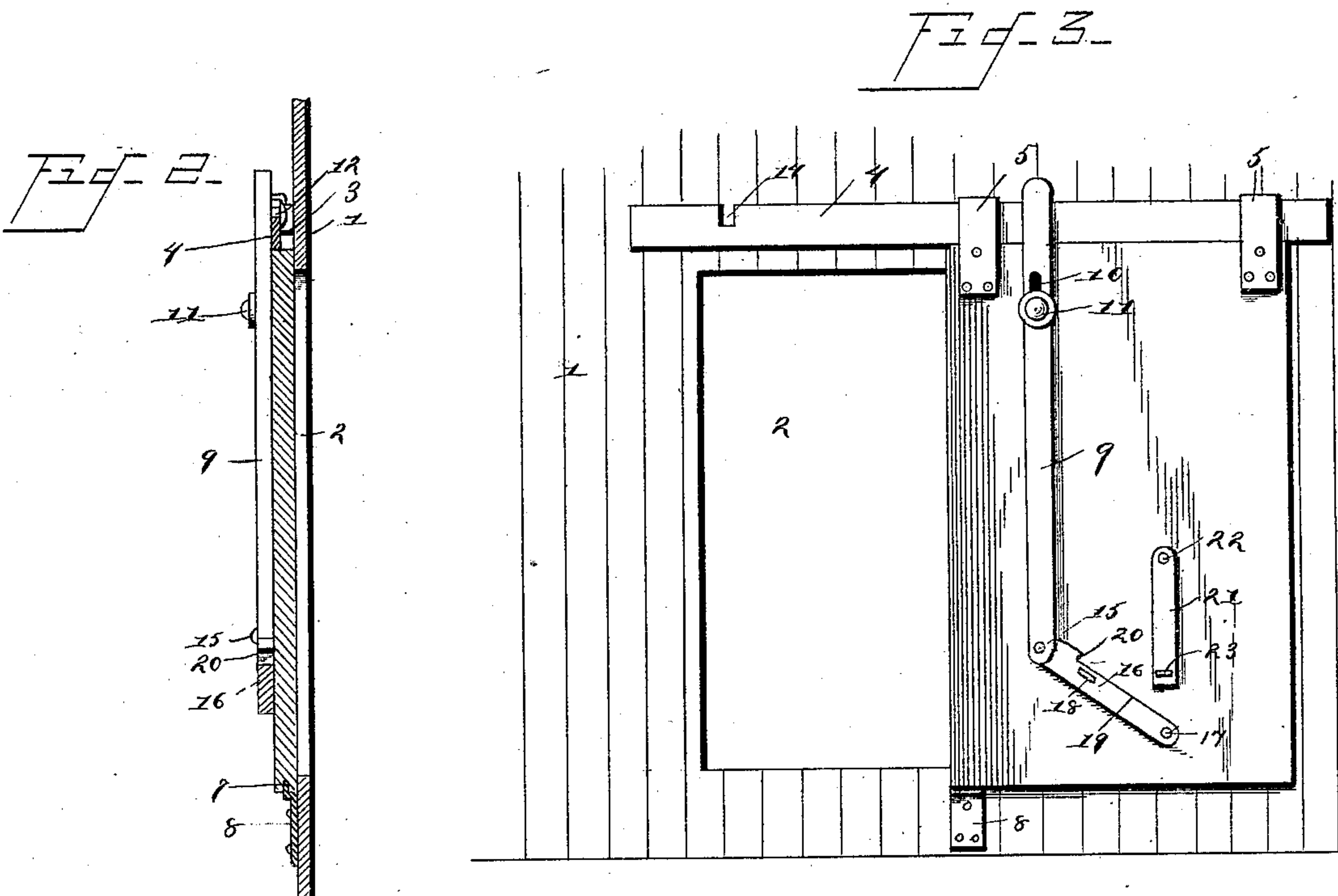
