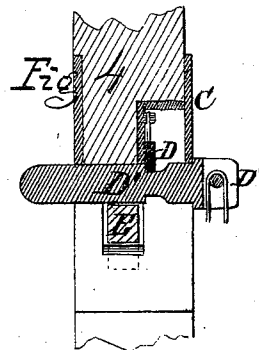
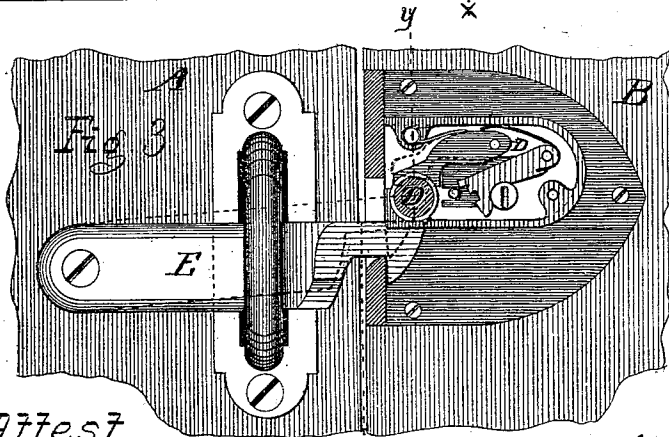
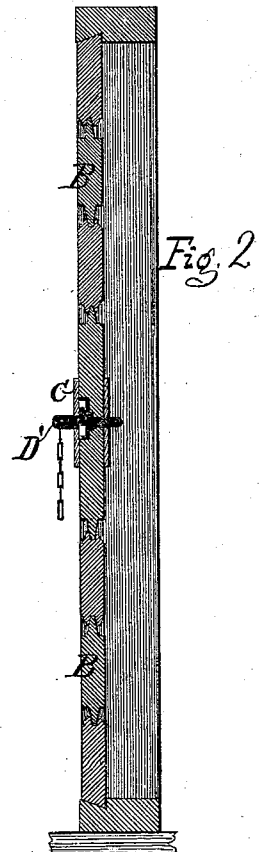
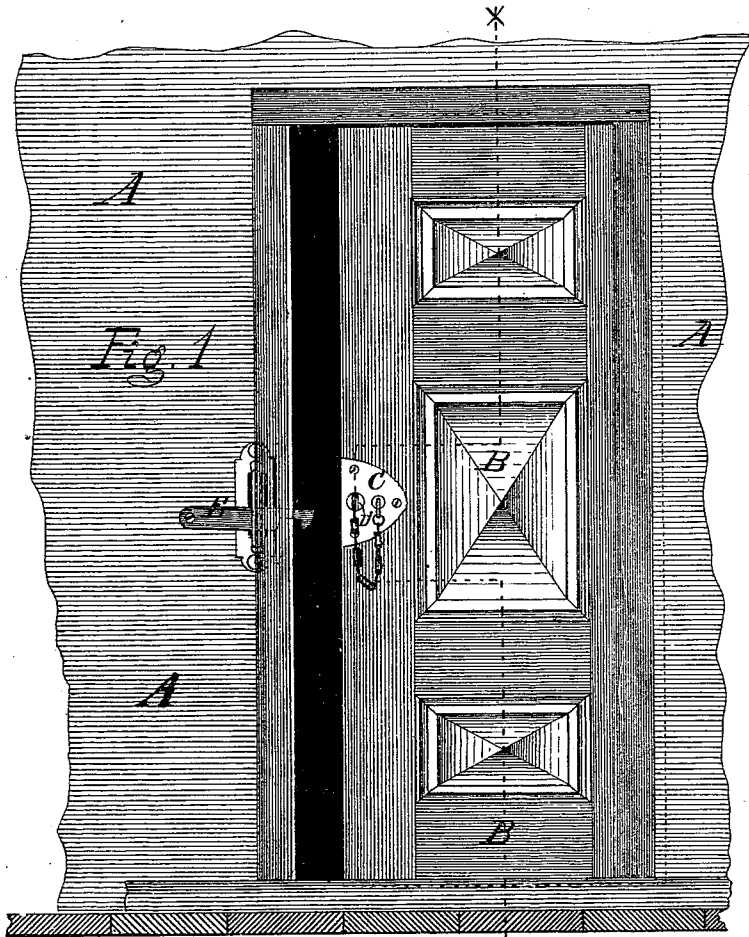


A. F. WHITING.

Improvement in Combined Latches and Locks
for Sliding Doors.

