H. K. POTTER.

DUMP CART.

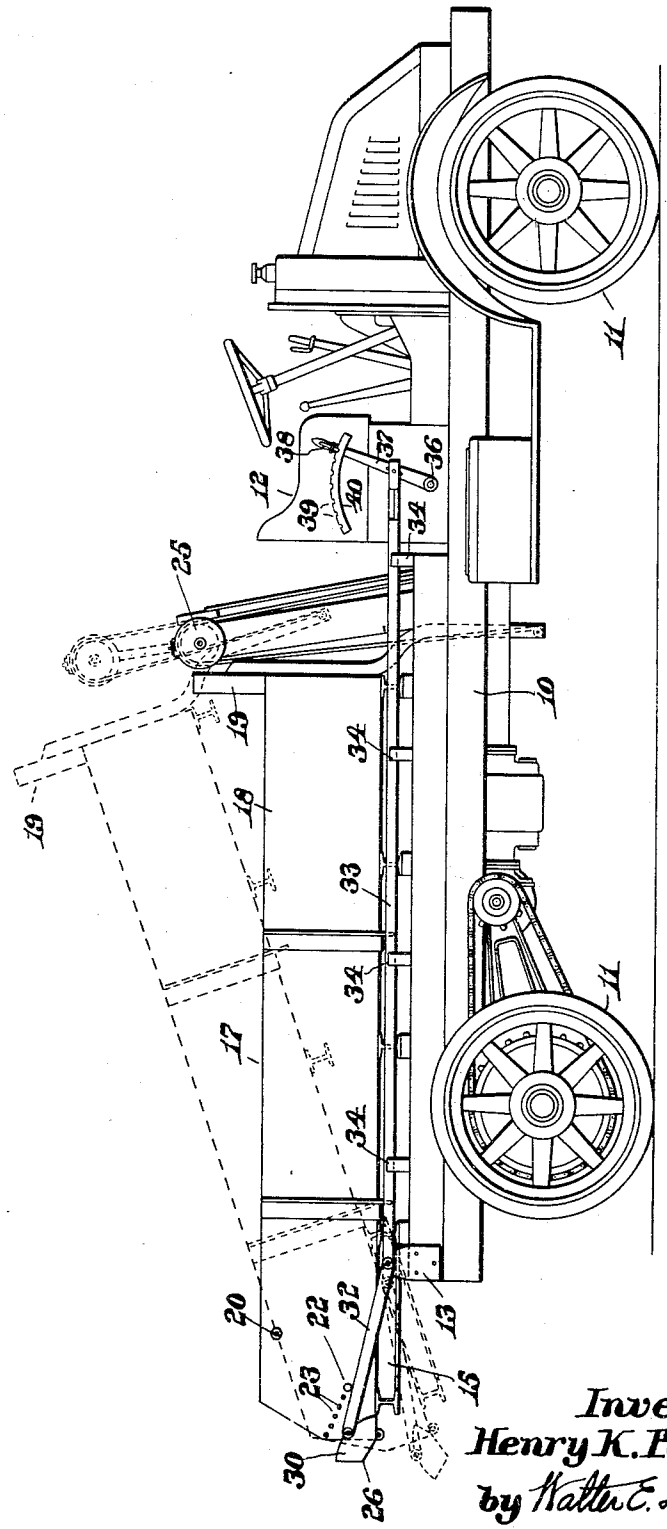
APPLICATION FILED SEPT. 20, 1917.

1,285,368.

Patented Nov. 19, 1918.

3 SHEETS—SHEET 1.

Fig. 1.



Inventor:
Henry K. Potter,
by Walter E. Lombard,
Atty.

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3 SHEETS—SHEET 2.

Fig. 2.

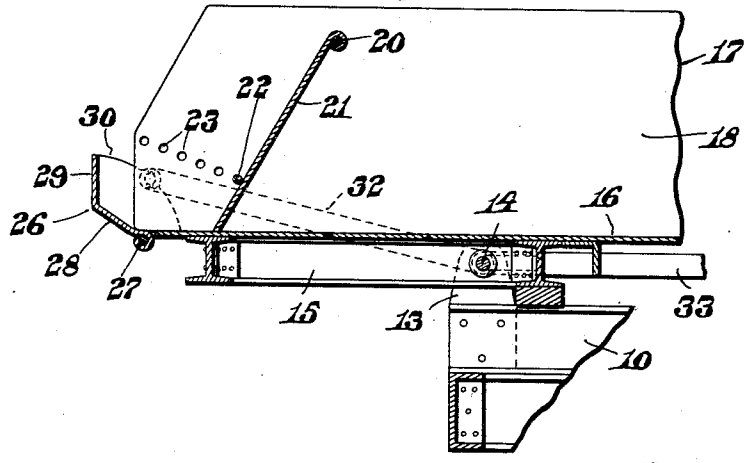


Fig. 3.