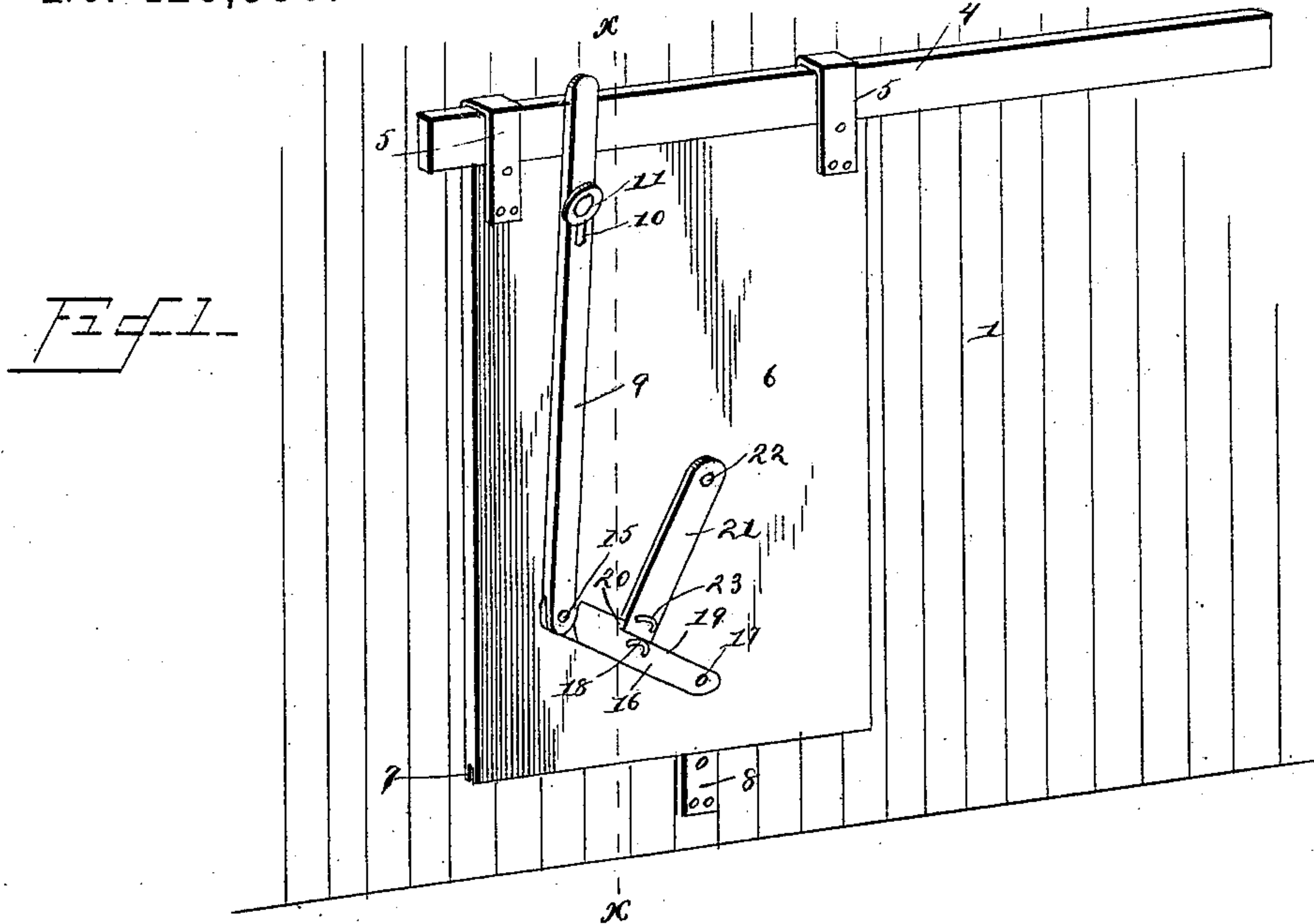


