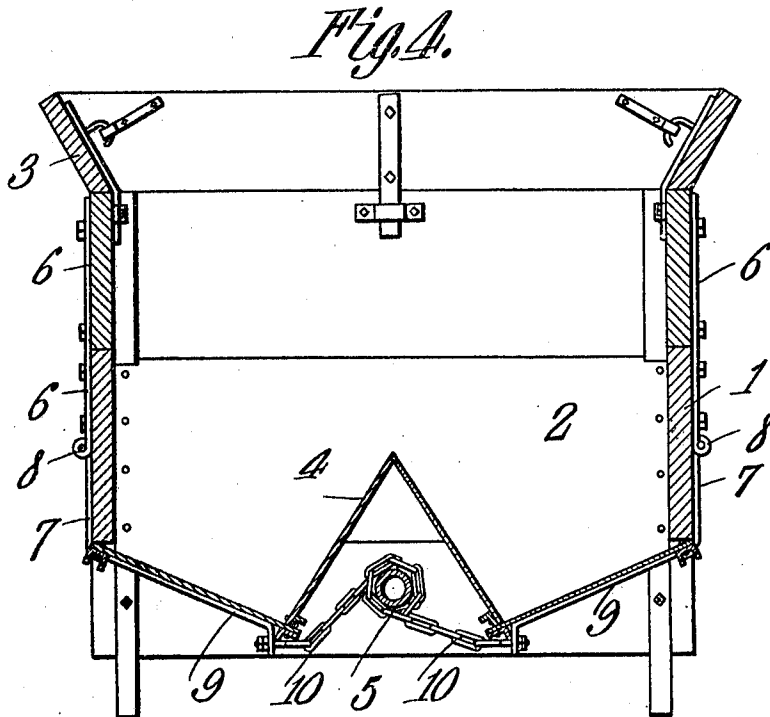
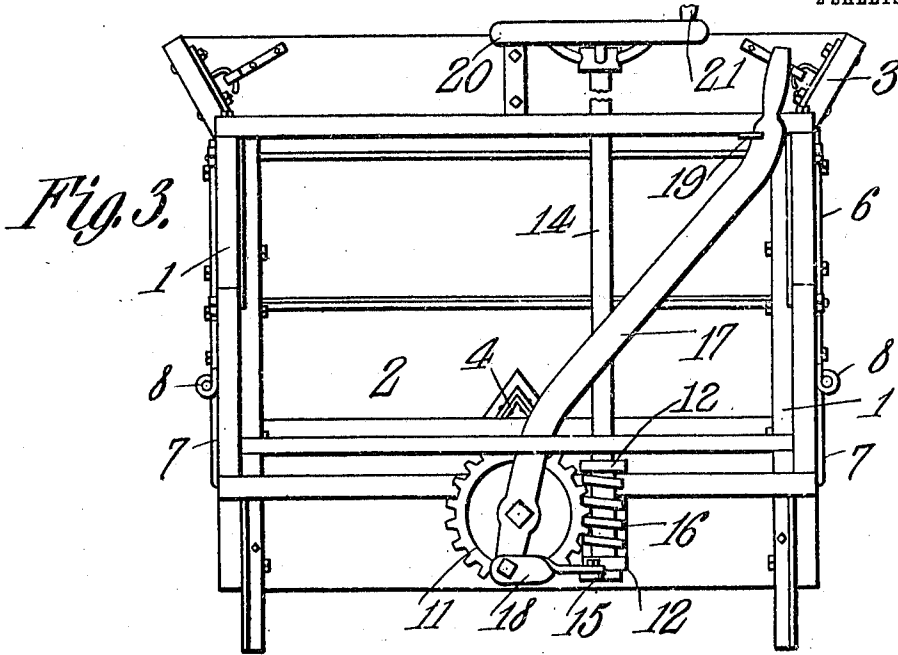


E. G. HARTLE.
DUMPING WAGON.
APPLICATION FILED SEPT. 15, 1909.

956,088.

Patented Apr. 26, 1910.

2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

EDDA G. HARTLE, OF GALION, OHIO.

DUMPING-WAGON.

956,088.

Specification of Letters Patent.

Patented Apr. 26, 1910.

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To all whom it may concern:

Be it known that I, EDDA G. HARTLE, a citizen of the United States, residing at Galion, in the county of Crawford and State of Ohio, have invented a new and useful Dumping-Wagon, of which the following is a specification.

This invention has relation to dumping wagons, and it consists of the novel arrangement and construction of its parts hereinafter shown and described.

The object of the invention is to provide a durable structure in the form of a wagon body, the parts of which are so assembled and arranged that they may be easily and readily manipulated at the will of an operator to cause the body to automatically empty itself of its contents.

