L. I. TODD.

Seal-Lock.

No. 165,384. Patented July 6, 1875.

Fig. 1.

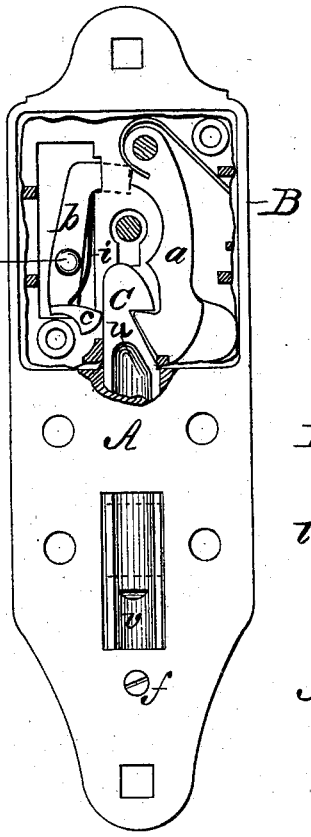

Fig. 2.

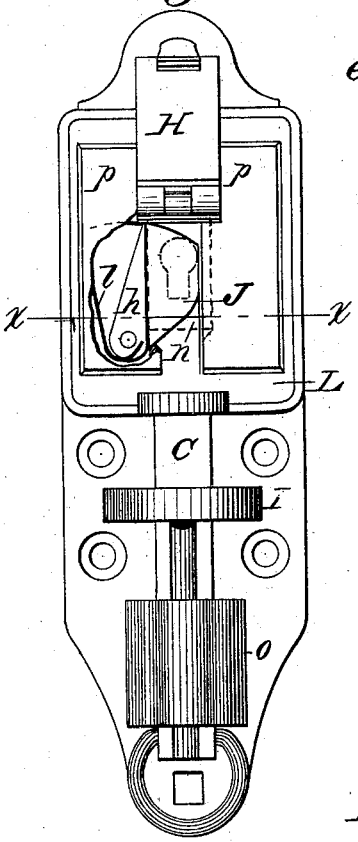

Fig. 3.

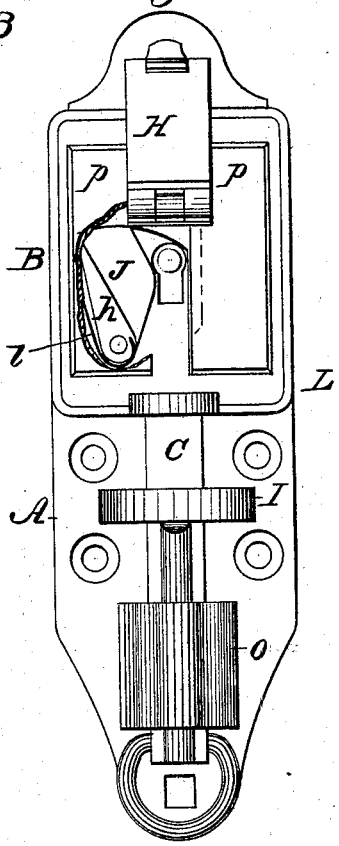

Fig. 4.

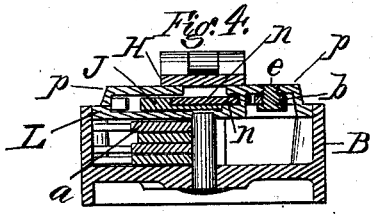

Fig. 5.

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LYMAN I. TODD, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN SEAL-LOCKS.

Specification forming part of Letters Patent No. **165,384**, dated July 6, 1875; application filed March 29, 1875.

To all whom it may concern:

Be it known that I, LYMAN I. TODD, of Chicago, in the county of Cook and State of Illinois, have invented certain Improvements in Locks, of which the following is a specification.

My invention relates to locks for cars, and the invention consists of a plate provided with a rib, and pivoted so as to swing over the key-hole under the seal, and be shoved back into a recess in the case when the key is inserted, and also an elbow-lever pivoted within a chamber along side of the seal chamber, and having one end projecting laterally through a hole into the seal-chamber to lock the seal in place, said lever being operated by the lock-bolt when closed, all as hereinafter more fully described.

Figure 1 is a back plan view with a portion of the case broken away to show the arrangement of the interior parts. Figs. 2 and 3 are plan views of the front. Fig. 4 is a transverse section on the line *x x* of Fig. 2.

