H. BAILEY.

Dumping-Wagon.

No. 209,745. Patented Nov. 12, 1878.

Fig. 1.

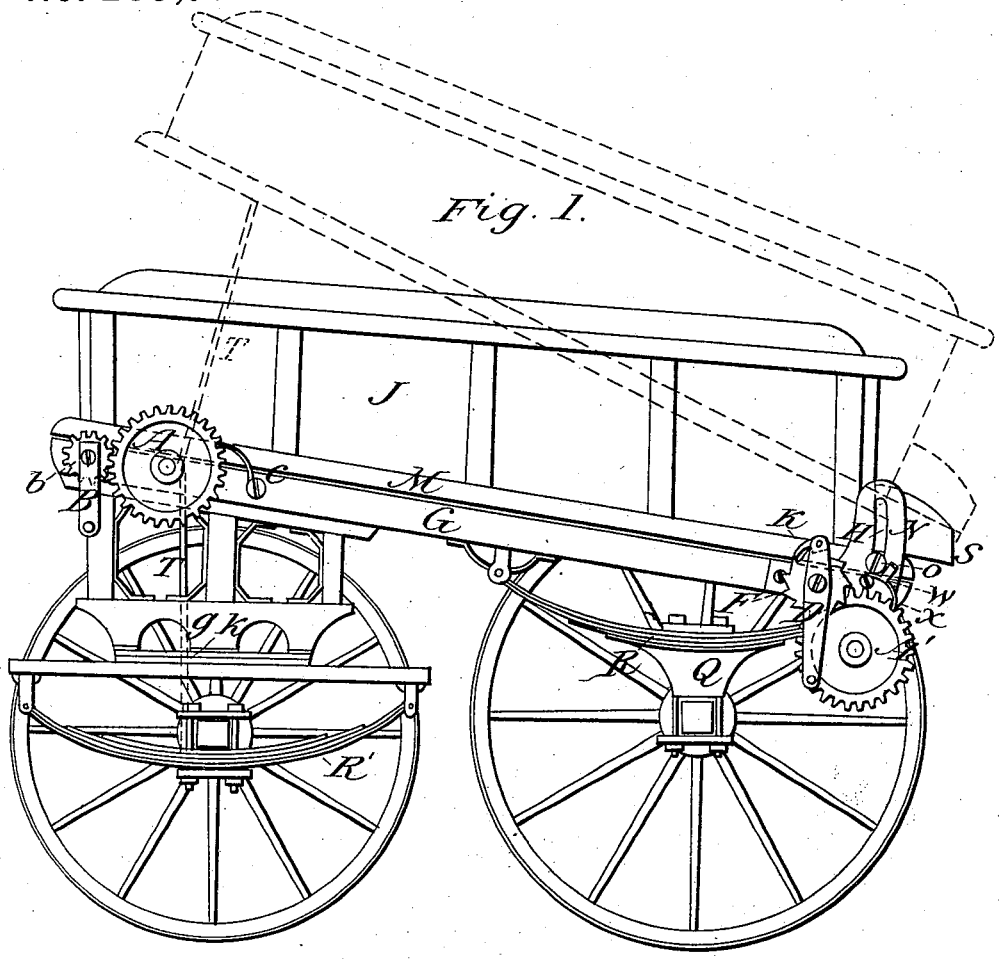
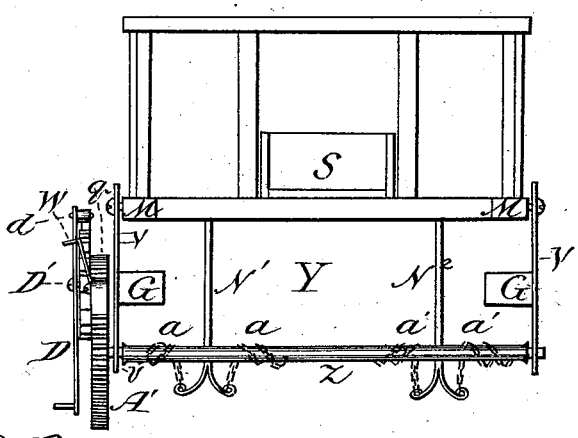


Fig. 2.



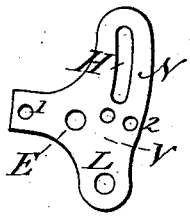


Fig. 3.

Attest:

John E. Thomas,

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Inventor:

Hamilton Bailey,

per Theophilus Weaver.

His Atty.

UNITED STATES PATENT OFFICE.

HAMILTON BAILEY, OF HARRISBURG, PENNSYLVANIA.

IMPROVEMENT IN DUMPING-WAGONS.

Specification forming part of Letters Patent No. **209,745**, dated November 12, 1878; application filed August 22, 1878.

