

No. 836,723.

PATENTED NOV. 27, 1906.

D. J. WATEROUS.
DUMPING WAGON.
APPLICATION FILED MAY 8, 1906.

Fig. 1.

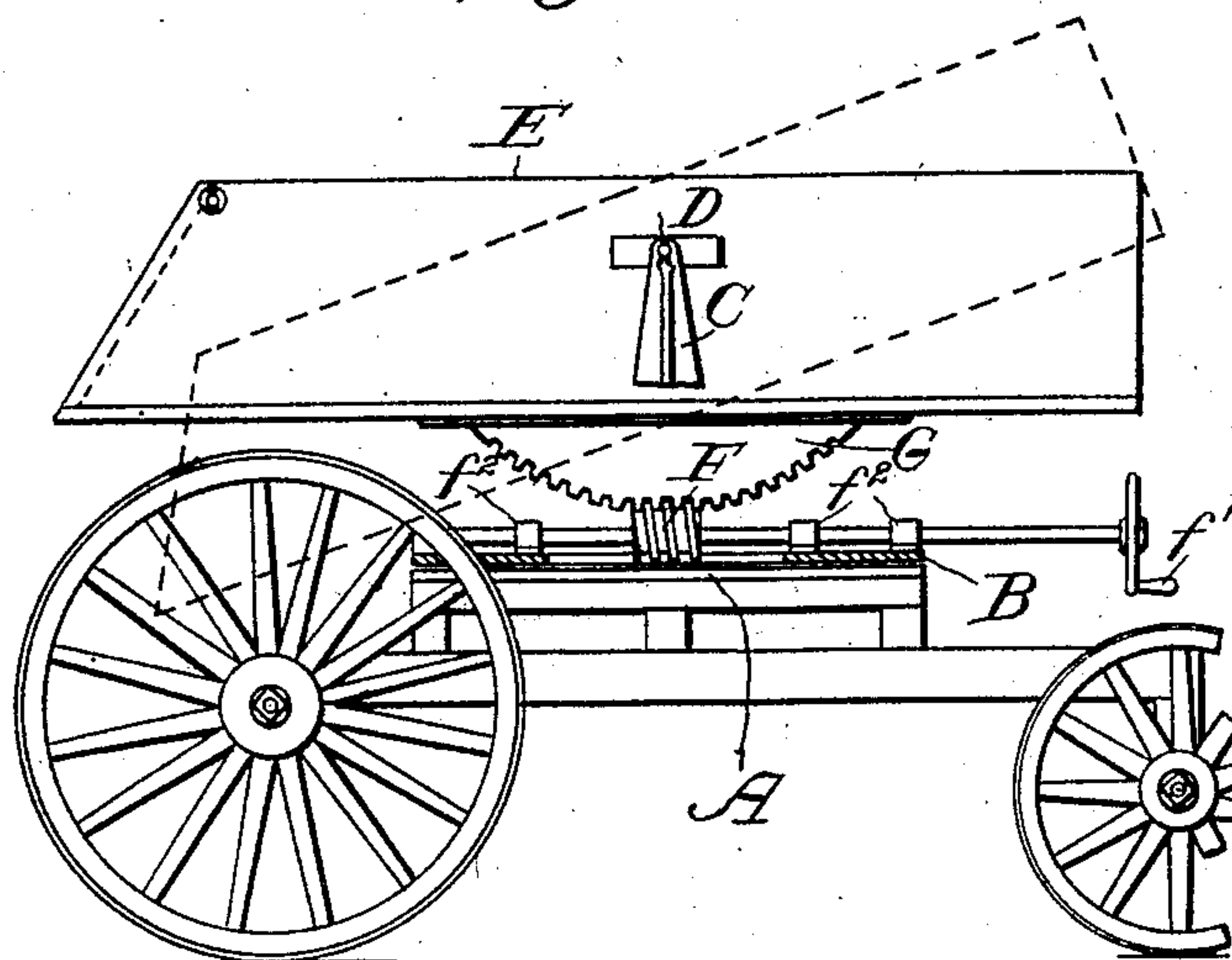


Fig. 2.

