

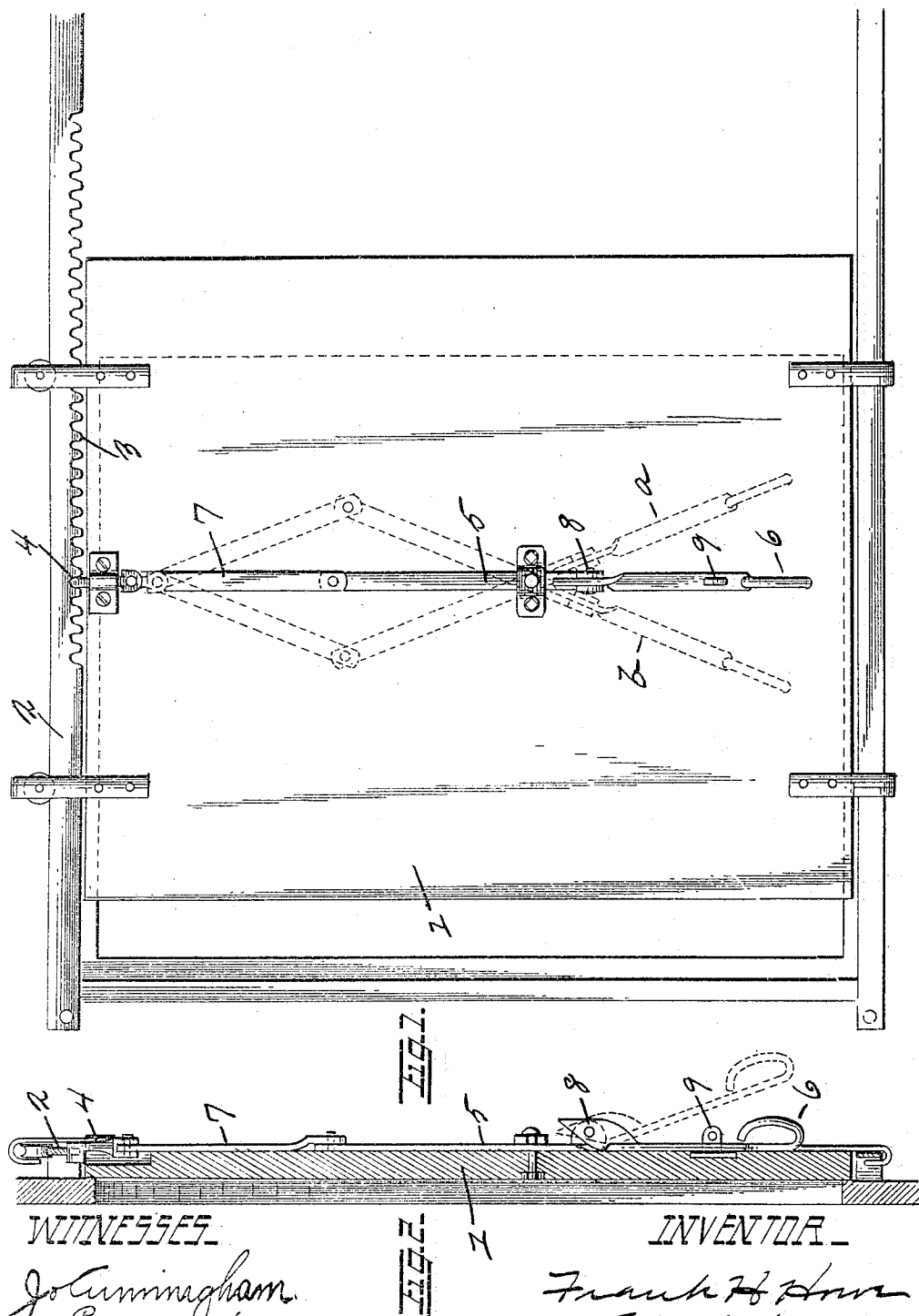
No. 766,253.

PATENTED AUG. 2, 1904.

F. H. HOWE.
CAR DOOR OPERATING AND LOCKING DEVICE.

APPLICATION FILED JULY 18, 1903.

NO MODEL.



WITNESSES
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CAR-DOOR OPERATING AND LOCKING DEVICE.

SPECIFICATION forming part of Letters Patent No. 766,253, dated August 2, 1904.

