L. D. GREGG.

DUMP CAR.

APPLICATION FILED JUNE 9, 1915.

1,298,039.

Patented Mar. 25, 1919.

2 SHEETS—SHEET 1.

Fig. 1.

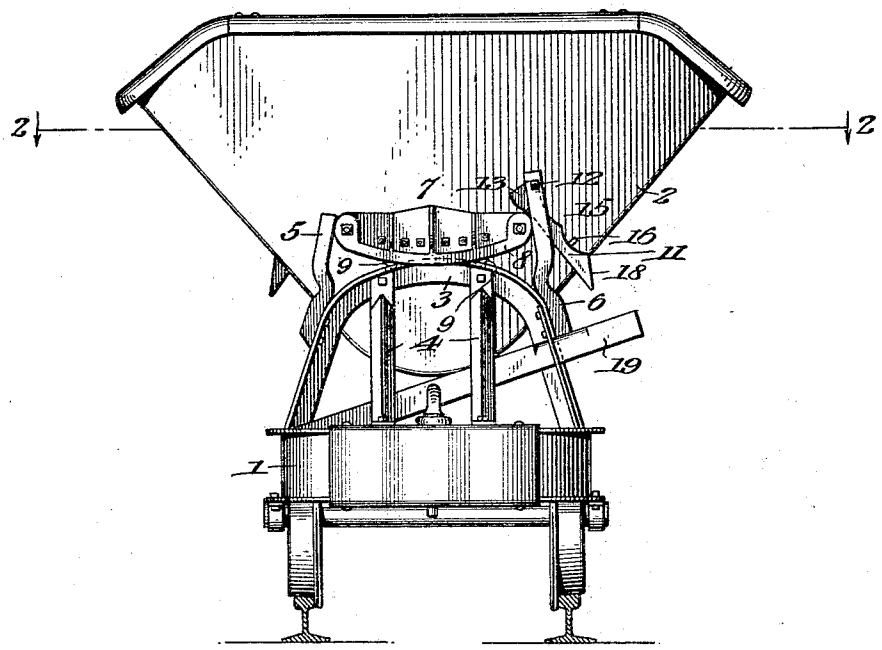
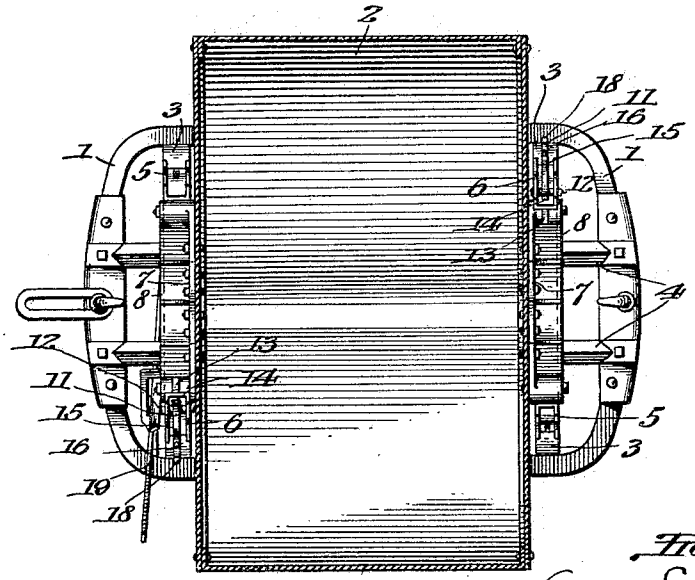


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

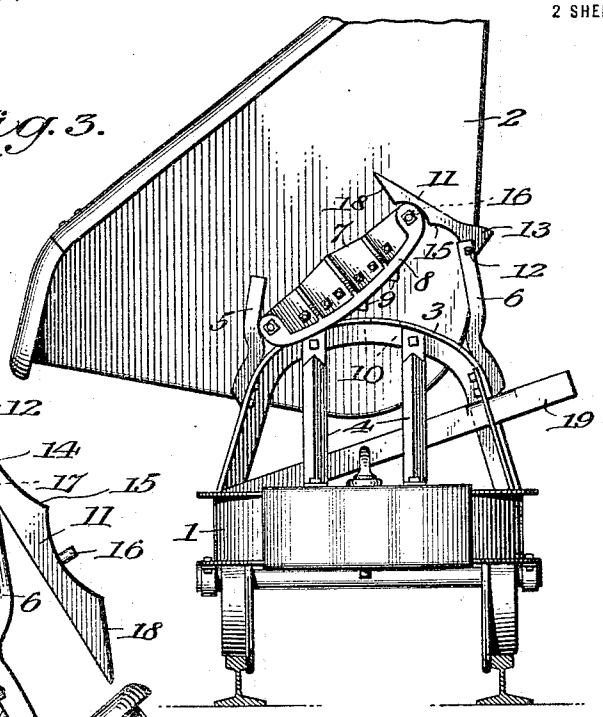


Fig. 5.

