

No. 719,533.

PATENTED FEB. 3, 1903.

J. THOMPSON.
DUMPING WAGON.

APPLICATION FILED AUG. 26, 1902.

NO MODEL.

2 SHEETS—SHEET 1.

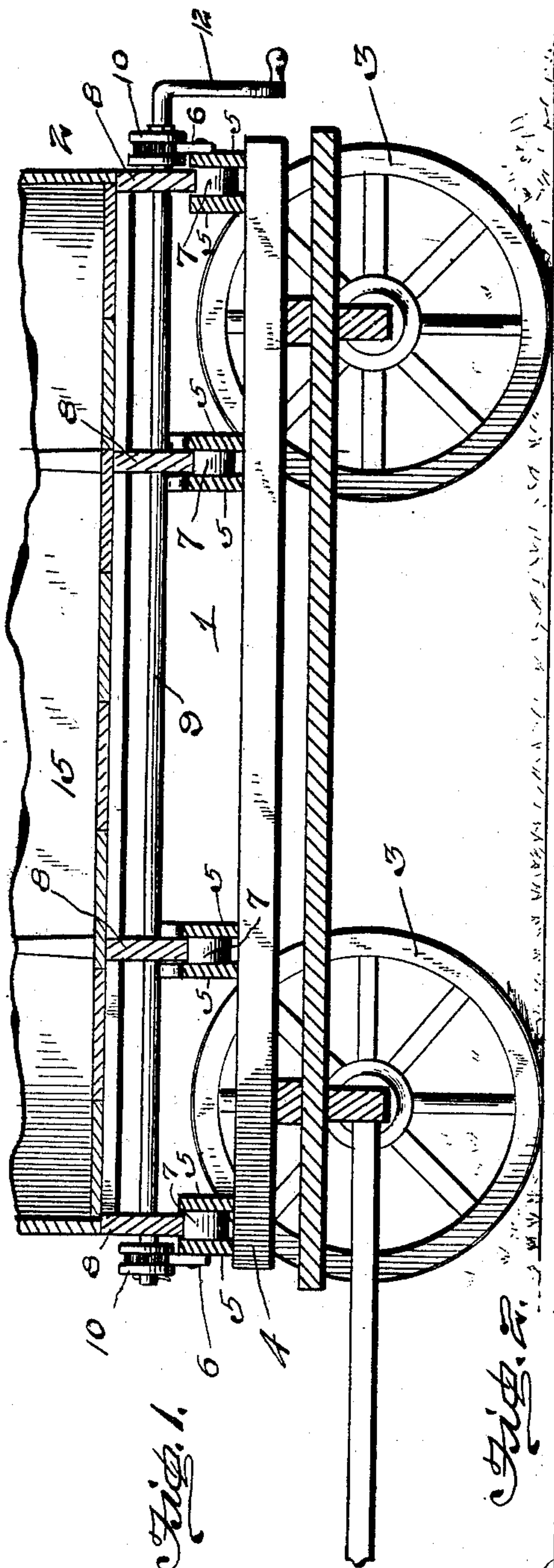


Fig. 1.