In the accompanying drawings, Figure 1 is a bottom view of the dumping wagon. Fig. 2 is a side elevation of the same with parts broken away. Fig. 3 is a front elevation of the same. Fig. 4 is a transverse sectional view of the same. Fig. 5 is a perspective view of a portion of the dumping wagon.

The structure includes a body having vertical sides 1 and at its ends inclined bottom sections 2. Detachable collar-boards 3 may be mounted at the upper edges of the sides and ends of the body if desired, and the said boards may be of any desired pattern. A ridge 4 extends longitudinally of the body and forms a portion of the bottom thereof. The ends of the ridge 4 project under the bottom sections 2 and a shaft 5 is journaled at its end portions in the ends of the body of the structure and lies under the said ridge 4. Upper hinge members 6 are attached to the outer surfaces of the sides 1 of the body and lower hinge members 7 are pivotally connected with members 6 at the joints 8 which are located above the lower edges of the sides 1. Bottom sections 9 are attached to the lower hinge members 7 and are adapted to close against the lower edges of the bottom sections 2 and the lower edges of the ridge 4. The outer ends of the chains 10 are attached to the lower ends of the hinge members 7 and the inner ends or portions of the said chains are arranged to wind about the shaft 5.

A worm wheel 11 is fixed to the forward portion of the shaft 5 and guides 12 having elongated slots 13 are located adjacent to said worm wheel 11. A shaft 14 is journaled

in the slots 13 and at its lower end rests upon and is pivoted to a link 15 which in turn is pivoted to the lower guide 12. A worm 16 is carried by the shaft 14 and normally meshes with the worm wheel 11. A lever 17 is fulcrumed upon the axis of the shaft 5 and at its lower end is pivotally connected by means of a link 18 with the free end of the link 15. A catch 19 is mounted at the forward end of the body of the structure and at times is adapted to receive and hold the upper end of the lever 17. A hand wheel 20 is mounted at the upper end of the shaft 14 and may if desired be provided with a handle grip 21.

When the bottom sections 9 are in closed position as above described, they are inclined and consequently pockets are formed between the said bottom sections 9 and the sides of the ridge 4. When the sections 9 are closed as indicated the body of the structure may be filled with material in the usual manner and the sections 9 will be held in closed position by means of the chains 10 which are wound upon the shaft 5 and the shaft is held in a stationary position by the worm 16 which is brought into engagement with the worm wheel 11 by swinging the lever 17 to one side until it engages the catch 19 through the link connections 18 and 15 above described.

When it is desired to permit the wagon body to dump an operator disengages the upper end of the lever 17 from the catch 19 and swings the said lever so that the link 18 moves longitudinally and the link 15 swings upon its pivot. This carries the lower end of the shaft 14 away from the worm wheel 11 and the worm 16 disengages from the said wheel and consequently the shaft 5 is rendered free to rotate. Under the weight of the load the sections 9 will swing down upon the joints 8 as axes and the sides of the ridge 4 will direct the material toward the bottom sections 9 and as it flows from the wagon body the said sections 9 will direct the material toward the ground under the ridge 4. At the same time the bottom sections 2 will direct the material away from the front and rear ends of the body. Thus the material as it is dumped is not liable to come in contact with the running gear upon which the body may be placed nor is the material deposited upon the ground in the paths of movement of the supporting wheels of the running gear.

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

1. A dumping wagon comprising a body, 5 sections hinged to the sides of the body, a shaft journaled in the body, means operatively connecting said shaft with said sections, a worm wheel fixed to said shaft, a worm shaft journaled adjacent the worm 10 wheel and carrying a worm which normally engages the worm wheel, slotted guides receiving the worm shaft, a fulcrumed lever, and means operatively connecting said lever with said worm shaft whereby the worm 15 shaft may be shifted to disengage the worm from the worm wheel.

2. A dumping wagon comprising a body, sections hinged to the sides of the body, a shaft journaled in the body, means operatively connecting said shaft with said sections, a worm wheel fixed to said shaft, a worm shaft journaled adjacent the worm 20 wheel and carrying a worm which normally engages the worm wheel, slotted guides receiving the worm shaft, a lever fulcrumed 25 upon the first said shaft and means opera-

tively connecting said lever with the worm shaft whereby the worm shaft may be shifted to disengage the worm from the worm wheel. 30

3. A dumping wagon comprising a body, sections hinged to the sides of the body, a shaft journaled in the body, means operatively connecting said shaft with said sections, a worm wheel fixed to the said shaft, 35 slotted guides mounted upon the body, a lever fulcrumed upon the said shaft, links pivoted together at their inner ends and pivotally connected with said lever and one of the said guides respectively at their outer 40 ends, a worm shaft journaled upon one of the links and passing through the slots in the guides, a worm carried by said worm shaft and normally engaging the worm wheel. 45

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

EDDA G. HARTLE.

Witnesses:

P. C. THOMAS,
WILL T. RESCH.