No. 883,638. PATENTED MAR. 31, 1908.

L. I. HAMILTON.

SEAL LOCK.

APPLICATION FILED NOV. 30, 1907.

Fig. 1.

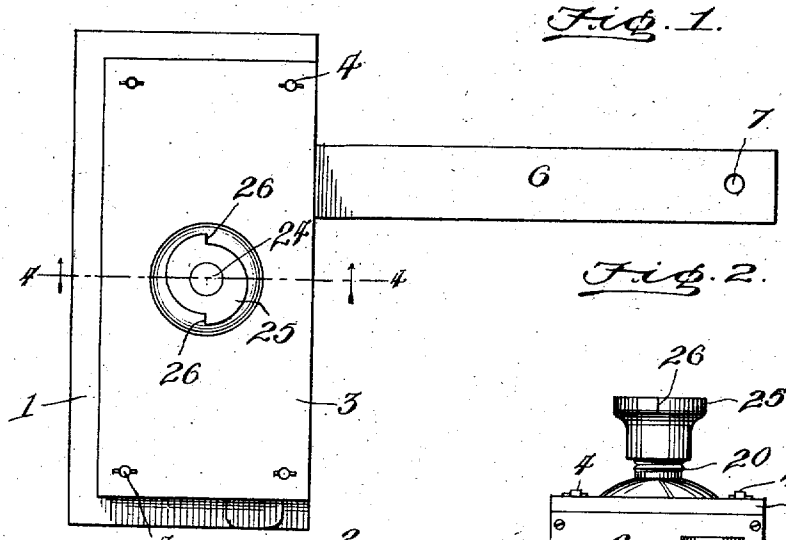
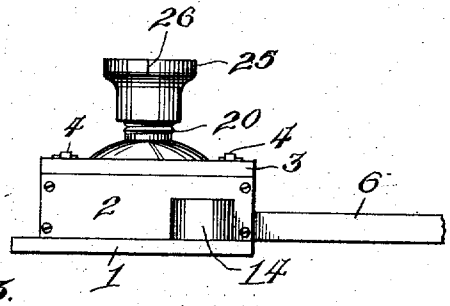


Fig. 2.



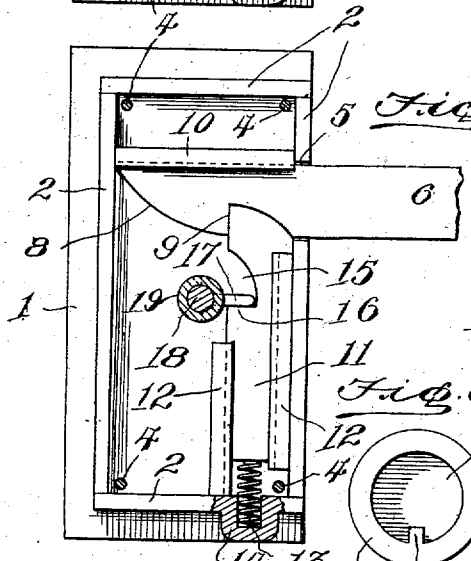


Fig. 3.

Fig. 4.

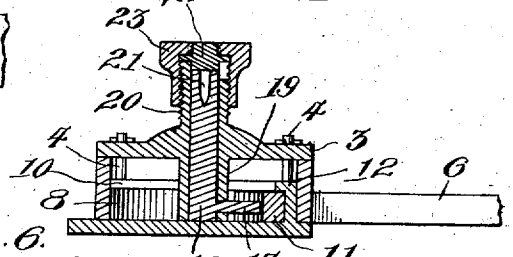


Fig. 6.

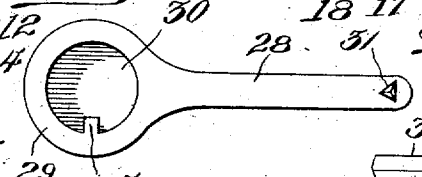


Fig. 5.

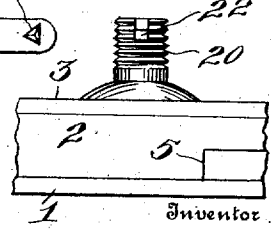
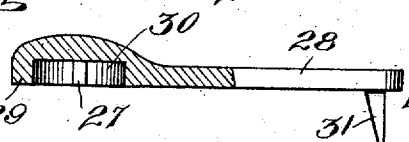


Fig. 7.



Witnesses

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UNITED STATES PATENT OFFICE.

LEWIS I. HAMILTON, OF NEW MADRID, MISSOURI.

SEAL-LOCK.

No. 883,638. Specification of Letters Patent. Patented March 31, 1908.

Application filed November 30, 1907. Serial No. 404,526.

To all whom it may concern:

Be it known that I, LEWIS I. HAMILTON, a citizen of the United States, residing at New Madrid, in the county of New Madrid and State of Missouri, have invented new and useful Improvements in Seal-Locks, of which the following is a specification.

This invention relates to car door seal locks, the object of the invention being to provide a lock and seal especially designed for use in connection with the sliding doors of box or freight cars whereby the door is automatically locked when closed and the lock protected by a seal so as to plainly indicate whether or not the lock has been tampered with.