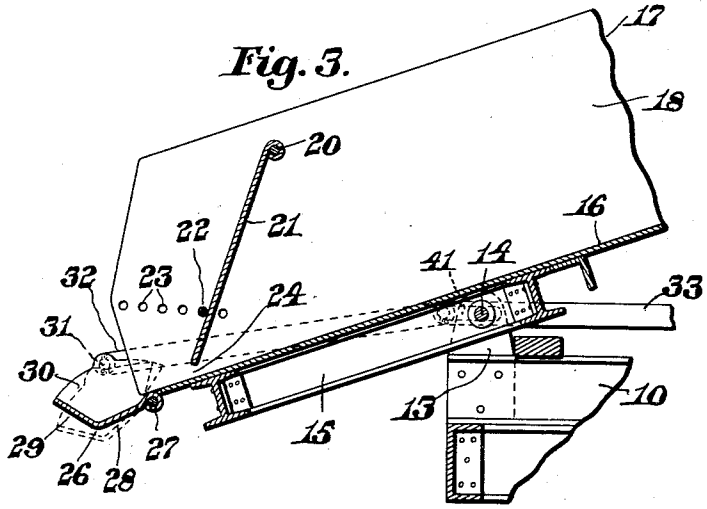
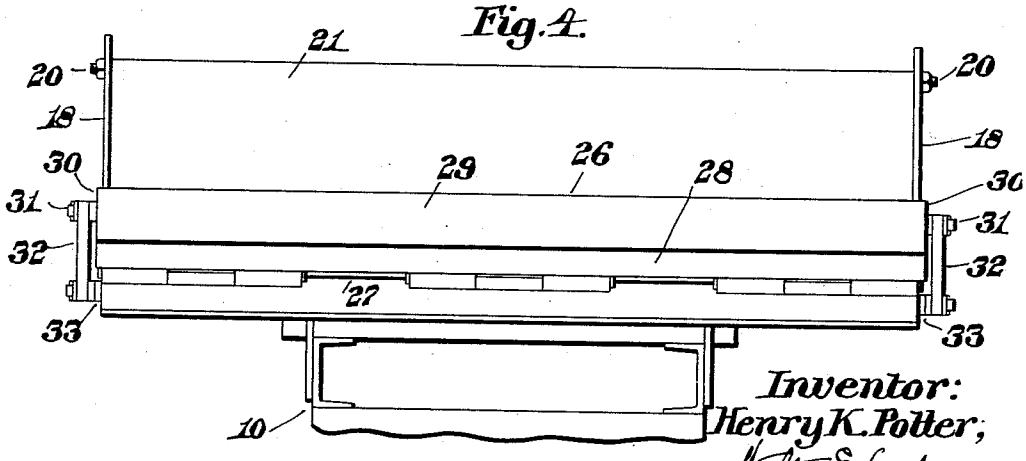


Fig. 4.



Inventor:
Henry K. Potter;
by Walter E. Lombard, Atty.

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3 SHEETS—SHEET 3.

Fig. 5.

