

J. M. THOMPSON.
Improvement in Dumping-Cars.

No. 130,335.

Fig

Patented Aug. 6, 1872.

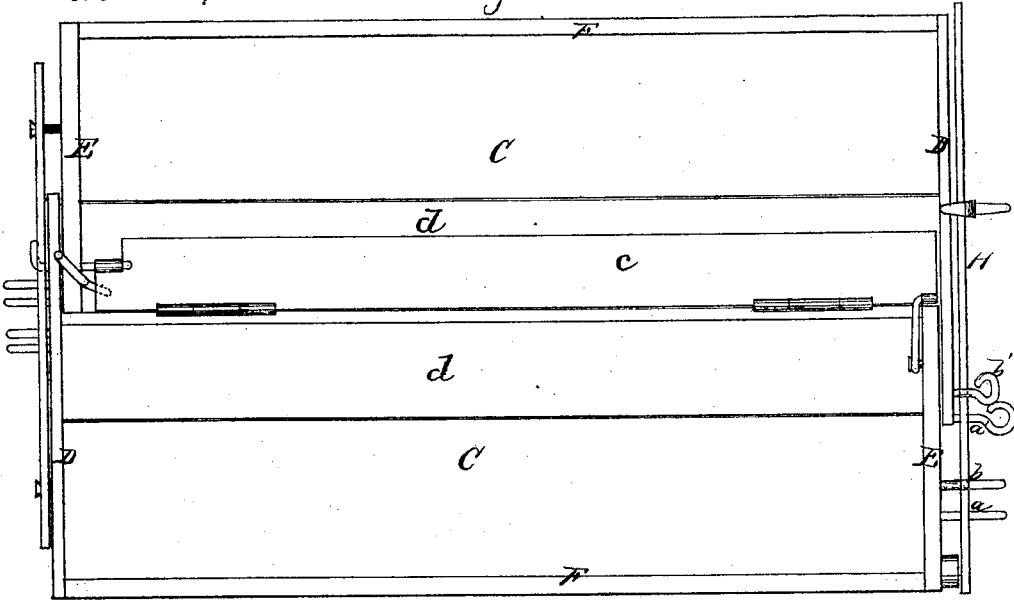


Fig. 2.

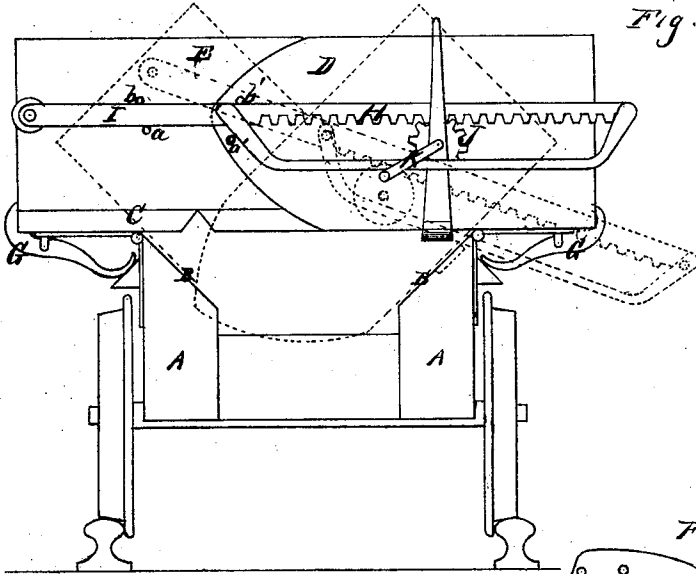
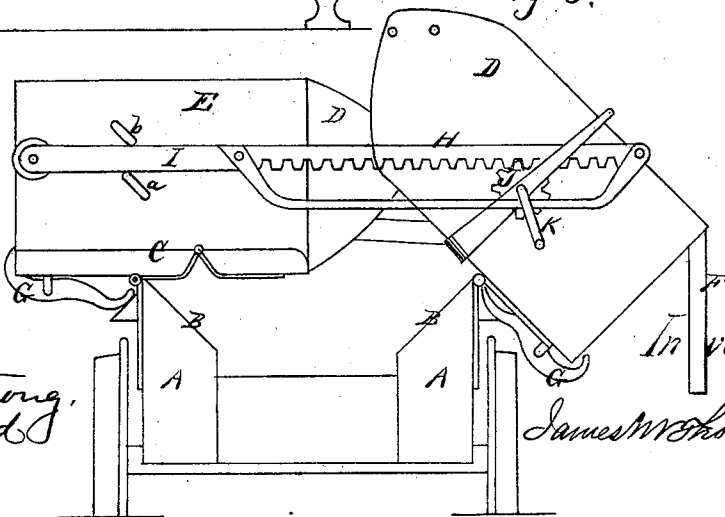


Fig. 3.



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UNITED STATES PATENT OFFICE.

JAMES M. THOMPSON, OF QUINCY, CALIFORNIA.

IMPROVEMENT IN DUMPING-CARS.

Specification forming part of Letters Patent No. 130,335, dated August 6, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, JAMES M. THOMPSON, of Quincy, county of Plumas, State of California, have invented an Improved Dump-Car; and I do hereby declare the following description and accompanying drawing are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvement without further invention or experiment.

