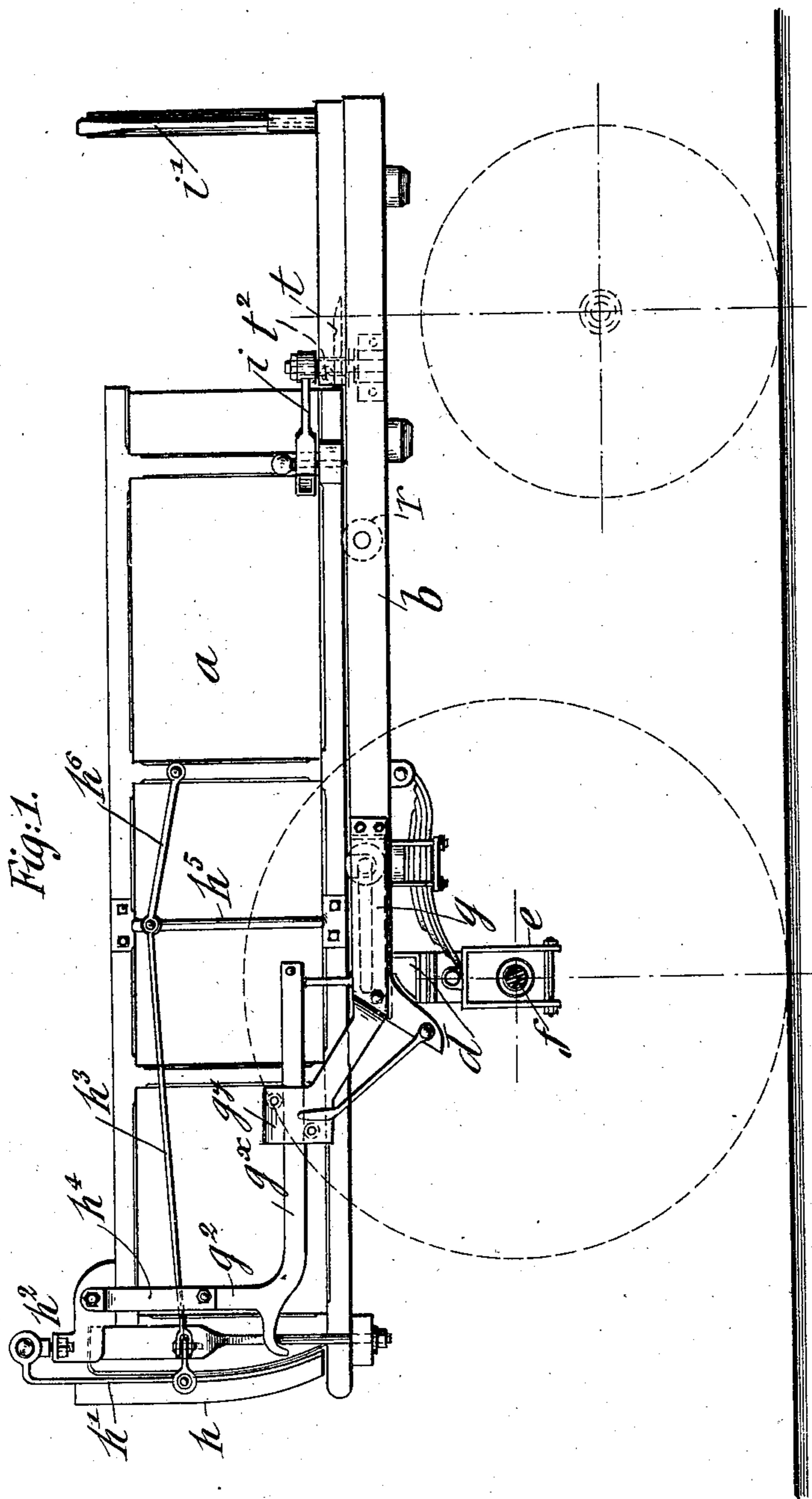


No. 877,180.

PATENTED JAN. 21, 1908.

G. DURSO.
DUMPING WAGON.
APPLICATION FILED OCT. 1, 1907.

3 SHEETS—SHEET 1.



Witnesses:
James Fitch
Henry J. Subertie

Inventor
Giovanni Durso
By his Attorneys
Gruel & Gravel

No. 877,180.