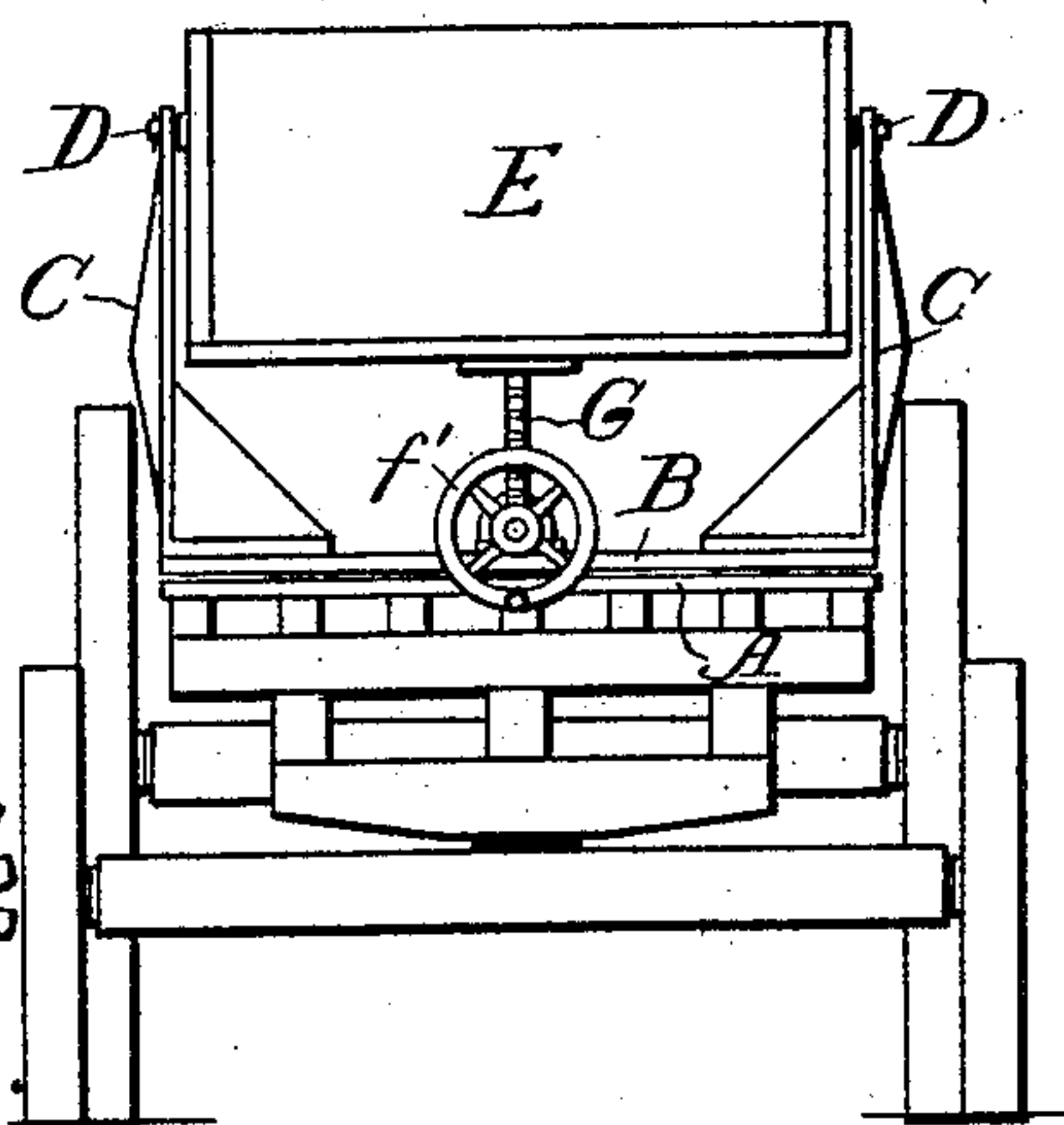
