

No. 880,054.

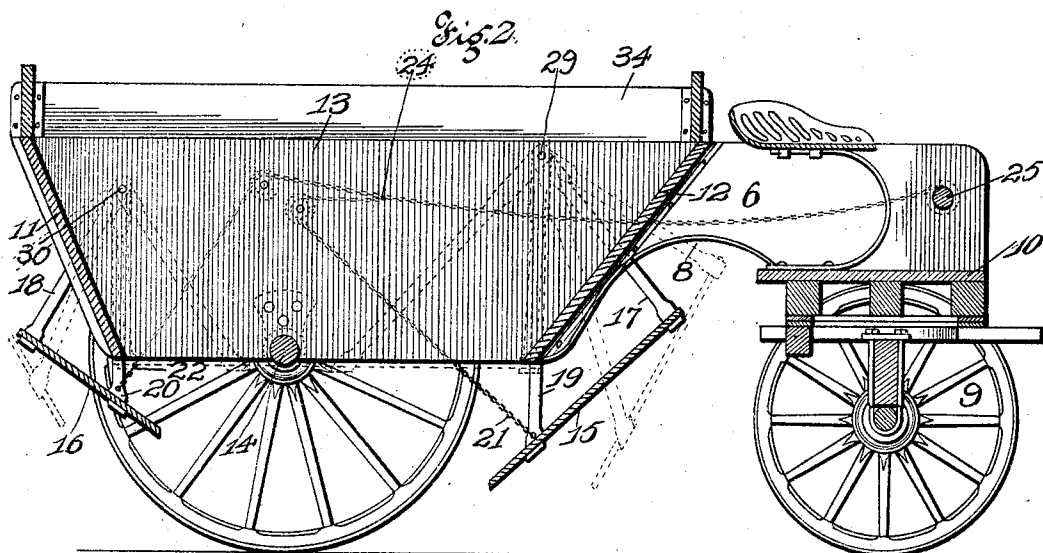
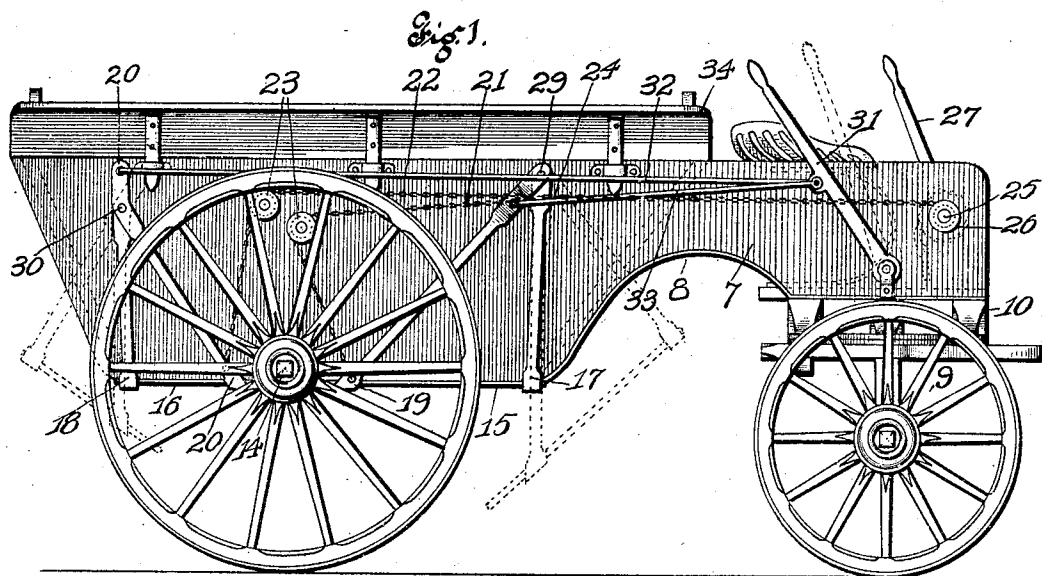
PATENTED FEB. 25, 1908.

J. H. VAN ARSDALE.

DUMPING WAGON.

APPLICATION FILED JUNE 7, 1908.

2 SHEETS—SHEET 1.



Witnesses

H. C. Stein

L. A. L. M. Intyre

Inventor

James H. Van Arsdale
by Hopkins & Eick's Atty.