No. 123,533.

Patented Feb. 6, 1872.



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UNITED STATES PATENT OFFICE.

ANDREW F. WHITING, OF BATH, MAINE.

IMPROVEMENT IN COMBINED LATCHES AND LOCKS FOR SLIDING DOORS.

Specification forming part of Letters Patent No. 123,533, dated February 6, 1872.

To all whom it may concern:

Be it known that I, ANDREW F. WHITING, of Bath, in the county of Sagadahoc and State of Maine, have invented a new and useful Improvement in Door-Locks for Railroad Cars; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing forming a part of the same, and in which—

Figure 1 represents a sectional elevation of a railroad car, showing the door thereof with my improved locking device attached. Fig. 2 is a transverse vertical view on line *x x* of Fig. 1, showing the bolt and latch. Fig. 3 is an elevation of a portion of the car-body, showing the latch and the method of its adjustment, and also a section of the door with the lock in position thereon, its outer plate being removed to show the operating mechanism; and Fig. 4 is a transverse section on the line *z z* of Fig. 3.

Corresponding letters refer to corresponding parts in all of the figures.

This invention refers to that class of locking devices which are used upon car-doors, and others which are made to slide instead of swinging upon hinges; and it consists in the combination of the parts hereinafter described and claimed.

To enable others to make and use my invention, I will proceed to describe it.

A in the drawing refers to the body of a railroad car, and B to the sliding door, which may be of ordinary or of any approved form of construction. Upon the door I place a lock, C, the outer plate of which is bolted to the outer surface of the door, but is so formed as to pass over its edge and extend inward upon its inner surface for a distance sufficient to enable it to receive the locking-bolt, which passes through it and extends through the door. Through the two parallel plates of the lock there is made an opening or hole for the reception of the locking-bolt, while its interior construction is such that a bar, D, which is pivoted to one or both of its plates, may be operated by a key, as shown in Fig. 3, or in any other convenient manner, it being so arranged that when pressed down by a spring its lower edge shall enter the annular groove in the locking-bolt, and thus prevent its being withdrawn.

The remaining parts of the lock may be

constructed as shown or in any other suitable manner; but as this invention does not relate to this portion of the lock these parts need not be more particularly described.

The locking-bolt D' is of the form shown in Figs. 2 and 4, it having upon its outer end an enlarged portion for regulating the distance to which it may be inserted into the lock, and in that portion of it which is within the lock an annular groove for the reception of the bar D is made. From this groove the bolt is cylindrical in form. At a proper point upon the body of the car a latch, E, is secured, the forward portion of which works in a guide, while its extreme outer end is in the form of a hook, and is so arranged as to enter a slot formed in the lock-plate, and allow the hooked portion of the latch to fall down within such plate and be held firmly therein by the locking-bolt D', as shown in Fig. 3 of the drawing.

The construction of the locking-bolt and its combination with the latch are regarded as of vital importance, as constituting a very convenient and safe locking device, and one in which, in case it becomes necessary to break any portion thereof in order to gain admission to the car, presents a portion which may be easily destroyed, without injury to the lock and without the expenditure of much time or money in replacing it.

Reference is here made to the latch E, which, in the event of the key being lost, can be easily broken and the door opened, when, by unscrewing the nut upon the bolt which secures it to the car, the broken latch can be removed and a new one put in its place by any of the train hands, and the car relocked upon the procurement of another key.

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

I claim the combination of the lock C, locking-bolt D' passing transversely through the lock, and latch E, the parts being constructed and arranged substantially as and for the purpose set forth.

In testimony whereof I have hereunto signed my name this 19th day of October, A. D. 1871, in presence of two subscribing witnesses.

ANDREW F. WHITING.

Witnesses:

JOS. R. EDSON,
J. WILLIAM MISTER.