

Apr. 17, 1923.

1,452,371

A. E. GINTHER

TRUCK OR WAGON BODY

Filed March 29, 1920

3 Sheets-Sheet 1

Fig. 1.

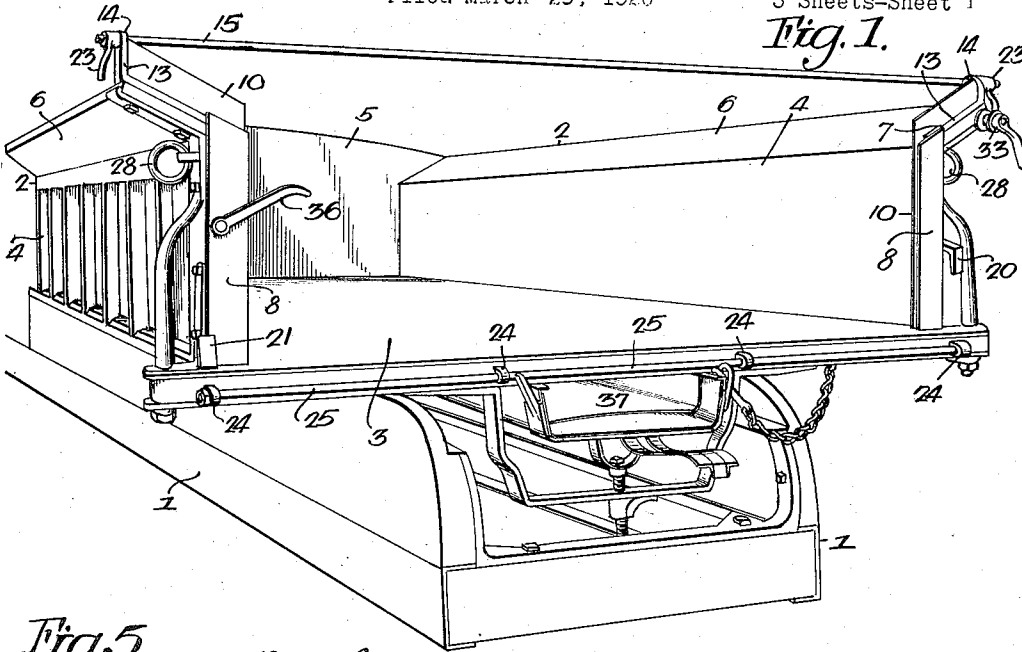


Fig. 5.

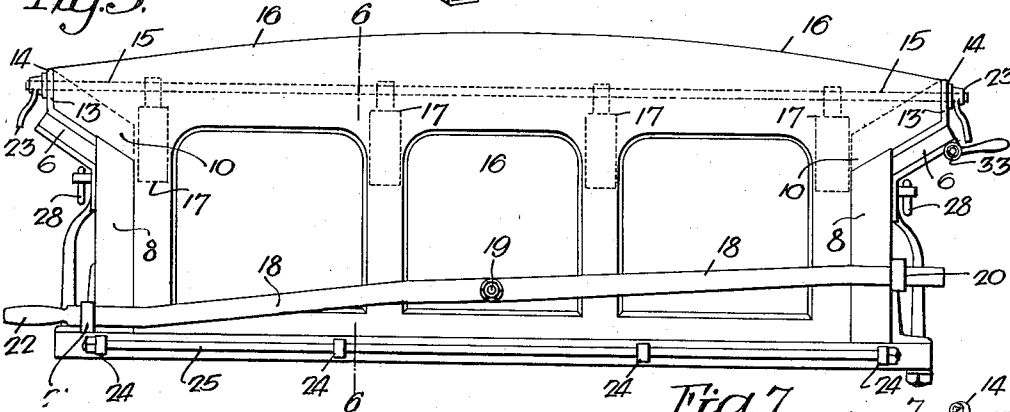


Fig. 6.

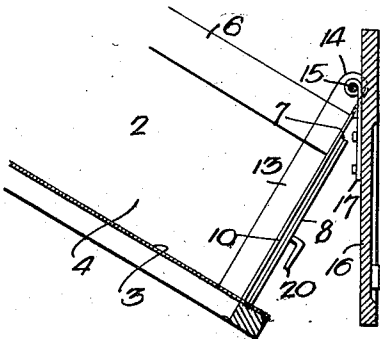


Fig. 7.

