No. 607,103. Patented July 12, 1898.

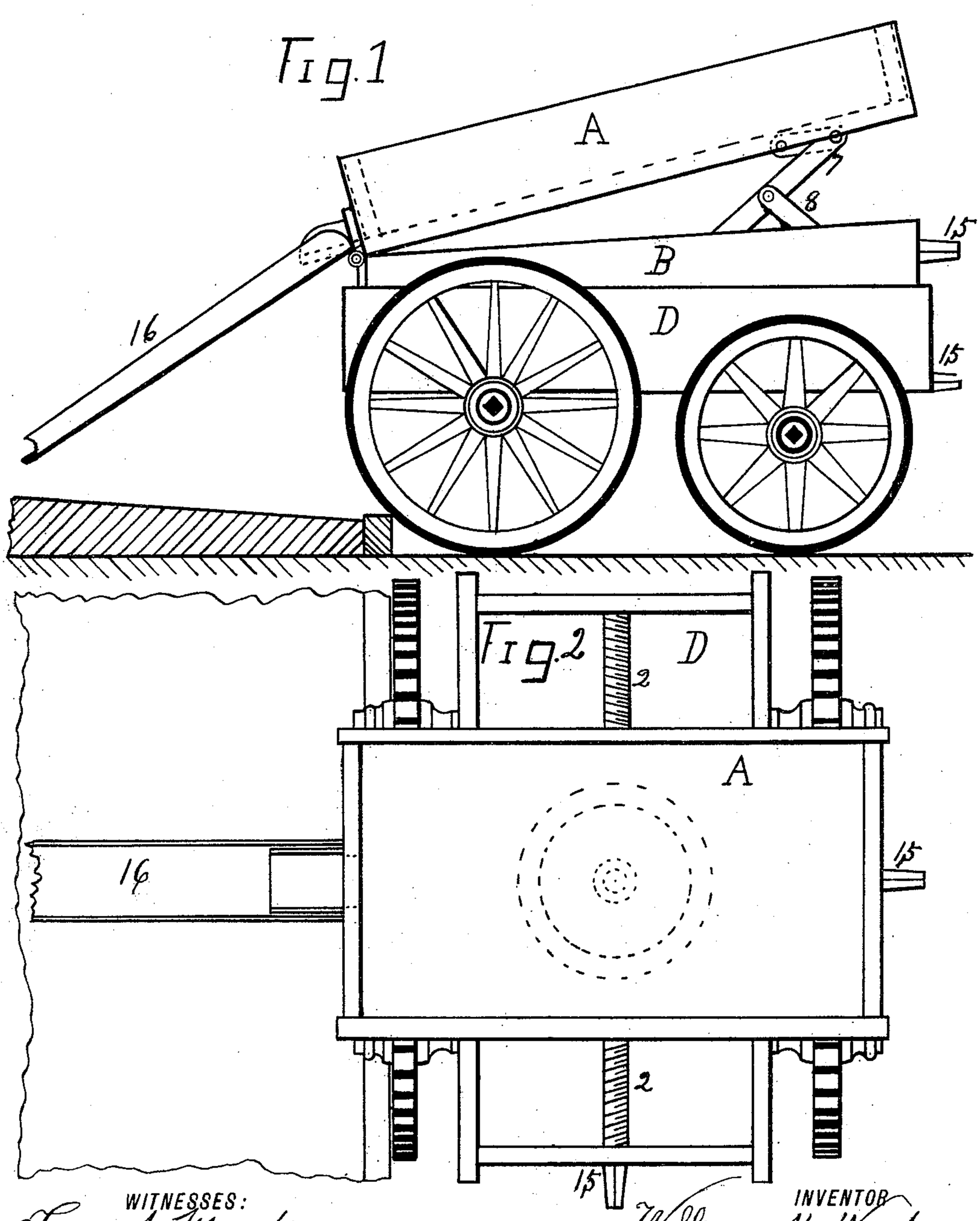
# W. M. WEST.

