(No Model.)

J. DOWLING.

SEAL LOCK.

No. 482,118. Patented Sept. 6, 1892.

Fig. 1

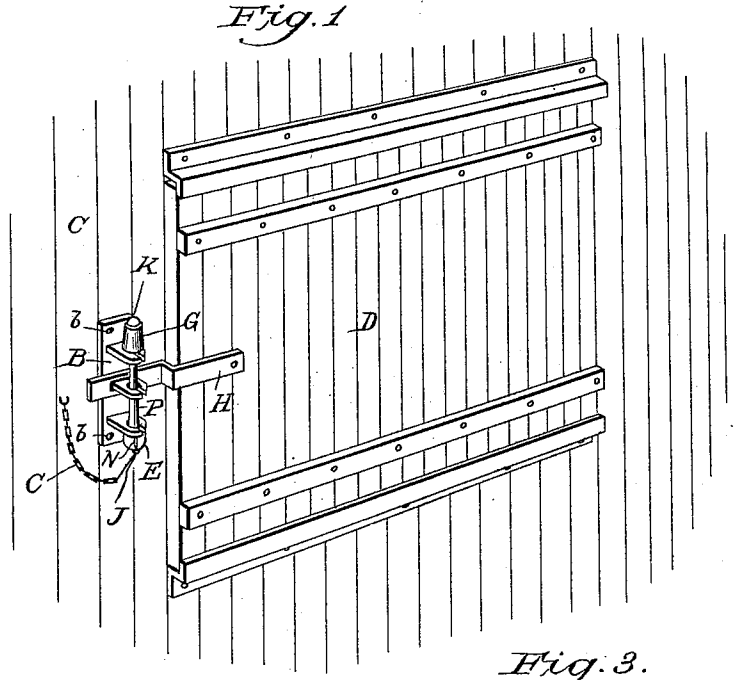


Fig. 3.

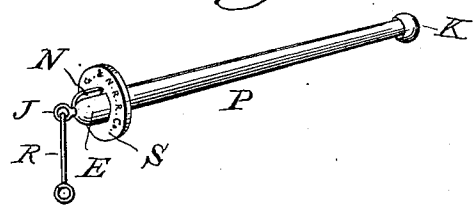


Fig. 2.

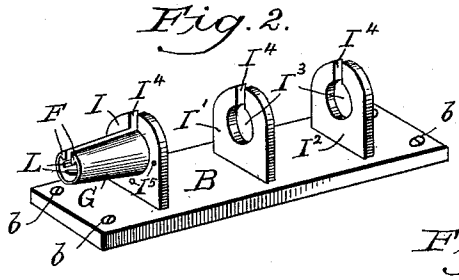


Fig. 5.

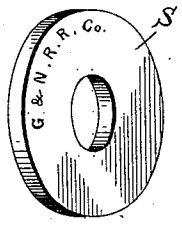


Fig. 6.

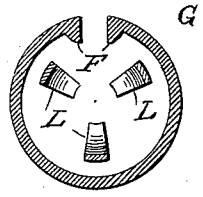
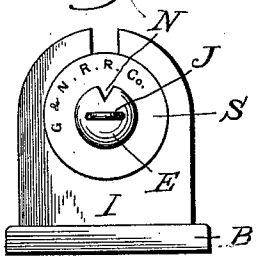


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN DOWLING, OF ALTOONA, PENNSYLVANIA.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 482,118, dated September 6, 1892.

Application filed May 20, 1892. Serial No. 433,721. (No model.)

To all whom it may concern:

Be it known that I, JOHN DOWLING, a citizen of the United States, residing at Altoona, in the county of Blair and State of Pennsylvania, have invented a new and useful Car Seal-Lock, of which the following is a specification.

This invention relates to improvements in car seal-locks, the objects in view being to provide a cheap and simple construction of the "seal" class, whereby when applied to a car and connected with the hasp any opening of the door of said car and tampering with its contents will be evidenced by the fracture or destruction of the seal.

With these objects in view the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective view of a car provided with a lock constructed in accordance with my invention. Fig. 2 is a detail in perspective of the lock. Fig. 3 is a similar view of the bolt. Fig. 4 is a bottom view of the lock. Fig. 5 is a detail in perspective of the seal. Fig. 6 is a transverse section through the guard.

Like letters of reference indicate like parts in all the figures of the drawings.

C designates the car, and D the sliding door covering the opening therein, which door is provided at its front edge with the hasp H.

