

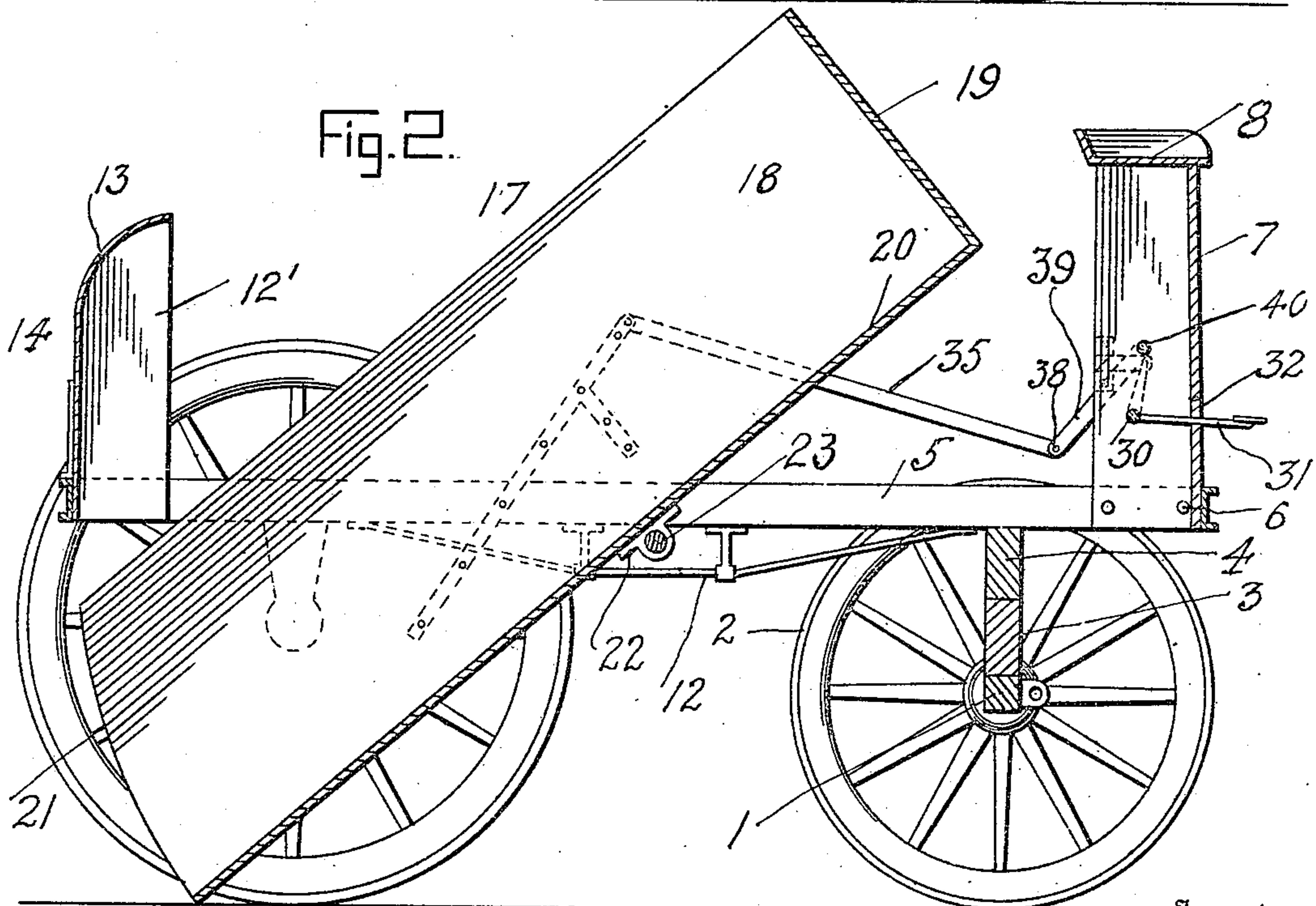
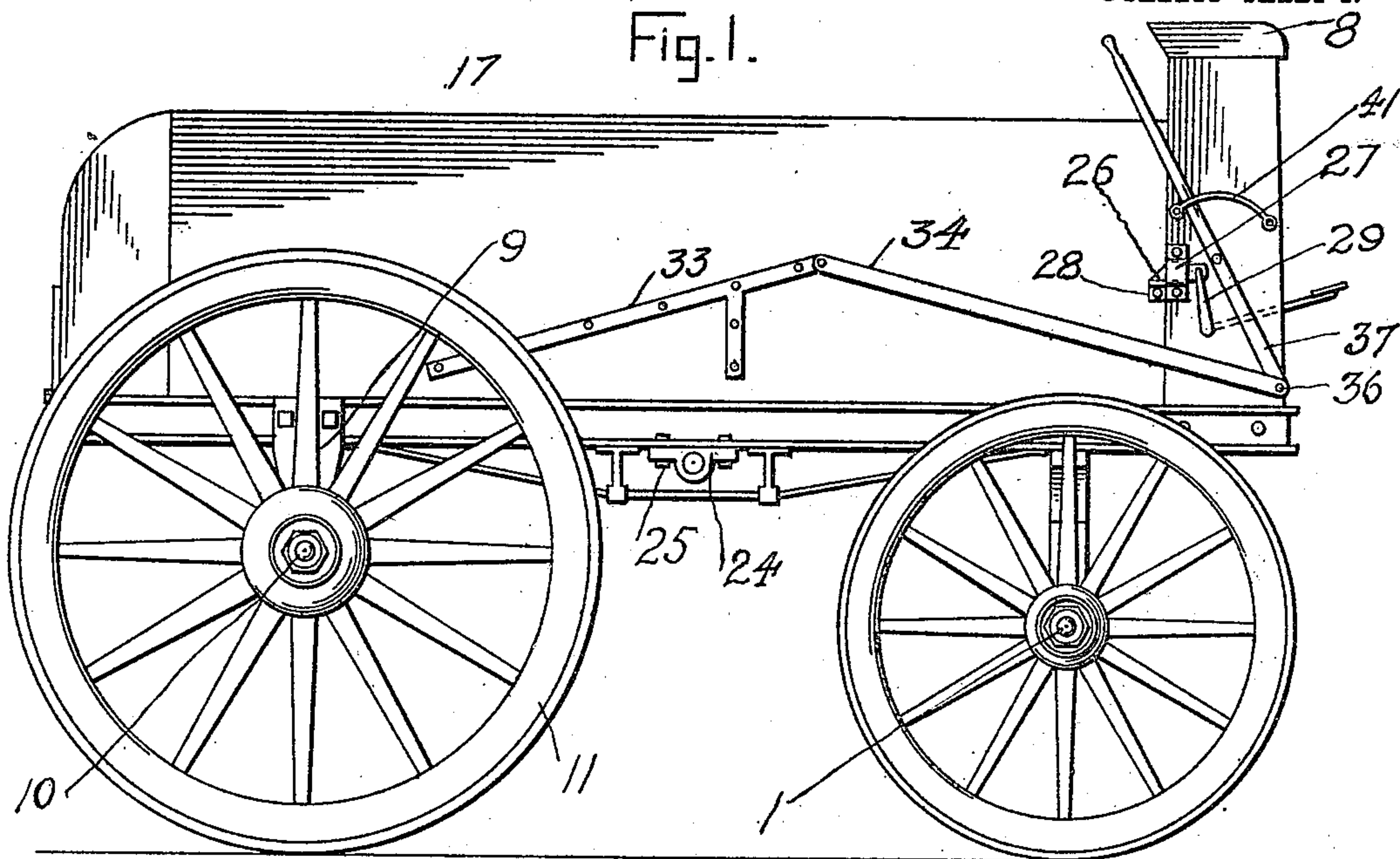
W. S. COATES, DEC'D.
J. E. COATES, ADMINISTRATRIX.
DUMP WAGON.