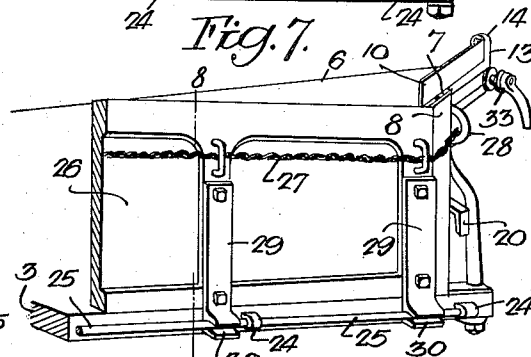
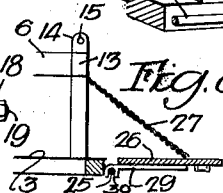


Fig. 8.



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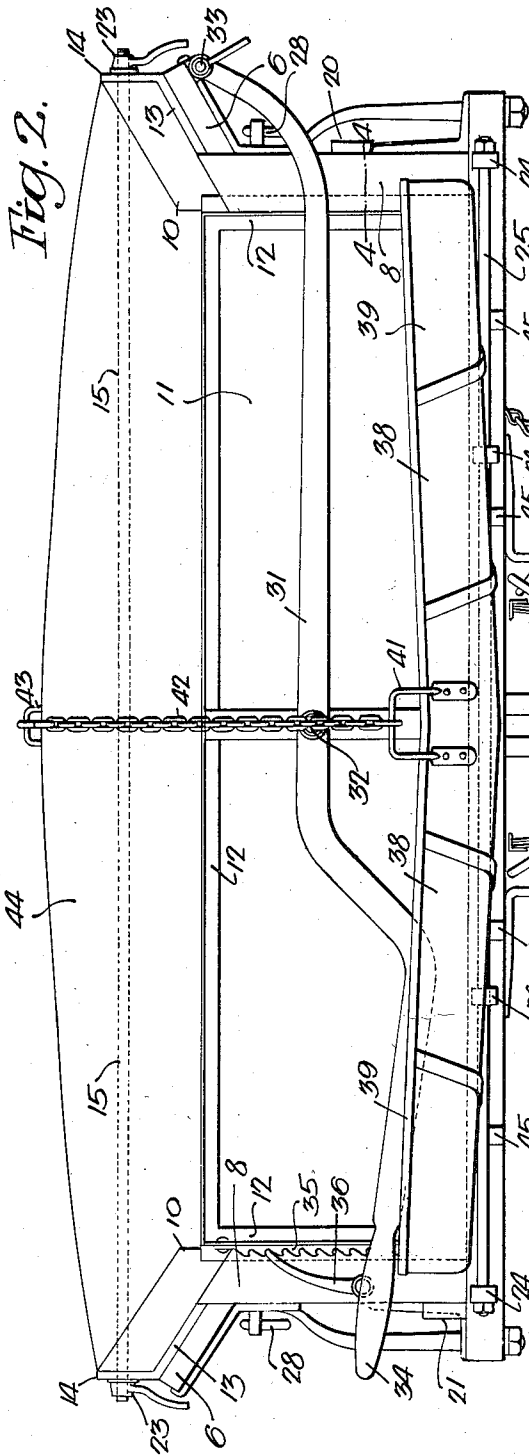
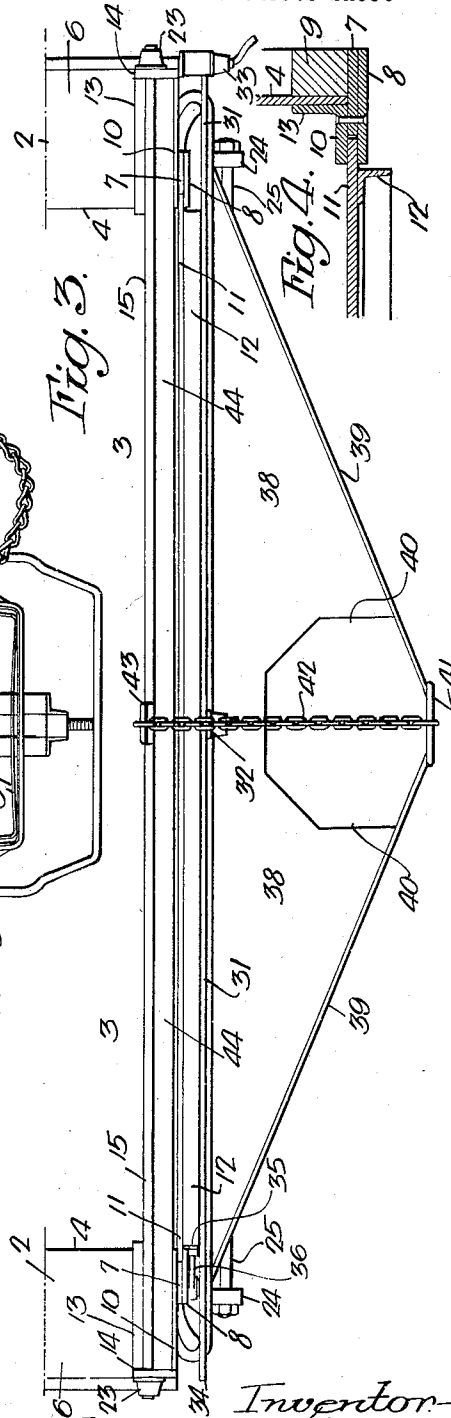
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3 Sheets-Sheet 2



