(No Model.)

M. M. CLARK.

DUMPING WAGON.

No. 261,308. Patented July 18, 1882.

Fig. 1.

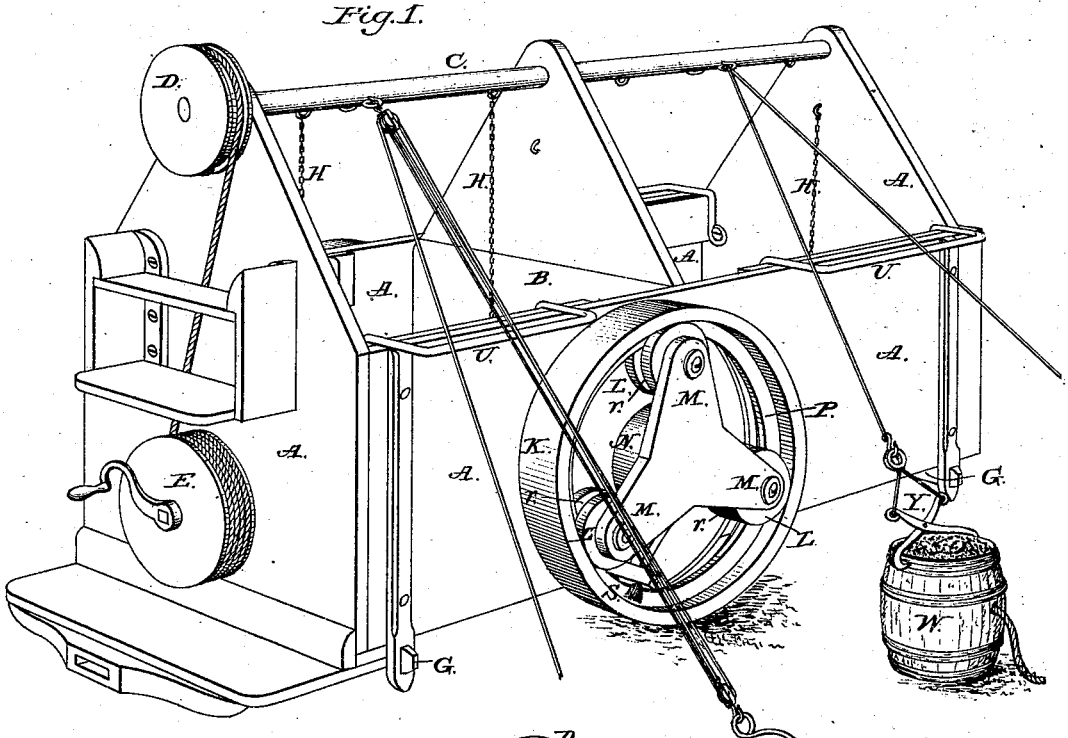
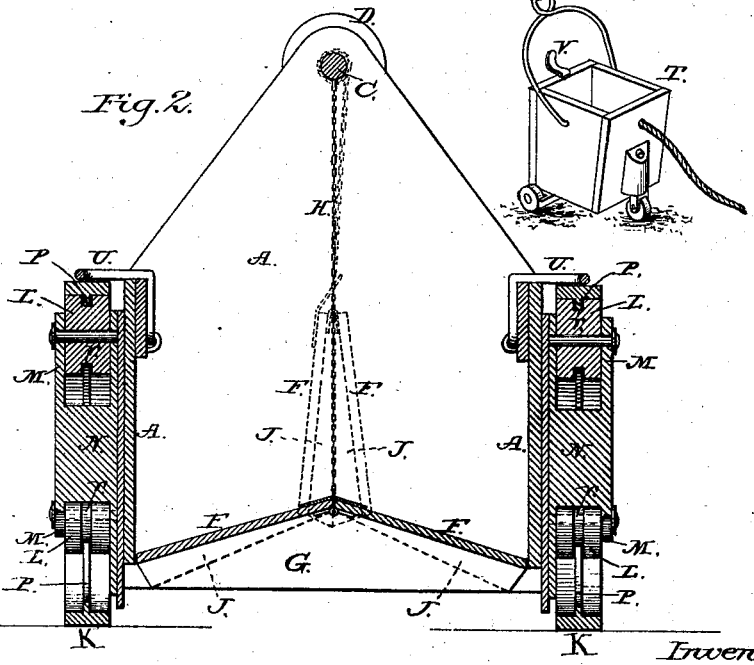


Fig. 2.



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UNITED STATES PATENT OFFICE.

MOSES M. CLARK, OF NEW HAVEN, CONNECTICUT.

DUMPING-WAGON.

SPECIFICATION forming part of Letters Patent No. 261,308, dated July 18, 1882.

Application filed May 9, 1882. (No model.)