Secured to the wall of the car adjacent to the door-opening is a metal plate B, and the same is secured in position through the medium of screws or bolts *b*, passed through perforations formed in the corners of the plate and taking into the said car. From the front face of the plate extends a series of outward projections or lugs I, I′, and I^2, each of which is provided with an opening or hole I^3. The lugs are further provided at their front edges with aligning-slots I^4. By means of pins or rivets I^5 are secured L-shaped spring-tongues L, which extend upwardly through the opening in the upper lug to a point above the lug I^3 and converge toward their upper ends. Surrounding these spring-tongues is a somewhat cylindrical housing or guard G, which is longitudinally slotted coincident with the slot formed in the front edge of the lug, said guard being preferably formed integral with said lug and forming a continuation of its opening or hole. The inner corners of the slot in the guard are extended or provided with flanges F, which terminate close to the spring-tongues and are designed to prevent the introduction of an instrument for the purpose of spreading the springs and liberating the bolt, so that the same may be withdrawn downwardly, as will hereinafter appear.

P designates the bolt or pin, and the same is provided at its upper end with a head K and at its lower end with a head E. Each of these heads is of such diameter as to permit of its passage through the holes in the lug. The lower head is somewhat larger than the upper head, and while the said upper head will readily pass through a circular seal S, which is located upon the pin, the lower head will not; but said seal must be cut or destroyed in order to effect such passage. The lower head is also provided with a notch N in its side. An eye J is located upon the under side of the lower head and a rod R, terminating in eyes, is loosely connected at one end to said eye, the free end of the rod being connected to a chain C, whose opposite end is securely fastened to the wall of the car.

The above completes the construction, and the operation is as follows: The door after being closed has its hasp passed over the central or intermediate lug I′, after which the upper end of the bolt or pin P is passed through the seal S, which seal is slid to the lower end of the bolt or pin against the lower head E. The upper end of the bolt or pin is then introduced upwardly through the openings in the series of lugs and forced between and beyond the upper converging ends of the spring-tongues L, where it is protected by the guard or housing G. The locking is now complete, and it will be seen that the springs L will prevent a downward withdrawal of the bolt or pin, and the seal abutting against the lower lug will prevent an upward withdrawal of the bolt or pin. In order to effect any withdrawal whatever, a knife must be inserted into the notch N and employed to sever the circular seal, so that the latter can be removed and the bolt or pin withdrawn upwardly through the openings in the lugs and from between the spring-tongues, which latter, as will be obvious, do not resist to any material extent

such upward withdrawal. After withdrawal the hasp may be removed and the door opened; but before said withdrawal a disengagement of the hasp with the locking-plate will be impossible.

By means of the chain I am enabled to secure the bolt or pin to the car, so that it is always handy and can be found when wanted, and I provide for the employment of this chain by the series of slots formed in the lug and guard, which permit of the passage therethrough of the rod R, which in reality forms a part of the chain. Were it not for these slots the bolt or pin must be loose, and the same might be misplaced or lost, thus rendering the lock inoperative.

The seal which I employ in connection with my improved lock may be made of paper, lead, leather, rubber, or any other equivalent material, and hence I do not limit myself to the use of any one of such materials.

Having described my invention, what I claim is—

1. In a car seal-lock, the combination, with the locking-plate having the series of outwardly-projecting lugs provided with holes, and with slots extending from their outer edges to the holes, said slots and holes being in alignment, spring-tongues surrounding the upper hole of the series and converging, and a cylindrical guard having a slot mounted on the upper lug and encircling the tongues, of a hasp for engaging the intermediate lug, a locking bolt or pin having upper and lower heads of a diameter less than the holes of the lug, the lower head exceeding in size the upper head, the seal adapted to pass over the upper head and of a lesser diameter than the lower head, and the chain connected to the bolt or pin and adapted at its opposite end to be connected to a car, substantially as specified.

2. The combination, with the lock-plate having the outwardly-projecting lugs provided with holes and inwardly-extending slots, the holes and slots registering, the cylindrical guard surrounding the hole of the upper lug, slotted to agree with the same, and provided at the inner corners of its slot with parallel flanges, and the L-shaped spring-tongues riveted to the upper lug, extending up into the guard, and having their upper ends converged, of the hasp for engaging the intermediate lug, the bolt or pin having the upper and lower heads of less diameter than the holes of the lugs, the lower head exceeding in diameter the upper head and provided with a notch and depending eye, the circular seal adapted to be introduced over the upper head of the pin and rest against the lower head thereof, the rod having opposite eyes, one of which engages with the eye of the bolt or pin, and the chain loosely connected to the lower end of the rod and adapted to be connected to a car, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN DOWLING.

Witnesses:
CHARLES LONG,
JACOB SNYDER.