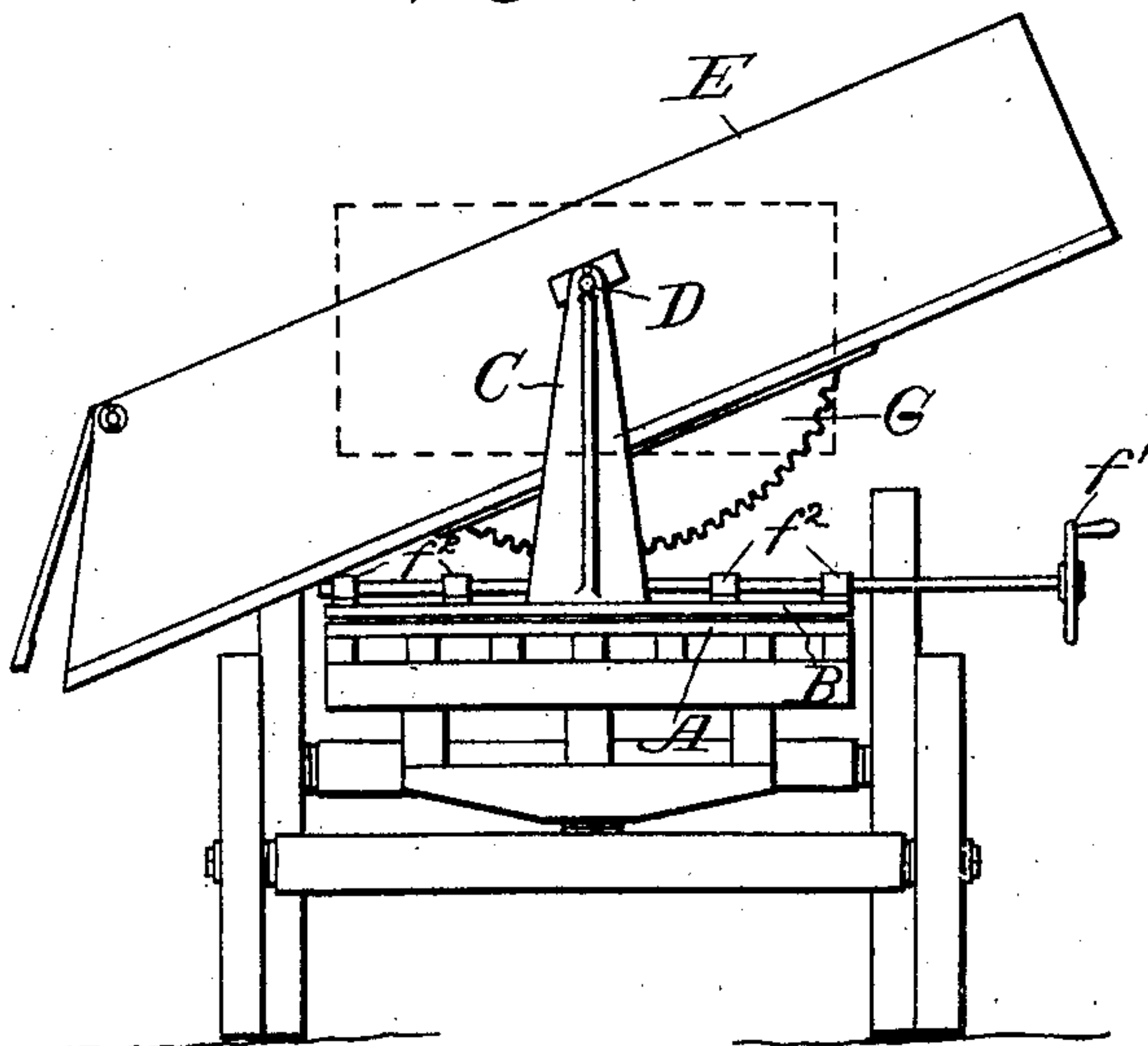


