J. HILL.

LOCKS FOR CAR-DOORS, &c.

No. 188,134. Patented March 6, 1877.

Fig. 1.

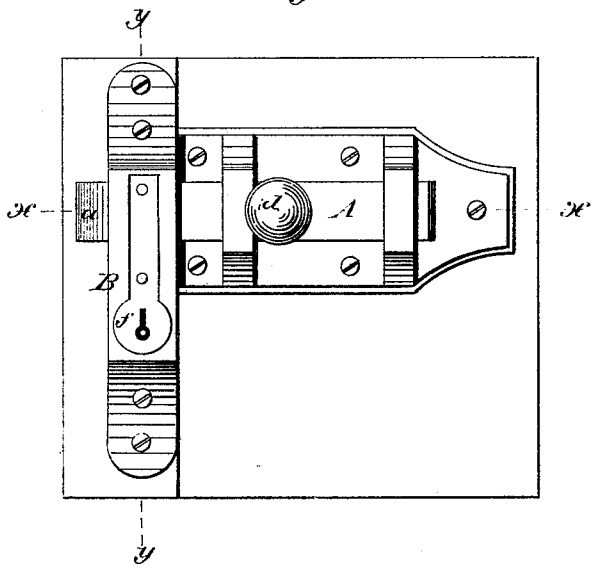


Fig. 2.

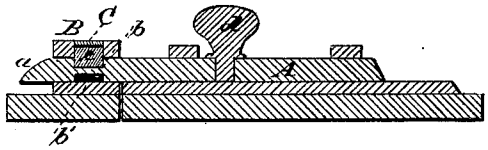
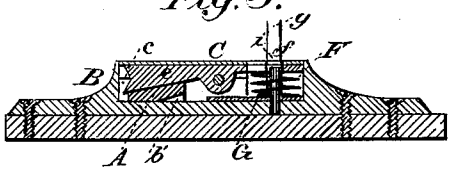


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOSEPH HILL, OF WABASH, INDIANA.

IMPROVEMENT IN LOCKS FOR CAR-DOORS, &c.

Specification forming part of Letters Patent No. **188,134**, dated March 6, 1877; application filed September 18, 1876.

To all whom it may concern:

Be it known that I, JOSEPH HILL, of Wabash, in the county of Wabash and State of Indiana, have invented certain new and useful Improvements in Locks for Car-Doors, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 is a front elevation, and Figs. 2 and 3 are sections in the lines *x x* and *y y* in Fig. 1.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to locks and bolts for railroad-car and other doors; and it consists in the novel construction and combination of parts hereinafter more fully shown and specified.

In the drawing, A is the bolt, which may either be affixed to and form part of a sliding door; or it may be made to slide, in the usual manner, upon a folding door. The end of this bolt is beveled, as shown at *a*, so as to permit it to engage readily with the lock or latch. It has also, near the beveled end, two grooves or mortises, *b b'*, one of which, *b*, is upon its outside, and the other, *b'*, upon its inside, as shown. It is operated by means of a knob or button, *d*.

B is the box or case which contains the latch and locking device. It has a transverse opening, *c*, through which the bolt may enter, as shown. Lengthwise in the box B is pivoted the latch C, which consists of a stem, *e*, shaped so as to fit into the groove *b* of the bolt, and a knob or handle, *f*, by which it is operated. Under the handle *f* is arranged a coiled spring, F, which forces it upward, and thus retains latch C in its proper position. The handle *f* has a perforation, *i*, forming a key-hole, through which a key may be inserted into the box. Below the coiled spring F is a tumbler or slide, G, operated by the key, which, in the drawing, is indicated by the letter *g*, and which forms the locking device of my improved latch and lock.

The manner in which it operates is as follows: When the bolt A has been slid under the latch C, and is secured by the same, the key *g* is turned, thus bringing the slide G—the end of which is beveled—down into the groove *b'*, and preventing the withdrawal of the bolt.

In order to unlock, this operation is simply reversed.

The advantages of my invention will be readily understood from the foregoing description.

The construction of my improved lock and latch is simple, cheap, and durable. It is easily operated, and cannot easily get out of order. Finally, it may be made to occupy less space than most of the car and other locks now in use.

Having thus described my invention, I claim, and desire to secure by Letters Patent of the United States—

The box B, having transverse opening *c*, pivoted latch C, perforated at *i*, coiled spring F, and tumbler or slide G, in combination with the bolt A herein described, substantially as and for the purpose herein shown and specified.

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

JOSEPH HILL.

Witnesses:

J. W. COLLINS,

M. H. KIDD.