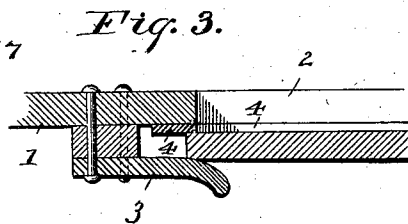
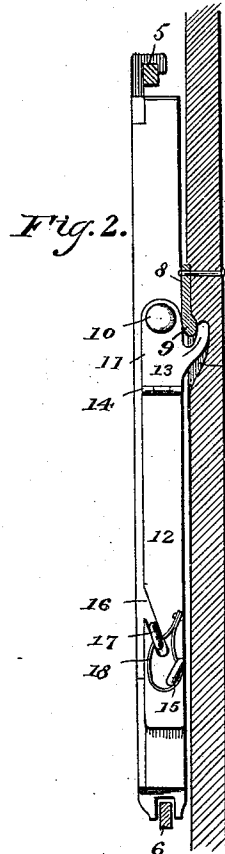
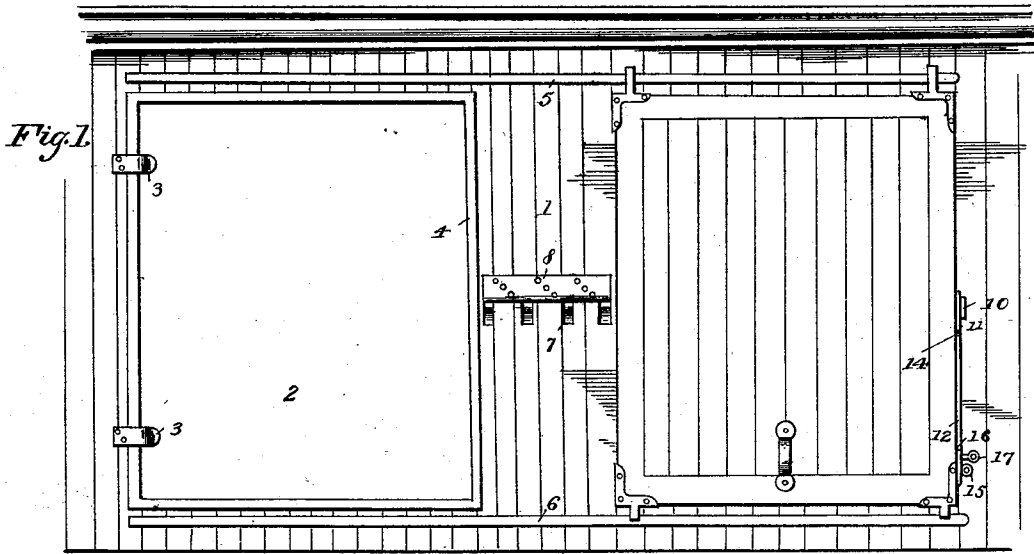


(No Model.)

I. C. COIN.
SLIDING DOOR LOCK.

No. 508,917.

Patented Nov. 21, 1893.



Witnesses

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B. A. Wood*

Inventor

Ina C. Coin,

By his Attorneys,

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UNITED STATES PATENT OFFICE.

INA CLORUS COIN, OF LEADVILLE, COLORADO.

SLIDING-DOOR LOCK.

SPECIFICATION forming part of Letters Patent No. 508,917, dated November 21, 1893.

Application filed January 21, 1893. Serial No. 459,196. (No model.)

To all whom it may concern:

Be it known that I, INA CLORUS COIN, a citizen of the United States, residing at Leadville, in the county of Lake and State of Colorado, have invented a new and useful Car-Door Lock, of which the following is a specification.

My invention relates to improvements in car-door locks; the objects in view being to provide a new and improved lock for freight and cattle car doors, the same being so constructed as to lock the door in different positions so as to be more or less open for the admission of air as when transporting cattle; and to provide means for conveniently sealing the lock, whereby any tampering therewith will cause a breakage of the same and a consequent knowledge of such tampering.