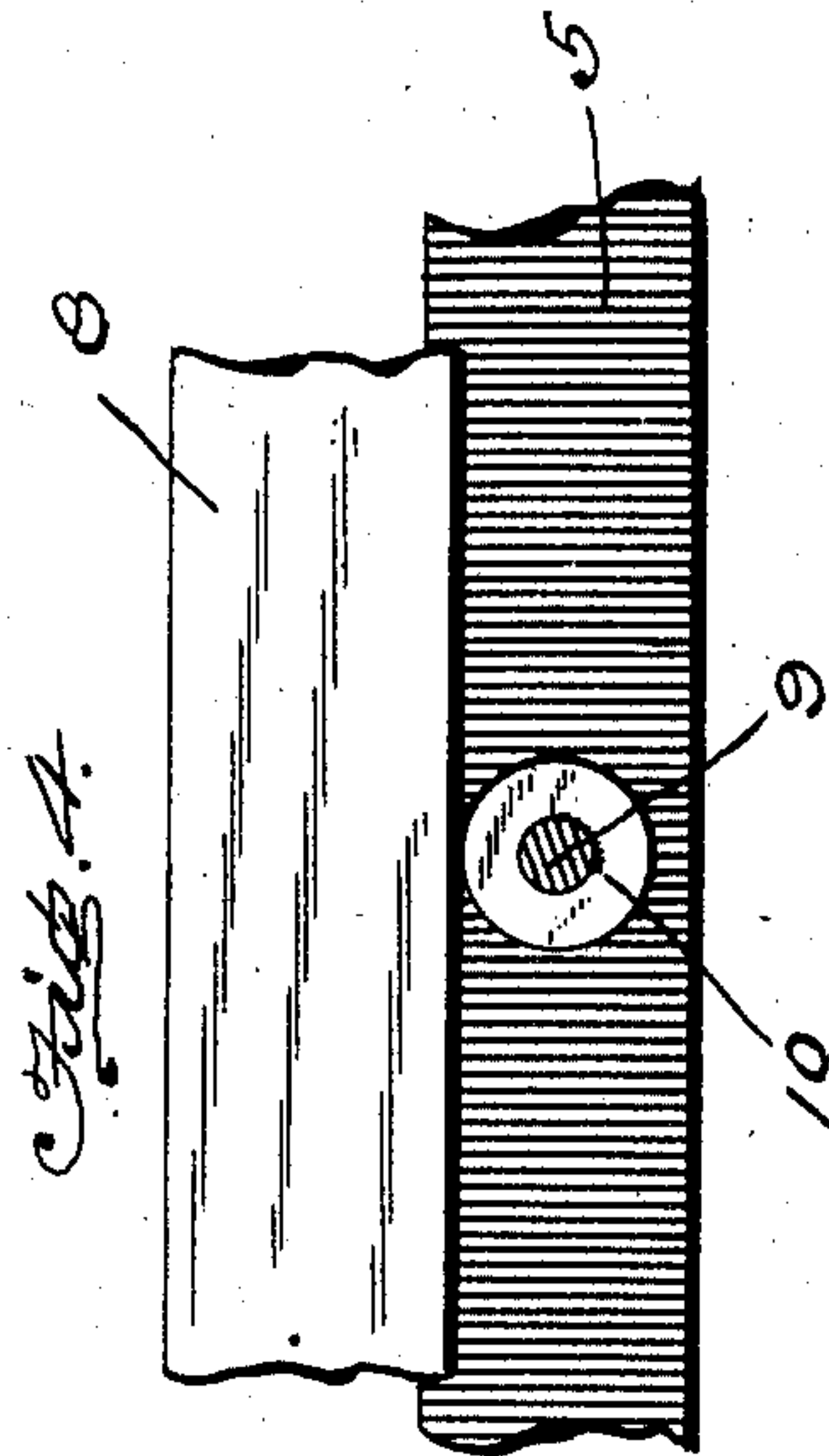


Fig. 2.