## DUMPING WAGON.

(Application filed Oct. 12, 1897.)

(No Model.) 3 Sheets—Sheet 1.

Fig. 1

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(No Model.) 3 Sheets—Sheet 2.

FIG 3

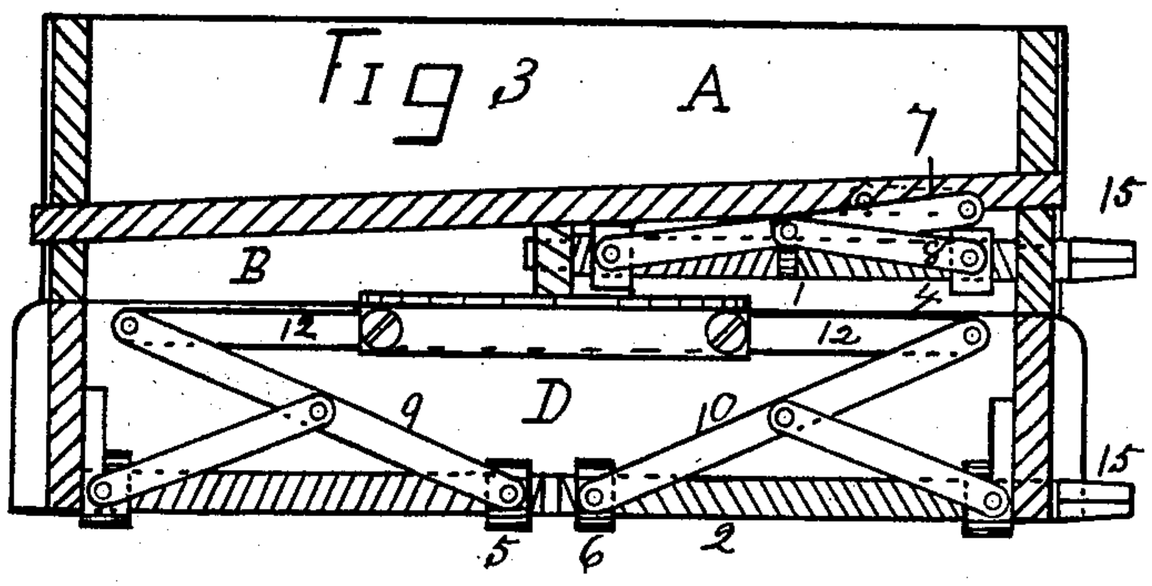



FIG. 4

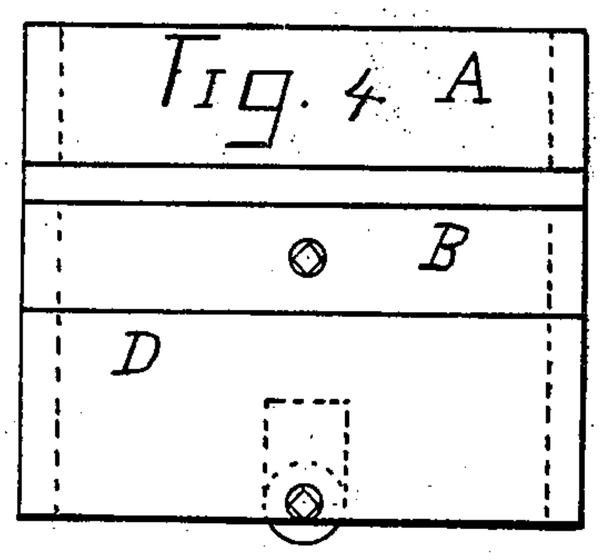



FIG. 5

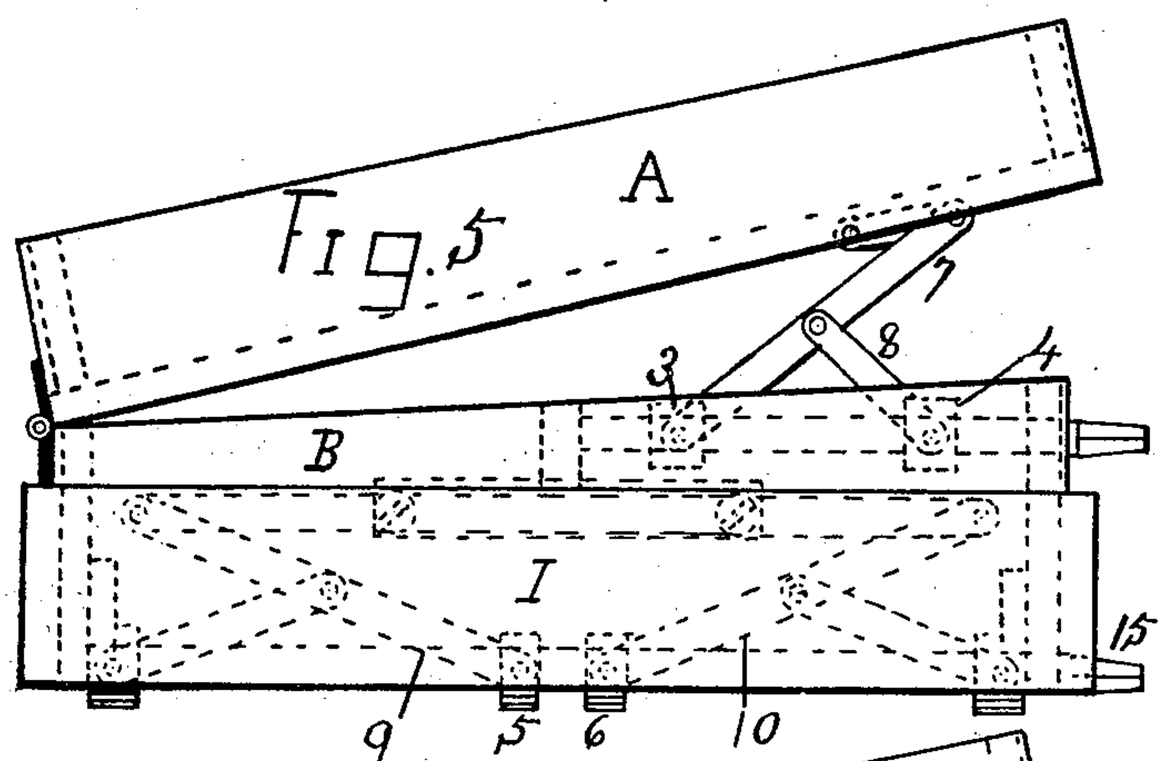