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

Referring to the drawings:—Figure 1 is a side elevation of a portion of a car and door provided with a lock constructed in accordance with my invention, the said door being shown open. Fig. 2 is a transverse section through the wall of the car, the door being shown in end elevation. Fig. 3 is a transverse sectional view through the jamb and front edge of the door.

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

1 designates the side-wall of an ordinary stock or freight-car, and the same is provided with the usual door opening 2 which has at one edge a series of convexed cam-lugs 3 and is surrounded by a rubber weather-strip 4. Above and below the door-opening there is secured to the wall of the car-door supporting-bars 5 and 6, respectively, the same being of the ordinary construction.

The side-wall of the car is provided at one side of the opening with a series of curved sockets 7, the same being arranged in alignment, and above said sockets there is secured a metal-bar or plate 8 whose lower edge is provided with a thickened rib 9, shown in Fig. 2, and which is located at the upper end of and takes within said sockets.

Pivoted by a bolt 10 to the edge of the door is an arm, and said arm is formed in two sec-

tions, namely, the upper section 11 and the lower section 12. The upper section 11 is the one through which the bolt 10 is passed, and its rear edge is provided with an upwardly and inwardly-curved locking-finger 13, the same being in alignment with the sockets or recesses 7 and designed to engage beyond the rib 9 of the locking-plate 8. The lower section 12 of the arm is hinged as at 14 to the lower end of the upper section of said arm whereby the arm as a whole is adapted to swing outwardly on the pivot 10, and the lower section transversely upon the hinge 14. The lower section 12 of the arm is provided with an eye 15, and in front of the same the edge of the arm is provided with an inclined slot 16. Secured to and extending from the edge of the door is an eye-bolt 17, and it will be obvious that the lower section 12 of the arm may be swung upon its hinge 14 so as to engage or disengage with said eye-bolt. Of course when the recess 16 of the arm is in engagement with the eye-bolt said arm cannot swing upon its pivot 10 or in an outward direction, and hence cannot become disengaged from the locking-plate.

In order to lock the door at any desired point, the same is slid upon its hangers 5 and 6 until the locking-arm arrives opposite that recess or socket 7 which brings the advanced edge of the door a sufficient distance from the door to permit the upper section to open, when the lower section 12 of the arm is swung outwardly upon its hinge 14 and the arm as a whole swung inward, so that its finger 13 will engage with the locking-plate 8, after which the lower section 12 of the arm is swung inward against the edge of the door, whereby the eye-bolt 17 is received by the recess 16. It now simply remains to pass an ordinary sealing wire 18, through the bolt 17 and eye 15. It will be seen now that in order to unlock the door the lower section of the arm must be swung upon its hinge to disengage the eye-bolt before the arm as a whole can be swung outward upon its pivot 10, and that such is impossible by reason of the presence of the seal and its wire. Consequently it is necessary that the said seal should be broken in order to permit of an unlocking of the door.

From the foregoing description in connec-

tion with the accompanying drawings it will be seen that I have provided a very cheap and simple construction of car-door lock, whereby the door may be locked either wholly or partially open, and is thus designed to be used as a lock for the door of a cattle-car as well as a freight-car; and finally that any tampering with the lock will be evidenced by the destruction of the seal.

10 I do not limit my invention to the exact details herein shown and described, but hold that I may vary the same to any extent within the scope of mechanical skill.

15 Having described my invention, what I claim is—

20 The combination with a car having an opening, and at one side of the same a series of sockets arranged in alignment, and a locking-plate arranged over the sockets, of a door supported for movement at the side of the

car, an arm consisting of upper and lower hinged sections, the upper section being pivoted to the edge of the door and provided upon its rear side with a curved finger for engaging with the sockets or recesses in the side wall of the car and with the lower edge of the locking-plate, and the lower section carrying an eye, and provided with a recess, an eye-bolt extending from the door and adapted to engage the recess, and a sealing-wire for connecting the two eyes, 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.

INA CLORUS COIN.

Witnesses:

FELIX J. BURNS,
J. H. ALLINGHAM.