

D. MANUEL.
DUMPING-CAR.

No. 178,070.

Patented May 30, 1876.

Fig. 1.

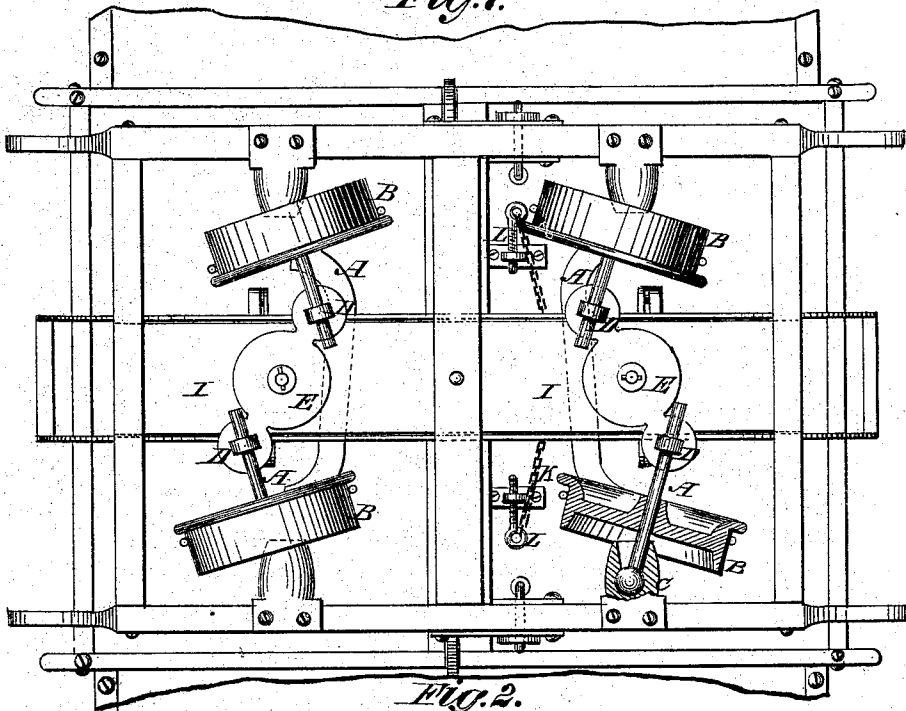
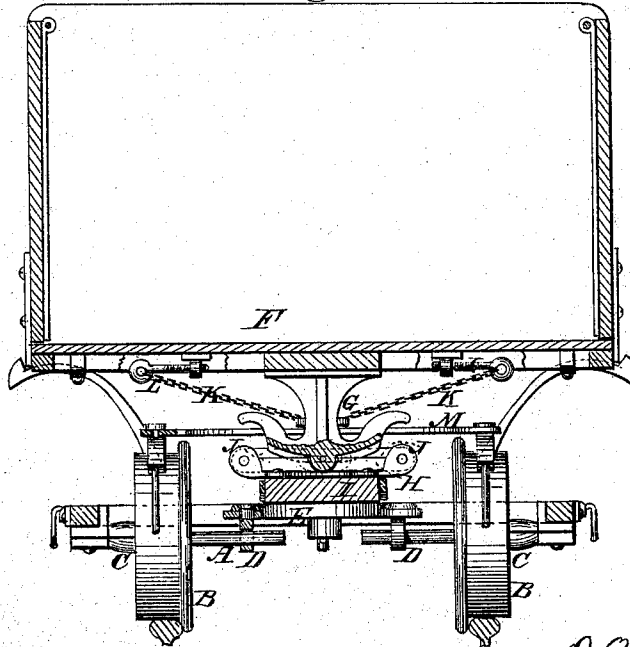


Fig. 2.



WITNESSES:

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Fig. 3

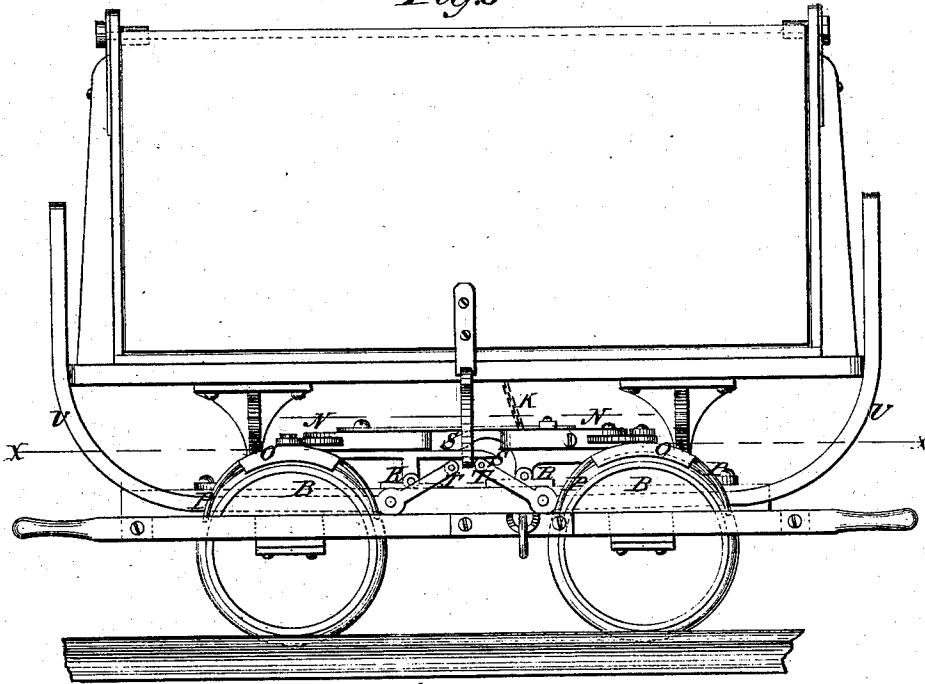


Fig. 4

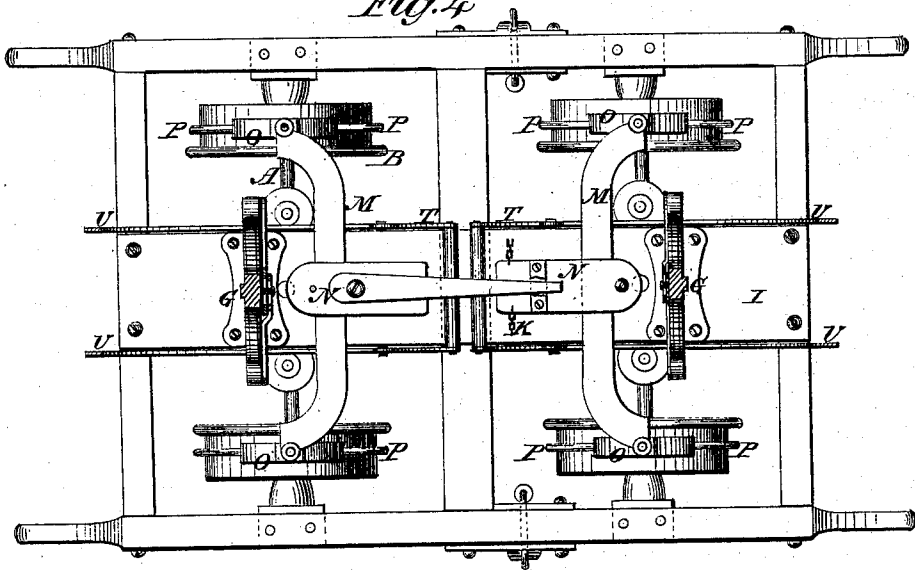
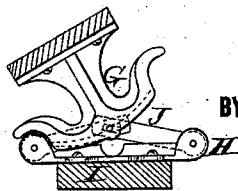


Fig. 5

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UNITED STATES PATENT OFFICE.

DAVID MANUEL, OF READVILLE, ASSIGNOR TO HIMSELF AND EZRA G. PERKINS, OF HYDE PARK, MASSACHUSETTS.

IMPROVEMENT IN DUMPING-CARS.

Specification forming part of Letters Patent No. **178,070**, dated May 30, 1876; application filed January 3, 1876.

To all whom it may concern:

Be it known that I, DAVID MANUEL, of Readville, in the county of Norfolk and State of Massachusetts, have invented a new and Improved Dump-Car, of which the following is a specification:

My invention consists of a body supported on rockers, which work on rocker-beds mounted on the perch of the car, and having links so connected with the rockers as to allow them to work freely, and at the same time keep them on the rocker-bed; and it also consists of a contrivance of the brakes to swing together with the wheels.

Figure 1 is a plan of my improved dumping-car inverted, and a horizontal section of one of the wheels and a bearing. Fig. 2 is a transverse section. Fig. 3 is a side elevation; and Fig. 4 is a horizontal section taken on the line *xx* of Fig. 3. Fig. 5 is a sectional elevation to exhibit the connection of rockers and links.

Similar letters of reference indicate corresponding parts.

A represents the independent axles for each wheel B, said axles having a ball-and-socket outer bearing C, and being at the inner end fitted in a bearing, D, swiveled to a rocking yoke, E, whereby the wheels are free to turn to the curves of the rails in going around them, and swing back to the line of the car again as the rails assume straight lines, thus enabling the car to run much easier on short curves than when mounted in the ordinary way. The car-body F is mounted on rockers G, for dumping easily, and the rockers are set on rocker-beds H, which have their support on the perch I of the car-frame, and are connected to the rockers by links J, which allow the rockers to work either way, and at the same time hold them on the beds. The box

is also connected to the bed by safety-chains K, as a further means of keeping it in place, the chains being connected by an adjusting-screw, L, for regulating their tension. The brake-bars M are, in consequence of the swinging contrivance of the axles, pivoted to their supports N, so that they can swing the brake-shoes O in unison with the wheels, and the shoes have a rod, P, extending part way down the faces of the wheels by which the wheels are made to swing the brakes. The brake-supports are pivoted at R, and have each a short lever, S, both of which project over the short arms T of the brake-lever U, that both may be worked by either of the brake-levers.

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

1. In independent axles, having a ball-and-socket outer bearing, the central inner connecting swivel-yoke, to serve as an inner bearing for the axles, as shown and described.
2. The rockers of the car-body, mounted on rocker-beds supported on the perch of the car, and connected to the rockers by links, in the manner described.
3. The combination of swinging brake-bars M with the wheels of a car having independent swinging axles, substantially as specified.
4. The rod-extensions P of the brake-shoes O, in combination with wheels, arranged to swing in the manner described.
5. The brake-bar supports, mounted on pivots R, and having levers S, arranged in combination with brake-lever U, substantially as specified.

DAVID MANUEL.

Witnesses:

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