APPLICATION FILED FEB. 4, 1909.

960,241.

Patented May 31, 1910.

2 SHEETS—SHEET 1.



Inventor

William S. Coates

Witnesses

A. J. Bopp
M. E. Leary

By

Andrew H. Coates

Attorney

W. S. COATES, DEC'D.
J. E. COATES, ADMINISTRATRIX.
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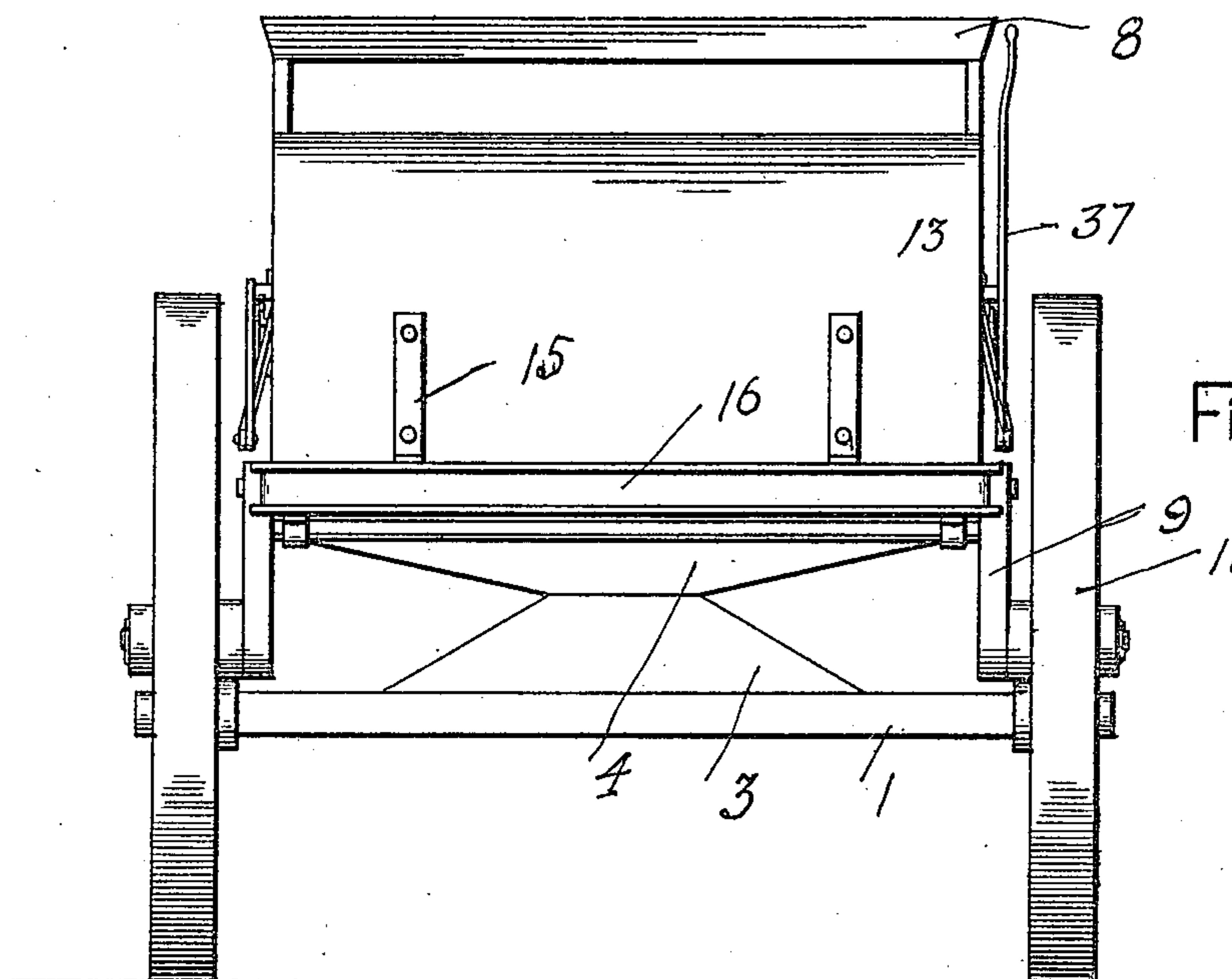


Fig. 3.