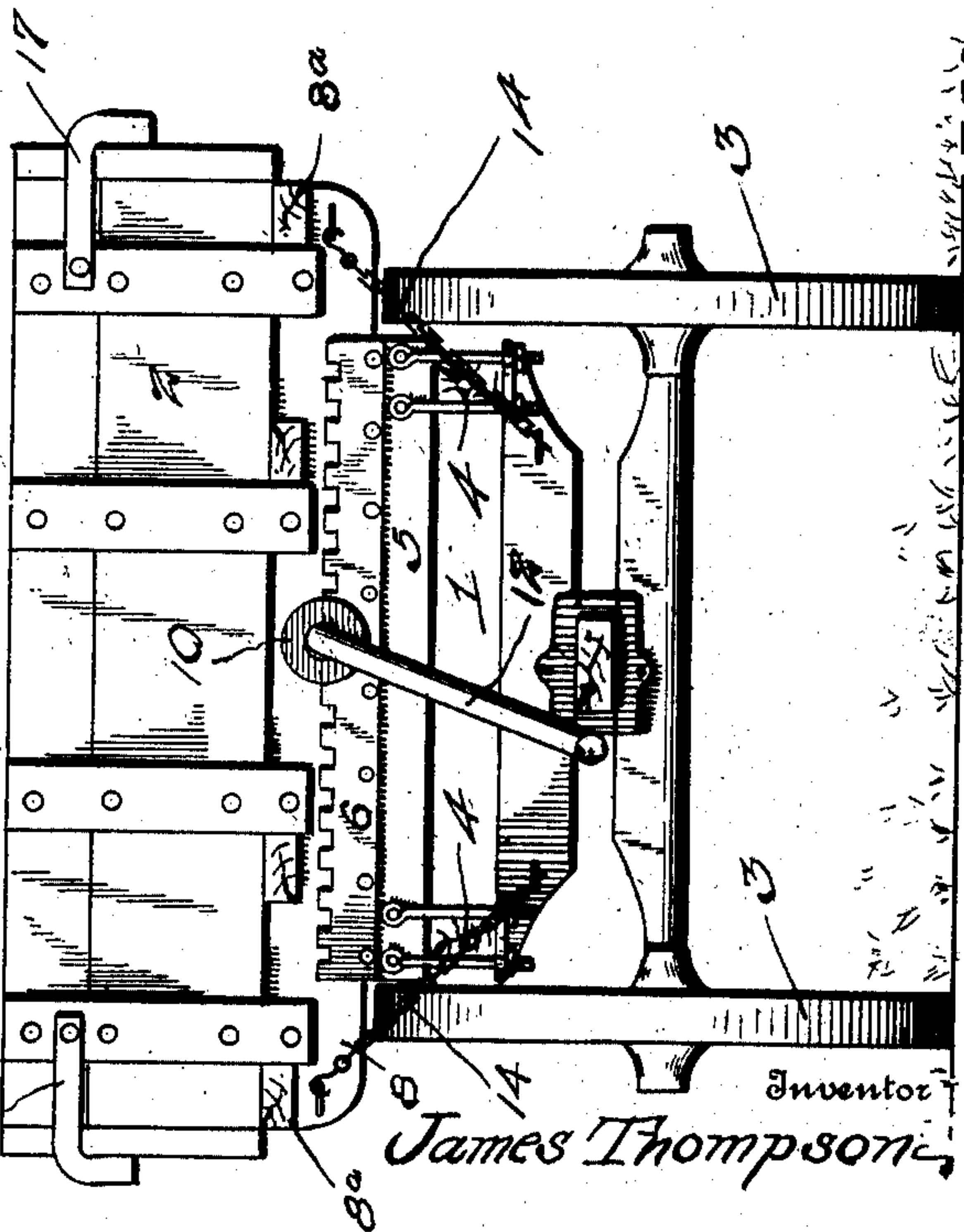


Fig. 3.

