No. 610,442. Patented Sept. 6, 1898.

M. J. GRIFFIN & P. W. HOGAN.

CAR.

(Application filed Feb. 10, 1898.)

(No Model.)

FIG. 1.

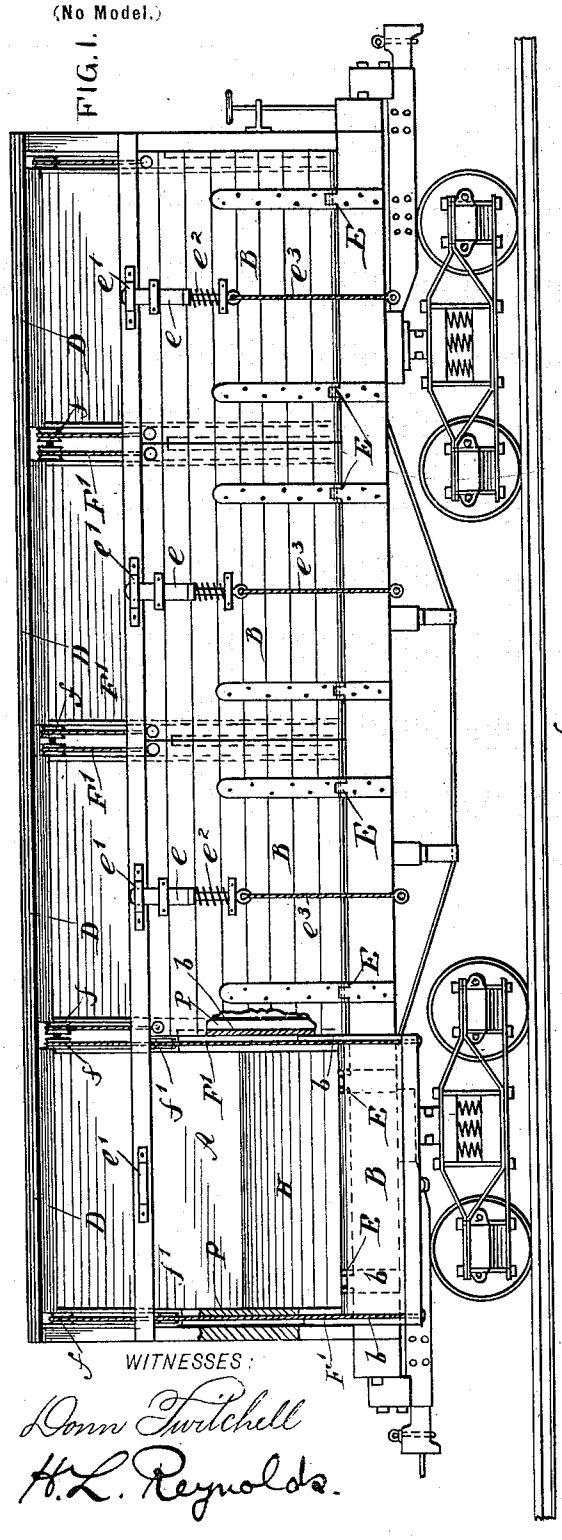
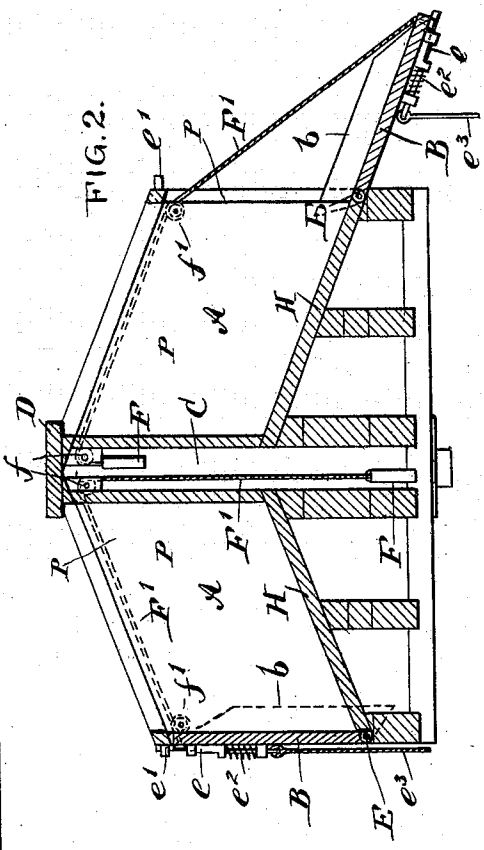


FIG. 2.



WITNESSES:

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MICHAEL J. GRIFFIN AND PETER W. HOGAN, OF ISLAND POND, VERMONT.

CAR.

SPECIFICATION forming part of Letters Patent No. 610,442, dated September 6, 1898.

Application filed February 10, 1898. Serial No. 669,812. (No model.)

To all whom it may concern:

Be it known that we, MICHAEL J. GRIFFIN and PETER W. HOGAN, of Island Pond, in the county of Essex and State of Vermont, have invented a new and Improved Car, of which the following is a full, clear, and exact description.

Our invention relates to an improvement in cars such as are used for carrying coal and similar goods; and it consists in dividing the car into a series of pockets or bins having sloping bottoms discharging toward the outer side and with the outer side normally closed by a door or chute, which can be dropped down and used for conveying the contents of the bin into any receptacle desired.

