

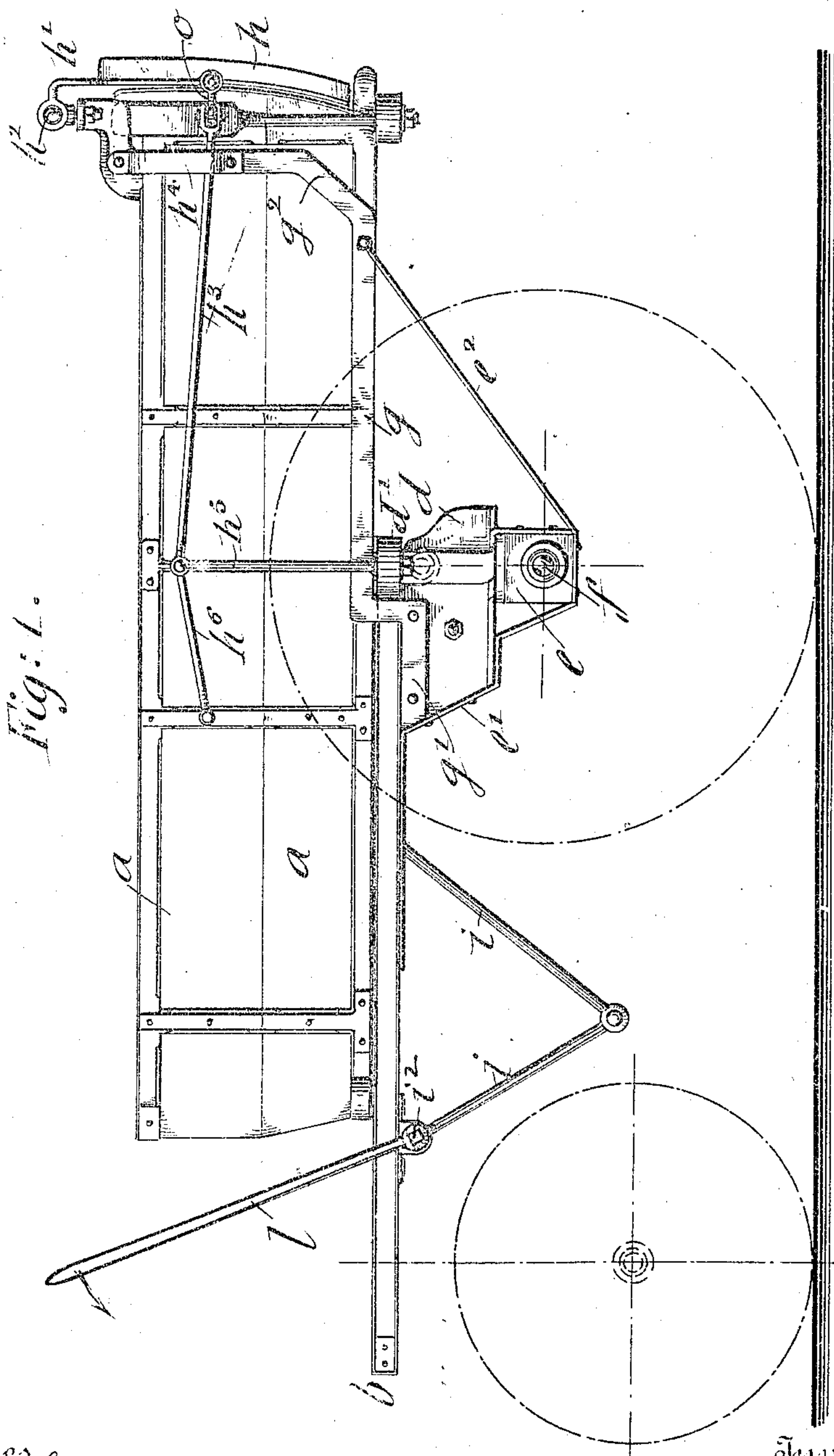
No. 819,416.