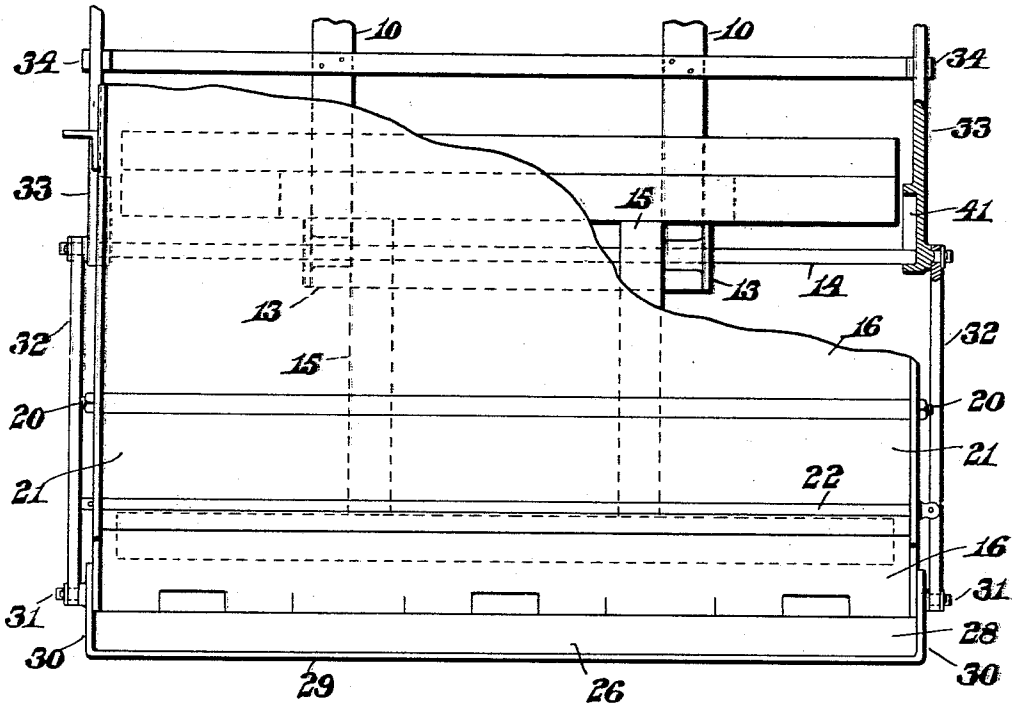


Fig. 6.

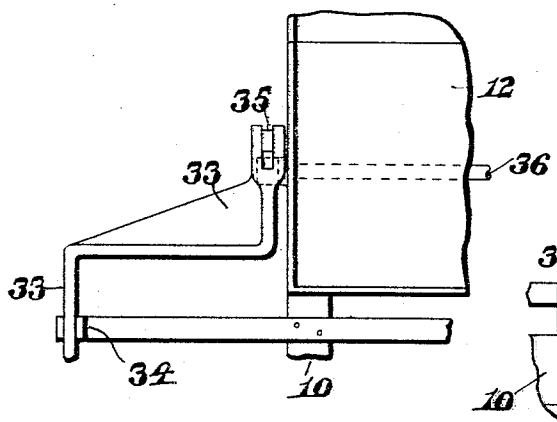
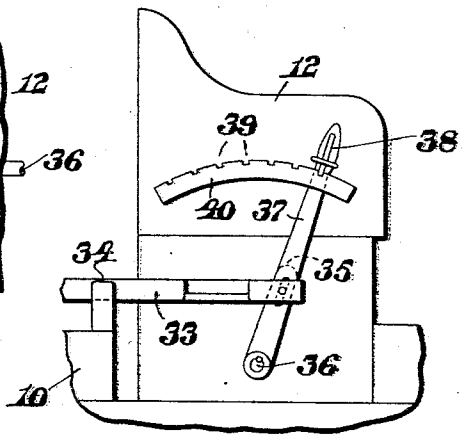


Fig. 7.



Inventor:
Henry K. Potter,
by Walter E. Lombard,
Atty.

UNITED STATES PATENT OFFICE.

HENRY K. POTTER, OF SOMERVILLE, MASSACHUSETTS.

DUMP-CART.

1,285,368. Specification of Letters Patent. Patented Nov. 19, 1918.

Application filed September 20, 1917. Serial No. 193,211.

To all whom it may concern:

Be it known that I, HENRY K. POTTER, a citizen of the United States of America, and a resident of Somerville, in the county of Middlesex and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Dump-Carts, of which the following is a specification.

This invention relates to dump carts and particularly that class of carts used for the delivery of coal, sand, and similar materials and it has for its object the production of a vehicle of this character in which the delivery of the material may be controlled from the seat of the operator.

The invention consists primarily in a swinging tailboard provided with means for regulating the opening between the lower edge thereof and the bottom of the receptacle to which said tail board is pivoted, combined with a coacting delivery controlling-member hinged to said bottom and adapted to be moved into various angles with said bottom.

The invention further consists in certain novel features of construction and arrangement of parts which will be fully understood by reference to the description of the drawings and to the claims to be hereinafter given.

For the purpose of illustrating the invention one preferred form thereof is illustrated in the drawings, this form having been found to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which the invention consists can be variously arranged and organized and that the invention is not limited to the precise arrangement and organization of these instrumentalities as herein shown and described.

Of the drawings:

Figure 1 represents an elevation of a vehicle embodying the principles of the present invention.

Fig. 2 represents a vertical section of a portion of the rear end of the same.

Fig. 3 represents a similar view showing the receptacle tilted about its pivotal connection with the truck.

Fig. 4 represents an elevation of the rear end of a portion of said vehicle.

Fig. 5 represents a plan of the rear end of the vehicle and its connecting parts.

Fig. 6 represents a plan of a portion of the operator's seat and a portion of one of the members for adjusting the position of the delivery controlling-member, and.

Fig. 7 represents a portion of an elevation of the seat end of the vehicle and showing the lever for operating the delivery controlling-member.