FIG. 6

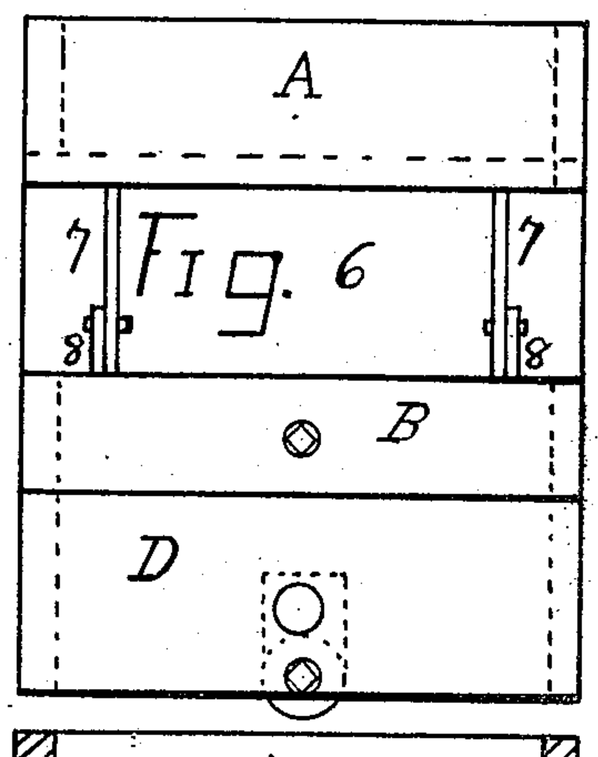



FIG. 7

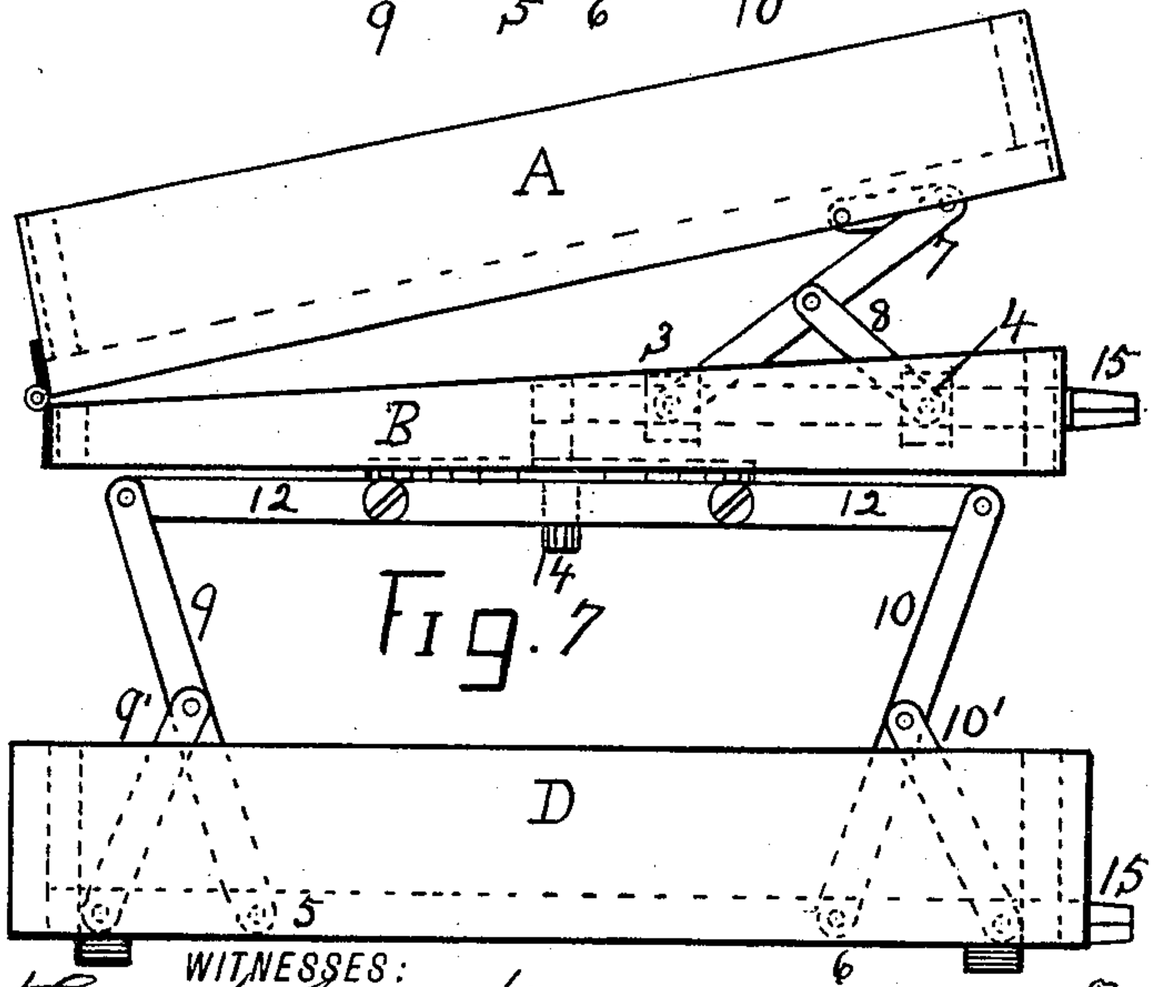
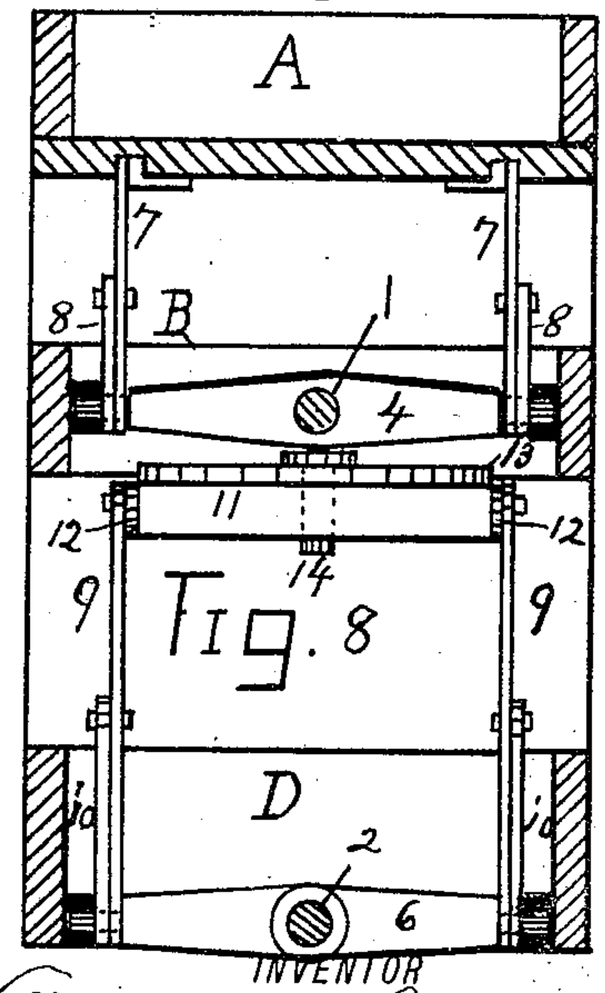



