No. 859,928.

PATENTED JULY 16, 1907.

W. J. DONNELLY.

DUMPING WAGON.

APPLICATION FILED APR. 18, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

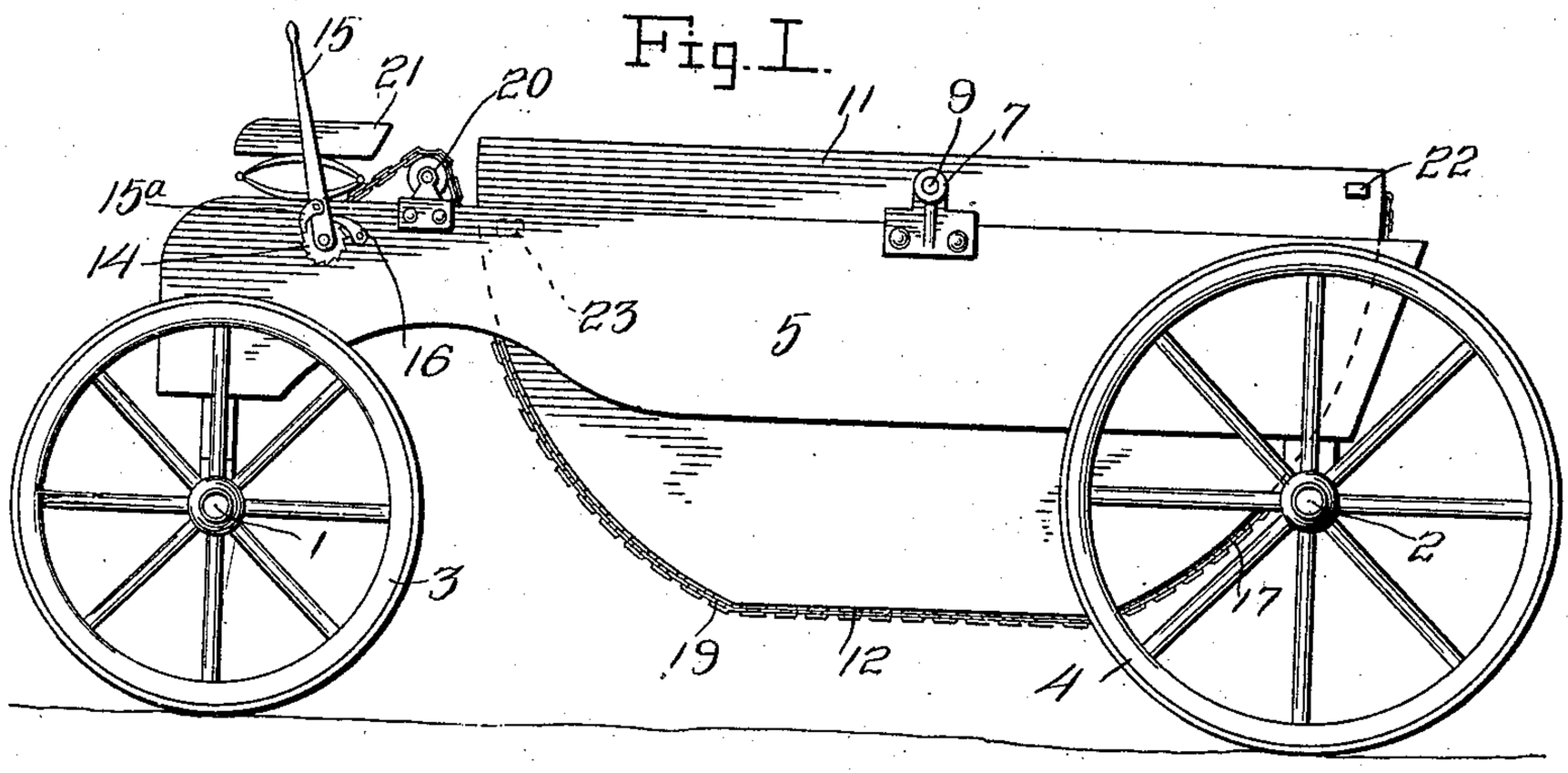
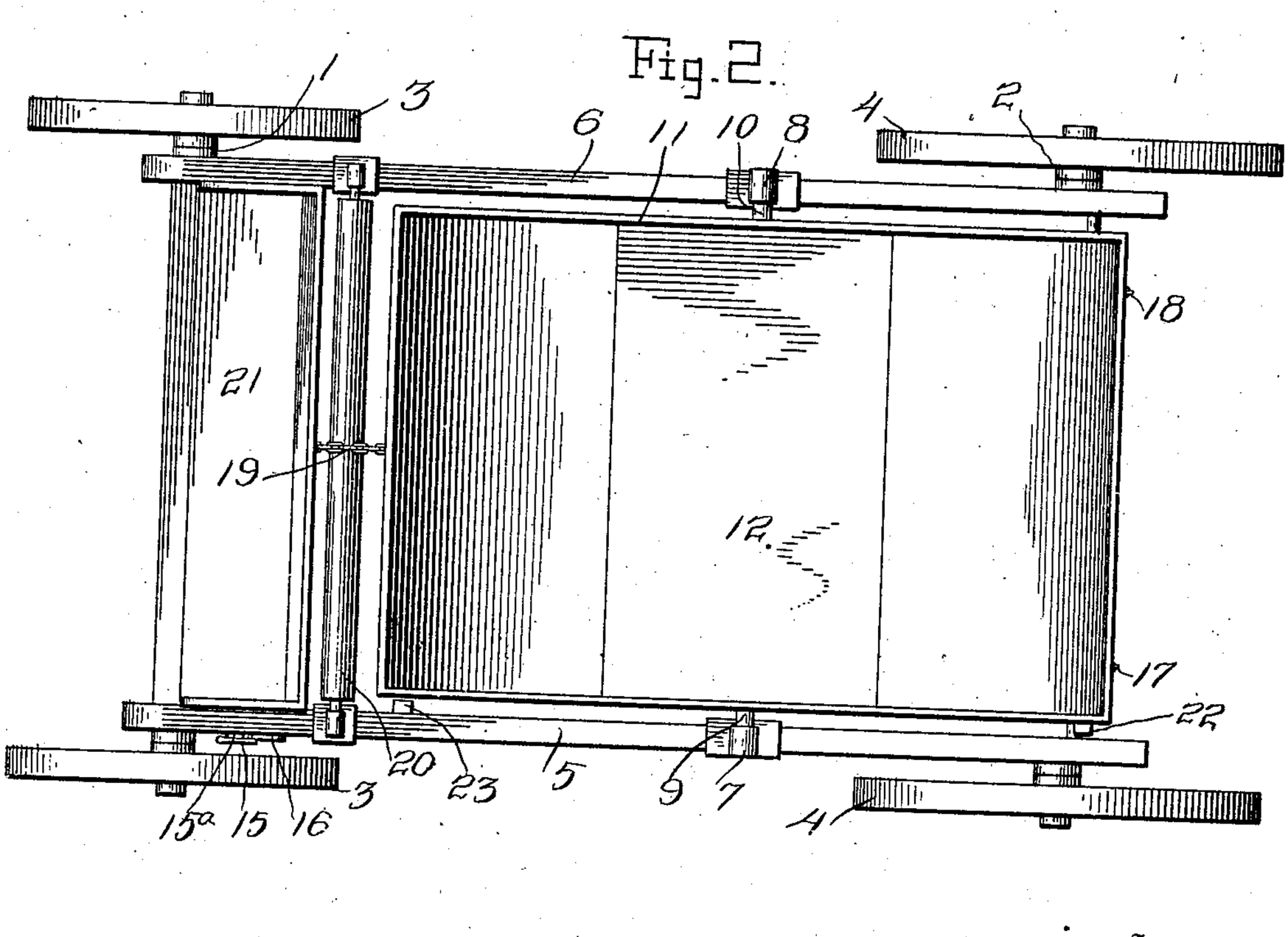


Fig. 2.



