G. WILLIAMS.

Dumping Car.

No. 56,480. Patented July 17, 1866.

Fig. 1. *Fig. 2.*

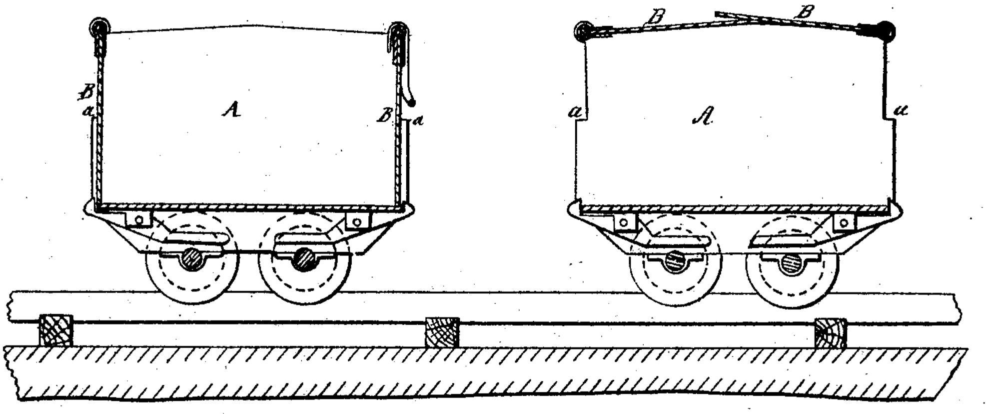


Fig. 3.

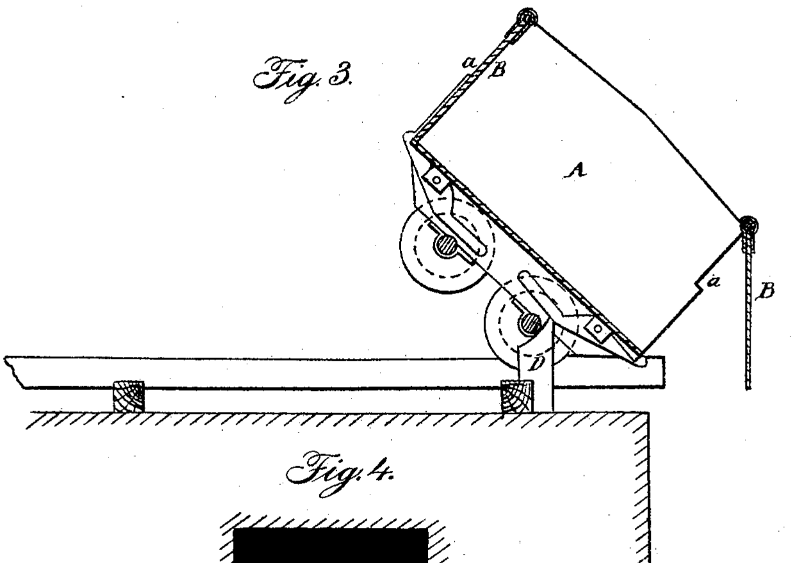


Fig. 4.

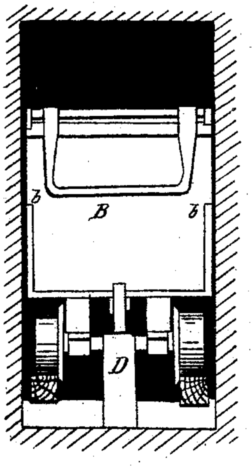
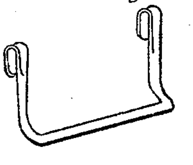


Fig. 5.



Witnesses:
C. A. Petti
Mm. A. C. Hlaucke

Inventor:
George Williams

UNITED STATES PATENT OFFICE.

GEORGE WILLIAMS, OF STERLING, COLORADO TERRITORY.

IMPROVED ORE AND TIMBER CAR FOR MINES.

Specification forming part of Letters Patent No. **56,480**, dated July 17, 1866.

To all whom it may concern:

Be it known that I, GEORGE WILLIAMS, of Sterling, in the county of Park and Territory of Colorado, have made a new and useful Improvement in Combined Ore and Timber Car for Mines; and I do hereby declare the following to be a full, clear, and exact description of the nature, construction, and operation of the same, sufficient to enable one skilled in the art to which it appertains to construct and use the same, reference being had to the accompanying drawings, which are made part of this specification, and in which—

Figure 1 is a vertical longitudinal section, showing the ends of the car down in order to travel as an ore-car. Fig. 2 is a vertical longitudinal section of car arranged for carrying timber. Fig. 3 is a vertical longitudinal section, showing the car in the act of dumping. Fig. 4 is an end elevation, showing the car in the crevice. Fig. 5 is a perspective view of the detachable handle by which the hand-car is moved.

The improvement in the construction of the car, which is to be drawn or driven by manual power in the crevice of the mine, consists in so constructing the ends that they shall be self-supporting, either against the ends or upper edges of the sides of the car; in the arrangement whereby the car is adapted for containing ore or long timbers; in the arrangement for tripping the door-fastening, and in the detachable handle for manipulating the car.

In the drawings, A A are the sides of the car, which are notched at *a*, so that the door B may shut partially against and partially within the sides, as shown in Figs. 1 and 5, the under portion, *b*, of the door shutting against the end in the notch *a*. This arrangement secures the door from displacement in any direction save the one in which it is secured by the latch C, which is pivoted underneath the car in such a manner as to be actuated by the post D, which is placed in the track so as to trip the trigger at the desired point.

A blow or pressure against the forward end or beneath the outer end of the trigger will not open it, but it requires the contact of the post D with the inner end, which is attained when the car arrives at the discharging-point. (See Fig. 3.)

In the condition shown in Fig. 1 the car is prepared to carry ore, rock, or the detritus of the mine to the point of discharge, and in the condition shown in Fig. 2 it is prepared for carrying timbers into the mine for the support of the roof and sides, for laying track, or other uses familiar to mining experts.

The conversion from the condition Fig. 1 to that shown in Fig. 2 is made by raising the doors and folding them over, so as to form a temporary roof, the wide portions *b b* resting upon the upper edge of the sides as they before rested against the ends.

The swinging handle, Fig. 5, is provided as a matter of convenience and security to the hands, which are thereby less exposed than when grasping the exposed upper edge of the door.

The car is designed to be used in crevices which have been opened by the removal of pay-rock, and the arrangement of duplicate doors permits the use of it without turning from either direction toward a common downcast shaft when used by two sets of miners whose tracks approach a common point of discharge from two different directions, and who use the car alternately.

The arrangement for change in the condition of the car permits it to carry loads each way with but little trouble in conversion, instead of compelling one car to be removed before the other can be put in position.

The form of the doors enables them to be supported by the sides without braces, cleats, or bars, and gives no occasion for the accumulation of trash therein or difficulty of discharge therefrom.

What I claim as new is—

1. The construction of the doors with a wider portion, *b*, to adapt them to be supported by the sides of the car, substantially as described.

2. A car constructed with end doors adapted to be folded over the top, for the purpose of converting it into a timber-car.

3. In combination with the above, a trigger, C, provided with an inward projection adapted to be tripped by the post D.

GEORGE WILLIAMS.

Witnesses:

CHARLES A. PETTIT,

ALEXR. A. C. KLAUCKE.