PATENTED MAY 1, 1906

G. D'URSO.  
DUMPING WAGON

APPLICATION FILED NOV. 6, 1905.

3 SHEETS—SHEET 1.



Witnesses  
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Jacob Roth

Inventor  
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By his Attorney  
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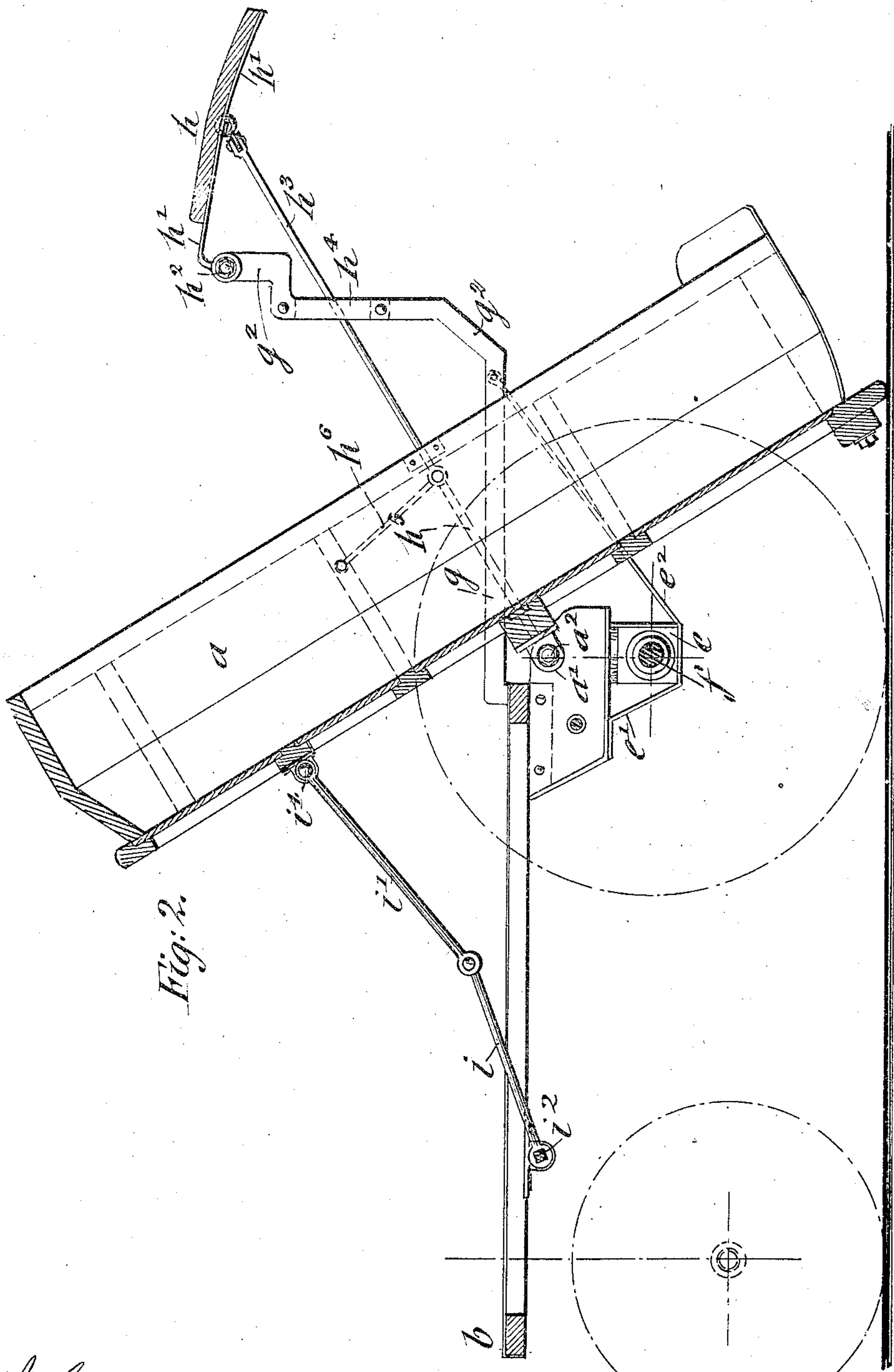
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3 SHEETS—SHEET 2.