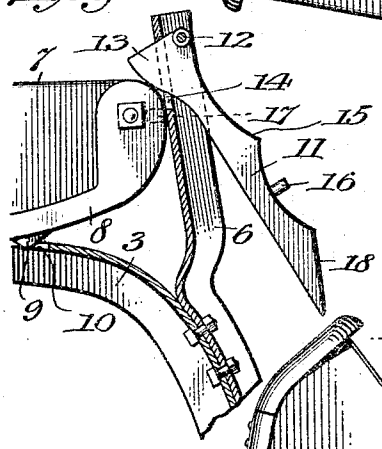


Fig. 4.

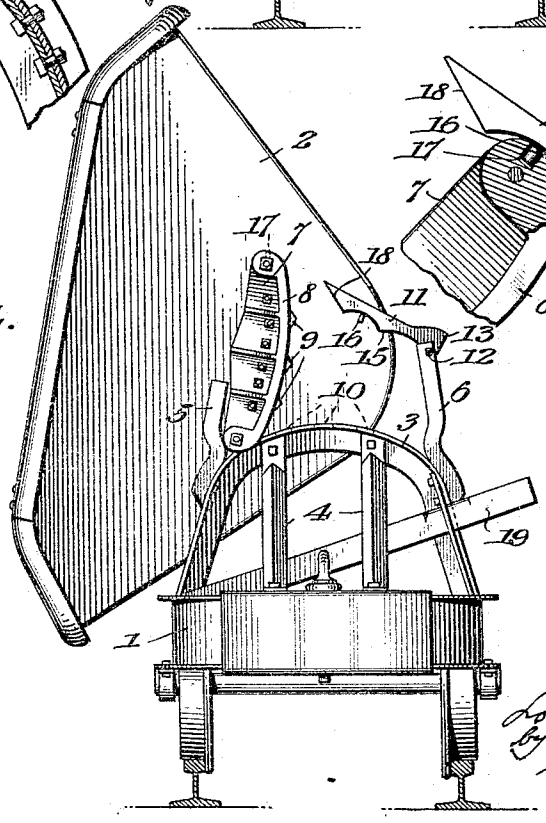
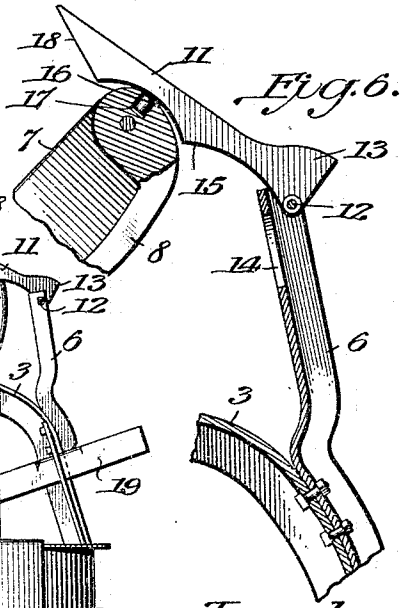


Fig. 6.



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UNITED STATES PATENT OFFICE.

LOUIS DAMARIN GREGG, OF HACKENSACK, NEW JERSEY, ASSIGNOR TO THE GREGG COMPANY, LIMITED, OF HACKENSACK, NEW JERSEY, A CORPORATION OF NEW YORK.

DUMP-CAR.

1,298,039. Specification of Letters Patent. Patented Mar. 25, 1919.

Application filed June 9, 1915. Serial No. 33,101.

To all whom it may concern:

Be it known that I, LOUIS DAMARIN GREGG, a citizen of the United States, residing at Hackensack, in the county of Bergen and State of New Jersey, have invented certain new and useful Improvements in Dump-Cars; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to dump cars, and has for its object to provide a latch construction in which the latch in one position will lock the car-body in its upright relation, and also in which the latch in another position will secure the body in a partially tilted relation; also in which, when the latch has been shifted from its locking position in changing the body from its upright to its tilted position, a part of the car body will engage and lift the latch so as to move it from the path of movement of the engaging part; also in which in moving the body from its dumping to its upright position a part of the car body will engage the latch and swing it so as to permit the part to pass by it, and furthermore will be engaged by said part so as to swing it from its locking position in order that the body may assume its upright position and be locked therein by the latch. It has furthermore for its object to provide improved features of construction in other parts of the car to simplify and increase their efficiency.

To the accomplishment of the foregoing and such other objects as may hereinafter appear the invention consists in the features hereinafter described and then sought to be clearly defined by the claims, reference being had to the accompanying drawings forming a part hereof, and in which:

Figure 1 is an end view of a dump car embodying the invention;

Fig. 2 is a horizontal section thereof on the line 2—2 of Fig. 1;

Fig. 3 is an end view showing the car-body in a partially tilted position;

Fig. 4 is a similar view showing the body in its dumping position;

Fig. 5 is a fragmentary view, partly in section, showing the latch in position to lock the body in its upright position;

Fig. 6, a similar view showing the latch in position to secure the car-body in a partially tilted position.

In the drawings the numeral 1 designates the car-frame which may be of any approved type of construction, and 2 the car-body which in general features is of the ordinary type.