Witnesses

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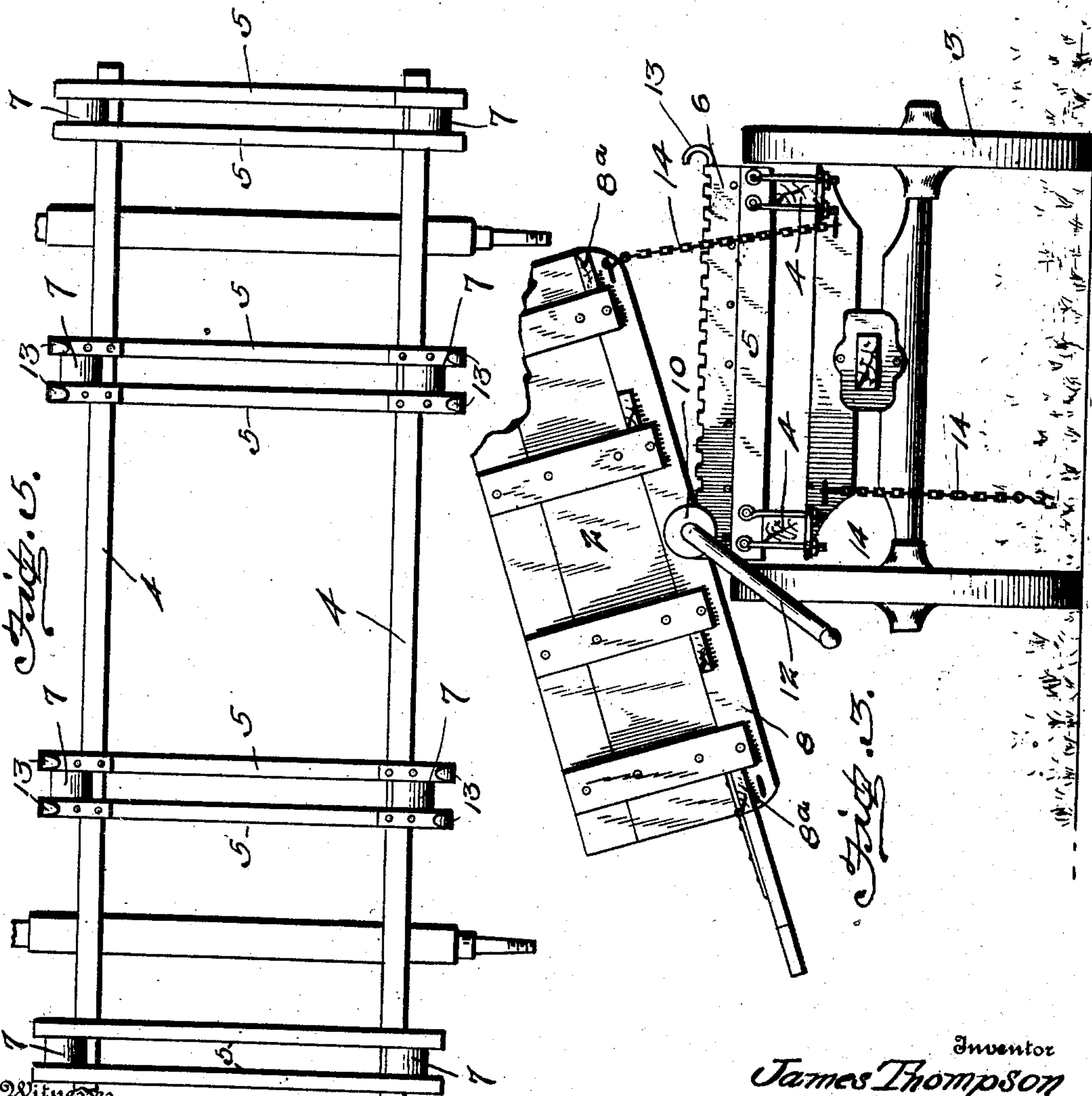


Fig. 5.

Fig. 6.

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UNITED STATES PATENT OFFICE.

JAMES THOMPSON, OF GREELEY, COLORADO.

DUMPING-WAGON.

SPECIFICATION forming part of Letters Patent No. 719,533, dated February 3, 1903.

Application filed August 26, 1902. Serial No. 121,087. (No model.)

To all whom it may concern:

Be it known that I, JAMES THOMPSON, a citizen of the United States, residing at Greeley, in the county of Weld and State of Colorado, have invented certain new and useful Improvements in Dumping-Wagons; and I do 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 ap-
10 pertains to make and use the same.

This invention relates to improvements in dumping-wagons, and particularly to those which dump or discharge their load at the sides.

15 The object of the invention is to construct a wagon of this character by which the body of the same may be readily moved laterally across the wagon-bed to either side and allowed to tilt and discharge its contents, the
20 sides of the wagon being adapted to be lowered when the body of the wagon is so tilted to allow the load to slide out.

A further object is to produce such a wagon which shall be simple of construction, durable
25 in use, easy to operate, and comparatively inexpensive of production.

With the above and other objects in view, which will readily appear as the nature of the invention is better understood, said invention
30 consists in certain novel features of construction and combination and arrangement of parts, which will be hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

35 Figure 1 is a longitudinal vertical section through a wagon, showing the application of my invention. Fig. 2 is a rear-end elevation of the same. Fig. 3 is a similar view showing the parts in their tilted or "dumped" po-
40 sition. Fig. 4 is a transverse vertical section on line 4 4 of Fig. 1, and Fig. 5 is a top plan view of the wagon-bed.

In the drawings, 1 denotes the wagon-bed, and 2 denotes the wagon-body.

45 3 denotes the supporting-wheels.