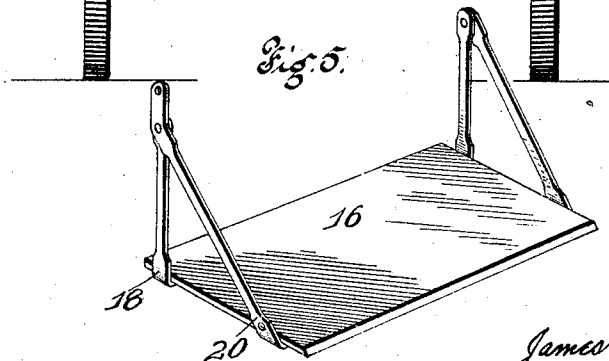
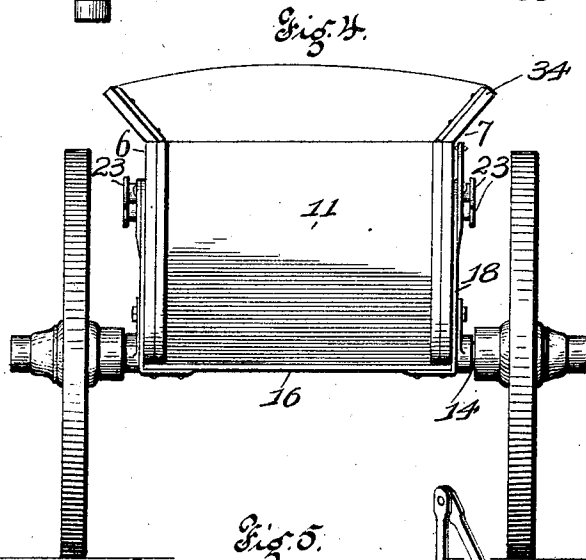
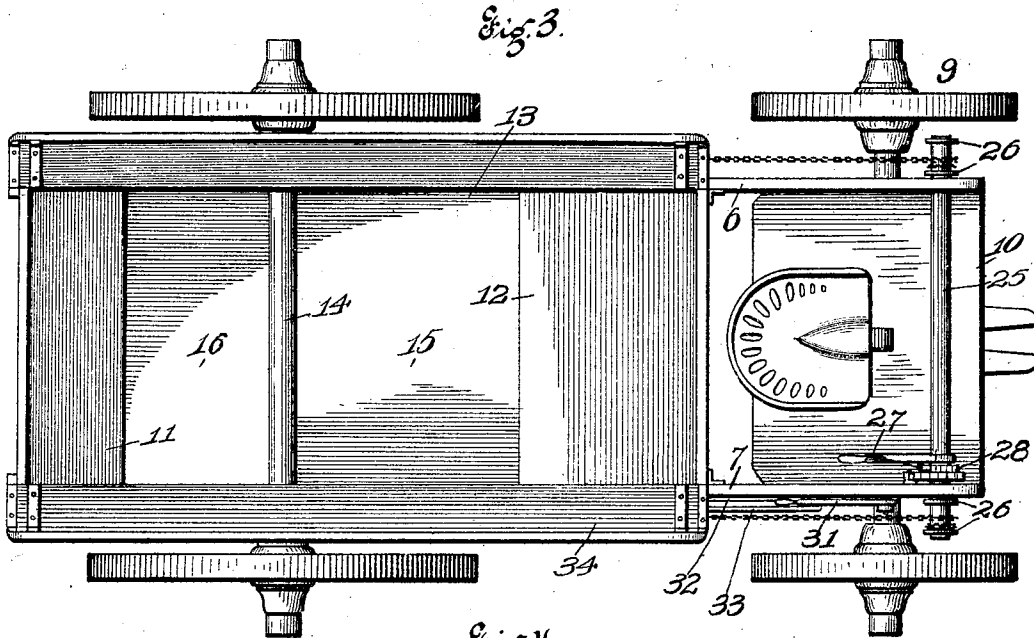
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UNITED STATES PATENT OFFICE.

JAMES H. VAN ARSDALE, OF ST. LOUIS, MISSOURI, ASSIGNOR TO LUEDINGHAUSENSPENSCHIED WAGON CO., A CORPORATION OF MISSOURI.

DUMPING-WAGON.

No. 880,054.

Specification of Letters Patent.

Patented Feb. 25, 1908.

Application filed June 7, 1906. Serial No. 320,634.

To all whom it may concern:

Be it known that I, JAMES H. VAN ARSDALE, a citizen of the United States, and resident of St. Louis, Missouri, have invented certain new and useful Improvements in Dumping-Wagons, of which the following is a specification.

This invention relates to improvements in dumping wagons, and consists in the novel arrangement, construction and combination of parts as will be fully hereinafter described and claimed.

The object of my invention is to construct the body of the wagon with the bottom so arranged as to be opened by swinging the same to the front and to the rear, providing an absolutely free passage for the material.

A further object of my invention is to construct the bottom of the body with suitable brackets or elbows by which the same is pivotally mounted to the sides of the body, and a suitable mechanism whereby the bottom may be tilted a portion to the front and a portion to the rear of the body to permit the material to be dumped to pass out freely, and to permit the vehicle to be conveyed over the dumped contents without interference to the bottom or to the running gear.

A further object of my invention is the arrangement of the bottom which forms the under side of the receptacle in which the material is carried in the body of the wagon, and the division of the bottom is such that the sections may be extended to any desirable angle to the front and rear so as to permit the same to pass freely over the dump contents.

In the drawings: Figure 1 is a side elevation of my complete invention. Fig. 2 is a vertical, central, sectional view of the same with the bottom open. Fig. 3 is a top plan view. Fig. 4 is a rear view. Fig. 5 is a detail, perspective view of one section of the bottom.

In the construction of my invention I provide a body composed of two sides 6 and 7, a portion thereof being sufficiently cut away at the point indicated by the numeral 8 which is to permit the front gear 9 to swing under the body when it is desired to make a short turn. The construction of the front gear 9 is of the ordinary vehicle type, and the body is mounted upon the front gear by means of the frame 10.

