

G. E. ALLISON.
CAR DOOR LOCK.
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968,727.

Patented Aug. 30, 1910.

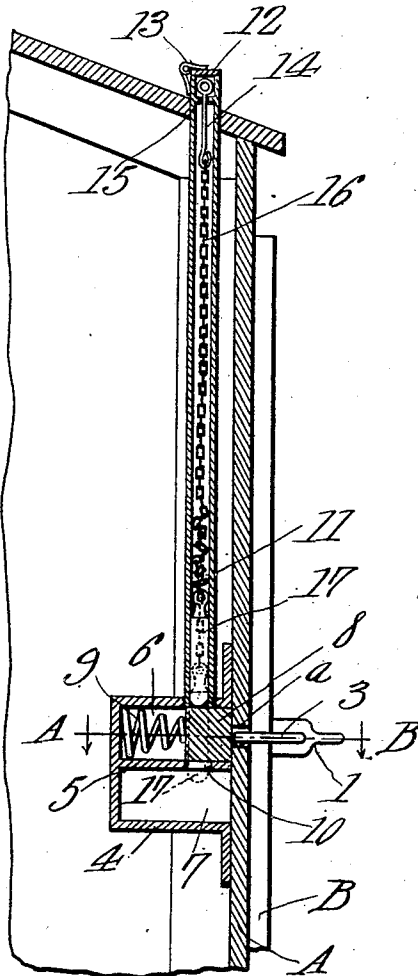


Fig. 1

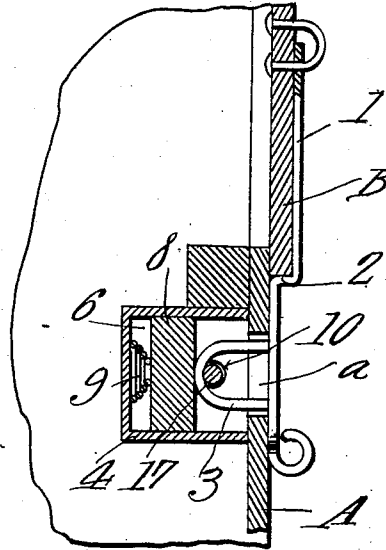


Fig. 2.

Witnesses

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GEORGE E. ALLISON, OF STONINGTON, CONNECTICUT.

CAR-DOOR LOCK.

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To all whom it may concern:

Be it known that I, GEORGE E. ALLISON, a citizen of the United States, residing at Stonington, in the county of New London and State of Connecticut, have invented a new and useful Car-Door Lock, of which the following is a specification.

This invention relates to car door locks and is designed to prevent the opening thereof except from the top of the car whereby any one attempting to open the car door will be in full view of the crew of a train or others who are employed to watch freight trains when standing in a freight yard, siding or the like.

It is proposed to have the lock include a hasp which can be conveniently manipulated in locking and unlocking the same and to dispense with a key for controlling the lock, the lock being under complete control by means accessible from the top of the car.

With these and other objects in view the invention consists in certain novel details of construction and the combination of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a vertical longitudinal section through the lock and through a portion of the car on which it is mounted. Fig. 2 is a section on line A—B Fig. 1.

Referring to the figures by characters of reference A designates the wall of the car and B designates the car door, there being an opening *a* in the said wall and close to the free vertical edge of the door when said door is shut. A hasp 1 is connected to the door and is offset as at 2 so as to overlap one edge thereof, there being a loop 3 extended from one face of the hasp and adapted to project into and through the opening *a*.

A casing 4 is secured to the inner surface of the wall A and has a central partition 5 arranged horizontally therein, said partition forming an upper compartment 6 and a lower compartment 7 within the casing, the outer end of said compartment being closed by the wall A. The slot *a* opens into the upper compartment 6 and is normally closed by means of a retaining slide 8 which is pressed yieldingly against the wall A, by means of a spring 9 seated within the com-

partment 6. An opening 10 is formed in the partition 5 and in vertical alinement with a guide tube 11 extending from the top of the casing 4 and upwardly to and through the roof of the car, the upper end of the tube being normally closed by a cap 12 which may, if desired, be provided with a spring 13 for holding the cap normally closed. Moreover, if desired, any suitable sealing means may be employed for holding the cap closed. A rod 14 is slidably mounted in the upper portion of the tube, it being mounted in a suitable guide 15, if preferred, and the lower end of the rod being connected, by means of a chain 16 or the like, to a bolt 17 which is loosely mounted in the lower end of the tube.