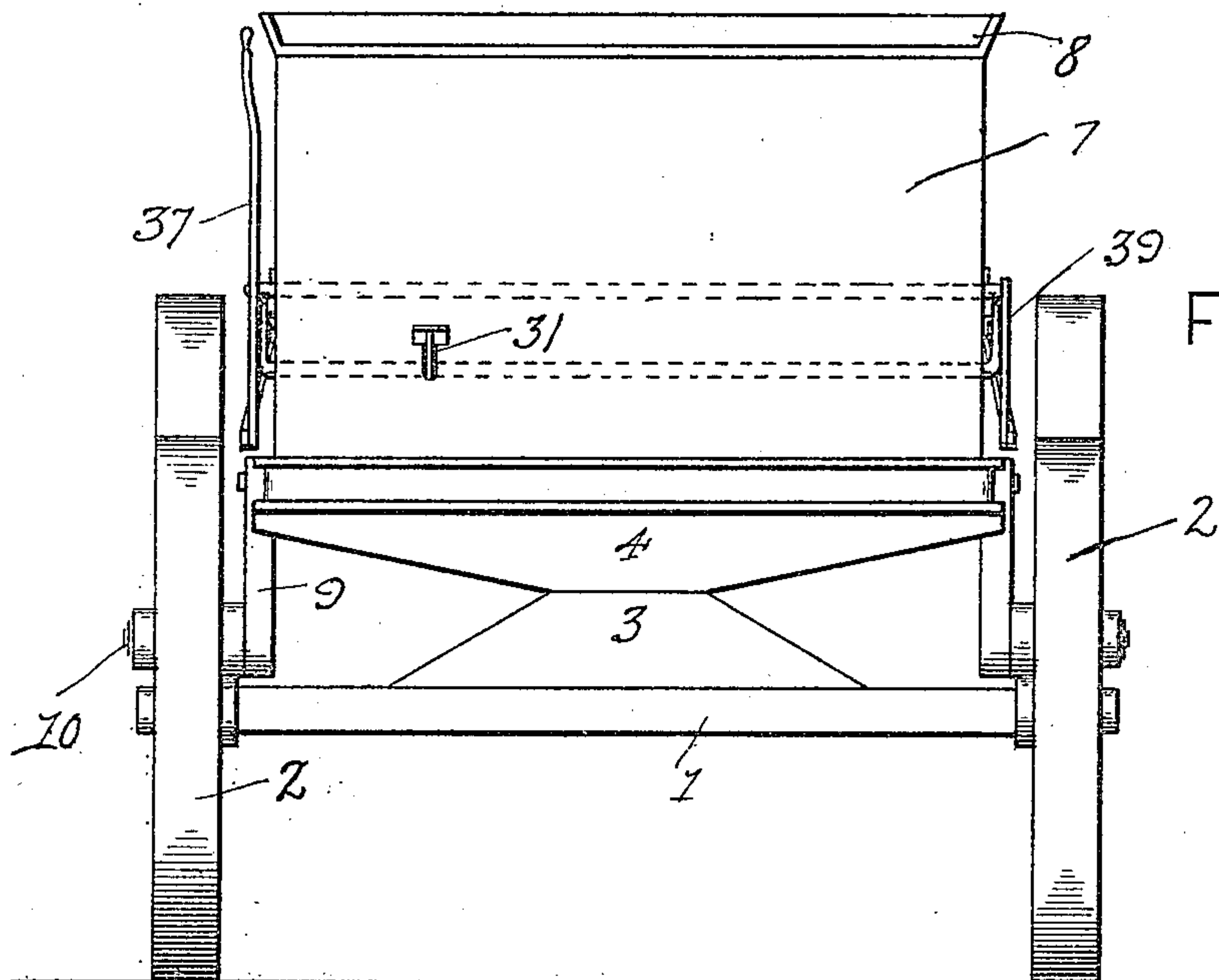


Fig. 4.