Fig. 3.



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UNITED STATES PATENT OFFICE.

DAVID J. WATEROUS, OF BRANTFORD, ONTARIO, CANADA.

DUMPING-WAGON.

No. 836,723.

Specification of Letters Patent.

Patented Nov. 27, 1906.

Application filed May 8, 1905. Serial No. 259,393.

To all whom it may concern:

Be it known that I, DAVID J. WATEROUS, a subject of His Majesty the King of Great Britain and Ireland, residing in the city of Brantford, in the county of Brant and Dominion of Canada, have invented a new and useful Improvement in Dumping-Wagons, of which the following is a specification.

My invention relates to that class of dumping carts, wagons, or sleighs by which the contents are dumped by tilting the box; and the object of my invention is to provide a wagon which can be dumped to deliver the contents toward the front or rear or toward either side. This I accomplish by mounting the wagon-body on relatively high supports rising from a centrally-disposed turn-table, whereby the height of the supports will permit the dumping of the body to a sufficient angle before it strikes the turn-table or the bed, and also by disposing the front and rear wheels at each side such a distance apart that the wagon-box (which is of proper width) can be dumped between them to deliver its contents to one side.

In the drawings similar letters of reference indicate similar parts.

Figure 1 shows a side view of my improved dumping-wagon in which the upright support shown is broken off just above the bottom of the box and the turn-table or circular revolving plate to which the supports are fixed is shown in section to give an unobstructed view of the worm and worm-wheel. Fig. 2 shows a front view of the same. Fig. 3 shows my improved wagon with the box tilted toward the side—as, for example, to deliver coal or other material—the dotted lines indicating box viewed from front or rear when in its normal position and evenly balanced.

In the accompanying drawings, the letter A designates a bed supported by or possibly forming part of the running-gear of a wagon, whereof the wheels are preferably disposed a sufficient distance apart at each side to permit the wagon-box to be dumped between them, as will be understood. Mounted upon this bed, and therefore also forming part of the running-gear, is a turn-table or revolving plate B, which necessarily stands always at a fixed distance above the ground. From the opposite sides of said turn-table rise two standards or upright supports C, which are of sufficient height to hold the wagon-box some distance above the running-gear, and hence permit said box to be dumped, as illustrated,

without the necessity for raising the box and its contents bodily, as is customary in many wagons of this character.

D is the bearing-rod or gudgeon on which the wagon-box is pivoted.

E is the wagon-box.

F is the worm by which the box is tilted.

G is the tilting worm-wheel.

The round revolving plate or turn-table B may be bolted to the bed A by a king-bolt through the center thereof, or the turn-table B may turn on rollers or ball-bearings running around the turn-table B near its circumference and bearing upon the bed A. Upon the turn-table B are mounted bearings f^2 , in which is journaled the shaft of a worm F, which shaft has a handle f' at one end, by which it may be rotated.

I make the worm-wheel G, which is operated by the worm F, not an entire wheel, but segmental, the part which comes into contact with the wagon-box E being flanged and fastened by screws or bolts to the bottom of the wagon-box E. This causes the segmental wheel G to stand on edge beneath the wagon-body E, which latter is thereby necessarily spaced to an extent above the body and turn-table, and from the fact that the uprights C are relatively high the pivots or gudgeons D are also by preference relatively high and the arc on which the segment of the wheel G is struck is of considerable size.

It will readily be seen that by grasping the handle f' of the worm-shaft and swinging it bodily the turn-table B, and with it the wagon-box E, can be readily turned in any direction. By turning the crank or handle f' the rear end of the wagon-box can be raised and lowered as desired. Thus the handle serves two functions, and yet it is always within the reach of the operator, as it is mounted on the turn-table and does not rise with the wagon-body.

I pivot the box at a point as nearly as possible at the center of gravity, so that the box may be more easily tilted.

The bed A can be made to rest upon the bolsters of the wagon and can be readily removed when not required and an ordinary box used.

What I claim, and desire to secure by Letters Patent, is—

1. In a dumping-wagon, the combination with the running-gear comprising wheels located relatively far apart, a bed, and a turn-table pivoted on the latter at a fixed distance

above the ground; of relatively high supports rising from opposite sides of the turn-table, the wagon-box pivoted between said supports and adapted to dump across the corner 5 of the turn-table to either side of the wagon or to the front or rear, and one means located upon the turn-table for turning the latter or dumping the box, or both.

2. In a dumping-wagon, the combination 10 with the running-gear comprising wheels located relatively far apart, a bed, and a turn-table pivoted on the latter; of supports rising from opposite sides of the turn-table, the wagon-box pivoted between them, a worm- 15 wheel carried by the box, a worm engaging it, and a worm-shaft journaled in bearings on the turn-table at a fixed distance above the ground and having a single crank-handle whereby the turn-table and box can be turned 20 or the latter dumped, or both.

3. In a dumping-wagon, the combination with the running-gear including the wheels, a bed, and a turn-table pivoted on the latter at a fixed distance above the ground; of supports rising from said turn-table, the wagon- 25 box pivoted to them so that its bottom shall be spaced above the turn-table, a segmental worm-wheel carried by the bottom of the box and standing within said space, a worm engaging it, and a worm-shaft journaled in 30 bearings on the turn-table and having a single crank-handle, as and for the purpose set forth.

In witness whereof I have signed my name to this specification in the presence of two 35 subscribing witnesses.

D. J. WATEROUS.

Witnesses:

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