FIG. 8

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# W. M. WEST.

## DUMPING WAGON.

(Application filed Oct. 12, 1897.)

(No Model 3 Sheets—Sheet 3.

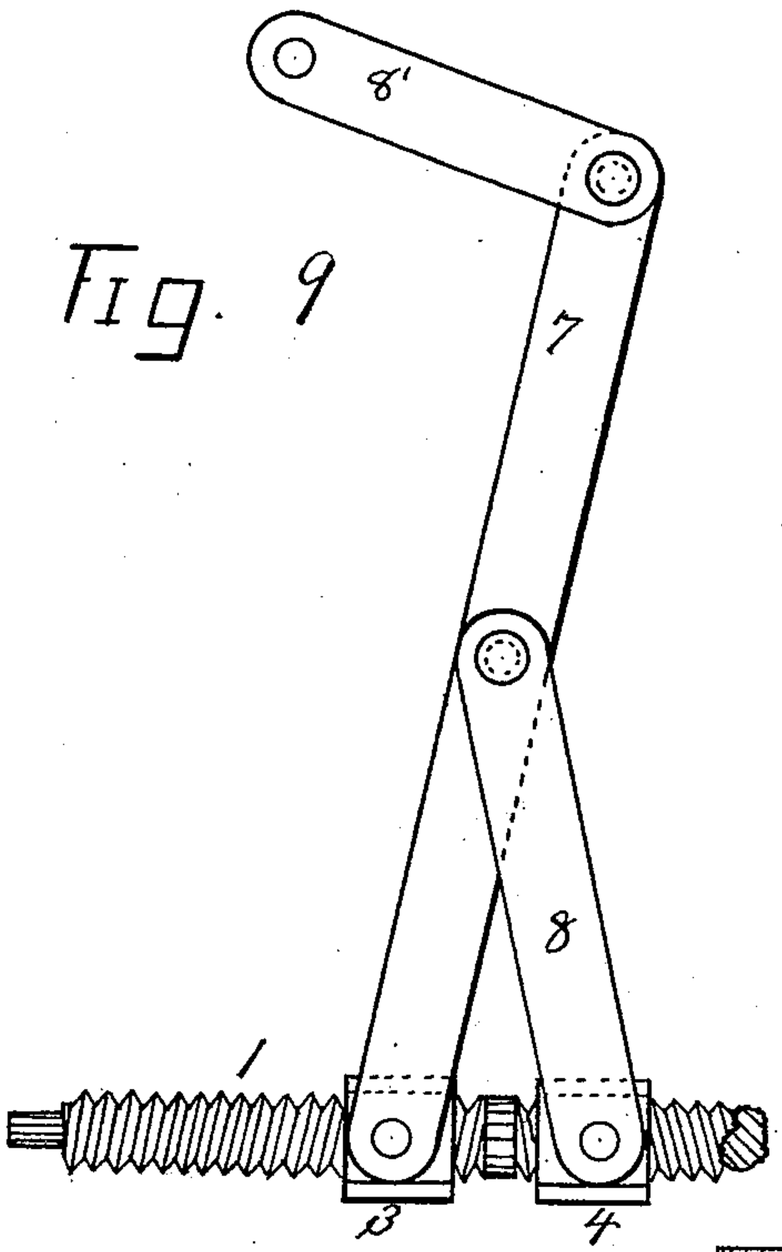


Fig. 9

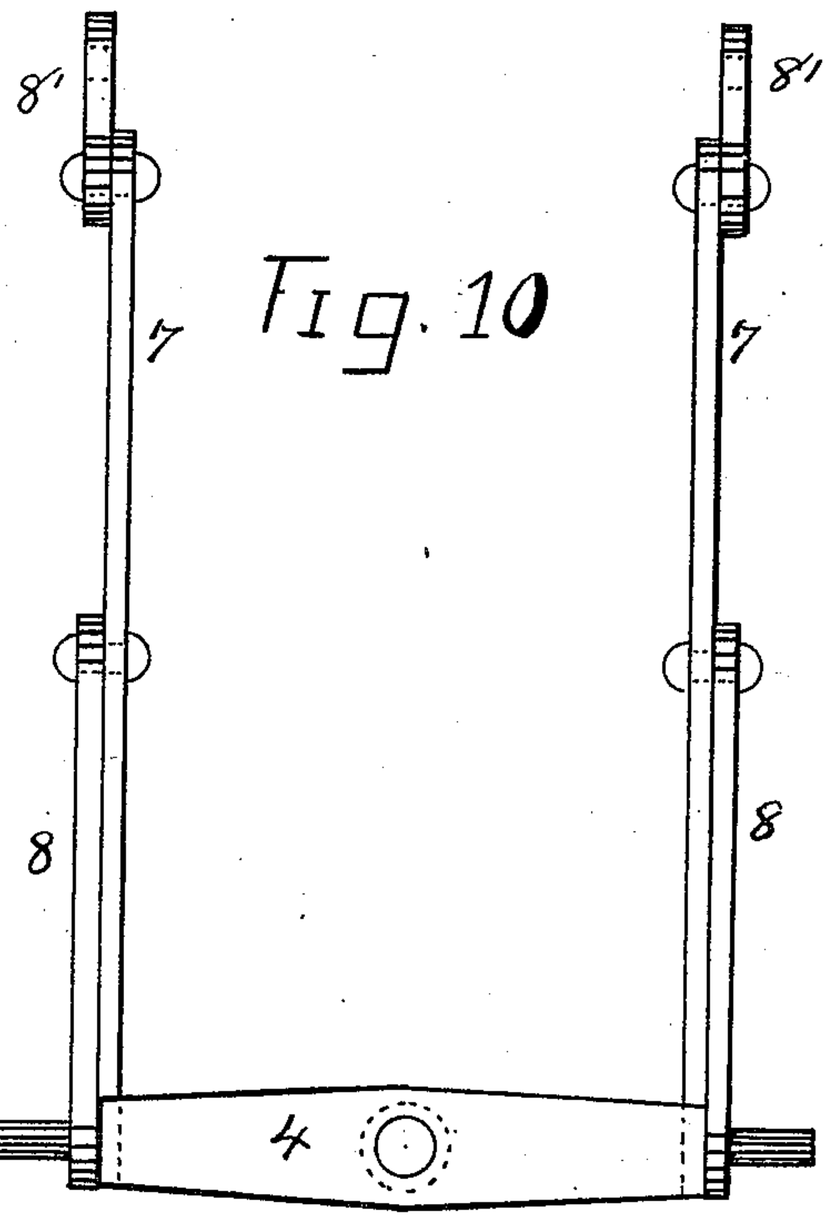


Fig. 10

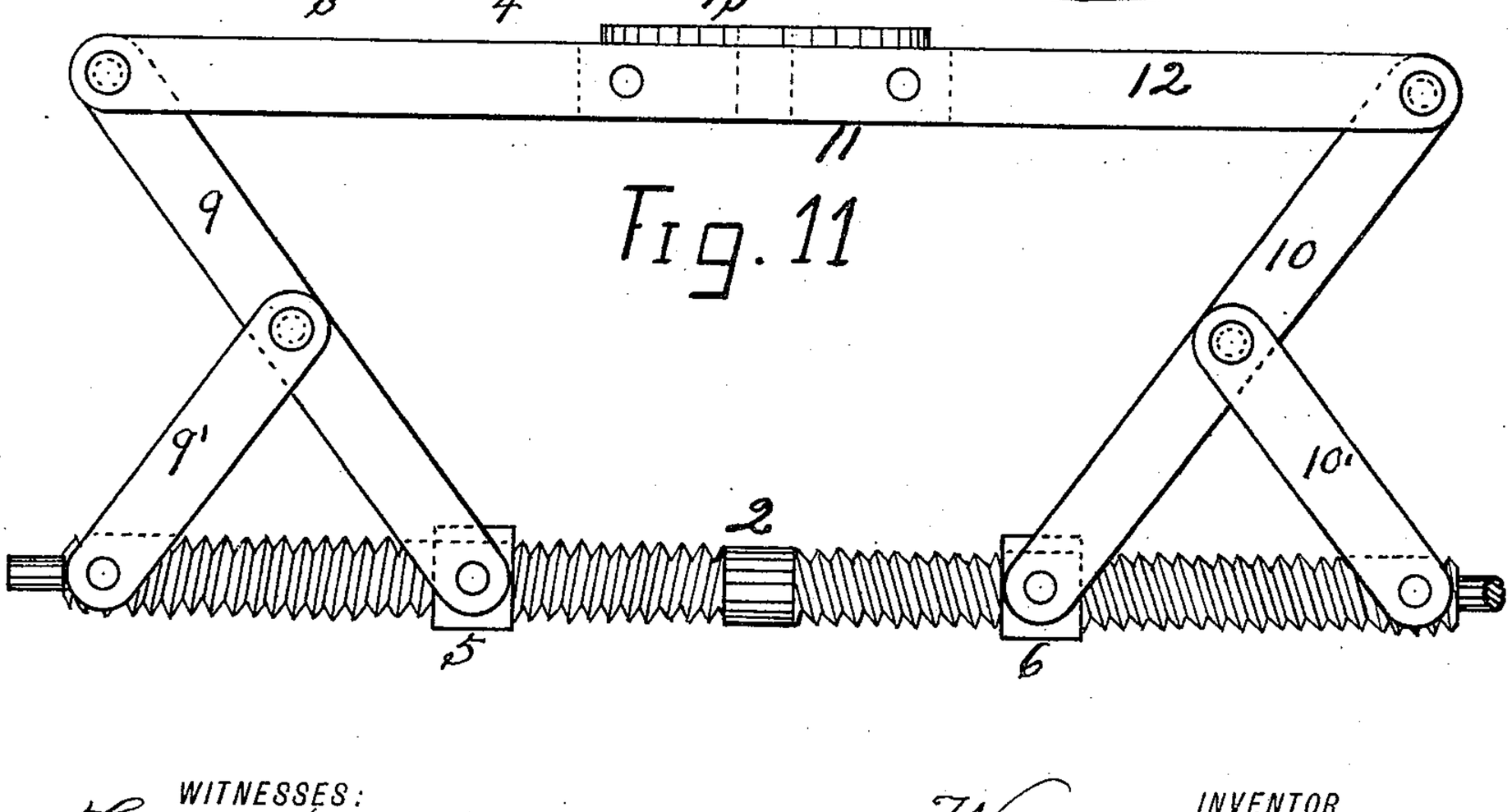


Fig. 11

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# UNITED STATES PATENT OFFICE.

WILLIAM M. WEST, OF CAMDEN, NEW JERSEY.

## DUMPING-WAGON.

SPECIFICATION forming part of Letters Patent No. 607,103, dated July 12, 1898.

Application filed October 12, 1897. Serial No. 654,963. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM M. WEST, a citizen of the United States, residing at Camden, in the county of Camden and State of New Jersey, have invented a new and useful Improvement in Dumping-Wagons, of which the following is a specification.

My invention belongs to vehicles that are principally used for hauling and delivering coal; and it consists, first, in a cart or wagon body, a bed, and intermediate frame, said intermediate frame