(No Model.)

G. W. HARRIS.
CAR DOOR FASTENING.

No. 420,556.

Patented Feb. 4, 1890.



Witnesses:

Geo. E. Fitch,

W. S. Duval

Inventor
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By *his* Attorneys

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UNITED STATES PATENT OFFICE.

GEORGE W. HARRIS, OF BRUSHTON, NEW YORK.

CAR-DOOR FASTENING.

SPECIFICATION forming part of Letters Patent No. 420,556, dated February 4, 1890.

Application filed November 9, 1889. Serial No. 329,730. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. HARRIS, a citizen of the United States, residing at Brush-ton, in the county of Franklin and State of New York, have invented a new and useful Car-Door Fastening, of which the following is a specification.

This invention has relation to car-doors, and more particularly to the means for locking the same; and among the objects in view are to provide a door which will automatically latch itself when closed and which is designed to be locked by a seal or padlock and to be operated in a simple and convenient manner.

With these general 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 of a car-door constructed in accordance with my invention. Fig. 2 is a vertical section on the line *xx* of Fig. 1. Fig. 3 is a front elevation, the car open.

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

1 represents the side of a car, and 2 the door-opening. Mounted upon brackets 3, above the opening, is the usual track 4, upon which, by means of inverted-U-shaped straps or clips 5, secured to the door and embracing the track, the door 6 is mounted and adapted to be reciprocated upon the track and to and from the opening. A groove 7 is formed in the lower edge of the door, and into the same extends the upturned end of an L-shaped guide-bracket 8, secured to the wall of the car under the door-opening.

9 represents a gravity latch or bar having a slot 10 near its upper end and loosely connected to the door by means of a bolt 11. A pin 12 extends from the rear upper end of the latch, and by reason of the loose mounting of the latch upon the door said pin is adapted to take into a notch 14, formed in the upper edge of the track 4, when the door is in a closed position, and by this means the door is latched against jarring open, but may be readily opened by an upward reciprocation of the latch 9, so as to disengage the locking-pin 12 from the notch 14. The lower end of

the latch 9 is by a bolt 15 pivotally connected to a latch-lever 16, the adjacent faces near the ends of the latch and latch-lever being cut away or half recessed to permit of a fitting of the two together. The latch-lever 16 is pivotally connected to the door 6 near its lower end by a bolt 17 and is provided near its center with a staple 18. The upper edge of the latch-lever from its rear end to near its front end is recessed, as at 19, and terminates in a shoulder 20 at its front end.

Above the latch-lever is pivoted a locking-lever 21, the upper end of which is pivoted to the base of the door by a bolt 22 and the lower end of which is provided with a staple 23, adapted, when the latch is in a latched position, to be thrown into line with the staple 18 of the latch-lever. By bringing the door opposite the opening the door is latched, as described, and the locking-lever is swung into the recess 19 until it abuts against the shoulder 20 thereof, when it will be apparent that the latched lever cannot be raised, and hence the latch is locked against unfastening. A seal or padlock may be inserted through the two staples 23 and 18, whereby the parts will be securely locked together and any tampering therewith will be manifested by the broken seal. To undo the lock the locking-lever is swung to a vertical position, when the latch-lever and latch may be raised and the door slid open.

If by accident the door should be left open, the jarring of the cars while in motion will serve to close the door and the latch will be gradually brought to a position where it would lock.

Having described my invention, what I claim is—

1. The combination, with the track provided with a notch, of the door mounted for movement on the track and provided with a vertically-reciprocating latch-bar having a locking pin or device for engaging the notch, a latch-lever pivotally connected at one end with the latch-bar and at its opposite end to the door, and means for locking the latch-bar against rising, substantially as specified.

2. The combination, with the track, of a vertically-reciprocating latch-bar for engaging the track secured to the door which is mounted

for movement on the track, a latch-lever pivotally connected to the lower end of the bar and at its opposite end to the door, and a locking-lever pivotally connected with the door and adapted to be swung over and upon the latch-lever, substantially as specified.

3. The combination, with the track having a notch, of the sliding door mounted on the track, the reciprocating latch-bar slotted and connected to the door by means of the bolt, a latch-pin connected to the upper end of the bar and adapted to drop into the notch, a latch-lever pivotally connected to the lower end of the bar and at its opposite end to the door, and a swinging locking-lever adapted to be thrown against the latch-lever, substantially as specified.

4. The combination of the track 4, having a notch 14, the door 6, mounted for sliding on the track, the latch-bar 9, slotted, as at 10, and

connected to the face of the door by the bolt 11 and provided with the pin 13, the latch-lever 16, bolted, as at 15, to the lower end of the latch-bar and at 17 to the face of the door and having the staple 18, and cut away upon its rear upper edge, as at 19, and terminating in the shoulder 20, and the locking-lever 21, pivoted at its upper end to the door by the bolt 22 and having the staple 23, the lower end of the lever being adapted to be swung against the shoulder 20, and the staples aligned to receive a padlock or other securing device, substantially as specified.

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

GEORGE W. HARRIS.

Witnesses:

HORACE J. TRYON,
ELTON E. HARRIS.