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2 SHEETS—SHEET 2.

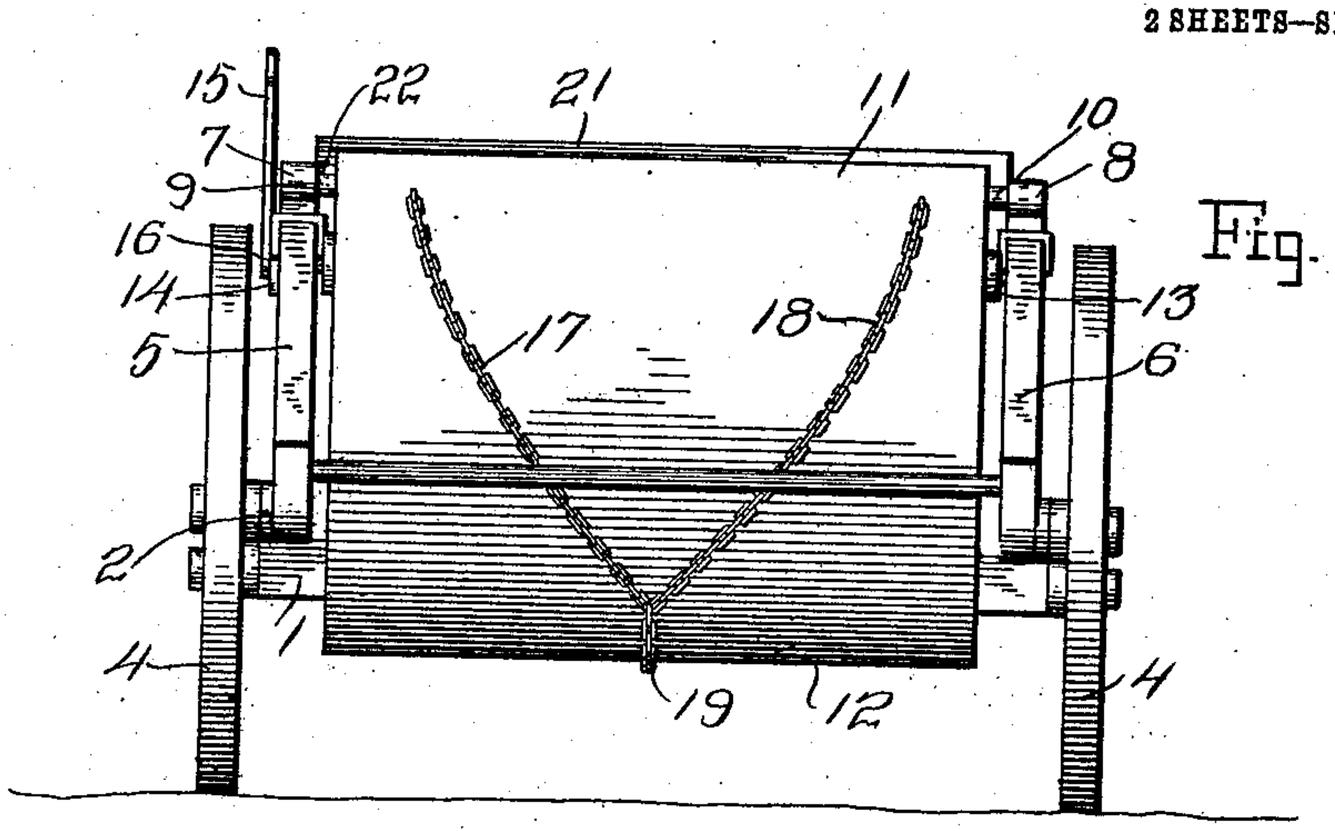
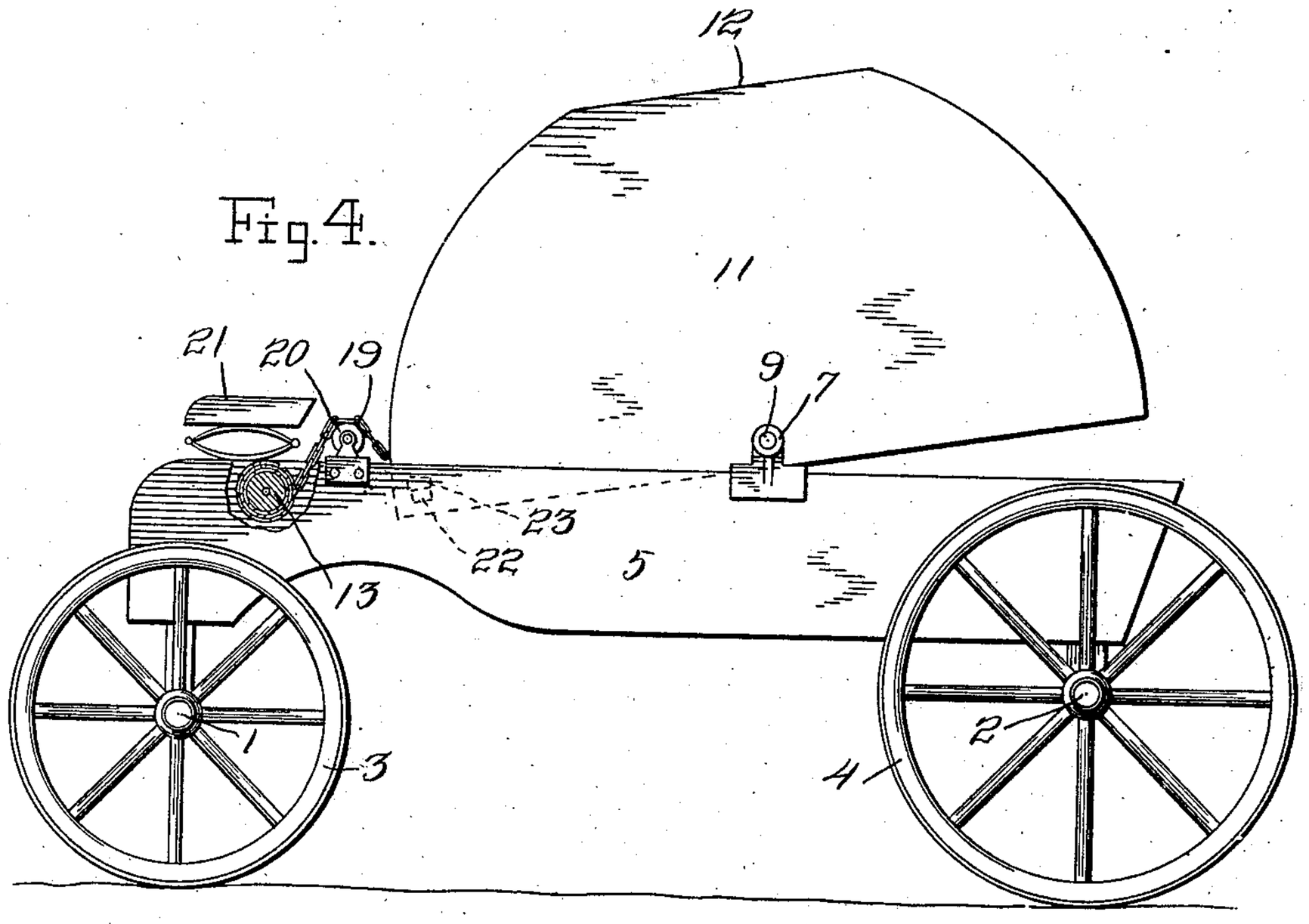


