### J. BULLOCK. DUMPING WAGON.

APPLICATION FILED JUNE 19, 1903. NO MODEL. 3 SHEETS-SHEET 1. Witnesses Hallock, Mornison Inventor John Bullock

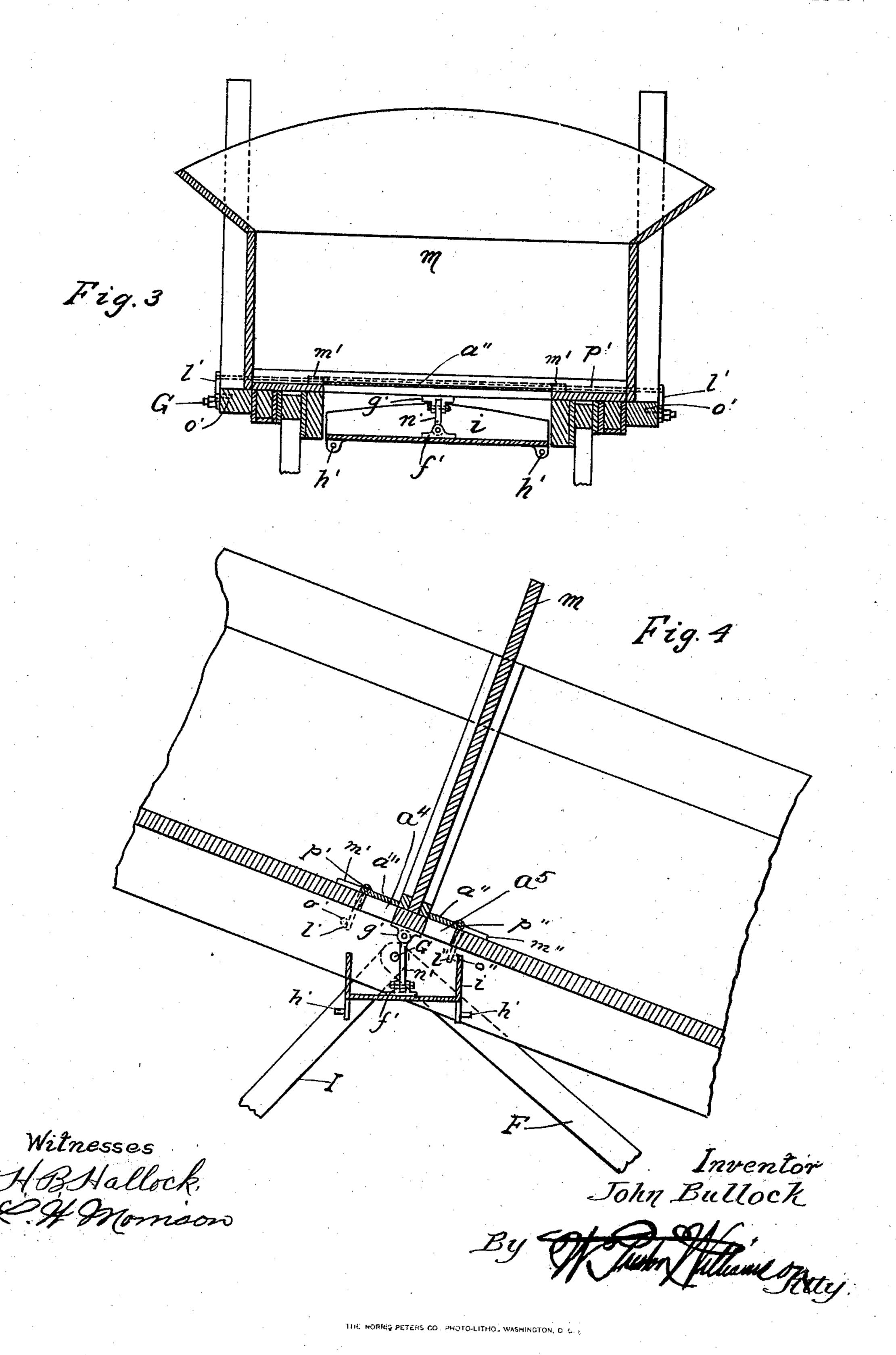
No. 751,455.

