(No Model.)

W. J. RENNIMAN.

DUMPING DEVICE FOR MINING CARS.

No. 347,151. Patented Aug. 10, 1886.

Fig. 1.

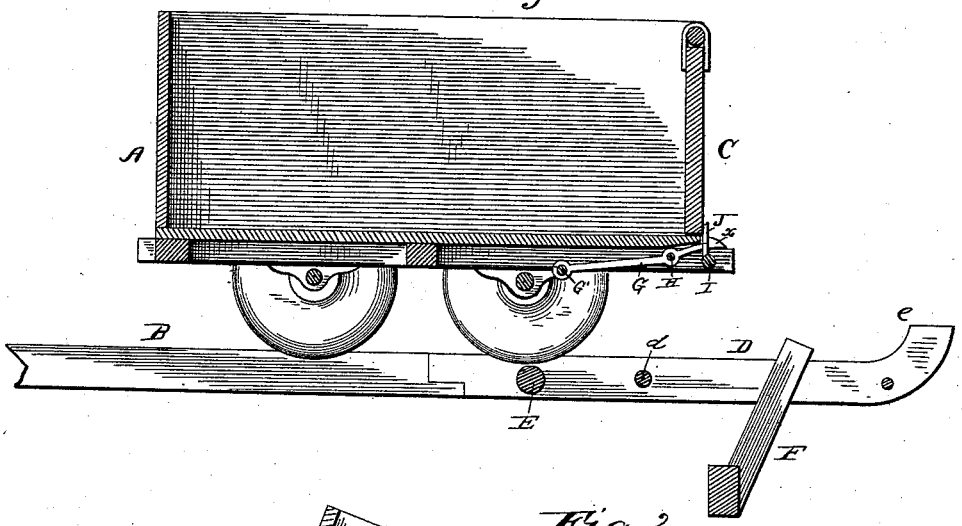


Fig. 2.

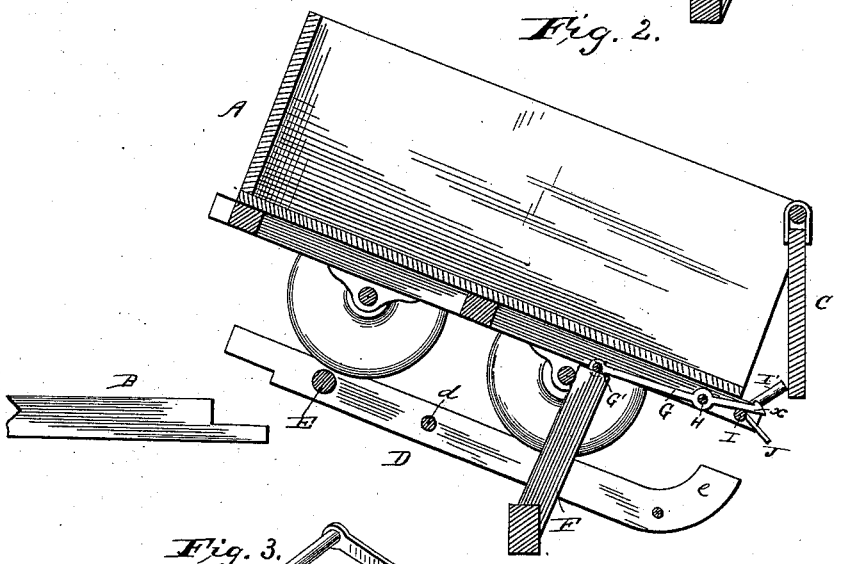
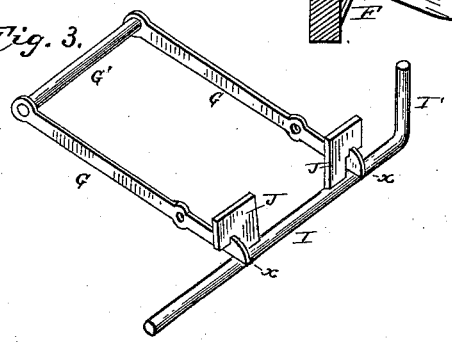


Fig. 3.