With the above general object in view, the invention consists in the novel construction, combination and arrangement of parts hereinafter fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is an elevation of a lock and latch embodying the present invention. Fig. 2 is a bottom edge view of the same. Fig. 3 is a sectional view of the lock with the adjacent face plate of the casing removed, showing the latch in engagement with the lock. Fig. 4 is a cross section through the lock taken on the line 4—4 of Fig. 1. Fig. 5 is a detail edge view of the lock case, illustrating the construction of the threaded boss whereby the removal of the seal is facilitated. Fig. 6 is a bottom plan view of the key. Fig. 7 is a sectional edge view of the key.

The lock comprises a suitable lock case having an extended base plate 1 by means of which the lock is adapted to be secured to the door frame of a box car. In addition to the marginal flanges 2 of the lock case, the latter is provided with a removable face plate 3 so that access may be had to the internal parts of the latter, the face plate 3 being held by suitable fasteners 4. One of the marginal flanges 2 is provided with an opening 5 through which the latch 6 is adapted to pass, said latch being provided with a hole 7 by means of which it may be pivotally connected to a sliding car door. The latch 6 is also provided with a beveled end or nose 8 and a bolt engaging shoulder 9 adjacent thereto. 10 designates a guide flange for the latch 6 and beneath which the latch rides when it enters the lock case as shown in Fig. 3.

The bolt 11 is mounted to slide between suitable guides 12 within the lock case and is upheld or urged toward the latch 6 by means of a coiled spring 13 seated in a recess 14 at the bottom of the lock case as shown in Fig. 3.

The latch 11 is further provided with a notch 15 having an abrupt side 16 which is at right angles to the length of the pawl against which operates an arm or projection 17 on the spindle 18 whereby the spindle when turned is adapted to throw the pawl 11 downward out of engagement with the latch 6.

The face plate 3 is provided with an inwardly extending sleeve 19 in which the spindle 18 is journaled and said face plate is also provided with an outwardly extending exteriorly threaded boss 20 through which the spindle 18 passes. The spindle is provided in its extremity with a notch or slot 21 and the boss 20 is also provided with a corresponding notch 22 with which the notch or slot 21 is adapted to register for a purpose which will hereinafter appear.

23 designates a screw cap which is mounted on the threaded boss 20 and removable therefrom for the purpose of inserting a lead seal 24 between the outer end of the boss 20 and the end of the cap 23 as shown in Fig. 4. The thread which connects the boss 20 and the cap 23 is preferably quite coarse so that when said cap is screwed inward on the boss, the disk which is interposed between said parts is mashed and caused to engage and interlock with the notched portions of the spindle and boss. When, therefore, the screw cap 23 is turned off to get access to the operative parts of the locking mechanism, the seal will incidentally be manipulated so as to plainly indicate that the lock mechanism has been tampered with.

The cap 23 is provided at its outer end with a flange or rim 25 which is notched and shouldered as indicated in Fig. 1, the shoulder 26 thereof being adapted to be engaged by the lug 27 of a key 28 used for removing the screw cap 23 said key embodying an enlarged circular head 29 having a circular recess 30 adapted to receive the outer portion of the screw cap 23, the lug 27 projecting into the recess 30 so as to engage one or the other of the shoulders 26 of the cap. At its under end the handle portion of the key is provided with a projecting point which is adapted to be inserted in the notches 21 and 22 above described for the purpose of prying out the lead seal 24 after the screw cap has

been removed in the manner above referred to. In unlocking a car door, the cap 23 is removed with the aid of the key 28. The seal 24 is then pried out of place by means of the point 31. The key 28 is then turned with the point 31 thereof in engagement with the notch 21 in the spindle 18, thereby turning said spindle and causing the projection 17 thereon to throw the bolt 11 away from the latch thus releasing the latch and allowing the same to be withdrawn from the lock casing

I claim:—

1. A car door seal lock comprising a latch, a bolt movable into and out of engagement with the latch, a bolt throwing spindle, and a seal retaining cap engaging said spindle.

2. A car door seal lock comprising a latch, a spring pressed bolt movable into and out of engagement with the latch, a bolt throwing spindle, and a seal retaining cap for said spindle.

3. A car door seal lock comprising a latch, a bolt movable into and out of engagement with the latch, a bolt throwing spindle provided with a notch or slot in the end thereof, and a seal retaining cap inclosing said spindle.

4. A car door seal lock comprising a latch, a bolt movable into and out of engagement with the latch, a bolt throwing spindle, a compressible seal, and a screw cap for compressing the seal, substantially as described.

5. A car door seal lock comprising a latch, a bolt movable into and out of engagement with the latch, a lock case embodying a threaded boss, a bolt throwing spindle journaled in said boss, and a cap threaded on said boss and adapted to compress the seal against the boss.

6. A car door seal lock comprising a latch, a bolt movable into and out of engagement with the latch, a bolt throwing spindle, and a seal retaining screw cap having a key engaging shoulder, substantially as described.

7. A car door seal lock comprising a latch, a bolt movable into and out of engagement with the latch, a bolt throwing spindle, a seal retaining shouldered cap, and a key for removing said cap provided with a lug for engaging the shoulder on said cap.

8. A car door seal lock comprising a latch, a bolt movable into and out of engagement with the latch, a notched or slotted bolt throwing spindle, a seal retaining screw cap fitting over the spindle, and a key having a cap engaging portion and a spindle engaging portion whereby the cap may be removed and the spindle turned, substantially as described.

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

LEWIS I. HAMILTON.

Witnesses:
W. L. MEIER,
O. O. HAMILTON.