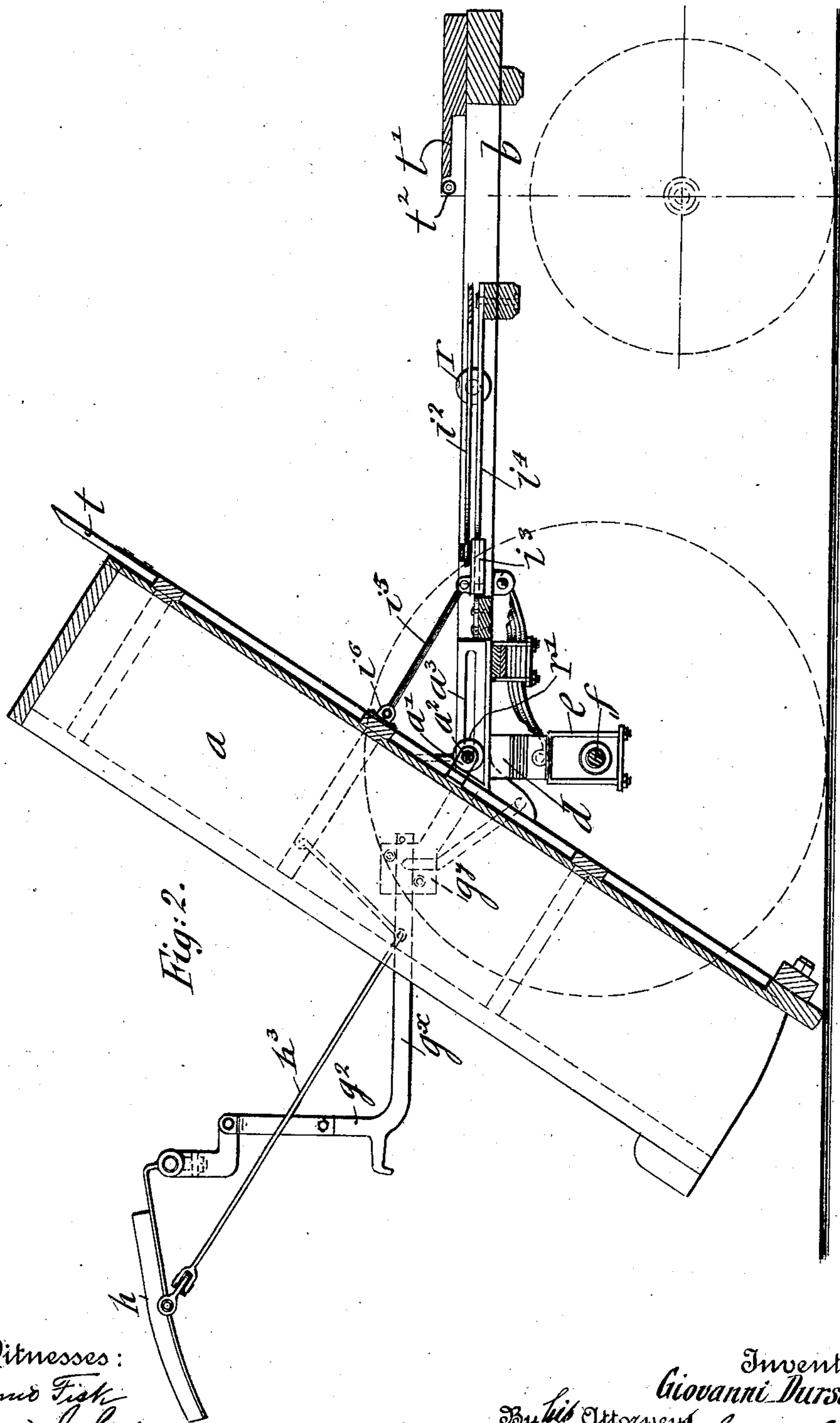
PATENTED JAN. 21, 1908.

G. DURSO.

DUMPING WAGON.

APPLICATION FILED OCT. 1, 1907.

3 SHEETS—SHEET 2.



Witnesses:
James Fish
Henry J. Larkins.

Inventor
Giovanni Durso
By his Attorneys
Lester Goepke

No. 877,180.

PATENTED JAN. 21, 1908.