Inventor

William S. Coates

Witnesses

V. L. Bogan
M. E. Lowry

By

Andrew H. Borne

Attorney

UNITED STATES PATENT OFFICE.

WILLIAM S. COATES, OF CEDAR RAPIDS, IOWA; JENNIE E. COATES, ADMINISTRATRIX
OF SAID WILLIAM S. COATES, DECEASED, ASSIGNOR OF ONE-HALF TO HENRY J.
McCABE, OF CEDAR RAPIDS, IOWA.

DUMP-WAGON.

960,241.

Specification of Letters Patent. Patented May 31, 1910.

Application filed February 4, 1909. Serial No. 476,021.

To all whom it may concern:

Be it known that I, WILLIAM S. COATES, a citizen of the United States of America, residing at Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Dump-Wagons, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to dump wagons and the object thereof is to provide a wagon of such class in a manner as hereinafter set forth with a pivoted body which when released will, owing to the weight of the load at the rear thereof, automatically swing upon its pivot and dump the load.

15 Further objects of the invention are to provide a dump wagon in a manner as hereinafter set forth which shall be strong, durable, allowing of the load to be readily dumped, efficient in its use, conveniently set up, and comparatively inexpensive to manufacture.

25 With the foregoing and other objects in view, the invention consists of the novel construction, combination and arrangement of parts hereinafter more specifically described and illustrated in the accompanying drawing, wherein is shown the preferred embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which come within the scope of the claim hereunto appended.

35 In the drawings, wherein like reference characters denote corresponding parts throughout the several views, Figure 1 is a side elevation of a dump wagon in accordance with this invention. Fig. 2 is a longitudinal sectional view of the wagon showing the body portion in dumping position. Fig. 3 is a rear elevation of the wagon, and, Fig. 4 is a front elevation of the wagon.

45 Referring to the drawings by reference characters, 1 denotes the front axle to which are attached the forward wheels 2. Upon the axle is mounted a bolster 3 for supporting a pillow-block 4 which is secured to and depends from the wagon body supporting frame 5. The frame 5 is formed of an elongated channel bar bent in a rectangular manner and secured by the hold-fast devices 6 to an upright support 7 carrying a seat 8. The support 7 is arranged at the

forward end of the frame 5 and within said frame, and the sides and front of the support abut against the inner face of the frame.

Depending from the rear of the frame 5 are the hangers 9, each carrying a spindle 10 upon which is mounted a rear wheel 11 of the wagon. Secured to the side bars of the frame 5 and depending from the lower faces thereof are the braces 12 whereby the frame is reinforced in a longitudinal direction.

Fixed to the rear of the frame 5 is an end closure comprising a pair of side walls 12' and an end wall 13. The side walls 12' are formed integral with the rear wall 13 and the said end closure which is referred to generally by the reference character 14 is positioned within the frame 5 at the rear thereof. The end wall 13 of the end closure 14 is connected by the straps 15 to the rear bar 16 of the frame 5. The straps 15 maintain the end closure 14 stationary. The rear wall 13 of the end closure 14 at its top curves toward the forward end of the wagon.

The wagon body is referred to generally by the reference character 17 and consists of a pair of side walls 18, a front wall 19 and a bottom 20. The rear end of the wagon body is closed through the medium of the end closure 14, the wagon body when in the position shown in Fig. 1 has the rear thereof extending within the end closure 14, the rear edges 21 of the side walls 18 conforming in contour to the shape of the rear wall 13 of the end closure 14.