Witnesses
C. D. Davis
W. D. Alexander

Inventor
W. J. Renniman.

By his Attorney
C. M. Alexander

UNITED STATES PATENT OFFICE.

WILLIAM J. RENNIMAN, OF AVOCA, PENNSYLVANIA.

DUMPING DEVICE FOR MINING-CARS.

SPECIFICATION forming part of Letters Patent No. 347,151, dated August 10, 1886.

Application filed June 2, 1886. Serial No. 203,952. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. RENNIMAN, a citizen of the United States, residing at Avoca, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Dumping Devices for Mining-Cars, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to dumping-cars for coal; and the object I have in view is to produce a car that will dump its load automatically and surely at the time and place it is desired, and that by very simple mechanism.

In the accompanying drawings, making part of this specification, Figure 1 represents a sectional view before dumping. Fig. 2 represents a sectional side elevation while the car is in the act of dumping, and Fig. 3 is a perspective of a portion of the dumping device.

In the figures, A represents a coal-car with a hinged door, C, at its forward end, which is to be properly closed and released at a suitable time for dumping the coal from the car. This car is provided with suitable wheels to run upon a tramway, B.

D represents an extension of the tramway, which is so hinged to it that when the car moves onto it its forward end drops to an angle of about forty-five degrees, while at the same time the car-door opens and allows the coal to pass out from the car. This extension or platform D is provided with an abutment at its forward end, as seen at *c*, is hinged back of its center at *d*, and is provided at its rear end with a counterpoise-weight, E.

G G represent two bars, which are connected together at their rear ends by a round, G′. They have a bar, H, which separates them near their forward ends, and which acts as a pivot or hinge when they are connected to the under side of the car, as they are by said bar. The forward ends of these bars G G are beveled and notched, as seen at *x x*, the purpose of which will appear.

I represents a rod or shaft, which is secured in proper bearings at the lower forward end of the car. It has a crank, I′, formed on it or attached to one end. Upon the shaft I are two L-shaped wings, which are marked J J. When the shaft I is partially revolved, the L-shaped upper ends of each catch over the beveled ends of the bars G G and into their notches at *x*. The lower end of the door C, as seen in Fig. 1, catches behind the wings J J, and these wings hold it in place until it is ready to dump its load.

F represents a post stationed within the dumping-frame D, but independent of it.

When the car A passes onto the frame or platform D, and it tips or drops forward upon its pivotal point, the round G′ of the bars G strikes against the standard or post F. This causes the forward ends of the bars G G to drop and release the wings J J from the notches at *x x*. The release of the wings of course releases the lower side of the door and allows the coal to be freely dumped from the car. The counterpoise at E will return the platform D to its normal position when the car is removed, and the door, falling back, will be secured in place by turning the shaft I, by its handle I′, so as to catch the wings J J under the notched ends of bars G G, thus placing the parts in position for another operation.

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

1. The bars G G, forming a frame beneath the car-body, and having a round, G′, a pivotal rod, H, and notched beveled ends *x*, in combination with the rod I and arm I′, and the wings J J, adapted to hold and release the door, substantially as specified.

2. In combination, the bars G G and pivotal rod H, as constructed, the crank-rod I, bearing the L-shaped wings J J, and the door C, the same operating as and for the purpose set forth.

3. The combination, in a dumping car, of the pivoted arms G G, having beveled notched ends and a round, G′, the bar I, the wings J J, and the post F, adapted to operate the parts to release the door when the car is dumped, substantially as specified.

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

WILLIAM J. RENNIMAN.

Witnesses:
L. C. PURMAN,
SMITH D. FRY,
CHAS. D. DAVIS.