(No Model.)

T. R. PUGH & A. P. LE GROS.

CAR DOOR LOCK.

No. 307,139. Patented Oct. 28, 1884.

Fig. 1.

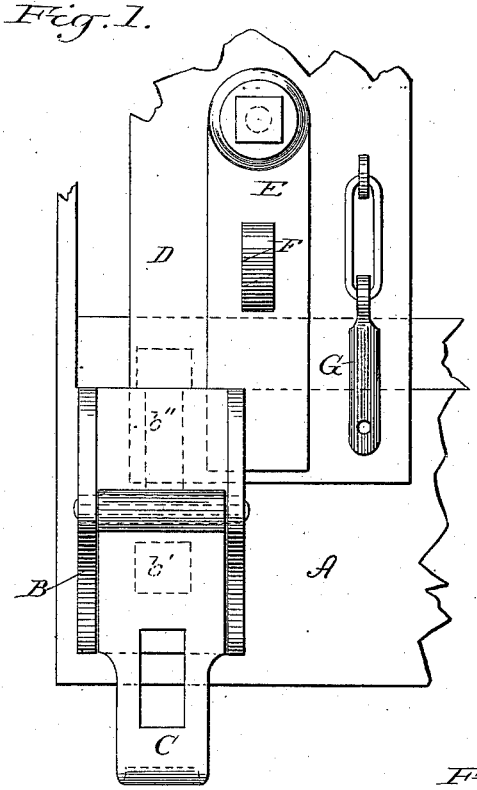


Fig. 2.

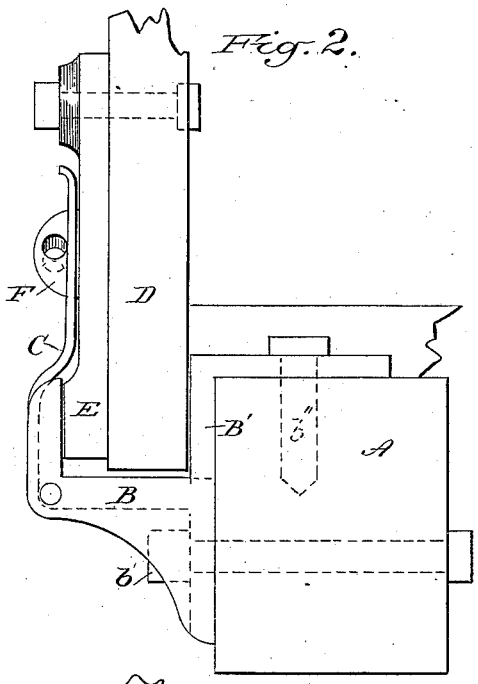


Fig. 3.

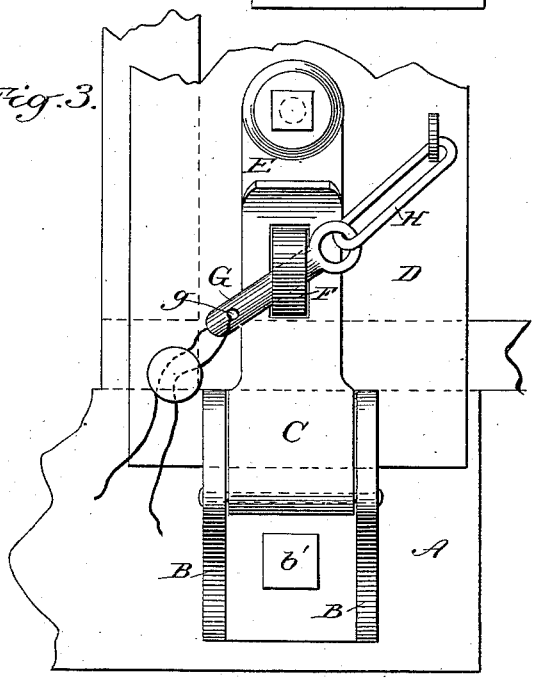
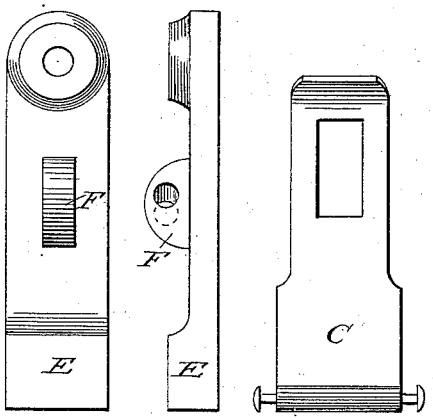


Fig. 4.