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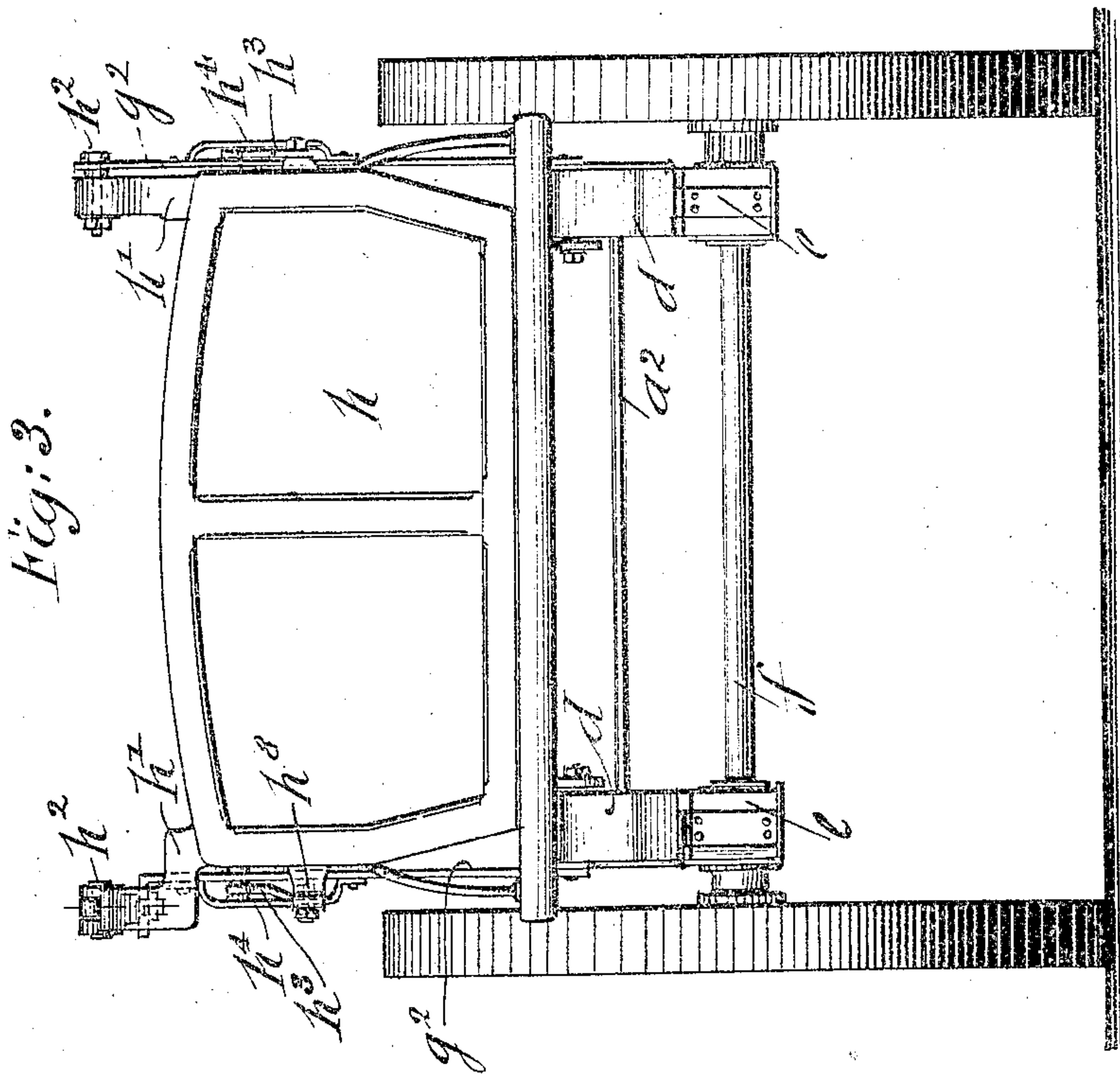