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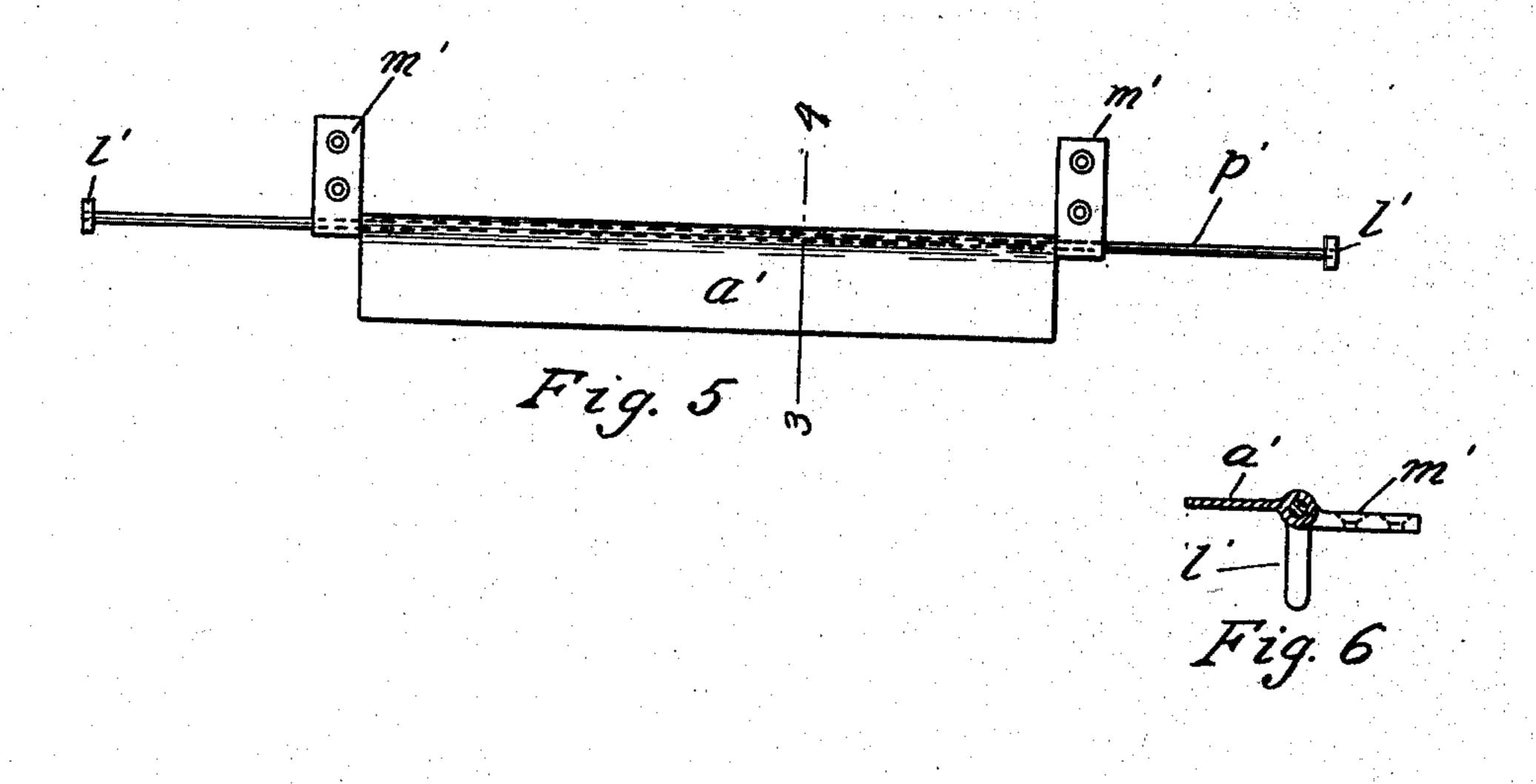
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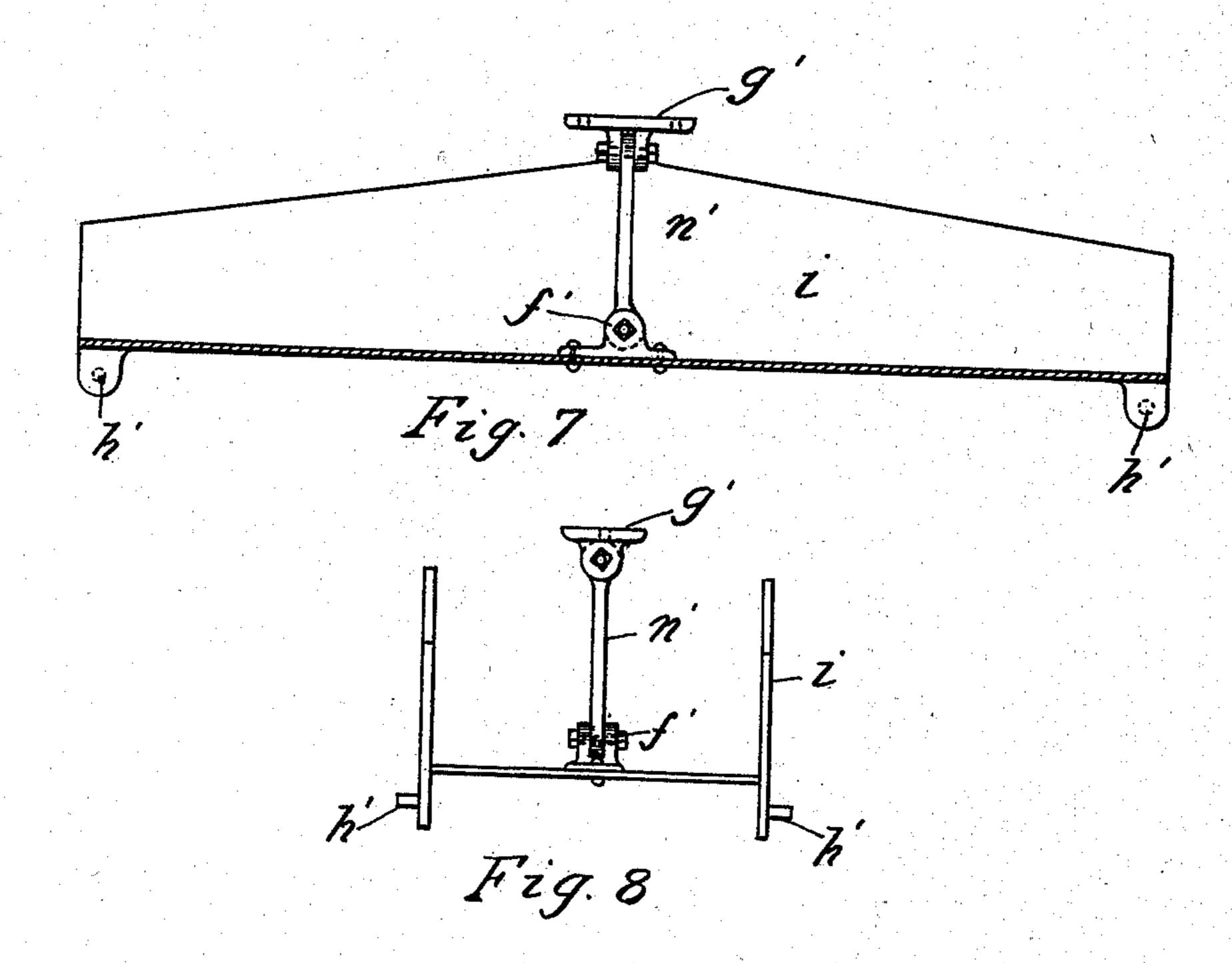
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Witnesses