My present invention relates to an improvement in cars, and more especially in that class of cars which are required to dump or empty the whole or a portion of their loads upon one or both sides of the track or in the center, and which I call a combined platform and dumping car. It consists of two stout timbers mounted in a suitable manner upon the car-trucks and extending lengthwise. These timbers are beveled so as to present each an edge upward, and to these edges the two halves of the car are so hinged as to be very nearly balanced. The two halves of the car are connected together by means of racks, one at each end of the car. These racks are securely bolted to one of the halves of the car, and the other half at each end carries a pinion with a crank, by means of which the rack is operated, and the halves moved so that both turn outward, or both empty in the center, or one may be emptied in the center and one at the side. The bottoms of the two halves meet in the center, so that when the car is level the floor is complete. A plate of thin iron is placed in such a position on the bottom or floor of one of the halves as to protect the joint formed in the floor, and by securing it to the other half it will, by sliding across the opening, prevent any of the load from escaping between when the floor begins to separate in dumping outward; or it can be detached from the latter and fastened to the former when it is desired to dump any of the load inside of the track. Each half of the floor may be formed of two pieces, hinged, so that any part of the load, less than one-half, can be discharged, if desired, inside or between the rails.

To more fully explain my invention, reference is made to the accompanying drawing, in which—

Figure 1 is a plan. Fig. 2 is an end view.

Fig. 3 is an end view, showing one-half dumping outward.

A A are two timbers, mounted upon trucks, and extending lengthwise of the car. These timbers have each a beveled side, B, at the top, these sides fronting inward, leaving the outer edges the highest, and to these the bottoms C of the two halves of which the car is formed are hinged, so that the two parts are balanced and meet in the middle. Each half is composed of a floor, C, two end pieces, D and E, and a side, F, which is hinged at the top to the ends so as to swing outward when it is necessary to deliver the load at the side. A catch, G, is so constructed that the tipping of the car will move it and free the side F, as shown. The ends of the car are so made that the end D of one-half partly overlaps and extends outside the end E of the other half, so that they will not interfere in their various movements, and will also prevent the escape of any portion of the load between the ends when dumping outward. A rack, H, with an arm, I, extends across each end of the car, as shown. The arm I is pinned to the end board E, and a pinion, J, with a crank, K, is attached to the end board D to mesh in the rack, so that by turning the crank the sides can be separated or brought together, and the whole load dumped outside or inside, as desired. The end pieces D and E can be attached to the bottoms C in such a manner as to be easily detached when it is not desired to dump the load, and to convert the car into a platform-car, when the halves or bottoms C can be held in position by stay-chains or other suitable device, the bottoms then forming a complete platform.

If it is desired to empty one of the halves to the outside it is only necessary to remove the pin *a*, or fastening at each of its ends, under the arm or rack; or the pins *b*, which are over the rack, if it is desired to dump inside; while the pins or fastenings which will remain will prevent it from dumping the opposite side from that desired. The pins all remaining in the other half will serve to hold it in position while the first is being turned about its point of attachment to the timber A, so as to allow its load to be discharged; or, if it is desired to discharge the other half at the same time, the fastenings *b'*, above the rack, at each

of its ends, can be removed to allow it to dump inside; or the lower fastenings *a'*, removed, to dump it outside, in the same manner as before described.

For the purpose of retaining all the load in one of the sections or halves until the other is discharged and the car moved to another place on the track, a vertical groove can be made in each of the ends and near the central joint, into which a board can be placed before loading, which will form a side for the half-bed, and prevent the escape of any of its load. In order to protect the central joint where the two parts of the bottom meet, I attach a plate, *c*, of thin iron, to one or the other of the halves. This plate may be made of one piece, or it may be hinged, and it prevents any part of the load from dropping through either while being transported or when the two halves begin to separate, in dumping to the outside, and by attaching it to the other side will be out of the way when dumping in any other manner. Each of the halves has its bottom made in two pieces hinged together, as shown, and held in place by some suitable device, so that if it is only necessary to discharge a small part of the load in the center one of these leaves can easily be dropped.

By constructing a dump-car in this manner it will be especially applicable to the work of ballasting railroads, as it can be wholly discharged outside or inside the rails, or half of the load may be discharged to the outside and half between the rails; or, if it is found that only a small portion of the load is needed at any point that portion of the load can be dis-

charged and the car moved on its length, the road being thus completely ballasted and no material wasted.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In combination with the two beveled-edged timbers *A A* of the truck or car-frame, the two parts of the body or platform, hung or hinged to the edges of the timbers so as to tip either way and dump the load either between or on either side of the wheels and track.

2. I also claim the central or inner portions *d d* of the bottom of the car, hinged to the outer portions *c c*, substantially as described, so as to dump a part of the load between the wheels and track and part outside of the track.

3. In combination with a centrally-divided car-bed hinged to tip either way, as described, I claim the overlapping ends *D* and *E*, as a means of locking them together by putting pins through the ends so overlapped.

4. In combination with the divided car-body above claimed, I claim the rack *H*, hinged to one part of the car-body and operated by a pinion on the other part, so as to tilt the parts to dump the load, and to replace the parts after dumping.

In witness whereof I have hereunto set my hand and seal.

JAMES M. THOMPSON. [L. S.]

Witnesses:

G. FITZGERALD,
W. RATLAFF BOONE.