Between the sides 6 and 7 are provided angular walls 11 and 12 which extend from the

top to the bottom, and form a receptacle 13 in which the material is placed for hauling. The section of the body forming the receptacle is supported upon the rear axle 14, and said axle is located in such position as to receive the greater part of the weight which has been figured to amount to two thirds, and by placing the axle in this position will form what is termed a short coupled vehicle which through experience has been found to cause lighter draft to the horses, and make the hauling easier than if the axle would be located on the rear end of the body.

The lower end of the receptacle 13 is provided with a bottom formed of two sections 15 and 16, and are supported by brackets or elbows 17 and 18 to the sides 6 and 7 of the body. The sections 15 and 16 are made of material of sufficient weight to cause the sections by their own gravity to assume the position as shown by solid lines in Fig. 2 when the operating mechanism is released, and will permit the material in the receptacle to pass out upon the ground. To the arms 19 and 20 of the brackets or elbows are connected chains 21 and 22. These chains pass over guide rollers 23, and connect together at the point indicated by the numeral 24. The chain is extended to the front of the body and attached to the shaft 25, and arranged to be wound upon said shaft between the flanges 26 when said shaft is operated by means of the lever 27, and ratchet mechanism 28 which is of the ordinary construction.

The brackets or elbows 17 are pivoted to the body at the point indicated by the numeral 29, and the brackets 18 are pivoted to the body at the point indicated by the numeral 30. At the right hand side of the body I provide a lever 31 to which are connected rods 32 and 33, the rod 32 extending rearwardly and connected to the upper end of the arm 20, and the rod 33 connected to the arm 19. These rods are for the purpose to raise the sections 15 and 16 in the position as shown by dotted lines in Fig. 2 when it is desired to raise said sections at a point higher than the normal position they assume when opened by the weight of the material, and from the position as shown by solid lines in Fig. 2.

Upon the top of the receptacle 13 I provide side boards 34 which are of ordinary construction, and are designed to be removed from the body when so desired. The

operating mechanism is only used to bring the sections 15 and 16 in closed position after the material has been dumped and to retain said sections in locked position by means of the ratchet mechanism carried by the shaft 25. The ends of the sections 15 and 16 when brought in closed position come in contact with the under side of the axle 14, and provide a close and leak proof joint.

10 I do not desire to limit myself to the precise construction of operating mechanism as I may use an endless chain system by which the bottom may be operated.

The operation of my invention is as follows:

15 After the receptacle 13 of the wagon has been sufficiently filled, and has been conveyed to the dumping site the driver by releasing the ratchet mechanism will permit the sections 15 and 16 of the bottom to open, and assume a position shown by solidlines in Fig. 2, the weight of the material assisting in opening the sections to this position. At this point the greater portion of the material has passed out of the receptacle, and the driver by manipulating the lever 31 can raise the sections to a higher position to entirely free the ends of the sections from the material, in a position indicated by dotted lines in Fig. 2. The wagon can then be hauled through the material without strain of any kind, but should the material extend upwardly at a point to contact with the end of the rear section the said section will have a tendency to spread the material, yet in no way conflict with the wheels of the vehicle as has been found to be a detriment in the dumping wagons now constructed with the bottom opening lengthwise with the body wherein the material forces the sections against the wheels, and act as a brake. After the wagon has been removed from the material the driver by means of the lever 27 and ratchet mechanism operates the shaft 25 which winds up the chain, and brings sections 15 and 16 in closed position to form the bottom of the receptacle.

Having fully described my invention, what I claim is:

1. A dumping wagon, comprising a body,

a bottom formed of two sections, one located 50 on each side of the rear axle, and means for swinging said sections to the front and rear away from the axle to provide a free passage for the material, substantially as specified.

2. A dumping wagon, comprising a body, 55 a receptacle formed in the body, the receptacle portion of the body supported upon the rear axle, a bottom composed of two sections, said sections pivotally connected to the sides of the body, the ends communicating with the axle when in closed position to form the bottom of the receptacle, and clear free from the axle when open, and means for closing the sections and to hold the same in closed position, substantially as specified. 65

3. A device of the class described, comprising a body, a running gear, the rear portion of the running gear supporting the receptacle portion of the body, a bottom composed of two sections one located on each 70 side of the axle of the running gear, brackets supporting said sections to the sides of the body, said sections arranged to swing open by gravity, and means for retaining the sections in closed position, and to permit the same to open when released, and a lever mechanism for raising the sections to a point higher than their normal position of gravity, substantially as specified. 75

4. A dumping wagon comprising a body, 80 the rear portion having a receptacle in which the material is to be placed, an axle supporting the receptacle portion of the body, and located at a position to receive the greater portion of the weight of the wagon and material, a bottom arranged to swing away from the axle to permit the contents of the receptacle to freely pass therefrom, and means for opening and closing said bottom, substantially as specified. 90

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

JAMES H. VAN ARSDALE.

Witnesses:

GEO. T. MICHAEL,
LOUIS H. JOSTES.