Inventor John Bullock

## United States Patent Office.

### JOHN BULLOCK, OF WILMINGTON, DELAWARE.

#### DUMPING-WAGON.

SPECIFICATION forming part of Letters Patent No. 751,455, dated February 9, 1904.

Application filed June 19, 1903. Serial No. 162,215. (No model.)

To all whom it may concern:

Be it known that I, John Bullock, a citizen of the United States, residing at Wilmington, county of Newcastle, and State of Delaware, have invented a certain new and useful Improvement in Dumping-Wagons, of which the following is a specification.

My invention relates to a new and useful improvement in coal-wagons which is so constructed and provided with such mechanism as to allow the body of the wagon to be raised and tilted either forward or backward, the coal to be discharged from the side of the body

into a central chute.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation of the body raised to its highest point and slightly tilted toward the rear; Fig. 2, a side elevation without the running-gear, showing the body in a tilted position for discharging the coal in the forward compartment; Fig. 3, a transverse section of the body, taken on the line 1 2 of Fig. 1; Fig. 4, a longitudinal section of the central portion of the body; Fig. 5, a detail plan view of one of the discharge-doors; Fig. 6, a section taken on the line 3 4 of Fig. 5; Fig. 7, a longitudinal section through the center of the oscillating chute; Fig. 8, an end view of the same.

Referring to the Figs. 1 and 2, A represents the frame of the wagon shown and described in Letters Patent No. 635,402. I and F are lifting-bars. H is the body. G is a rod extending through the ends of the lifting-bars and the sides of the body and acts as a pivot, upon which the body H is supported. Q is a bar placed on each side of the wagon and secured to the body at its upper end by means of the pins R. At its lower end it is se-

cured to a strap T by means of the pin S. The 50 strap T is so constructed that it will slide on the bar X, and by placing a pin in the hole U it can be held in any position desired. The purpose of the bars Q is to hold the body in its normal position while it is being elevated 55 by means of the lifting-bars I and F. At each end of the frame are placed shafts e and e', which have chains a and a' attached to them. On the ends of these shafts are placed ratchetwheels b and b', which are engaged by pawls 60 d and d', secured to the frame. The other ends of the chains are secured to the body by means of the bolts y and y', and it will be seen that by winding up the chain a' on the shaft e' by means of a crank c', attached to one end of the 65 shaft, and by disengaging the pawls d at the other end of the wagon it will cause the wagon to take an incline position, as shown in Fig. 2. By the same operation on the other end the body may be placed in an opposite position 7° from that shown in Fig. 2.