To all whom it may concern:

Be it known that I, HAMILTON BAILEY, of the city of Harrisburg, county of Dauphin, and State of Pennsylvania, have invented a new and useful Improvement in Dumping-Vehicles, which improvement is fully set forth in the following specification and accompanying drawing, in which—

Figure 1 is a side elevation of my dumping-vehicle with the near wheels of the vehicle removed, and showing, by indicated lines, the wagon-bed adjusted and in position for discharging its contents. Fig. 2 represents a rear-end view of my dumping-vehicle bed and the devices employed for raising said end thereof. Fig. 3 represents one of the slotted hinge-plates at rear end of the wagon-bed carriers.

My present application is an improvement on my patent on dumping-wagons, dated November 27, 1877, and numbered 197,447. I employ the devices secured by said patent on the front end of the bed-carriers for elevating said end of the wagon-bed, substantially as and for the purposes described in said patent.

The object of my present improvement is to provide the rear end of a dumping-vehicle bed with a hoist apparatus, whereby it may also be elevated to attain a better inclination for chutes across pavements for the discharge of coal into cellar-openings, the devices for hoisting the said rear end being mainly a modification of those employed on said front end, certain plates and ratchet appliances being employed in a novel manner.

My invention therefore consists, first, in providing the rear ends of dumping-wagon bed-carriers with slotted hinge-plates, whereby the hinge articulation may be adjusted vertically to attain sufficient elevation at said end for discharge-chutes to have proper inclination; second, in a peculiar combination and arrangement of hoisting devices located at the rear end of the wagon-bed, under and on the sides thereof, in such manner that they may not obstruct the place for carrying the chutes thereunder, and operated by ratchet, gears, lever, and pawls, as described hereinafter.

I mount my dumping-vehicle bed J on truck rails or carriers G G, which are supported in any approved manner upon a spring-vehicle, or vehicle without springs, if preferred, the springs R and R′ being applicable on or below the wagon axle-trees, in the usual manner.

My patent device for hoisting the front end of wagon-bed is shown at A *b* B C T.

My present improvements are the plates V, Fig. 3, and the application thereto of wheels A′ F, lever D, pawls K and X, shaft Z, which is also connected with the hinged props N^1 and N^2 by means of chains *a a a′ a′*. Each of said hinge-plates V, Fig. 3, is made with bearing L for shaft Z, by which wheel A′ is supported, with holes 1 2, through which it is bolted to the outside of rail G at its rear end with slot H, described with radius equal to length of rail G, through which, by stud O on bed-timber M, the bed may be hinged thereto at various elevations, according to adjustment of the parts hereinafter described. Said plates serve as guides to prevent lateral displacement on the rails G G, and also hold the bed to place thereon longitudinally.

The hinged props N^1 N^2 are attached to the under side of wagon-bed aside from the middle thereof, to afford a space, Y, between them for the attachment and operation of chutes, which are usually carried on guides under the middle of said bed. Said props N^1 N^2 are connected at their forked pendulous ends with shaft Z by chains *a a a′ a′*, which are wound upon the shaft when the bed is hoisted, as shown in Fig. 2, said shaft being revolved by wheel A′, which is driven by pinion Q on ratchet-wheel F, and the latter is rotated by lever D, pivoted to the stud which supports said wheel F, which the lever engages by means of the pawl K, loosely pivoted thereto. A pawl, X, holds wheel A′ when lever D is not engaged, or is being vibrated back to take a rear step on the ratchet. After the bed J has been elevated, and it is desired to let it down, lever D is turned back without engaging its pawl K, and thus pawl X is disengaged by said lever-handle lifting the hook W, which is an extension of pawl X. The bed will then descend by its own gravity, unwinding the chains *a a a′ a′* from shaft Z.

When the wagon-bed is elevated in front and rear, as shown in Fig. 1, it is evident coal may be readily discharged therefrom by gravity, and a chute of any approved make may

be attached or applied thereto to convey coal into a cellar-opening across a sidewalk.

Having thus fully and clearly described my invention, what I regard as new and useful, and what I desire to secure by Letters Patent of the United States, is embraced substantially in the following claims:

1. The slotted hinge-plates V V, applied to the truck-rails G G, or their equivalents, and adapted to hinge the vehicle-bed J thereto adjustably for different elevations, substantially as and for the purpose set forth.

2. The combination of the hinge-plates V V, wheel A′, lever D, ratchet-pinion F Q, pawls K and X, hook W, and props N^1 N^2, connected with shaft Z by chains *a a a′ a′*, and operating to adjust bed J at its rear end, substantially as set forth.

In testimony that I claim the foregoing as my invention I have hereunto set my hand and seal this 23d day of July, 1878.

HAMILTON BAILEY. [L. S.]

Attest:
THEOPHILUS WEAVER,
D. A. KEPNER.