

J. E. POSTER.
DOOR FOR MINING CARS.
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956,329.

Patented Apr. 26, 1910.

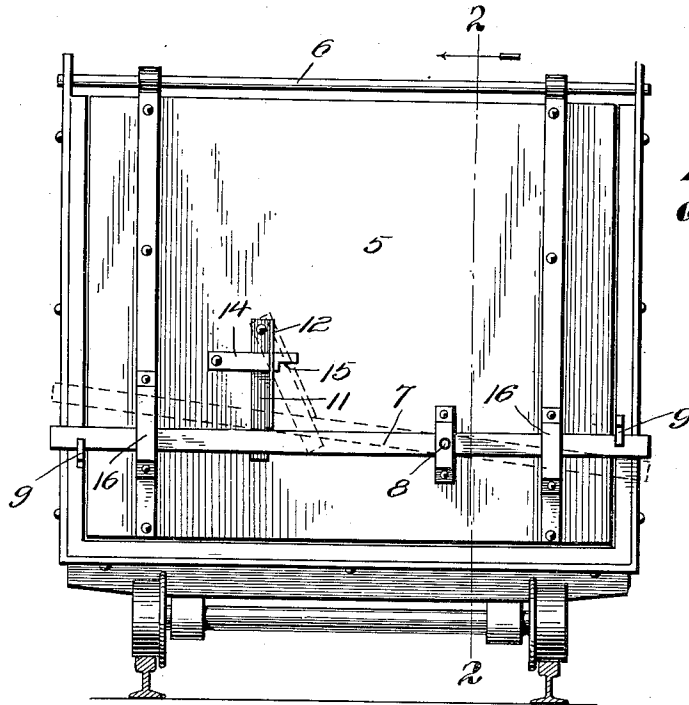


Fig. 1.

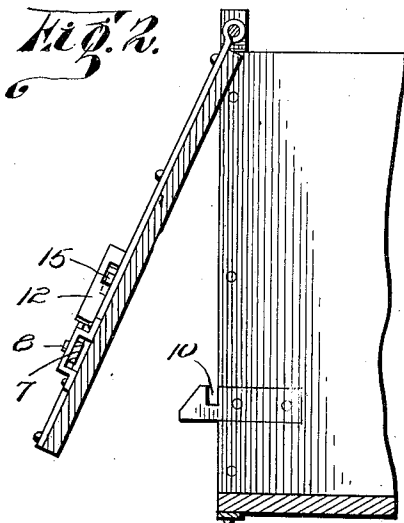


Fig. 2.

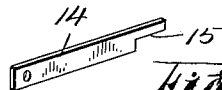


Fig. 3.

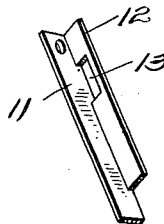


Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

JAMES E. FOSTER, OF LORE CITY, OHIO, ASSIGNOR OF ONE-HALF TO ELMER E. VORHIES, OF LORE CITY, OHIO.

DOOR FOR MINING-CARS.

956,329.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JAMES E. FOSTER, a citizen of the United States of America, residing at Lore City, in the county of Guernsey and State of Ohio, have invented new and useful Improvements in Doors for Mining-Cars, of which the following is a specification.

This invention relates to doors for mining cars, and the principal object of the invention is to provide a simple and convenient door which may be readily thrown open to admit of the contents of the car being discharged, together with means whereby the door when closed may be held securely locked.

A further object of the invention is to provide auxiliary locking means for the car door in connection with a latch, whereby the auxiliary locking means may be held disengaged from the latch lever whereby the door is secured when closed.

Further objects of the invention are to simplify and improve the general construction and operation of a device of the character outlined above.

With these and other ends in view which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the invention may be resorted to when desired.

Figure 1 is an end view of a car equipped with the improved door and door securing means. Fig. 2 is a vertical sectional view, showing the door swung partly open. Fig. 3 is a perspective detail view of the auxiliary latch lever. Fig. 4 is a perspective detail view of the auxiliary locking device.

Corresponding parts in the several figures are denoted by like characters of reference.

The door 5 is suspended from a shaft 6 in such a manner that the lower edge of the door is capable of swinging outward, as will be seen in Fig. 2. The door may be normally secured in a closed position by means

of a latch lever 7 fulcrumed at 8, the ends of said lever being adapted to engage beveled catch members 9 secured upon the sides of the car and having notches for the reception of the ends of the lever 7, as will be seen at 10 in Fig. 2.

Pivotally mounted upon the door 5, a short distance above that arm of the latch lever 7, which moves upwardly to disengage the lever from the catch members, as will be seen in dotted lines in Fig. 1, is an auxiliary locking member consisting of a plate 11 having a flange 12 adapted to engage the upper edge of the lever 7 when the latter is in engagement with the catch members 9, as seen in Fig. 1, thus securely locking the lever 7 against displacement. The flange 12 is provided with a slot 13 for the passage of one end of a latch member consisting of a lever 14, pivoted upon the door 5 and provided in its underside, near its free end, with a notch 15. It will be readily seen that when the locking member 11 is swung to a disengaged position with reference to the lever 7, as seen in dotted lines in Fig. 1, it may be retained in such position by permitting the free end of the latch lever 14 to drop until the shoulder formed by one wall of the notch 15 abuts upon the flange 12. The auxiliary locking device will thus be held disengaged from the lever 7, while the latter is being disengaged from the catches 9 to permit the door to swing open. Keepers 16 are mounted upon the car door to confine and guide the arms of the lever 7.

By this improved device a car door may be held very securely in closed position, and the auxiliary locking device whereby the latch lever is secured when in engagement with the catch members may be held positively disengaged from the said latch lever while the latter is being manipulated for the purpose of discharging the load from the car in connection with which the device is used.

Having thus described the invention, what is claimed as new, is:—

1. A car door having a latch lever, an auxiliary locking device consisting of a pivotally supported plate having a flange to engage the latch lever, and means for supporting the auxiliary locking device in non-engaging position.

2. A car door having a latch lever, an auxiliary locking device consisting of a plate having a flange adapted to engage said

latch lever, said flange being provided with a slot, and a pivotally supported arm extending through said slot and having a notch.

- 5 3. A car body having beveled and notched catch members, a hingedly supported door, a latch lever pivoted upon the door and adapted to engage the catch members, a locking device consisting of a pivotally support-
10 ed plate having a flange to engage the latch

lever, and a pivotally supported member adapted to engage the flanged plate to sustain the latter in non-engaging position with reference to the latch lever.

In testimony whereof I affix my signature 15
in presence of two witnesses.

JAMES E. FOSTER.

Witnesses:

LORA MENDENHALL,
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