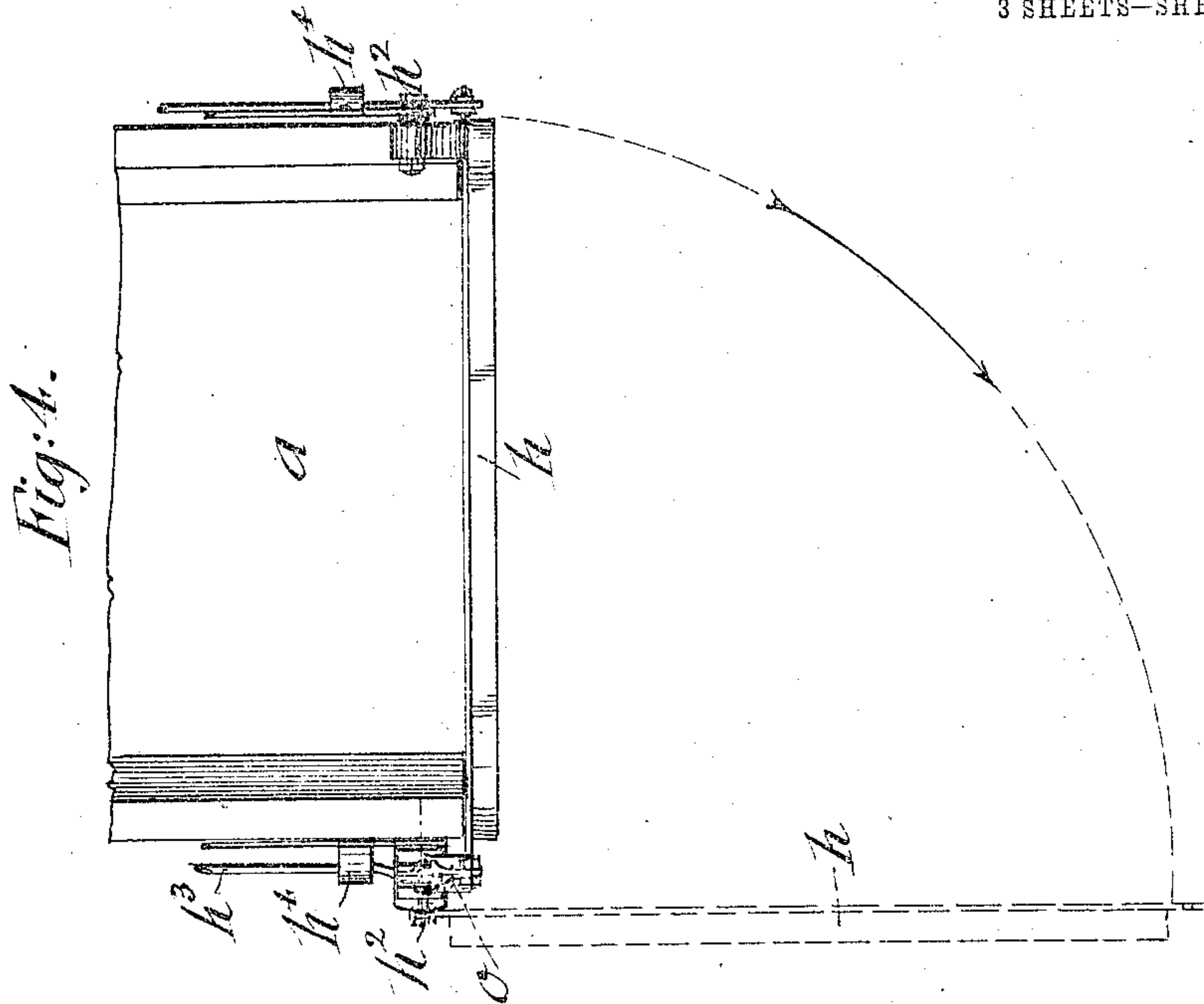
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3 SHEETS—SHEET 3.