Referring to Figs. 3 and 4, m is a board or partition in the center of the body for the purpose of dividing it into two compartments.  $a^2$  and  $a^3$  are doors arranged at each side of 75 the partition m for the purpose of normally closing the discharge-openings  $a^4$  and  $a^5$  upon each side of the partition. These doors are secured to rods or shafts p' and  $p^2$ , which are free to revolve in the bearings m' and  $m^2$  and have se-80 cured to their ends levers l' and l2, whereby the doors may be manipulated so as to open or close the discharge-openings. o' and  $o^2$  are pins placed in the frame to hold the door in position when closed. Underneath the doors 85  $a^2$  and  $a^3$  is placed an oscillating chute i, which is secured to the body by means of the toggle n' and the supports f' and g'. An ordinary gravity-chute can be attached to the oscillating chute by means of the lugs h'. It will 90 thus be seen that by opening either one or the other, or both, of the doors  $a^2$  and  $a^3$  the material will be discharged into the oscillating chute i, which by the construction shown will always incline in the direction of the gravity- 95 chute, thus permitting the material to be dis-

charged from either side, as may be desired.

It is understood that this improvement will

not interfere with dumping from the rear, as shown and described in Letters Patent No. 635,420.

The great advantage in this improved dump-5 ing-wagon is that the wagon may be driven up close to the curb, so that the body will lie parallel therewith, and the material may be discharged from the side of the wagon by first tilting the wagon in one direction, so that the 10 forward compartment is discharged, and then reversing the body, so that the rearward compartment is discharged. Thus with a very slight addition a wagon may be provided which may be discharged from the side without interfer-15 ing with the same discharging from the rear in the ordinary manner.

Of course it is understood that the partitions m slide in grooves in the side, so as to be re-

moved when desired.

Of course I do not wish to be limited to the exact construction here shown, as slight modifications could be made without departing from the spirit of my invention.

Having thus fully described my invention,

25 what I claim as new and useful is—

1. In a dumping-wagon, a body, a frame and rounded gear, means for elevating the body above the frame, means for tilting the body either forward or rearward while in the elevated position, an opening formed through the floor of the body in the center thereof, a door for opening or closing said opening, an oscillating chute arranged below the body so as to receive any material falling through the 35 opening, a chute designed to be attached to either end of the oscillating chute, as and for the purpose specified.

2. In a dumping-wagon, a body, a frame and rounded gear, means for raising the body above 4° the frame, said means being pivotally connected to the center of the body, chains attached to the forward and rearward ends of the body, means carried by the frame of the wagon for winding up the chains so as to draw 45 down either end of the body and cause the same to tilt either forward or backward, a re-

movable partition arranged in the center of the body dividing the same into a forward and back compartment, the floor of the body being provided with an opening upon each side 50 of the partition, doors adapted to open or close said openings, a chute arranged below the openings and extending laterally of the body, said chute being pivoted at the center so as to tilt toward either side of the wagon, 55

as and for the purpose specified.

3. In a dumping-wagon, a body, a frame and rounded gear, means for lifting the body above the frame, said means being pivotally connected to the central portion of the body so 60 that said body is balanced thereon, chains connected to the forward end of the body, chains connected to the rearward end of the body, shafts extending laterally through the frame to which the other ends of the chains are con- 65 nected, cranks secured to the shafts for turning the same, a ratchet-and-pawl mechanism for preventing retrograde movement of the shafts, a removable partition arranged within the center of the body dividing the same in a 70 forward and rearward compartment, the floor of the body being provided with an opening upon each side of the partition, doors for opening or closing said openings, a chute arranged below the opening and below the floor 75 of the body, said chute extending laterally of the body, a toggle pivoted at one end to the body upon a lateral pivot, the other end of the toggle being pivoted to the center of the chute upon a longitudinal pivot so as to allow 80 the chute to tilt in two directions, lugs secured to either end of the chute whereby ordinary chutes may be attached, as and for the purpose specified.

In testimony whereof I have hereunto af- 85 fixed my signature in the presence of two sub-

scribing witnesses.

JOHN BULLOCK.

Witnesses:

GEO. H. HOLLIS, J. G. Gray.