The invention further consists in certain novel features which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a side elevation of our improved car, one of the bins being shown as having its chute down or in a discharging position; and Fig. 2 is a cross-section of the car-body with one of the chutes lowered.

The car is designed for use in transporting coal, and particularly for coal which is intended to be discharged into locomotive-tenders.

The object sought to be accomplished is to provide a car in which the coal is divided into separate quantities which may be discharged one at a time, said quantities being of such a size as will ordinarily be required for filling a tender, and to have the coal discharged from the car directly into the tender, thus saving the expense of unloading into bins and then loading from the bins into the buckets or tubs usually employed for filling tenders. With this object in view the body of the car is formed with its bottom H sloping from the center toward each side. Upon this bottom are constructed the bins of the car, consisting of a series of chambers A, formed by a central longitudinal partition and lateral partitions placed at suitable intervals. The slope given to the floor H of the bins is such as will permit the coal to flow out of the bins. The outer sides of the bins are open, or at least partially open, and are closed while being filled with the coal by means of a door or chute B, which is hinged to the outer edge of the floor and is adapted to swing to a vertical position, so as to close the outer side of the bin.

The door or chute B is provided with side boards *b*, which are adapted to prevent the coal from falling off the side when discharging. The partitions P between the bins are made double, with a space between the two parts adapted to receive the ropes F′ and the sides *b*. These sides are made thin and occupy but little space. The floor between the halves of the partition is cut to allow the inner ends of the sides *b* to extend downward beneath the floor when the chute is up. The door is also provided with a slide *e*, movable in proper guides and held upward by means of a spring e^2. The slide *e* forms a catch to hold the door in its raised or closed position. The end of the slide *e* engages a staple *e′*, fixed to the upper part of the car. A rope e^3 is attached to the lower end of the slide *e*, by which it may be conveniently engaged to release the same.

For convenience in raising the door a rope F′ is attached to the outer edge thereof and carried over pulleys *f′* and *f*, located within the space in the partitions and upon the under side of the longitudinally-extending footboard D of the car. This rope F′ extends back to the center of the car and after passing over the pulley *f* is attached to counterweight F, which moves vertically in a well or chamber C, adapted to receive said counterweights. The counterweight F should be made of such weight as to nearly, if not quite, balance the weight of the door B.

In using our car an elevated track is to be provided alongside of the track occupied by the locomotives when the tenders are being filled with coal. This track is to be elevated to such a height that the cars when placed upon it will have their chutes B just above the tender when said chutes are lowered. The locomotive desiring a supply of coal will run alongside one of these cars and get in position to receive the coal from one of the pockets. The catch *e* is released by pulling upon the rope e^3. The door or chute B will drop down into the discharging position, and the coal from this pocket will slide out and into

the tender. This will take less time than to load the tender by the ordinary method of using a large bucket and a crane, besides requiring no extra help for such work. It will also prevent the great waste due to the numerous handlings of the coal necessitated by the ordinary method of coaling locomotives and will also make it unnecessary to provide as expensive a construction for the purpose as is necessary where bins are used. The only special construction necessary for using these cars is an elevated track. This, however, is necessitated where coal-bins are used, and in that case they would have to be of greater elevation than where our cars are used.

By dividing the car up into a series of bins the contents of the car may be discharged at different times and in such quantities as desired. The car itself thus acts as the coal-bin.

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

1. The combination in a car having its body divided into bins extending from the middle to the side thereof and provided with sloping floors, the outer side of each bin being open, of a door for each bin, each of said doors being pivoted at its lower edge to the car to swing outwardly and downwardly, and side boards attached to each door, and of such length as to form a continuous extension of the side walls of the bins when the doors are open, there being provided a series of slots or openings in which are received the lower edges of said side boards when the doors are closed, as and for the purpose set forth.

2. The combination with a car having a coal-bin formed with a floor sloping toward and extending to a side of the car, the outer side of said bin being open, of a door pivoted by its lower edge to the outer edge of said floor and arranged to swing outwardly and downwardly, forming a continuation of the same, the said floor being formed with slots in the rear of each side edge of the door, and side boards attached to the said side edges of the door, and of such a length as to overlap the side walls of the bin when the door is at the outward and downward limit of its movement, the inner and lower ends of said boards being received in the said slots when the door is closed, as and for the purpose set forth.

3. A car-body consisting of end walls, two spaced apart, longitudinal partitions connecting said end walls, said partitions extending along the middle of the car, transverse double partitions extending at predetermined intervals from a longitudinal partition to the adjacent side of the car, floors sloping from a longitudinal partition to an adjacent side of the car and provided with slots or openings near their outer edges and between a double partition, doors pivoted at their lower edges to swing outwardly and downwardly and forming sides for the car and chutes for the bins formed by the partitions, cords attached to the outer edges of the doors each of said cords passing through the space of a double transverse partition back into the space between the longitudinal partitions and there provided with a weight, and side boards attached to the side edges of each door and of such a length that they will overlap the transverse partitions when the door is fully open, the said side boards when the door is closed entering the space between the double partitions and down into the said slots in the floor, as set forth.

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Witnesses:
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