

(No Model.)

I. BARKER.
ROTARY TIPPLE FOR DUMP CARS.

No. 502,805.

Patented Aug. 8, 1893.

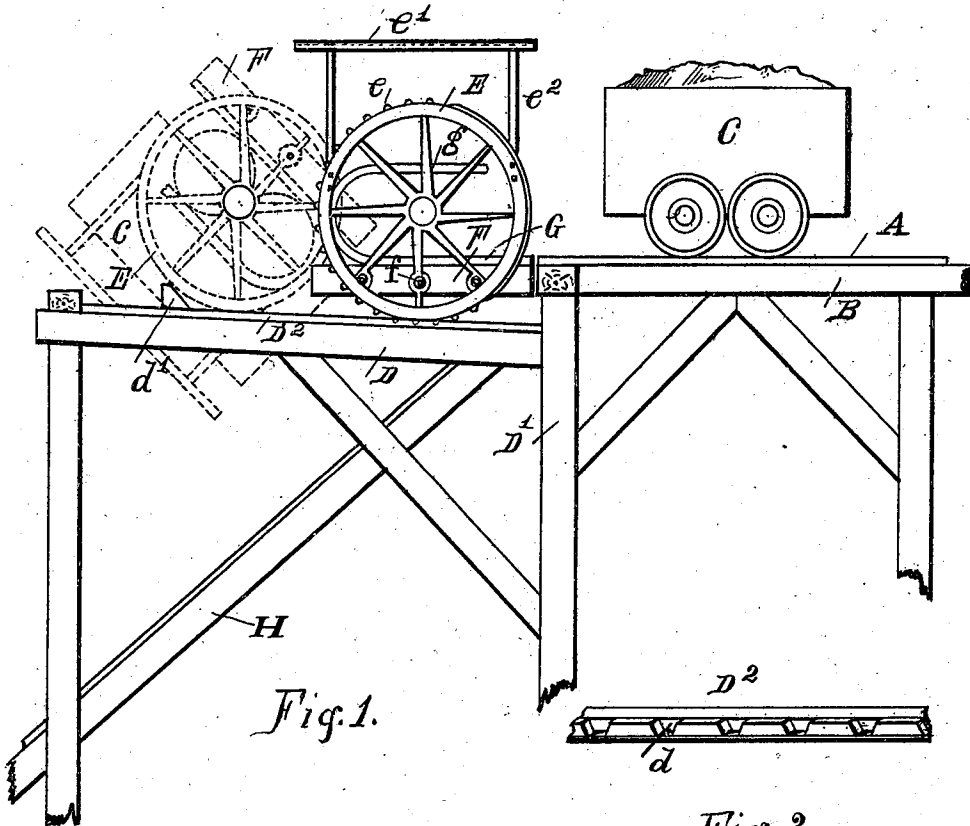


Fig. 1.

Fig. 3.

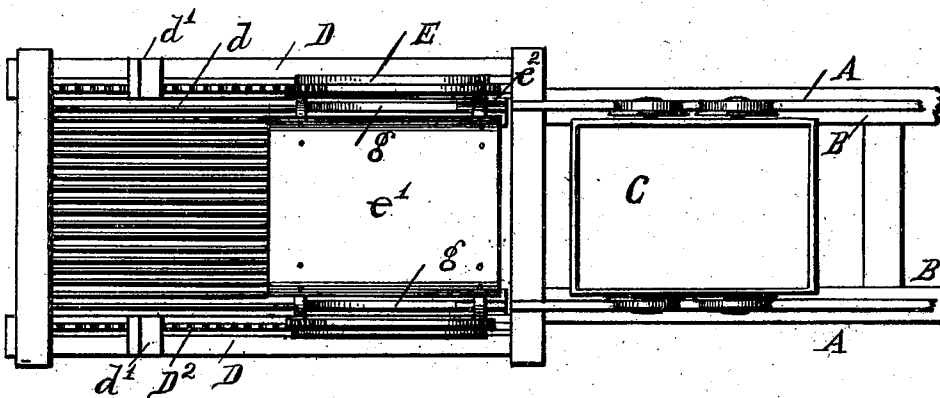


Fig. 2.

Witnesses
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By his Attorney N. DuBois.

UNITED STATES PATENT OFFICE.

IRVING BARKER, OF SPRINGFIELD, ILLINOIS.

ROTARY TIPPLE FOR DUMP-CARS.

SPECIFICATION forming part of Letters Patent No. 502,805, dated August 8, 1893.

Application filed January 3, 1893. Serial No. 457,195. (No model.)