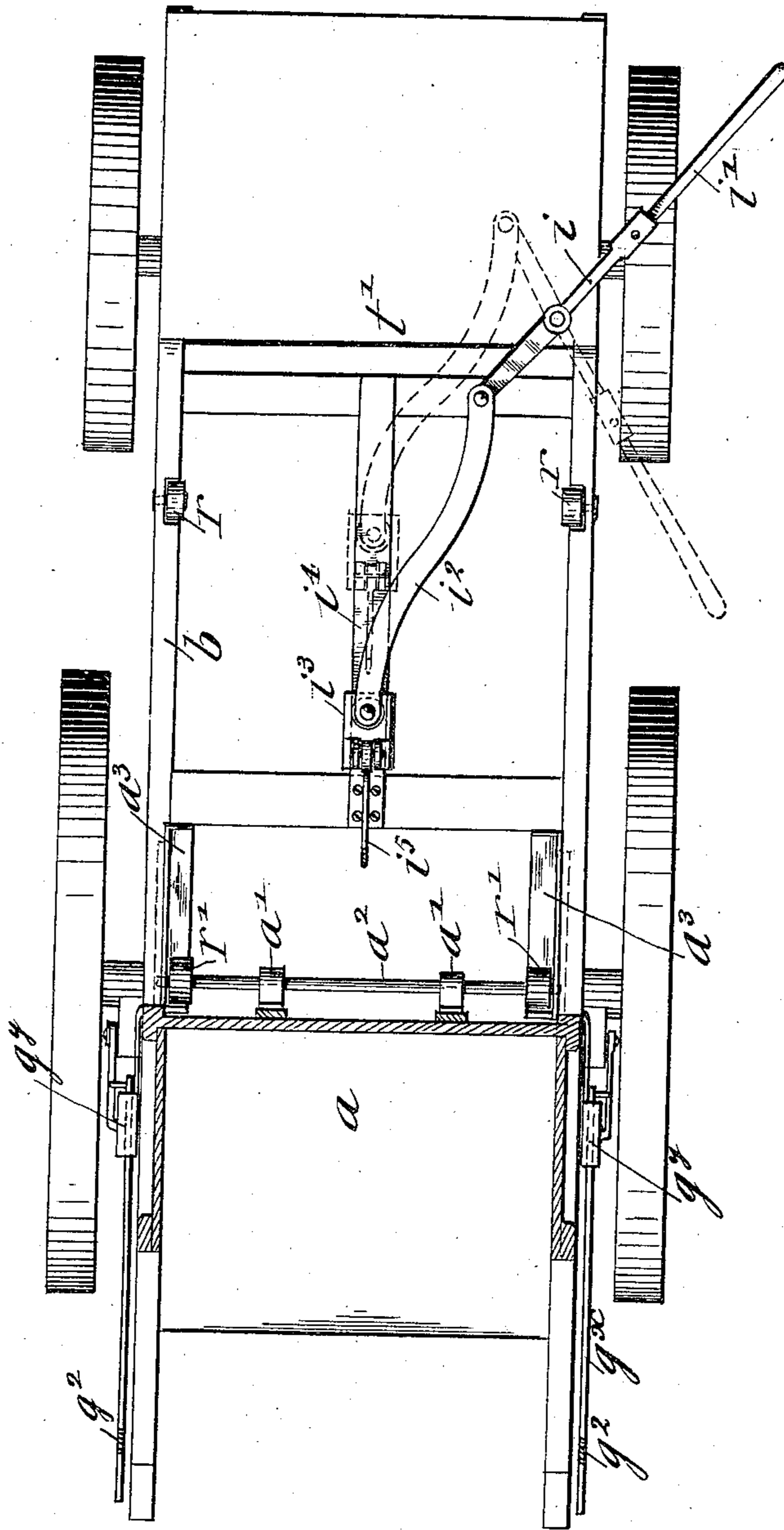
G. DURSO.

DUMPING WAGON.

APPLICATION FILED OCT. 1, 1907.

3 SHEETS—SHEET 3.

Fig. 3.



Witnesses:
James Fitch
Henry J. Schrieber.

Inventor
Giovanni Durso
By his Attorneys
Lapley & Lapley

UNITED STATES PATENT OFFICE.

GIOVANNI DURSO, OF NEW YORK, N. Y.

DUMPING-WAGON.

No. 877,180.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed October 1, 1907. Serial No. 395,332.

To all whom it may concern:

Be it known that I, GIOVANNI DURSO, a citizen of the United States, residing in New York, in the borough of the Bronx and State of New York, 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 more especially to improvements in the dumping-wagon for which Letters Patent No. 819,416 were granted to me on May 1, 1906.

It was found by practical tests with the dumping-wagon before patented that the raising of the wagon with its load, required considerable effort, so that only a man of considerable strength could attend to the dumping of the wagon. This objection interfered with the introduction of the dumping-wagon.

The object of this invention is to improve the wagon in such a manner that the raising of the same, with the load, can be accomplished with much greater ease, by first imparting to the wagon-body and the load a rearward motion and then dumping the body and load when arriving at the lowermost position; and for this purpose the invention consists of a dumping-wagon embodying the novel features of construction which will be fully described hereinafter and finally pointed out in the claim.

In the accompanying drawings, Figure 1 represents a side-elevation of my improved dumping-wagon, Fig. 2 is a vertical longitudinal section showing the body tilted for dumping the load, and Fig. 3 is a plan-view of Fig. 2, with some of the parts removed.

Similar letters of reference indicate corresponding parts throughout the figures of the drawings.