It is to be understood that when the loop 3 is withdrawn from the opening *a*, the spring 9 will press the slide 8 forward against the wall A and the bolt 17 will thus be free to rest upon the slide 8 as shown in Fig. 1. To lock the door, the loop 3 of the hasp is inserted into the opening *a* and pressed against the slide 8 so as to force said slide inwardly from under the bolt 17. Said bolt will then promptly drop by gravity into the loop 3 and will be supported in the opening 10, thus locking the hasp to the wall of the car. In order to unlock the door it is first necessary to get onto the roof of the car and raise the cap 12 after which the cap 14 can be drawn upwardly and the chain or other connection 16 will thus lift the bolt 17 out of the loop 3 and also out of the path of the slide 8. The spring 9 will then promptly shift the slide toward the opening *a* and the loop 3 will be projected from said opening and the door thus released.

It is to be understood of course that various changes may be made in the construction and arrangement of the parts without departing from the spirit or sacrificing any of the advantages of the invention as defined in the appended claims.

What is claimed is:—

1. The combination with a car and door, of a hasp carried externally by the door, locking means carried by the car for engagement with the hasp, and means accessible from the roof of the car only for releasing the hasp.

2. A lock comprising a casing having a partition, a slidable bolt working into the casing and partition, a tubular guide for the

bolt, spring pressed means for supporting the bolt at one limit, a hasp having a loop to enter the casing for the reception of the bolt, said loop adapted to force the bolt supporting means out of engagement with said bolt, and means in the guide for shifting the bolt.

3. A lock comprising a casing having a compartment therein and an opening in one wall of said compartment, a bolt working across said compartment, a tubular bolt guide extending from the casing, means in the guide for shifting the bolt, a spring pressed supporting device movably mounted within the compartment and normally closing said opening and supporting the bolt at one limit and a hasp having a loop to enter the opening to displace said supporting device and receive the bolt.

4. A lock comprising a casing having a compartment therein, a spring pressed supporting device movably mounted within said compartment, a bolt normally supported by said device, a hasp having a loop for insertion into the compartment to displace said supporting device and receive the bolt, and flexible means extending above the bolt for elevating said bolt.

5. The combination with a car and a door, of a casing secured to a wall of the car and having a compartment, there being an opening in said wall and at one end of the compartment, a supporting device movably mounted within the compartment, means for holding said device normally in a predetermined position to close the opening, a bolt normally supported by said device, a guide therefor, means housed within the guide for actuating the bolt, said guide and means extending to and through the roof of

the car, and a hasp connected to the door and having a loop insertible through the opening and against the supporting device to shift said device and release the bolt.

6. The combination with a car and a door movably connected thereto, there being an opening in the wall of the car, of a casing having a compartment communicating with said opening, a guide tube extending from the casing and through the roof of the car, a bolt slidably mounted within said guide, bolt operating means within the guide and extending to the top of the car, spring pressed bolt supporting means slidably mounted within the casing, and a hasp having a loop insertible into the opening and against said means to release the bolt.

7. The combination with a car and a door movably connected thereto, there being an opening in the wall of the car, of a casing secured to the wall and back of the opening, a guide tube extending upwardly from the casing and through the roof of the car, a closure upon the upper end of the tube, a locking bolt slidably mounted within said tube, bolt actuating means normally housed within the tube, spring controlled means within the casing for holding the bolt normally elevated, and a hasp connected to the door and having a loop insertible through the opening for shifting the supporting means to release the bolt.

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

GEORGE E. ALLISON.

Witnesses:

JOHN H. RYAN,
ELIAS B. HINCKLEY.