Upon the frame, at opposite ends, are the bowed or arch-shaped standards 3, preferably formed of angle-bars, and braced by the uprights 4. To the standards are bolted, or otherwise attached, upright extensions 5 and 6, preferably of channel iron, and to opposite ends of the car-body are bolted, or otherwise attached, rocker-shoes 7, which rest upon the arched standards 3 so as to rock thereon between the upright extensions 5 and 6. The rocker-shoes preferably have depending side flanges 8 to fit along the side edges of the standards, and also by preference provided with studs 9 on their under faces so as to enter slots 10 in the top of the standards to prevent sliding of the shoes in rocking on the standards.

To the upright extensions 6, one of which is at one side of the car-body at one end thereof and the other at the opposite side at the other end, are pivotally supported the latches 11. As both are formed and operate alike, the description of one will answer for both. Each latch is pivotally supported at one end by a pivot-bolt 12 to the upper end of the extension 6 and at that end is formed with what for convenience will be designated a dog 13 which when the latch is in the position shown in Figs. 1 and 5 will project through a slot 14 formed in the web of the channel-iron extension 6, below the top edge thereof, and lie over or above the end of the rocking shoe when the body is in its upright position as shown in Figs. 1 and 5 so as to prevent the body from rocking, or in other words lock it in its upright position. In dumping the body, the latch on the side where the operator is standing is swung on its pivot into a position with its free end overhanging the rocking-shoe, and the body then tilted away from the operator. In the movement of the car-body the end of the rocker-shoe will strike a shoulder 15 formed on the under face of the latch for the pur-

pose and kick the latch back into its first or normal hanging position at the outer side of the upright extension 6, and when the car-body is rocked back to its upright position the end of the rocker-shoe will strike the dog projecting through the slot in the web of the extension and swing the latch outwardly so that the shoe may pass to its normal position when the latch will swing by gravity so as to bring the dog above the end of the shoe and lock the car-body.

If it is desired to tilt and hold the car-body in a partially tilted position short of the full dumping position the body will be tilted to the position indicated in Figs. 3 and 6 so that a pin 16 provided on the underside of the latch will enter a socket 17 formed in the end of the rocker-shoe and thus lock the body against either forward or backward movement.

If for any reason or cause the latch be thrown or left in the overhanging position indicated in Fig. 4 when the car-body has been put in its dumping position, then on moving the body back to its upright position the end of the rocker-shoe will strike the inclined face 18 of the latch and by the impact throw the latch back to its normal hanging position shown in Figs. 1 and 5. It will thus be observed that the latch is automatically thrown or swung into the positions mentioned by impact of the rocker-shoe therewith in the movements of the car-body. It will also be observed that it is only necessary to manually manipulate the latch at one end of the car when it is desired to unlock the car-body and tilt the body away from the operator whether it is to be dumped in one direction or another.

The numeral 19 designates a lever for the brake mechanism.

The construction described is composed of few parts which are simple and efficient to discharge the functions specified for them.

I have illustrated and described with particularity the preferred details of construction but it is to be understood that alterations may be made without departing from the essential features as expressed in the appended claims.

Having described my invention and set forth its objects what I claim is:

1. A dump-car comprising a tiltable car-body, a rocker-shoe attached to the body, a support affording a bearing for the rocker-shoe, upright extensions between which the rocker-shoe may oscillate, a gravitating locking latch pivoted at one end to one of the upright extensions, the latch consisting of an elongated arm formed at its pivoted end with a dog so disposed that when the arm is in its normal downward and outwardly inclined position the dog will overlie the rocker-shoe to secure the car-body in an upright position, and means for sustaining the arm in an upwardly and inwardly inclined position in the path of the rocker-shoe so as to be engaged by the shoe in the movement of the car-body to throw the arm into its normal inclined locking position.

2. A dump-car comprising a tiltable car-body, a rocker-shoe attached to the body, a support affording a bearing for the rocker-shoe, upright extensions between which the rocker-shoe may oscillate, and a gravitating locking latch pivoted at one end to one of the upright extensions, the latch consisting of an arm formed at its pivoted end with a dog so disposed that when the arm is in its normal downward and outwardly inclined position the dog will overlie the rocker-shoe to secure the car-body in its upright position, the opposite face of the arm being formed to interlock with the rocker-shoe to hold the car-body in a tilted position when the arm is swung to an upward and inwardly inclined position, the upright extension to which the latch is pivoted being formed with a slot to receive the dog of the latch, there being a web across the upper end of the slot to afford a rest for the latch in its elevated position.

3. A dump-car comprising a tiltable car-body, a rocker-shoe attached to the body, a support affording a bearing for the rocker-shoe, upright extensions from the support between which the rocker-shoe may rock, and a pivoted latch supported by one of said extensions, the rocker-shoe being formed with a socket and the latch with a pin to enter the socket to secure the car-body in a tilted position.

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

LOUIS DAMARIN GREGG.

Witnesses:
EARL W. FAHLGREN,
S. LESLIE DAVIDSON.