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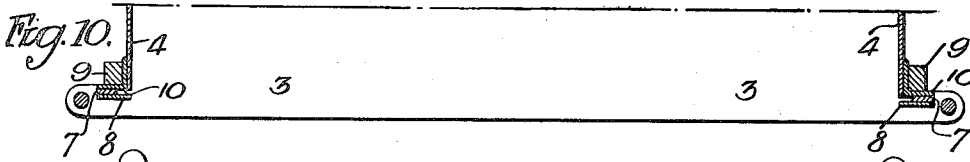
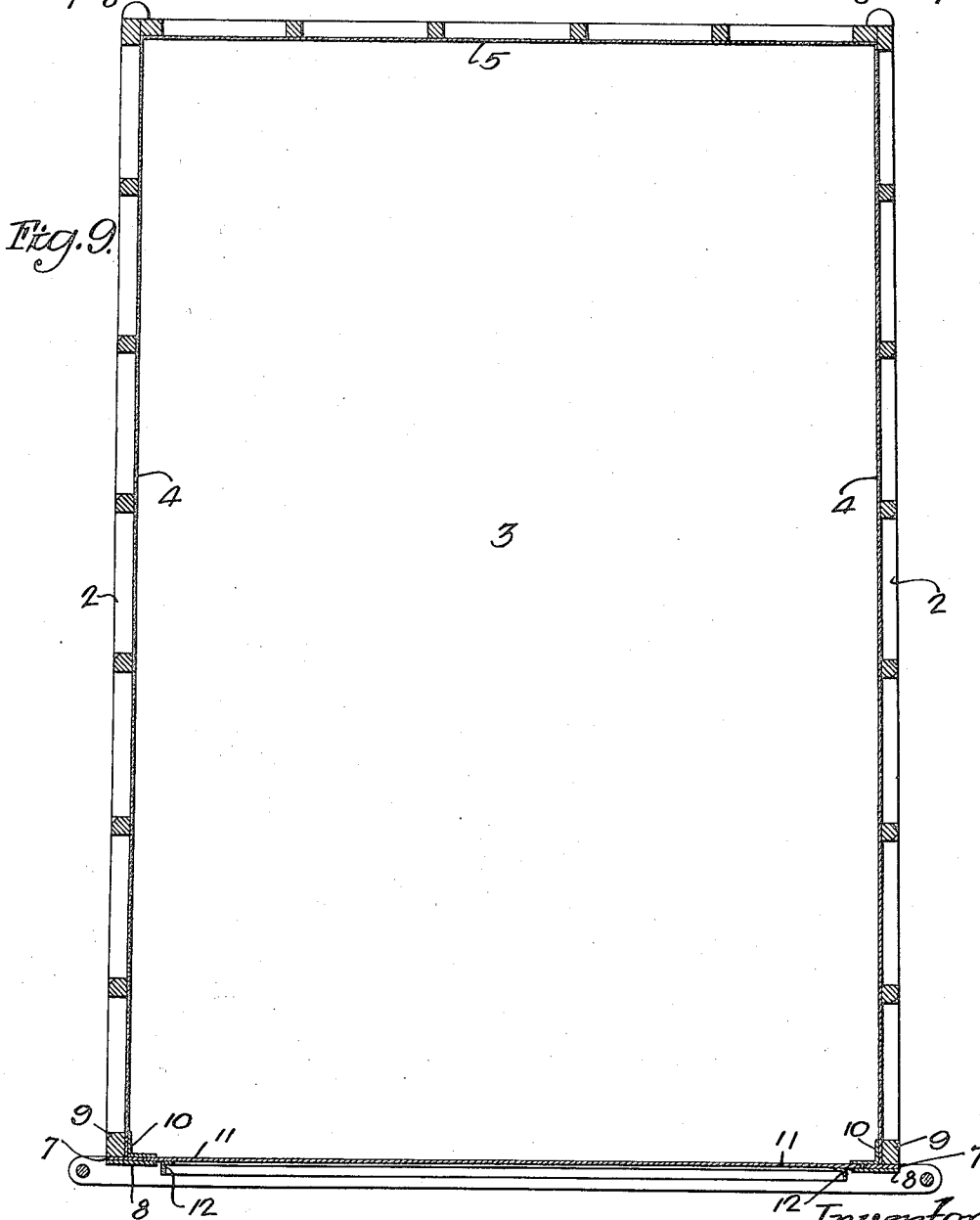
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A. E. GINTHER