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# UNITED STATES PATENT OFFICE.

GIOVANNI D'URSO, OF NEW YORK, N. Y.

## DUMPING-WAGON.

No. 819,416.

Specification of Letters Patent.

Patented May 1, 1906.

Application filed November 6, 1905. Serial No. 286,104.

*To all whom it may concern:*

Be it known that I, GIOVANNI D'URSO, 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 dumping-wagons which are intended for the dumping of sand, earth, bricks, and similar substances, the wagon having the advantage that the body of the same can be dumped without the driver leaving the reach connecting the front and rear bolsters, and the dumping motion of the body moving simultaneously the gate away from the end of the body and into raised position, so as to permit the free dumping of the materials in the wagon-body.

The invention consists of a dumping-wagon of which the body is pivoted midway between its ends to a bolster supported on the rear axle and tilted by means of a lever connection between the bottom of the body and a hand-lever applied to the side of the reach, the end-gate being pivoted to stationary supports that are attached to the sides of the bolsters and connected by an actuating lever mechanism with the side walls of the body, so as to be moved away and raised above the body when the same is tilted and returned to the end of the body when the same is returned into normal position. The invention consists, further, of certain details of construction and combinations of parts to be hereinafter described, and finally pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of my improved dumping-wagon. Fig. 2 is a vertical longitudinal section showing the body tilted for discharging the load. Fig. 3 is a rear elevation of the wagon; and Fig. 4 is a plan view of the rear end of the body and the end-gate, showing the means for opening the end-gate in a lateral direction.

Similar letters of reference indicate corresponding parts throughout the several views.

Referring to the drawings, *a* represents the body of my improved dumping-wagon. The body is constructed of wood reinforced by iron straps in the usual manner. It rests on a reach *b*, which is supported by a bolster *d*, supported on boxes *e*, applied to the rear axle *f*, the boxes *e* being connected by reinforcing-

strips *e'* to the front part of the bolster and the under side of the reach and by braces *e''* with stationary supports *g*, that are attached at the front end's *g'* to the bolster *d*, and that are provided with angular upwardly-extending portions *g''*, to the upper ends of which the end-gate *h* is connected by means of a suitable hinge connection *h''* between the supports *g''* and reinforcing-straps *h'* of the end-gate *h*. The bottom of the body *a* is applied about midway of its length by means of ears *a'* to a transverse pivot-rod *a''*, so as to permit the tilting of the body. The tilting is accomplished by a lever connection, which consists of two pivot-connecting rods *i i'*, the lever-rod *i* being keyed to a squared rod *i''*, which is supported in bearings of the reach *b*, while the lever-rod *i'* is pivoted to ears *i''*, that are attached to the bottom of the body at a point midway between pivot-rod *a''* and the front end of the same, as shown clearly in Fig. 1. For operating the lever mechanism *i i'*, a hand-lever *l* is applied to the end of the squared rod *i''*, as shown in Fig. 1, so that the driver, while standing on the platform on the reach *b*, can readily turn the hand-lever *l* forward and cause thereby the raising of the levers *i i'* from their lower position (shown in Fig. 1) into the raised position, (shown in Fig. 2,) and produce thereby the tilting of the wagon-body until the rear end of the same arrives on the ground.

The end-gate *h* is connected at both sides by pivot-rods *h''*, which are guided in keepers *h'''* and attached to the upright supports *g''* with upright supports *h''*, that are attached to a transverse bar *d'*, which is attached to the under side of the bottom, so as to tilt with the wagon-body. The supports *h''* are further connected, by means of braces *h'''*, with the wagon-body, so as to be securely held in position in connection with their attachment to the projections of the transverse bar *d'*. When the wagon-body *a* is tilted by the lever mechanism described, simultaneously the end-gate is moved away from the end of the wagon-body and supported in a raised position on the rear supports *g''* by the connecting-levers *h''*, which push the end-gate in a raised position, as shown in Fig. 2. Likewise on the return of the wagon-body on the reach *b* the end-gate is returned into normal position by the connecting lever-rod *h''*, and thereby the body closed again normally, ready to receive the next load.



