mounted through a slot in the front flange of the casing 10^a immediately below the latch-bolt. The lower end of the lock-bolt 19^b engages in a recess or seat 22^a in the seal-box. The seal-box 21^a is provided with a seal-slide 24^a, carrying a serially-numbered frangible or fragile seal 25^a. The casing 10^a is recessed between its outer face and the plane of reciprocation of the seal-box 21^a, and the recess therein is covered by a plate 32. The plate 32 is provided with a keyhole 33, communicating with the aperture in the central portion of the seal-box 21^a.

In practical operation a key may be inserted from the interior of the room, breaking the frangible or fragile seal 25^a, traversing the keyhole 33 in the plate 32 and entering the recess of the casing 10^a behind said plate 32. The key may then be rotated to lift the lock-bolt 19^b against the resilience of the spring 20^a out of engagement with the seal-box 21^a on the latch-bolt 15^a. The latch-bolt may then be moved rearwardly within the casing by the application of manual force to the thumb-piece 17^a and left in such position, sustaining the lock-bolt 19^b out of engagement with the seal-box 21^a. The seal-box may then be removed from the casing and supplied with a new seal-slide carrying an imperforate seal with a serial number other than the one previously employed.

I claim as my invention—

1. A lock-casing, a latch-bolt therein, a lock-bolt engaging said latch-bolt, a seal-box within the casing engaged by the lock-bolt, and a seal in said seal-box registering with the keyhole of the lock-casing.

2. The lock-casing having the thumb-bolt therein, the spring-pressed lock-bolt engaging said thumb-bolt, a seal-box also engaged by said spring-pressed lock-bolt, a breakable seal in said seal-box in alinement with the keyhole of the casing and arranged to be broken before the thumb-bolt is released.

3. The combination of the casing having the keyhole, the guard 29 removably and replaceably mounted over said keyhole, the lock mechanism within the casing, the seal-case removably and replaceably mounted in the casing, the seal in the seal-case and covering the keyhole and a lock-bolt mounted for reciprocation wholly within the casing and arranged to engage and retain the seal-case.

CHARLES H. CONNOLLY.

Witnesses:
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W. W. MAYSENT.