To all whom it may concern:

Be it known that I, IRVING BARKER, a citizen of the United States, residing in the city of Springfield, in the county of Sangamon and State of Illinois, have invented a new and useful Rotary Tipple for Dump-Cars, of which the following is a specification.

My invention relates to tilting platforms or tipples such as are used in conjunction with coal or ore cars of common construction for tilting the cars for the purpose of dumping the contents of the car into the chute or other suitable receptacle.

The purposes of my invention are to provide means whereby the contents of the car may be automatically dumped when the car is run upon the tipple, and after the car is emptied it may automatically return into position to be again loaded. I attain these purposes by the mechanism shown in the accompanying drawings, to which reference is hereby made, and in which—

Figure 1—is a side view of the tipple and shows the car in position on the track. This view also shows, in dotted lines the revolved position of the tipple in the act of dumping the contents of the car. Fig. 2—is a top view of the tipple and the car. Fig. 3—is an enlarged detached view of part of the rail showing the notches in the side of the rail.

Similar letters indicate similar parts in all the views.

A tramway A of ordinary construction is placed on the trestle work B and the car C runs upon the tramway. Connected with the trestle work are parallel sills D secured to suitable supports D'. These sills incline slightly upward toward their outer ends in order that the wheels E carrying the platform may return by gravity to their initial position after the car has been run out and stopped on the platform and the contents dumped as hereinafter explained.

Secured on top of the sills D are guide rails D² on which the wheels E run. These rails have on their sides equi-distant notches d adapted to receive the sprockets e on the wheels E in order to prevent the wheels from slipping on the rails.

The platform F is secured to the wheel E in a horizontal position below the axis of said wheels E by means of bolts f, and on top of

this platform is a tramway G having at its outer end upwardly curved stops g.

When the platform F is in a horizontal position as shown the tramway G is in line with the tramway A on the trestle work B so that the car may be run from one tramway onto the other.

The stops g serve to prevent the car from running off the platform F and the horizontal extensions of the stops extend over both wheels of the car and prevent the car from falling off the platform while being dumped.

As the wheels E move along on the rails D², the platform F being secured to the wheels is tilted as shown by dotted lines in Fig. 1 thereby discharging the contents of the car upon the chute H by which it is conveyed to any desired point.

Vertical standards e² secured to the inside of the wheels E support the hood E' which is secured to the standards. This hood is preferably made of sheet iron and is designed to check the fall of the contents of the car. It is particularly adapted for the use with coal cars and is intended to prevent the breaking and scattering of the coal. A block d' serves to stop the wheels E at any desired point.

In practice the loaded car is pushed from the tramway A on the tramway G until the wheels of the car strike the stops g; when the wheels of the car strike the stops g the momentum of the car is sufficient to cause the wheels E to move outward on the upwardly inclined rails D² thus rotating the platform F sufficiently to discharge the contents of the car. When this is done the wheels E by gravity move down the inclined rails D² and in so doing restore the platform to a horizontal position, and this movement of the platform gives such impetus to the car that when the platform reaches the horizontal position the car runs off the tramway G and back on to the tramway A.

It is obvious from the description that any car of ordinary construction may be used with the tipple. In the drawings I have shown a car with closed ends but a car having a door in one end may be used; for example such as is shown and described in Letters Patent of the United States, No. 485,403, for an automatic latch for dump cars, issued to me November 1, 1892.

In case a car having a hinged door is used the means for disengaging the latch may be connected with the stops *g* on the platform *F*; and where such a car is used it is necessary
 5 to rotate the tippie platform only to such extent as will permit the contents to slide out of the car and not to invert the car as shown in Fig. 1.

What I claim as new, and desire to secure by
 10 Letters Patent, is—

1. An automatic dumping apparatus consisting of a tram-way supported on trestle work, the upwardly inclined sills supported below the level of said tram-way, the notched rails
 15 supported on said sills, the toothed wheels adapted to run on said notched rails, the platform secured to the sides of and rotatable with said wheels, the tram-way on said platform upon the same level as, and in line with
 20 the tramway on the trestle, the car adapted to run on said tramways, the means for re-

taining said car on said platform while being dumped, and the hood supported on said wheels, as set forth and for the purpose stated.

2. In a rotary tippie for dump cars, the
 25 combination of the trestle work, the tramway supported thereon, the car adapted to run on said tramway, the upwardly inclined sills below the level of said tramway, the rails on said sills, the wheels running on said rails, 30 the platform secured to said wheels, the tramway on said platform and the stops at the end of said tramway, as set forth and for the purpose stated.

In witness whereof I have hereunto sub- 35
 scribed my name, at Springfield, Illinois, this
 18th day of October, 1892.

IRVING BARKER.

Witnesses:

TAD A. BAILEY,
 WILL I. OLDEN.