Fig. 3.

Fig. 4.



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UNITED STATES PATENT OFFICE

WILLIAM J. DONNELLY, OF DUBOIS, PENNSYLVANIA.

DUMPING-WAGON.

No. 859,928. Specification of Letters Patent. Patented July 16, 1907.

Application filed April 18, 1906. Serial No. 312,451.

To all whom it may concern:

Be it known that I, WILLIAM J. DONNELLY, a citizen of the United States, residing at Dubois, in the county of Clearfield, State of Pennsylvania, have invented certain new and useful Improvements in Dumping-Wagons; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to dumping wagons and has for its object to provide a vehicle of this character, which, while of less height than the ordinary semi-cylindrical dumping wagons, it has greater clearance and capacity.

It is a further object to provide a wagon having a simple dumping mechanism which can be operated quickly and without any great effort on the part of the driver. Other objects and advantages will be apparent from the following description.

In the drawings forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation of the wagon. Fig. 2 is a plan view. Fig. 3 is a rear elevation. Fig. 4 is a side elevation partly in section showing the wagon in a dumping position.

Referring specifically to the drawings, 1 and 2 are respectively the front and rear axles which are supported by wheels 3 and 4. Connecting these axles near their outer ends are rails 5 and 6 carrying on their upper edges journal brackets 7 and 8 adapted to receive the trunnions 9 and 10 of the body 11. In vehicles of this character, it has been the custom to use a body semi-cylindrical in form, it having many advantages over the rectangular and similarly shaped bodies. This invention contemplates the use of a substantially semi-cylindrical body 11 having its lower portion flattened, as at 12, or otherwise shortened to give more clearance between the body and the surface of the ground. A further change in form is made by adding to the top of the semi-cylindrical body sufficient height to compensate for the loss in capacity by the change at the bottom. In this manner is secured a dumping body having all the advantages of the semi-cylindrical bodies now in use without the disadvantage of the great height necessary for the given capacity. Another advantage gained by this form of body is that without increasing the height of the body, the greater capacity is obtained which enables the diameter of the cylinder to be decreased for a given quantity, thus permitting of bringing the front and rear axles closer together.

Journaled in the forward parts of rails 5 and 6, is a roller 13, one end of which extends beyond the outer face of rail 5 and has fixed thereon a ratchet wheel 14 adapted to be operated by a lever 15, and to be held against reverse movement by a pawl 16 secured to said rail. Any suitable construction of lever may be used, that illustrated is journaled on the roller and is provided with a pawl 15ª adapted to engage the teeth of the ratchet wheel 14. The function of the roller 13 and its operating mechanism is to dump the body 11, as will be hereinafter described.

Two chains 17 and 18 are secured at their upper ends to the rear corners of the curved bottom, and at their lower ends to a single chain 19 which passes under the bottom, up over pulley 20, mounted in brackets carried by rails 5 and 6, and is then secured to the roller 13. To prevent the body from making a complete revolution, a stop 22 is provided on its side, near the top and rear edges, which comes in contact with a stop 23 carried by rail 5.

A seat 21 of any suitable design and construction is provided at the front of the wagon, and in the drawings is shown as supported by the rails 5 and 6.

The operation of my device is as follows: The body 11 being eccentrically pivoted in bearings 7 and 8, will remain in its loading position until the lever 15 is moved back and forth, which operates through pawl 15ª to revolve the roller in one direction, the pawl 16 preventing reverse movement thereof. The revolving roller operates to wind the chain 19 thereby pulling the rear end of the body 11 downward to a dumping position, said movement being limited by stops 22 and 23. When the load has been dumped, the pawls 15ª and 16 are moved out of engagement with the teeth of ratchet wheel 14 and the body will resume its normal position by gravity.

What is claimed is:

A dumping wagon comprising side rails, a substantially cylindrical body, having a flat bottom, eccentrically pivoted thereon, stops on the rails and stops on the body, the latter being adapted to engage the former, a pulley mounted on said side rails in front of and adjacent to the top of said body, a windlass mounted forward of said pulley and a chain having branching portions connected to the rear upper corners of the body and passing below the body over said pulley and adapted to be wound on the windlass.

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

WILLIAM J. DONNELLY.

Witnesses:
JAMES J. RENEHAN,
JAMES M. COBLE.