As for loading the wagon, it is necessary to impart a lateral motion to the end-gate  $h$ . One pivot of the same is swiveled, as shown in Fig. 1, for this purpose, and the end-gate is attached by means of a link  $o$ , pivoted to a gudgeon  $h^2$  on the same to the forked rear end of the lever-rod  $h^3$ , so that when the bolt connecting the opposite side of the end-gate  $h$  is disconnected from the opposite pivot-rod  $h^3$  the end-gate can be swung on its swiveled pivot into open position from its closed position, as shown in dotted lines in Fig. 4, for convenient access to the wagon-body whenever this should be necessary for loading or unloading the same and whenever the wagon is used as an ordinary wagon.

The advantages of my improved dumping-wagon are that the same can be readily tilted with the load from its normal position into dumped position by the hand-lever at the front end of the reach and the lever mechanism between the same and the front of the wagon-body, while simultaneously the end-gate is moved out of the way and supported in raised position, so as not to interfere with the dumping operation. After dumping, the body is readily returned again into normal position on the reach and the end gate in position at the rear end of the same, so as to be ready for receiving the next load. The wagon can be used with four wheels or with a single front wheel, as desired.

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

1. The combination, with the front and rear axles, of a bolster on the rear axle, a reach connecting the same with the front axle, a body pivoted to the bolster on the rear axle, means applied to the front end of the body for tilting the same on its pivot, side supports attached to the bolster, an end-gate hinged to the rear ends of said side supports, and a lever connection between the end-gate and the bolster for raising the end-gate when the wagon-body is tilted and returning the same to the rear end of the body when the same is returned into normal position.

2. In a dumping-wagon, the combination, with the front and rear axles, of a bolster on the rear axle, a reach connecting the same on the front axle, a body pivoted to the bolster on the rear axle, a lever mechanism connected with the front part of the wagon-body for tilting it or returning it to normal posi-

tion, side supports attached to the bolster and provided with angular upwardly-extending rear portions, an end-gate hinged to the upper ends of the rear supports, upright rods supported on the under side of the wagon-body, and lever-rods between said upright supports and the sides of the end-gate for raising the latter when the body is tilted and returning the same into normal position on the rear end of the body when the same is in normal position.

3. In a dumping-wagon, the combination, with the rear axle, of bolsters on the same, a wagon-body pivoted to said bolsters, side supports attached to said bolsters and extending in rearward direction and provided with upwardly-extending rear portions, upright supports attached to a transverse bar of the wagon-body, an end-gate hinged to the upper rear portions, and pivot-rods connecting the sides of the end-gate with the upper ends of the upright side supports.

4. In a dumping-wagon, the combination, with the rear axle, of boxes on the same, a bolster supported on the same, a wagon-body pivoted to the bolster, a transverse bar attached to the bottom of the body, upright rods attached to the ends of said transverse bar, side supports, provided with upwardly-extending rear supports, braces connecting said axle-boxes with the rear supports, keepers on said rear supports, an end-gate hinged to the upper ends of said rear supports, and pivot-rods between the sides of the end-gate and the upright supports of the wagon-body.

5. The combination, in a dumping-wagon, of a dumping-body, side uprights attached outside of said body, side supports attached to the bolster and provided with angular upwardly-extending rear portions, an end-gate hinged to the upper ends of the rear supports, pivot-rods supporting said supports with the sides of the end-gate, a link connection between one of said pivot-rods and one side of the end-gate, and a removable bolt connection at the opposite end of the gate so as to permit the loosening and swinging over the same into open position.

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

GIOVANNI D'URSO.

Witnesses:

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HENRY J. SUHRBIER.