90 The wagon body 17 is fixed through the medium of the keepers 22 to a shaft 23 which is pivoted in the bearings 24 secured to the side bars of the frame 5 by the hold-fast devices 25. The width of the wagon body with respect to the frame 5 is such that when the wagon body is shifted to normal position, the rear of the wagon body will clear the side walls 12' of the end closure 14. The shaft 23 is connected to the wagon body at a point between the center and the forward end thereof so that when the wagon body is released in a manner as hereinafter referred to, the weight of the load at the rear of the wagon body will automatically tilt the latter, causing a dumping of the load.

105 The wagon body 17 is retained in normal position through the medium of a pair of

latches 26 which slide through keepers 27 secured to the sides of the support 7. The rear ends of the latches 26 are adapted to be engaged by the stops 28 fixed to the sides 18 of the wagon body 17 at the forward end thereof and as clearly shown in Fig. 1. The latches 26 are shifted by a pair of crank arms 29 which at one end are secured to the forward ends of the latches 26 and at their other ends are connected to a rock-shaft 30 provided with a forwardly extending foot tread 31, the tread 31 projects through an opening 32 in the front of the support 7 as clearly shown in Fig. 2 so that the tread can be conveniently engaged by the foot of the driver. By shifting the foot tread to the position shown in Fig. 2, the shaft 30 is rocked in one direction carrying the crank arms 29 therewith and shifting the latches 26 forwardly which moves the inner ends of the latches out of the path of the stops 28 and allows of the wagon body tilting upon its pivot so that the said body will assume a dumping position and to restore it to the position shown in Fig. 1, each side wall 18 of the wagon body 17 has secured thereto an inclined strap 33 to the forward end of which is pivoted a downwardly inclined link, the link arranged at one side of the wagon body is indicated by the reference character 34 and the link upon the other side by the reference character 35. The link 34 at its forward end is pivotally attached as at 36 to the lower end of a lever 37 and the link 35 at its forward end is pivotally attached as at 38 to the lower end of a crank arm 39. The said arm 39 is carried on one end of a shaft 40 while the other end of said shaft 40 is attached to the lever 37 intermediate the ends of the latter. To limit the rearward as well as the forward movement of the lever 37, a keeper 41 is provided and through which the lever 37 extends. The keeper 41 is secured to one side of the support 7. The shafts 30 and 40 are journaled in the sides of the support 7. When the lever 37 is swung forwardly, the links 34 and 35 will move rearwardly thereby assisting the tilting action of the wagon body 17 if it be necessary. The links 34 and 35 will always move rearwardly when

the wagon body 17 is tilted, as will be evident. By moving the lever 37 rearwardly, the wagon body is caused to assume the position as shown in Fig. 1. When the lever 37 is swung rearwardly so as to cause the wagon body to assume the position shown in Fig. 1, the driver maintains pressure upon the foot tread 31 so that the stops 28 will clear the inner ends of the latches 26.

When the wagon body is moved to the position shown in Fig. 1, the rear end thereof extends within the end closure 14, the latter constituting what may be termed the end-gate of a wagon.

What I claim is:

A dump wagon comprising a portable rectangular supporting frame, a transversely extending shiftable element connected to said frame, a wagon body fixed to said element and adapted to be tilted within the frame when the said element is shifted, said body-portion of less length than said frame, a seat support arranged upon said frame forwardly of the body, a pair of straps secured to the sides of the body, a transversely extending shaft mounted in said support, a crank arm attached to one end of said shaft, a lever fixed intermediate its ends to said shaft, a link attached at one end to one of said straps and at its other end to the lower end of said lever, a link attached at one end to one end of the other of said straps and at its other end attached to the lower end of the crank arm, said lever constituting means for shifting said element whereby said body can be tilted and restored to normal position, a rock-shaft mounted in said support, stops carried by the wagon body, shiftable latches adapted to extend in the path of said stops, whereby the wagon body is retained in normal position, cranks connected to the latches and to the rock-shaft and a foot tread connected to the rock-shaft for operating the same when pressure is applied to the tread.

In testimony whereof I affix my signature in the presence of two witnesses.

WILLIAM S. COATES.

Witnesses:

JOHN M. ELY,
PEARL M. ROY.