Application filed July 18, 1903. Serial No. 166,135. (No model.)

To all whom it may concern:

Be it known that I, FRANK H. HOWE, of Curtice, county of Ottawa, and State of Ohio, have invented certain new and useful Improvements in Car-Door Operating and Locking Devices; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form part of this specification.

My invention has reference to a car-door operating and locking device by means of which a car-door may be securely fastened when either open or closed or at any intermediate position.

The invention is especially adapted for employment upon the doors of box-cars carrying perishable goods, it being desirable in such cases to permit the door to stand open slightly for the purpose of ventilation.

In carrying out my invention I employ simple, inexpensive, and easily-operated means for locking the door at any point desired, the handle for operating the locking means being also employed to open and close the door, the bolt which secures the door in locked position being automatically withdrawn when either of these operations is performed.

To this end my invention comprises the novel combination and arrangement of the parts hereinafter shown, described, and claimed.

In the accompanying drawings, Figure 1 is an elevation of a car-door, showing my improved operating and locking device in position thereon. Fig. 2 is a side elevation of the device in place, showing the door in section.

Referring to the parts, 1 indicates the car-door, the same being suitably suspended from a track 2, the lower edge of which is formed with marginal teeth or serrations 3.

4 is a bolt carried by the door, the same being guided vertically and adapted to engage the serrations 3 when projected or to be disengaged therefrom when retracted.

5 is an operating-lever carried by the door and pivoted thereto at a point approximately central thereof, the same being provided at its

lower end with a handle 6, adapted for the twofold purpose of opening and closing the door and for operating the bolt 4, a link 7 connecting the upper end of the operating-lever with the bolt. At a point between its pivotal connection and the handle thereon the operating-lever is provided with a hinge-joint 8, permitting the lower end of the lever to be broken outward, as shown in dotted lines, Fig. 2. The operating-lever is also provided with an elongated perforation adjacent to the handle thereon, adapted to register with a stud or a staple 9 upon the face of the door, so that the handle may be locked in the position shown in full lines, Fig. 1, by means of a pad-lock or sealed by means of the ordinary sealing devices employed by railroad companies.

The invention is operated as follows: Should it be desired to open the door, the same being in closed position, the handle of the operating-lever is grasped and the lower portion of the lever broken outward, as shown in dotted lines, Fig. 2, and the same is then pushed to the right to the position in dotted lines *a*, Fig. 1. This operation will withdraw the locking-bolt and disengage the same from the serrated track. The pressure upon the handle being continued in a right-hand direction, the door will slide to the right. In like manner if the handle of the operating-lever is grasped and moved to the left to take the position in dotted lines *b*, Fig. 1, the initial effect of the operation will be to retract the bolt, the door then moving to the left by continued pressure upon the operating-handle. When it is desired to lock the door at any intermediate position, the lever and link connecting the same with the locking-bolt are made to assume the position in full lines, Fig. 1, the bolt being projected when in this position to engage the serrated track. The lever when in this position may be sealed by means of an ordinary seal, unauthorized breaking of which would be punishable by the usual penalty imposed.

It is apparent from the foregoing description that the door may be locked in either closed or open position or at any intermediate point and that the engagement of the handle of the operating-lever and its move-

ment in either direction to open or close the door will first effect the withdrawal of the locking-bolt, the operation being simple, convenient, and effective. Furthermore, since
5 the door is engaged at a point near its center the tendency to jam while opening or closing is entirely eliminated.

The novelty, utility, and advantages of my invention will be apparent.

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

In a car-door operating and locking device of the character described, the combination
15 with a car-body, a longitudinal track thereon provided with a serrated lower portion, a door slidably supported upon said track, a slidable bolt mounted in a suitable guide upon said door and provided with a socket at its
20 rear end, a link adapted to enter said socket

and pivotally secured to the bolt, a lever mounted substantially centrally upon said door having one end portion cut out to form a socket, being pivotally connected at its forward end with said link, supporting means
25 carried by the door for said lever, a handle having a flattened perforated portion adapted to enter the socket of the lever, and means for pivotally supporting the same within the socket whereby said handle may be swung
30 outwardly and upwardly, substantially as described.

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

FRANK H. HOWE.

Witnesses:

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HENRY G. DEHRING.