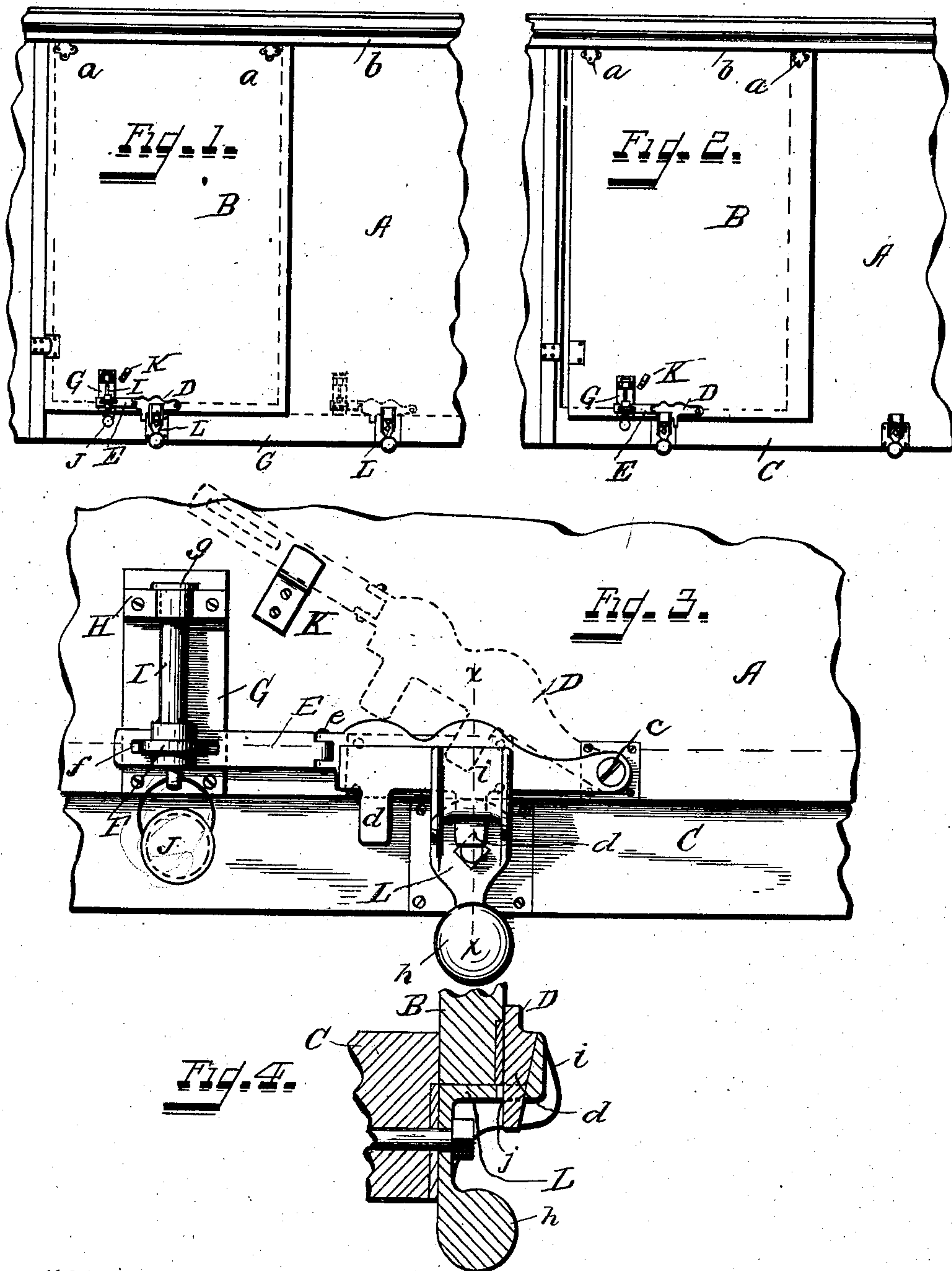


No. 742,110.

PATENTED OCT. 20, 1903.

F. C. ANDERSON.  
CAR DOOR FASTENING.  
APPLICATION FILED MAR. 17, 1902.

NO MODEL.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

FRANK C. ANDERSON, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-THIRD TO  
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## CAR-DOOR FASTENING.

SPECIFICATION forming part of Letters Patent No. 742,110, dated October 20, 1903.

Application filed March 17, 1902. Serial No. 98,651. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK C. ANDERSON, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Car-Door Fastenings, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to doors for freight-cars; and it has for its object the provision of certain novel equipments whereby the door can be opened and closed without binding even if the car has sagged and the door-posts become warped or bent and can be locked in both its open and closed positions in a very simple and efficient manner.