TRUCK OR WAGON BODY

Filed March 29, 1920.

3 Sheets-Sheet 3



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UNITED STATES PATENT OFFICE.

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TRUCK OR WAGON BODY.

Application filed March 29, 1920. Serial No. 369,628.

To all whom it may concern:

Be it known that I, ANTHONY E. GINTHER, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Truck or Wagon Bodies, of which the following is a specification.

One object of my invention is to construct a wagon body which can be used for a diversity of purposes and to which can be applied different forms of tail boards.

A further object of the invention is to design the body so that when it is tilted the load will flow freely therefrom.

Heretofore, it has been the general practice to construct a wagon body with an upper pivoted tail board, which can be used as a contractor's wagon in distributing materials for road building and like purposes, and to construct another form of wagon body with a permanently attached tail board pivoted to the body at its lower edge to be used for trucking purposes, and still another form in which the tail board can be raised and lowered for use in carrying coal and like granular material.

In the accompanying drawings:

Fig. 1 is a perspective view of a wagon body illustrating my invention;

Fig. 2 is an end view showing the vertically adjustable tail board mounted thereon;

Fig. 3 is a plan view of the rear end of the wagon illustrated in Fig. 2;

Fig. 4 is a sectional view on the line 4—4, Fig. 2;

Fig. 5 is an end view of the wagon body showing the tail board pivoted to the body at its upper end, and means for locking the tail board;

Fig. 6 is a sectional view on the line 6—6, Fig. 5, showing the wagon body tilted and the tail board hanging from the pivots; Fig. 7 is a sectional view of the wagon body, showing the tail board pivoted at its lower end to the floor of the wagon body;

Fig. 8 is a sectional view on the line 8—8, Fig. 7, showing the tail board in a horizontal position;

Fig. 9 is a plan view of the wagon body; and

Fig. 10 is a plan view of the rear end

of the wagon body, showing the guide flush with the sides.

Referring to Fig. 1, 1 is the chassis, or frame, on which my improved body 2 is mounted. This body has a floor 3 and sides 4, and a permanent front end 5. In the present instance, the sides are flared, as at 6, and the rear of the body is open from one side to the other, as shown in Figs. 1 and 9. As will be noticed on referring to Fig. 9, the interior of the wagon body is narrower at the front than at the rear and there are no side obstructions, except at the extreme rear end. At the rear end of each side member of the body is an angle plate 10, which is shaped to conform to the flare of the sides, as at 13, and has eyes 14 for the reception of a transverse rod 15 from which is hung the tail board 16. The tail board 16, in the present instance, has an eye plate 17 for the rod. Secured to the angle plate 10 are two plates 7 and 8. The plate 7 is a filling plate and its inner edge is set back of the edge of the plate 8, forming a groove, or slideway, for the sliding tail board 11. This structure, with the end post 9, makes a very substantial rear construction for the wagon body. The tail board 11 has reinforcing flanges 12, as shown in Figs. 2, 3 and 4. The tail board 16 fits snugly against the rear of the wagon body and is locked in position by a bar 18 pivoted at 19 to the tail board and arranged to pass back of a hook 20 at one side and a projection 21 at the opposite side of the wagon body. The bar is provided with a handle 22 by which it can be operated so that, when the bar is in the position illustrated in Fig. 5, the tail board is locked in the closed position, but, if it be desired to discharge a load, when the handle 22 is raised so as to turn the bar 18 on its pivot, releasing the tail board to allow it to swing clear of the wagon body, as in Fig. 6, and permit the load to be discharged, according to the inclination of the wagon body. This construction is used by contractors.

The rod 14 is threaded at each end and handled nuts 23 are applied to the ends so as to hold the rod rigidly and at the same time brace the sides of the wagon body.