In constructing my improved lock I provide a plate, A, upon the upper portion of which is a box or case, B, to contain the tumblers and operating parts—there being a sliding bolt, C, working through a hole in a lug, O, and a narrower lug or staple, I, both cast on the face of the plate, as shown in Figs. 2 and 3—this bolt C being so arranged that its upper end will enter a hole in the lower edge of the case B, where its beveled and notched end will engage with the locking-tumblers *a*, as shown in Fig. 1, there being any desired number of these tumblers, and they being provided with springs to cause to automatically engage with the bolt C. The face plate or cover L of the case B is set into the case from the front, and secured by screws put through the plate A from the back, their ends entering studs on the under side of plate L. This plate L is provided on its outer face with two raised lips or projections *p p*, between which and the plate proper there is left a chamber or recess, as shown in Fig. 4—these lips *p* extending from near the outer edges of plate L inward toward the center, where there is left between them a vertical open space extending from top to bottom of the lips—the key-hole being located about midway of this space, as shown in Figs. 2 and 3. In the cavity under the left hand lip *p* is pivoted a plate, J, as shown in Figs. 2 and 3, which has a spring, *l*, arranged so as to cause said plate, when the key is withdrawn from the lock, to swing around over the key-hole, as represented in Fig. 2. The lower edge of this plate is inclined, so that by sliding the key upward along the open space it will operate against this inclined edge of the plate J, and thus force it back and uncover the key-hole, as shown in Fig. 3. This plate J has on its left-hand side a projecting rib, *h*, equal in thickness to the glass seal *n*, (shown detached in Fig. 5,)—this rib *h* being of such a form that, when the plate J is over the key-hole, its inner edge will stand parallel with the outer wall of the recess under the lip on the opposite side of the key-hole, thus leaving a vertical space between the outer face of the plate J and the lips *p*, for the reception and retention of the seal *n*, as shown in Figs. 2 and 4, in the latter of which the seal *n* is shown in place resting on the plate J directly over the key-hole. Upon the outside of the projections or lips *p* is hinged a lid, H, which, when allowed to hang in its normal position, covers the seal, and which can be turned up to give access to the seal and key-hole. The recess for the seal extends up under the plate to which this lid is hinged, and is open at its upper end, so that the seal can be dropped or slid therein from above—it resting on shoulders at the bottom of the recess under the lips *p*, as shown by dotted lines in Fig. 2. To lock the seal in place I pivot a lever, *b*, by a pin, *e*, under the lip *p* on the right hand side, as shown in Fig. 4, and in reverse in Fig. 1. This lever *b* has at its lower end an arm *c*, the end of which is beveled, so that as the bolt C is shoved up to engage with the tumblers *a*, its rounded end will strike against the beveled end of arm *c*, and thereby throw the upper end of lever *b*, which has a projection on it, over above the upper end of the seal *n*, as represented in Fig. 1, thereby locking the seal securely in place. A spring, *i*, is connected to lever *b*, as shown in Fig. 1, in such a manner that, whenever the bolt C is withdrawn, the lever is thrown back to its original position, which

leaves the opening above unobstructed for the insertion of another seal. This lock is to be applied upright, in the position shown, it being securely bolted either to the body of the car or to the door, as may be preferred, there being a hasp arranged to shut over the stud or staple I when the bolt is dropped down, so that as the bolt is shoved up, the hasp will be locked securely on the stud I, the bolt C sliding over the outside of the hasp. When unlocked the bolt will hang suspended in the stud O, the upper end of the bolt C just coming even with the upper edge of the stud. To keep this bolt from dropping out it is made with a groove, *v*, in its under side, as shown in Fig. 1, and a screw, *f*, is inserted from the back side through the plate A, as represented in Fig. 1, the end of this screw protruding through into the groove *v* of the bolt. The groove *v* stops just short of the head of the bolt C, thereby leaving a shoulder, *u*, as represented in Fig. 1, which, resting on the inwardly-projecting end of the screw *f*, when the bolt is dropped down, holds the latter in place; and as this screw cannot be got at when the lock is bolted in place, it forms a perfectly secure and very simple and cheap means of holding the bolt. The seals *n* to be used with this lock are to be made of glass or similar material; and all those applied at the various stations on the route are to be numbered, as represented in Fig. 5, each station having a different number, so that the number on the seal shall itself indicate the station at which it was applied. In addition to this, as a means of identifying either the different stations on the same road or the various roads or companies who may apply the seals, the latter may be made of different colors—each separate station, or each separate company or road using and applying different-colored seals. By these means the seal used may be made to indicate not only by what company the goods were sent, but also from what particular station on that company's road they were shipped.

In use, the seal is first dropped into its recess, and after the hasp is shut over the stud I, the bolt C is shoved up. To open the lock the lid H is turned up, the seal broken—the plate J preventing any of its fragments from entering the lock at the key-hole—the key then slid along the central recess, and shoving back the plate J, when the key is inserted, and the bolt released.

The lock thus made is strong, secure, and not liable to get out of order, and is especially well adapted for use on cars.

I am aware that various plans have been devised for locking seals in place in locks, and also that locks have been made with a plate to cover the key-hole underneath the seal, and therefore I do not claim such broadly or irrespective of the special construction herein shown; but

What I do claim as my invention is—

1. The elbow-lever *b*, provided with the inclined arm *c*, pivoted in a chamber alongside of the seal and chamber, in combination with the sliding bolt C and spring *i*, all constructed to operate substantially as shown and described.

2. The plate J, provided with the rib *h*, in combination with the spring *l*, said plate being pivoted so as to swing over the key-hole and be shoved back into a recess in the face of the lock-case, as shown and described.

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Witnesses:

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