Under the present construction of freight-car doors when there is no provision made for holding the door locked in its open position and frequently in the switching of cars when empty, the doors being unlocked and free to slide under the buffing jars necessary in this duty, the doors are slid back and forth against their edge stops and frequently great injury is done to them, their locks become broken, and for future use they have to be nailed up or held in place by cleats nailed to the sides of the car, and in opening a door thus secured very little care is exercised, and generally a crowbar is used to pry off the cleats and pry the door open, and in closing doors where the timbers are warped the crowbar is again used to pry the door out to permit it to pass such warped timbers, and altogether the door and car receive such rough treatment that the car has to go very frequently to the repair-shop and a new door has to be supplied with new equipments. My invention remedies all of this destructive practice, and its novelty will be hereinafter more fully set forth, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a part of a car, showing the door applied thereto and locked in its entirely-closed condition by my improved fastening. Fig. 2 is a corresponding view showing the door locked in a partly-open position. Fig. 3 is an enlarged detail side elevation of my improved fastener. Fig. 4 is a sectional

side elevation on the dotted line *xx* of Fig. 3 looking to the right.

The same letters of reference are used to indicate identical parts in all the figures.

A represents a freight-car of the usual or any suitable construction; B, its sliding door, hung by the usual or any suitable hangers *a* upon the transverse rail *b*, as seen in Figs. 1 and 2.

My improved fastener (shown in detail particularly in Figs. 3 and 4) is applied at the bottom edge of the door, preferably near its middle, one part being secured to the lower part of the door and its opposite or engaging part to the sill C of the car. The part secured to the door is a plate D, pivoted, as at *c*, to the door and having two or more downwardly-projecting tongues *d*, whose outer sides are beveled, as seen particularly in Fig. 4. To the end of the plate D, opposite its pivot *c*, is hinged by a vertical pivot, as at *e*, a hasp E, with a slot *f* in its outer end adapted to engage over a staple or keeper F, projecting from a plate G, having a perforated bearing-plate H at its upper end for the passage of a vertical locking-pin I, whose lower end when the hasp is engaged over the staple F is adapted to pass through the perforation in said staple to lock the same and to lock the pin against accidental or fraudulent withdrawal. Its lower projecting end has a perforation for the reception of any suitable locking-seal J, which in this instance is represented as an ordinary lead seal with a wire passing through the perforation in the pin. The upper end of the pin is headed, as at *g*, to limit its downward movement, but not to prevent its being drawn up to release the hasp from the staple when the seal is removed. When out of use, I provide a bracket K, secured upon the door, with which the hasp may be engaged, so as to hang it and the plate D up and out of the way, as shown by the dotted lines, Fig. 3.

Suitably pivoted to the sill of the car is a plate L, to which is secured at its lower end a weight *h* and at its upper end a socketed bracket *i*, having a perforation *j* through its lower side for the passage of either one of the tongues *d*, as seen in Fig. 4, and the inner face of the bracket *i* is beveled to correspond



with the bevel of the tongues, so that when the plate D is lowered to engage either one of the tongues with the socketed bracket *i*, as seen in Fig. 4, the lower edge of the door is 5 firmly forced against the sill of the car to effect a tight closure, as will be readily understood.

By having a plurality of tongues upon the plate D the door may be locked in an entirely-closed position, as seen in Fig. 1, by 10 the engagement of the right-hand tongue with the swinging bracket-plate, or it may be locked in a partially-opened position to give ventilation by engagement of the left-hand 15 tongue, as seen in Fig. 2, and by the employment of a second swinging bracket-plate upon the sill of the door, as seen in Figs. 1 and 2, the door may be locked when it is entirely opened, as shown by the dotted lines in Fig. 20 1, and this is desirable in order to prevent the accidental sliding of the door backward or forward in case of such jars as are incident to cars in shunting, coupling, or other sudden movements.

25 One of the principal advantages of my construction growing out of placing the fastener at the bottom edge of the door is that when it is disengaged and the bracket-plate L is swung sidewise the door can be swung outward 30 (the hangers having sufficient play for this purpose) for a sufficient distance to enable it to clear any warped posts and then can be slid along to the position desired and can be drawn in and locked.

35 While I prefer a plurality of locking-tongues, it is evident that a large part of the advantage of my invention would be secured

with a single tongue, and in this respect my invention is not to be limited to the number 40 of tongues employed.

While I prefer that the bracket-plate L should be pivoted with its bracket *i* projecting 45 above the edge of the door, it is evident that said plate might be rigid upon the car-sill and its bracket need not project above the edge of the door, in which case the swinging of the plate would be obviated.

Having thus fully described my invention, I claim—

1. A car-door fastener comprising a plate 50 provided with one or more tongues, said plate pivoted to the door near its lower edge, a hasp pivoted to said plate, a locking-staple for said hasp secured to the door, and a swinging 55 bracket-plate secured to the body of the car below the lower edge of the door with which any one of said tongues may be engaged in order to lock the door against endwise movement.

2. In a car-door fastener the combination 60 of a plate provided with one or more tongues pivoted near the bottom edge of the door, a hasp pivoted to said plate, a locking-staple for said hasp secured to the door, a locking-pin for said staple and hasp adapted to receive a seal, and a swinging bracket-plate secured to the body of the car below the lower 65 edge of the door with which any one of said tongues may be engaged in order to lock the door against endwise movement.

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Witnesses:

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