At the rear end of the floor 3 of the wagon body are brackets 24 through which extends a rod 25. This rod is used when it is desired to provide a tail board 26, as illustrated in Fig. 7, which is held in its raised position by a chain, or rope, 27, which is attached to the eyes 28 at each side of the wagon body. In this instance, the tail board 26 is removably pivoted to the rod 25 having a series of plates 29, slotted at 30, at the lower end, the slot being at right angles to the body of the tail board, so that when the tail board is in the vertical position, as in Fig. 7, the lower end of the board is held rigidly by the rod, and when the tail board is let down, as in Fig. 8, the outer end is held by the chain 27, and the inner end is held by the rod through the slots 30. When it is wished to detach the tail board, all that is necessary is to release the chains and lift the tail board bodily from the rod 25.

In the present instance, the tail board, 11, Figs. 2 and 3, can be vertically adjusted to any position desired so as to allow material to flow under the tail board. In this case a bar 31 is pivoted to the center of the tail board at 32 and to one side of the wagon body at 33, and has a handle 34 at the opposite side so that, on raising the handle, the tail board will be lifted. There is sufficient play at the pivots 32 to allow the board to be lifted without binding. In order to lock the tail board in any position to which it is elevated, ratchet teeth 35 are provided at one side of the tail board, which are engaged by a pawl 36 pivoted to the end of the wagon body. This construction is used when the wagon is handling coal and like granular material.

When the wagon is used for delivering coal to places that require a chute, I locate the chute 37 under the wagon body, as in Fig. 2, the chute being supported on suitable carriers. I also provide a projecting hopper 38 having a comparatively shallow flange 39. In this hopper is an opening through which the coal is discharged. The chute is arranged so as to receive coal as it passes through the opening 40. The chute can be directed to any point at the back or at the side of the wagon. The hopper 38 has a hand hold 41 to which is attached, in the present instance, a chain 42, which is, in turn, attached to an eye 43 on a cross brace 44 directly back of the sliding tail board 11. This cross brace 44 is held by the rod 15 and acts as a fixed portion of the tail board. The inner edge of the hopper has hooks 45 which engage the rod 25 at the rear of the floor of the wagon body.

It will be seen by the above construction that I provide a universal wagon body, which can be used for all purposes for which a wagon body need be used and which will

accommodate any of the three standard tail boards, viz, a vertically adjustable tail board, an upper hinged tail board, and a lower hinged tail board, so that a wagon equipped with this body and with the three types of tail boards can be used for hauling of every description, obviating the necessity of providing different wagons, or trucks, for different purposes.

I have found that where loose material is loaded in a wagon, the movement of the wagon over the streets packs the material so that it will hold even when the wagon is tilted to a greater degree than the angle of flow of the material, but by tapering the body, as described above, the material will free itself immediately and will flow more readily.

In Fig. 9, I have shown the plates 10 extending beyond the sides of the wagon, but, in Fig. 10, I have shown the plates set back and flush with the inner walls of the sides. Either construction may be used.

I claim:

1. The combination of a wagon body open at its rear; a groove at each side of the body near the rear thereof; a longitudinal cross bar extending from one side to the other at the upper end of the rear of the body; and a second longitudinal cross bar secured to the body at the rear of the floor, said grooves and upper and lower rods permitting the selective attachment of vertically sliding, upwardly swinging or downwardly swinging tail boards respectively, so that different types of tail boards may be used with the one type of wagon body.

2. The combination of a wagon body comprising a floor and upright front and side members, end plates secured at the rear of said side members and slightly spaced therefrom to form vertical grooves, an upper longitudinal cross bar connecting the side members at the rear of the body, a lower longitudinal cross bar secured to the floor at the rear thereof, said grooves and upper and lower bars permitting the selective attachment of vertically sliding, upwardly swinging or downwardly swinging tail boards respectively, so that different types of tail boards may be used with the one type of wagon body.

3. The combination of a wagon body comprising a floor and upright front and side members; end plates secured at the rear of said side members and slightly spaced therefrom to form vertical grooves, the inner edges of said end plates being flush with the inner surfaces of said side members so as not to interfere with the discharging of the material when the wagon body is tilted to discharge its contents; and a vertically sliding tail board adapted to slide in said grooves and constituting a removable closure for the rear of the wagon body.

4. The combination of a wagon body comprising a floor and upright front and side members, a groove at each side of the body near the rear thereof, an upper longitudinal cross bar connecting the side members at the rear thereof, a lower longitudinal cross bar secured to the floor, at the rear thereof, said grooves and upper and lower cross bars permitting the selective attachment of vertically sliding, upwardly swinging or downwardly swinging tail boards respectively, and a hopper attached to the rear of the body and supported by said lower longitudinal cross bar. 10

5
ANTHONY E. GINTHER.