The wagon-bed consists of the longitudinally-disposed side bars 4, supported upon bolsters carried by the axles, as usual. 5 denotes cross-bars connecting the said side bars,
50 said cross-bars being formed of parallel strips, and on the top of the outer strip of each end cross-bar is fixed a rack-bar 6, extending

across the width of the wagon-bed. The purpose of said bar will hereinafter appear. Between the parallel strips of the said cross-bars 55 are journaled antifriction bearing-rollers 7, upon which the sills 8 of the wagon-body are adapted to rest and slide. The rollers 7 are so journaled and are of such diameter that they will be below the upper edges of the parallel strips of the cross-bars, and the sills 8
60 of the wagon-body are of such width as to readily fit and slide between the said strips, this construction effectually preventing any forward, rearward, or twisting movement of
65 the wagon-body and consequent slipping off of the sills 8 from the rollers 7.

9 denotes a central longitudinally-disposed shaft journaled in the sills 8 immediately below the floor of the wagon-body. The ends
70 of the said shaft project beyond the end cross-bars and are provided with flanged cog-pinions 10, which are adapted to engage the rack-bars 6. The rear end of the shaft 9 is extended beyond the rear pinion and is squared to
75 receive a crank 12, whereby the said shaft is rotated.

13 denotes laterally-projecting hooks fixed at the ends and upon the top of the strips forming the cross-bars 5 and are adapted to
80 engage the shaft 9 when the wagon-body has been shifted to one side of the bed and forming a bearing or rest for said shaft and allowing the wagon-body to tilt thereon, the tilting movement of the wagon-body being limited by
85 chains 14, one end of each of which is connected to some part of the wagon-bed and the opposite ends of which are provided with hooks for detachably connecting the same with the sills
90 of the wagon, there being preferably four of such chains, one at each corner of the wagon, the chains also serving, when hooked up at both sides, to prevent the body of the wagon from running over to one or the other side of the wagon-bed when the same is tilted by
95 reason of inclined roadway or other causes, it being necessary to unhook the chains on the side of the wagon to be dumped before that operation can take place, as will be seen by reference to Fig. 2 of the drawings. 100

15 denotes the sides of the wagon-body, which are hinged at their lower edges to the ends of the sills 8 and are adapted to swing downwardly and outwardly on a line with the

floor of the wagon. The sides are braced by vertical standards 16, the lower ends of which when the sides are opened are adapted to abut against the outside longitudinal bars 8^a, 5 connecting the sills 8, and thus support the sides 15 in their open position.

17 denotes hooks pivoted to the ends of the wagon-body and adapted to engage the sides thereof when the same are raised to hold 10 them firmly in this position.

In operation when it is desired to "dump" the wagon to discharge a load the crank is applied to the rear end of the shaft 9, and said shaft and the pinions 10 carried thereby are 15 rotated in one direction or the other, said operation causing the pinions 10 to engage the teeth of the rack-bars 6, and thereby move said wagon-body laterally to one side or the other of the wagon-bed until the outer 20 side overbalances the inner side, which occurs at or about the time that the shaft 9 reaches hooks 17, at which time the wagon-body will be caused to tilt, it being understood that the chains 14 have been previously unhooked 25 on the side of the wagon to be dumped. The side of the wagon now being swung downwardly and outwardly, as shown in Fig. 3 of the drawings, the contents of the wagon will be discharged. Movement of the crank in 30 an opposite direction will restore the wagon-body to a horizontal position, and further retrograde movement of the crank and shaft will draw the said body back over the wagon-bed again to its normal position.

35 From the foregoing description, taken in connection with the accompanying drawings,

it is thought that the construction, mode of operation, and advantages of my improved dumping-wagon will be readily apparent without requiring a more extended explanation. 40

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of 45 this invention.

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

In a dumping-wagon, the combination with 50 a wagon-bed, of a wagon-body carried by said bed, outwardly and downwardly swinging sides hinged to said body, a longitudinally-disposed shaft carried by said body, flanged cog-pinions carried by said shaft, rack-bars 55 carried by said wagon-bed and adapted to be engaged by said cog-pinions, means for rotating said shaft and pinions to move said body laterally in either direction across said bed and tilt the same, antifriction-rollers for 60 supporting said body, guideways to prevent front or rear movement of the same, and means for supporting said body in its tilted position, substantially as and for the purpose set forth. 65

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JAMES THOMPSON.

Witnesses:

J. B. PHILLIPS,
P. W. ALLEN.