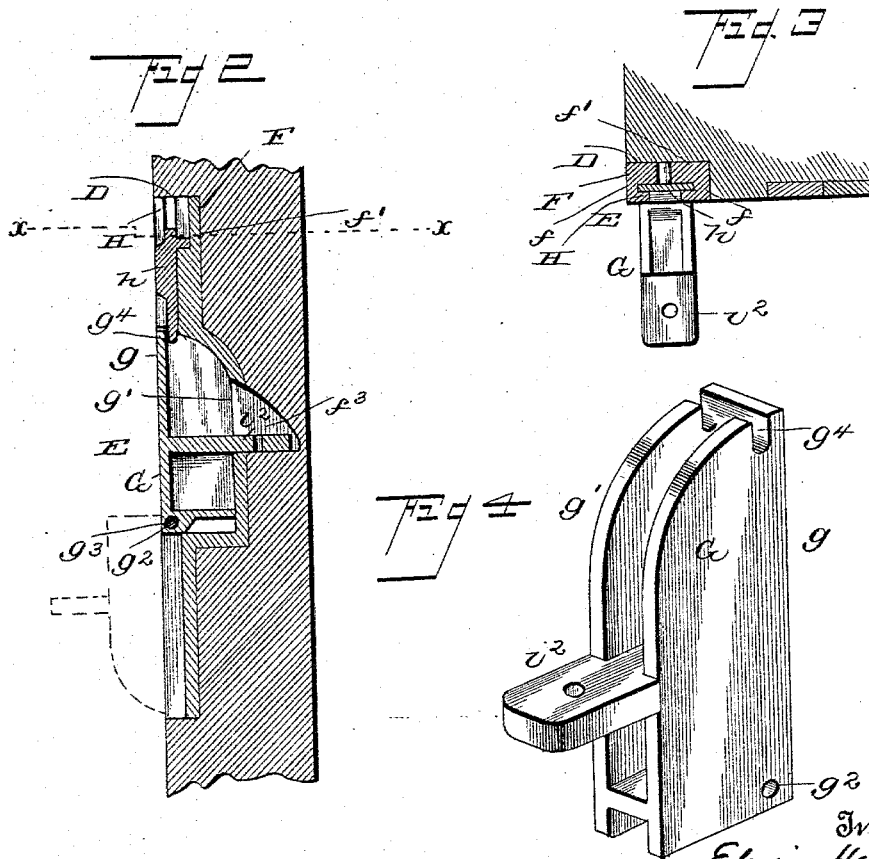


E. HUBBELL.
SLIDING DOOR LOCK.

Patented Jan. 17, 1893.



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EDWIN HUBBELL, OF PLATTSMOUTH, NEBRASKA, ASSIGNOR OF ONE-HALF
TO HENRY R. GERING, OF SAME PLACE.

SLIDING-DOOR LOCK.

SPECIFICATION forming part of Letters Patent No. 490,251, dated January 17, 1893.

Application filed July 30, 1892. Serial No. 441,701. (No model.)

To all whom it may concern:

Be it known that I, EDWIN HUBBELL, a citizen of the United States, residing at Plattsmouth, in the county of Cass and State of Nebraska, have invented certain new and useful Improvements in Door-Fasteners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to door fasteners and consists in the construction and novel arrangement of parts as hereinafter more fully described, illustrated in the accompanying drawings and pointed out in the appended claim.

The object of my invention is to provide a simple and inexpensive device for locking sliding doors and is particularly adapted for use on freight car doors.

In the drawings Figure 1 is a perspective view of a car door with my improved fastener secured in place. Fig. 2 a vertical section of my improved fastener. Fig. 3 a transverse section on the line X—X Fig. 2. Fig. 4 a detail view of the fastener.

Referring to the accompanying drawings in which like letters of reference indicate corresponding parts in all the figures, A represents the side of a car provided with the usual opening for the door B which slides in suitable ways C secured to the side of the car above and below the door. To one side of the opening in the side of the car and adjacent to the rear edge of the door B when it is in a closed position, is formed a vertical recess D, designed to receive the fastener E. In the recess D is secured a metallic casing F, consisting of the side walls f , and the back f' , fitting within the recess D so as to be flush with the side of the car.

G indicates the latch, consisting of a metallic block, having a plane face g adapted to lie against the plane rear face of the casing in its locking position, as shown in Fig. 1, and a convex face g' adapted to fit within a correspondingly shaped recess formed in the casing F in its upper position as shown in Fig. 2. Near the lower end of the latch is formed a transverse opening g^2 , through which passes

a pin g^3 , secured in the sides f of the casing F, forming a hinge or pivot for the latch G.

Sliding in ways H, formed in the upper inner faces of the sides f is a gravity catch h , which is flush with the side of the car, and is adapted to engage and hold the latch G in its upper or closed position, the free end of the latch having formed therein upon its outer face a recess g^4 into which the gravity catch h drops.

Secured to the car door by means of a staple I is a hasp I' provided in its free end with an elongated slot i , adapted to engage a staple i^2 , secured to the convex face of the latch G, and in order that said hasp may be held in engagement with the latch a pin J, secured to one end of a chain J' is employed.

In the back f' of the casing F is formed a recess f^3 , adapted to receive the staple i^2 when the latch G is in a closed position.

While I have shown a pin for securing the hasp to the latch G, it will be readily understood that any padlock may be employed for the same purpose, and while I have shown my improved fastener applied to a car door it will be seen that it may be employed upon any sliding door.

The operation of my device is as follows:—Supposing the car door to be locked as shown in Fig. 1, to open the door the operator removes the pin and the hasp from the staple i^2 , and turns the latch upward upon its pivot; the convex face of the latch pressing against the lower edge of the gravity catch lifts the latter and passes under it until the face g of the latch is flush with the side of the car, when the catch drops into the recess g^4 and holds the latch in position. The door can now be slid past the fastener. In fastening the door, the operation is reversed; the door having been slid into its closed position, the gravity catch is lifted by hand, permitting the latch to be dropped into the locking position.

Having thus fully described my invention, what I claim and desire to secure by Letters Patent is,

The combination of a wall or casing, a door arranged to slide thereupon, a door fastener movably secured to the wall or casing, ar-

5 ranged to abut against the rear edge of the sliding door when the latter is closed, and to be thrown back flush with the wall or casing to open the door, and a gravity catch to hold the latch when so withdrawn, said catch being raised by said latch as it is so thrown back, substantially as described.

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

EDWIN HUBBELL.

Witnesses:

AMOS BURTNETT,

H. W. SAGE.