To all whom it may concern:

Be it known that I, MOSES M. CLARK, of the city of New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Dumping Cars or Wagons; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The object of my invention is to provide for the easy traction of a heavily-loaded car or wagon and for quickly dumping the same and automatically closing it in readiness for the reception of another load.

In the accompanying drawings, Figure 1 is a view in perspective of a wagon for removing street-sweepings constructed according to my invention, and Fig. 2 a transverse section in line through the center of the wheels.

A A is the body of the wagon, which, when constructed as illustrated in the drawings, is about eighteen feet in length and seven or eight feet in height, and is divided by a central transverse partition, B, into two compartments. The ends A A and the central partition, B, are carried up in the middle to a suitable height above the sides A A to support properly a longitudinal shaft, C. This shaft is made to rotate by means of a drum or pulley, D, on its front end, a windlass and drum, E, arranged on the front of the car beneath it, and a chain or rope extending from the one to the other, so that by turning the crank of the windlass E and winding the rope on its drum the rope unwinding from the drum D will cause its rotation.

The bottom of each compartment of the car or wagon is divided centrally into two longitudinal sections, F F, (see Fig. 2,) which rest upon inclined end pieces or supporting-strips, G, so as to slope from the center down to the sides, and which are hinged together upon the central division-line.

Chains H are led from the rotating shaft C to engage either the hinges or the edge of one of the sections at two or three points on the hinge-line, so that the rotation of the shaft will, by winding up the chains, pull the sections up in the center and so draw them in from the sides, thereby opening wide the bottom of the car. The two sections as they are drawn up will close together, as shown by the dotted lines in Fig. 2; but they are prevented from doing so fully by means of wedge-shaped cleats J J, secured centrally on the under side thereof, which serve to keep their outer edges far enough apart to cause them, when relieved from the tension of the chains and cleared of the incumbrance of the load, to slide back of their own weight down the inclined end pieces, G, and so resume their normal position to close the bottom of the car, as shown by the positive lines, Fig. 2. In this arrangement of a centrally-hinged divided bottom the weight of the load, so soon as it begins to be discharged, tends to facilitate the withdrawal of the sections, rendering it easy to open them fully, while their weight, when they are relieved from the tension, will, as they bear upon the inclined end pieces, which serve as inclined ways therefor, cause them to glide down the ways, and thus automatically close the bottom.

The traction of the heavy dumping car or wagon is facilitated by means of a special construction of wheels, in which a loose revolving band or tire, K, is supported upon three or more friction wheels or rollers, L L L, whose journals or axes are supported at one end in bearings formed in the side of the car or wagon and at the other in radial arms M M, projecting from a central block, N, fixed to the side of the car. The revolving band or tire K is kept from slipping laterally by means of an endless tongue, P, on its inner periphery, which engages a counterpart groove, *r*, in each of the friction-wheels. When in use it is designed that this wheel shall be inclosed from the top to near the ground with a suitable case or cover of canvas or sheet metal to exclude the dust from the friction-rollers.

To prevent an accretion of dirt or dust upon the tongue P, a set of fixed brushes or scrapers, S, Fig. 1, are secured to project from one of the radial arms against the top and sides of the tongue, as is shown in Fig. 1.

The loading of the wagon is facilitated by the use of a vessel, T, placed on rollers, and which, when full, is designed to be hoisted to the top of the car by suitable tackle secured to the shaft C, a swinging bail, U, being pivoted on

the edge of the car to engage a hook, V, on the edge of the vessel to cause it to tip and dump itself automatically when it is drawn up to the top edge of the car. Barrels of ashes W are in like manner hoisted and emptied into the car by the use of a block and tackle and suitable grappling-tongs, Y, as illustrated in Fig. 1.

The centrally-hinged and centrally-lifting bottom F F may be adapted to coal-cars and other vehicles, and also to stationary bins, and I contemplate such use and applications thereof.

The car or wagon constructed with two wheels, as illustrated in the drawings, is designed for use in connection with a second car of the same description, the two being coupled together, end for end, by suitable central eye-bolts or hinges, which shall cause the two to mutually support each other and produce substantially one conveyance, jointed midway between its wheel-supports.

I do not herein claim the construction of wheel for my improved dumping-car, as herein described and illustrated, as I intend to make the same the subject of a separate application for Letters Patent.

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

The combination, with the sides and open bottom of a car, wagon, or bin, and with inclined supporting-strips G therein, of a longitudinally-divided and centrally-hinged movable flooring, resting upon said inclined strips to slope from the center to the sides, a longitudinal rotating shaft supported in bearings over the center of the hinged flooring, and chains extending from said shaft to the hip or hinge line of said flooring, substantially in the manner and for the purpose herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MOSES M. CLARK.

Witnesses:
DAVID A. BURR,
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