Similar characters designate like parts throughout the several figures of the drawings.

In the drawings,

10 is the frame of a motor vehicle which may be of any usual construction.

The frame 10 is mounted on wheels 11—11 and near its forward end is provided with a seat 12 for the operator. At the rear end of the frame 10 are two brackets 13, 13 having a rod 14 extending therethrough, this rod 14 also extending through the longitudinal I-beams 15 forming a part of the support for the bottom 16 of the receptacle 17 having the side walls 18—18 and the end wall 19.

A rod 20 extends through both side walls 18 and suspended from this rod 20 is a swinging tail board 21 normally retained in the closed position indicated in Fig. 2 by the rod 22 disposed in the alined holes 23 in the side walls 18.

When traveling over the road the tail board 21 is in closed position, unless it is desired to deliver a limited amount of sand, gravel or similar material upon the surface of the road.

In order to accomplish this delivery of material the rod 22 is changed into another set of alined openings 23 as indicated in Fig. 3 thus permitting the tail board 21 to swing farther to the rear and leave an opening 24 between its lower edge and the bottom 16 of the receptacle 17.

When the receptacle 17 is tilted at an angle to the truck 10 by means of any usual lifting device 25, the material may pass down the bottom 16 through the opening 24. It is obvious that when the receptacle is in the position shown in Fig. 3, an even delivery of the material therein will be accomplished.

It is evident, however, that in depositing sand, gravel and similar materials upon the surface of a road it is desired at times to deposit a greater quantity of material at one place than at other places and sometimes it is desirable to cut off the delivery entirely.

It is apparent that it would be very objectionable to be obliged to stop the vehicle

and adjust the various instrumentalities when it is desired to accomplish these results.

To meet this difficulty and make it possible for the operator to control the delivery of material from his seat 12 is the main object of the present invention.

This control is accomplished by the delivery controlling-member 26 hinged at 27 to the rear end of the bottom 16 of the receptacle 17.

Each end wall 30 has pivoted thereto at 31, a link 32, the opposite end of which is pivotally connected to the slidable bar 33 mounted in guides 34 extending laterally from the truck frame 10.

The bar 33 on the left of the vehicle is pivotally connected to the short lever 35 as shown in Fig. 6, the upper end of said lever 35 being indicated in dotted lines in Fig. 7.

The lever 35 is secured to the rocker shaft 36 which has also secured to its opposite end the controlling lever 37 pivotally connected to the bar 33 on the right side of the vehicle.

The upper end of the controlling lever 37 is provided with the usual locking device 38 adapted to coact with the notches 39 in the quadrant 40 to retain the delivery-controlling-member 26 in adjusted position.

The rear ends of the bars 33 are provided with recesses 41 in which the outer ends of rod 14 are positioned, these ends serving as guides for the rear ends of the bars 33 in their reciprocating movement.

When the delivery-controlling-member 26 is in the position indicated in dotted lines in Fig. 3 and the receptacle 17 is inclined as shown, the material in said receptacle will have as free a delivery as is possible through the limited opening 24.

Without changing the size of the opening the delivery of material may be retarded by simply moving the delivery-controlling-member into position shown in full lines in Fig. 3.

If the delivery-controlling-member 26 is moved into the position shown in Fig. 2 the delivery will be cut off altogether.

It will be obvious therefore that by means of the movement of the delivery-controlling-member 26 about its pivot 27 any amount of material may be delivered or the delivery entirely discontinued and this movement of the delivery-controlling-member 26 is under the control of the operator without leaving his seat 12 or stopping the vehicle.

The amount of delivery of the material may be further varied by changing the position of the tail board 21, but with the tail board 21 in any adjusted position and varying the size of the delivery opening 24, the regulation of the delivery through the opening 24 will continue to be under the control of the operator.

This device is of great advantage in vehicles used in connection with the construction and repair of roads.

It is believed that the operation of the invention and its many advantages will be fully understood without further description.

Having thus described my invention, I claim:

1. In a device of the class described, a truck; a receptacle pivoted to the rear thereof and adapted to be tilted about its pivot; a swinging tail board hinged at its upper end to said receptacle with its ends extending to and abutting the sides of said receptacle; means for limiting the swinging movement of said tail board to vary the opening between the lower edge of said tail board and the bottom of said receptacle; and a delivery-controlling member pivoted to the bottom of said receptacle at the rear of said tail board, and adapted to limit the delivery of the material passing beneath said tail board.