Referring to the drawings, a represents the body of my improved dumping-wagon. It rests on a reach b , which is supported by a bolster d on boxes e applied to the rear axle f , the boxes being connected by suitable springs with the reach. Mounted on the bolster are stationary supports g in keepers g^y of which are slidable rearwardly-extending bars g^x having angular upwardly-extending portions g^z , to the upper ends of which an end-gate h is applied by means of a suitable hinge-connection h^2 between the supports g^z and the reinforcing straps h^1 of the end-gate h .

The bottom of the body is applied about midway of its length by means of ears a^1 to a transverse pivot-rod a^2 so as to permit the

tilting of the body on the pivot. The tilting is accomplished by means of a lever-connection which is composed of four parts, viz., a lever i which is fulcrumed to one side of the fore-part of the reach and provided with a square socket for inserting the squared end of a hand-lever i^1 , a link i^2 which connects the inner end of the lever with a slide-piece i^3 that is guided on longitudinal ways i^4 at the center of the reach, and a lifting-rod i^5 which connects the ears on the slide-piece with ears i^6 on the bottom of the wagon-body, as shown clearly in Fig. 2. The transverse pivot-rod a^2 of the wagon-body is guided at both ends in slotted ways a^3 attached to the inside of the reach at either side, so that the body can follow the motion imparted to the slide-piece by the hand-lever and intermediate connection and be moved in backward direction in its ways, simultaneously being lifted by the lifting-rod so as to be moved into tilted position for dumping the load.

For facilitating the backward motion of the wagon with the load in the same, and also the forward motion for returning it to its normal position on the reach, antifriction-rollers r , r^1 are employed at both sides of the reach, one pair r near the front-portion and the other pair r^1 on the transverse pivot-rod a^2 . The rollers r^1 roll on the ways or guides a^3 in which the ends of the pivot-rod are guided. These antifriction-rollers r , r^1 facilitate the horizontal sliding motion of the body on the reach both for tilting the body and returning it to normal position on the reach. In the latter position, the body is locked by means of a tongue t attached to the front-part of its bottom to an overlapping portion t^1 at the front-part of the reach, a roller t^2 being also arranged for permitting the sliding of the tongue over the overlapping portion, as shown in Fig. 2.

The end-gate h is connected at both sides by pivot-rods h^3 which are guided in keepers h^4 and attached to the upright supports g^2 with upright supports h^5 at the sides of the wagon-body. The supports h^5 are further connected by means of braces h^6 with the wagon-body so as to be securely held in position. When the wagon-body a is tilted by the lever mechanism described, the end-gate is simultaneously moved away from the end of the wagon-body and supported in raised position on the rear-supports g^2 by the connecting-levers h^5 , which push the end-gate into raised position, as shown in Fig. 2.

Likewise, by the return of the wagon-body to the reach *b*, the end-gate is returned to normal position by the connecting-lever *h*³ and thereby the rear part of the wagon-body 5 closed, ready for receiving the next load. The folding end-gate and the mechanism for moving the same are the same as in the patent heretofore referred to.

The advantages of my improved dumping- 10 wagon are that the same can be readily tilted, with its load, from its horizontal position into dumping position by the hand-lever connection with the lifting device, the tilting action being facilitated and acceler- 15 ated by the horizontal motion which is imparted to the wagon-body on the antifriction-rollers, by which, without effort, the wagon-body is moved backward and then tilted by the action of the lifting-rod; simul- 20 taneously with the tilting operation the end-gate is moved out of the way and held in raised position while the dumping action takes place. After the load is dumped, the wagon-body is returned to horizontal posi- 25 tion on the reach and moved forward on the same by the lever-connection and locked to the front-part of the wagon, the improvement consisting in the dividing of the motion into two operations, first, the backwardly-

sliding motion, which is quickly followed by 30 the tilting motion. This renders the operation of the wagon easy, so that any one can attend to the same.

Having thus described my invention, I claim as new and desire to secure by Letters 35 Patent:

In a dumping-wagon, the combination of a reach provided at the sides with front and rear ways of which the latter are slotted at the sides, of a wagon-body slidable on said 40 ways, a pivot-rod extending transversely of said wagon-body beneath the same and protruding at its ends through the slots in said rear ways, antifriction rollers mounted on said rod and traveling on said rear ways, a 45 lifting rod connected with the wagon-body in advance of said pivot-rod, a slide-piece guided longitudinally of the reach and to which said rod is connected, and means for actuating said slide-piece. 50

In testimony, that I claim the foregoing as my invention, I have signed my name in presence of two subscribing witnesses.

GIOVANNI DURSO.

Witnesses:

PAUL GOEPEL,
HENRY J. SUHRBIER.