

UNITED STATES PATENT OFFICE.

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CALIFORNIA.

MINE-CAR.

No. 863,971.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, THOMAS M. EDMONDSON, a resident of Los Angeles, in the county of Los Angeles and State of California, and DUNCAN FERGUSON, of Havilah, in the county of Kern and State of California, both citizens of the United States, have invented a new and Improved Mine-Car, of which the following is a full, clear, and exact description.

Our invention relates to mine cars which are necessarily made short in length and narrow in width, in consequence of the contracted areas and inconvenient places in which they are used. To convey a load of any considerable quantity, therefore, it is necessary to extend the body of the car in height, which adds to the labor and time required in loading the car due to the increased difficulty in lifting the loading material over the top of the body of the car.

Our invention has for its main object, therefore, to provide means whereby a car of this character may be loaded with the least possible expenditure of time and labor. It frequently becomes necessary, moreover, to remove the drill machinery and column out of the mine. This cannot be done conveniently with the ordinary box car now in use, and one of the objects of our invention is to provide a mine car capable of being quickly and readily loaded, and adapted to receive and transport the mining appliances out of the car.

Such results we accomplish by the means illustrated in the accompanying drawings, in which drawings like characters of reference indicate like parts throughout the views, and in which

Figure 1 is an end elevation of a mine car embodying our invention; Fig. 2 is a plan of one end of the body of the car; Fig. 3 is an end elevation of a car embodying a modification of our invention; and Fig. 4 is a plan of the end of the car body shown in Fig. 3.

As illustrated in the drawings, the body of the car is of box formation having side walls 1 and end walls 2. A gate-way 3 is formed in the upper portion of the end wall 2, having gate jambs 4 secured to the end wall of the body of the car, as indicated by dotted lines in Fig. 1. The gate way 3 is adapted to receive a gate 5 which is hinged at its lower end by means of a hinge pin 6 to hinge bars 7 and 8 attached to said gate and the end wall of the body of the car. A latch 9 is pivotally attached to the end wall 2, and preferably provided on its end with an eye adapted to engage a pivot pin 9^a secured to the end wall of the body of the car, the opposite end 9^a of said latch being looped around the upper edge of the gate 5 so as to lock the upper end of the gate in position in line with the end wall of the body, as shown in Fig. 1. In cars of ordinary

width the gate 5 is preferably made narrower than the end wall of the body so as to leave upper side portions 2^a which are reinforced by the plates 4 forming the gate jambs, thereby stiffening the end wall of the car and preventing the car body from spreading under pressure of the load contained therein. The ends of the gate-way 3 and gate 5 are preferably inclined downward and inward for the purpose of strengthening the end wall as much as possible, and also for decreasing the area of the gate at its lower portion. Where the car is necessarily made narrow in width, the gate 5 is preferably extended entirely across the loading end of the car with its ends adapted to bear against jambs formed on the end of the car by means of angled bars 11, as clearly illustrated in Fig. 4. When the car is in use the end gate 5 is dropped so as to open the gate-way 3 and allow the loading material to be readily lifted into the car through the gate-way, instead of being obliged to lift such material over the top of the body, as in cars of ordinary construction. But one end of the car is provided with a gate so that the loading material may be thrown into the opposite end of the car through the gate-way 3, and the rear and upper portion of the car filled through the gate-way. The gate 5 may then be closed and the remainder of the load lifted over the top of the car body or gate. When it is desired to remove the drilling appliances from the mine, the column drill and other portions of machinery may be readily placed within the body of the car by dropping the end gate, and transported as conveniently as on a platform car.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

1. In a mine car, a box body having a partial end wall, hinge bars extending transversely of said wall, a gate provided on its ends with hinge rods, and gate jambs extending vertically across said end wall and adapted to bear against the ends of said gate.

2. In a mine car, a box body having one of its ends provided with vertically extending gate jambs and with a partial end wall, comprising a transverse lower portion and vertically extending side portions, hinge bars extending transversely of the lower portion of said end wall, and a gate provided on its ends with hinge bars connected at their lower ends to the upper ends of the hinge bars of the end wall.

In testimony whereof we have signed our names to this specification in the presence of the subscribing witnesses.

THOS. M. EDMONDSON.

DUNCAN FERGUSON.

Witnesses to signature of Thos. M. Edmondson:

W. H. DICKINSON,

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Witnesses to signature of Duncan Ferguson:

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