2. In a device of the class described, a truck; a receptacle pivoted to the rear thereof and adapted to be tilted about its pivot; a swinging tail board hinged at its upper end to said receptacle; means for limiting the swinging movement of said tail board to vary the opening between the lower edge of the tail board and the bottom of said receptacle; and a delivery-controlling-member pivoted to the bottom of said receptacle at the rear of said tail board, said delivery-controlling-member being provided with a closed bottom having an upwardly inclined back wall extending the entire length of said bottom.

3. In a device of the class described, a truck; a receptacle pivoted to the rear thereof and adapted to be tilted about its pivot; a swinging tail board to said receptacle; means for limiting the swinging movement of said tail board; and a delivery-controlling-member pivoted to said receptacle at the rear of said tail board, said delivery-controlling-member being provided with a closed bottom having an upwardly and rearwardly inclined back wall extending the entire length of said bottom and sides inclosing the rear ends of the side walls of said receptacle.

4. In a device of the class described, a truck; a receptacle pivoted to the rear thereof and adapted to be tilted about its pivot; a swinging tail board hinged at its upper end to said receptacle; a rod positioned in openings in the sides of said receptacle and extending transversely thereof for limiting the swinging movement of said tail board; and a delivery-controlling-member pivoted to the bottom of said receptacle at the rear of said tail board.

5. In a device of the class described, a

truck; a receptacle pivoted to the rear thereof and adapted to be tilted about its pivot; and two swinging members extending the entire width of and pivoted to said receptacle at the rear thereof, said swinging members having their pivots oppositely disposed thereby being adapted to coact and control the quantity of material being delivered from said receptacle.

6. In a device of the class described, a truck; a receptacle pivoted to the rear thereof and adapted to be tilted about its pivot; and two swinging members at the rear of said receptacle and pivoted thereto with their pivots oppositely disposed, one of said swinging members having an inclined rear wall and a bottom forming a continuation of the bottom of said receptacle.

7. In a device of the class described, a truck; a receptacle pivoted to the rear thereof and adapted to be tilted about its pivot; two swinging members at the rear of said receptacle with their pivots oppositely disposed and adapted to control the quantity of material delivered during the movement of said truck; and means under the control of the operator for moving the rear swinging member about its pivot.

8. In a device of the class described; a truck; a receptacle pivoted to the rear thereof and adapted to be tilted about its pivot; a tail board pivoted at its upper end to the side walls of said receptacle; means for positioning said tail board at various angles; and means to the rear of said tail board and pivoted to the bottom of said receptacle for varying the delivery of material passing beneath said tail board.

9. In a device of the class described; a truck; a receptacle pivoted to the rear thereof and adapted to be tilted about its pivot; a tail board pivoted at its upper end to the side walls of said receptacle with its lower edge normally resting on the bottom of said receptacle at a point considerably forward of the rear end of said receptacle; means limiting the rearward movement of said tail board to provide variable openings between said lower edge and said bottom; and a delivery-controlling-member pivoted to said bottom and having an upwardly inclined rear wall.

10. In a device of the class described; a truck; a receptacle pivoted to the rear thereof and adapted to be tilted about its pivot; a tail board pivoted at its upper end to the side walls of said receptacle with its lower edge normally resting on the bottom of said receptacle at a point considerably forward of the rear end of said receptacle; means limiting the rearward movement of said tail board to provide variable openings between said lower edge and said bottom; and a delivery-controlling-member pivoted to said bottom and having an upwardly inclined rear wall and sides inclosing the rear ends of the side walls of said receptacle.

11. In a device of the class described, a truck, a receptacle pivoted to the rear thereof and adapted to be tilted about its pivot; a swinging tail board pivoted at the top and adapted to be adjusted to control the maximum quantity of material to be deliverd; a member hinged to the rear end of the bottom of said receptacle and provided with a closed bottom and an upwardly and rearwardly inclined back wall connected to said bottom by side walls positioned outside of the sides of said receptacle; and means whereby said hinged member may be adjusted into various positions to further reduce the quantity of material to be delivered.

12. In a device of the class described, a truck, a receptacle pivoted to the rear thereof and adapted to be tilted about its pivot; a swinging tail board pivoted at the top and adapted to be adjusted to control the maximum quantity of material to be delivered; a member hinged to the rear end of the bottom of said receptacle and provided with a closed bottom and an upwardly and rearwardly inclined back wall connected to said bottom by side walls positioned outside of the sides of said receptacle; and means operable from the driver's seat whereby said hinged member may be adjusted into various positions to further reduce the quantity of material to be delivered.

Signed by me at 4 Post Office Sq., Boston, Mass., this 17th day of September, 1917.

HENRY K. POTTER.

Witnesses:
WALTER E. LOMBARD,
NATHAN C. LOMBARD.