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THOMAS R. PUGH AND ALFRED P. LE GROS, OF LOUISVILLE, KENTUCKY.

CAR-DOOR LOCK.

SPECIFICATION forming part of Letters Patent No. 307,139, dated October 28, 1884.

Application filed November 17, 1883. (No model.)

To all whom it may concern:

Be it known that we, THOS. R. PUGH and ALFRED P. LE GROS, citizens of the United States, residing at Louisville, in Jefferson county, Kentucky, have invented an Improvement in the Fastenings of Freight-Car Doors, of which the following is a specification.

Our invention relates to the fastening and sealing of the doors in the sides of freight-cars, and is intended to give additional safeguards, both moral and physical, against thieves without or within the car. The usual mode of fastening and sealing the door at present is to let it run at the bottom on two stirrups or guide-bars, besides a third, to which it slides when open. To prevent the slipping or tipping of the door, wedges are introduced between it and the upright part of the stirrup on the outside of the door. These stirrups are at or near each side or corner of the door. They are attached to the door-sill by a bolt which runs horizontally through the stirrup and sill, the bolt-head being on the outside of the stirrup, and its screw-point reaching beyond the opposite face of the door-sill, where it is held by a nut. This screw-point and nut are exposed under the car-floor. Near the middle of the height of the door, and near one or the other of its edges, a staple or latch is put, and a latch or staple on the adjoining door-post, and when the door is closed the latch is put over the staple and a wire with a leaden seal is run through the staple, so that the latch cannot be lifted without breaking the seal. Our object is to secure the stirrup more firmly to the car, so as to keep it from being taken off too easily, to bring the seal within easy inspection of persons on the ground, and to prevent the pushing open the door by any person (say a thief) who may have locked himself in on the inside.

We illustrate our invention by the annexed drawings, among which Figure 1 is a front view of a section of the door and door-sill with the stirrup, wedge, &c., while the door is open. Fig. 2 is a cross-section of the same. Fig. 3, a front view, the door being closed and sealed. Fig. 4 shows certain parts in detail.

In all these figures A is a section of the door-sill.

B is the stirrup or guide-bar. The part thereof which is new, or which we add to that in use heretofore, is marked B′, and is separated by a dotted line from the lower and old part. This can be fully seen only in Fig. 2. Two bolts are seen in that figure passing through stirrup and door-sill. That running horizontally is old, that running vertically and marked *b″* is new.

C is a latch, which is pivoted on the stirrup and closes into a slotted recess thereof and reaches upward.

D is a section of the door.

E is a wedge that hangs from a bolt fastened to the door, and to which a staple, F, is attached, (it may be of one piece, wedge and staple being presumably of iron or steel,) which staple the latch C is expected to embrace.

G is a sealing-pin with an eye-hole at *g* for sealing-wire, which hangs by chain or link H from a small ring or staple in the door.

The object and effect of the upper angle of the stirrup, (above the dotted line between B and B′, in Fig. 2,) which fits up to and upon the upper end of the door-sill, is to give room for holding the stirrup down by the bolt *b″*, of which the head is embedded in and covered by the car-floor, while the screw-point is embedded in the wood of the sill; hence, neither end is accessible to thieves within or without, while the horizontal bolt *b′* now in use, with its nut, is exposed at both ends to the handling of persons outside of the car. By combining the staple and latch with the wedge we bring them and the seal into a position more convenient for inspection, and, moreover, give greater firmness to the sealing-pin. By using a pin of substantial thickness, with an eye-hole for a wire, instead of a mere wire, and running this pin through the staple over the latch, we offer a physical obstacle to any one who should try to push the door open while confined himself in the inside of the car.

What we claim as new, and desire to secure by Letters Patent, is—

1. In the stirrups or guides for sliding doors of freight-cars, an upper angle reaching up to and upon the upper edge of the door-sill, with a bolt or its equivalent holding it down by being driven downward through it into

the door-sill, substantially as shown and specified above.

2. In a car-door fastening, the combination of the stirrup secured to the body of the car, the slotted latch or hasp C, hinged to the stirrup, the wedge E, pivoted to the car-door and provided with the staple F, and means, substantially as described, for securing the latch or hasp upon said staple, substantially as described, and for the purpose set forth.

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