being provided with an elevating mechanism to elevate the front of the body and give the same such desired pitch as will by gravity discharge the load through an open gate in the tail-board; second, in a bed provided with mechanism to bodily elevate the intermediate frame and body and give such desired elevation to the load as will shoot the load by gravity and a trough into a coal-vault, and, if desired, the discharge may be made over the side while the vehicle stands parallel with the curb of the sidewalk, as illustrated in the accompanying drawings, in which—

Figure 1 is a side view of a coal-wagon constructed according to my invention and discharging the load at the rear of the wagon. Fig. 2 is a top view of a coal-wagon constructed according to my invention and discharging the load at the side of the wagon. Fig. 3 is a longitudinal section of the body, intermediate frame, and bed, showing the elevating mechanism. Fig. 4 is an end view. Fig. 5 is a side view of the body, intermediate frame, and bed, showing the body elevated. Fig. 6 is an end view of Fig. 5. Fig. 7 is a side view of body, intermediate frame, and bed, showing the frame and body elevated. Fig. 8 is a cross-section of bed, frame, and body as elevated in Fig. 7 and showing an end view of the elevating mechanism. Fig. 9 is a side view of one of the body-elevating arms and a section of the screw-shaft. Fig. 10 is an end view of body-elevating arms and one of the cross-bars. Fig. 11 is a side view of the intermediate frame and body-elevating mechanism.

Similar letters and numerals of reference refer to similar parts throughout the several views.

Previous to describing the construction and operation of my invention it will be well to say that in a city or town where street-cars are operated on the streets travel is much impeded by backing the coal-wagons to the curb and discharging the load from the rear of the wagon or cart, and in narrow alleys there is not room to back against the curb. In such cases it is desirable to discharge the load at the sides and while the vehicle stands parallel with the curb of the sidewalk, and in some cases a high elevation of the load is desired when discharging that there will be sufficient inclination to cause the coal to shoot from the wagon to the coal-bin.

That others may make my invention, I will now describe the construction, reference being had to the accompanying drawings, in which—

A represents the body, B the intermediate frame, and D the bed. These may be made of wood or metal. The body A is constructed with head-board, side-boards, and a tail-board, in which is a gate for discharge. These parts may be mounted on two or four wheels.

The intermediate frame B and bed D are each provided with a shaft 1 and 2. On these shafts are cut a right and left hand screw-thread, each shaft carrying two cross-bars 3 and 4 on shaft 1 and 5 and 6 on shaft 2. In the middle of each of these cross-bars is cut a screw-thread to correspond with the thread on which it works. From the cross-bar 3 are two long arms 7, and from these arms are two shorter arms 8, which at their lower ends connect with the cross-bar 4. At the top of arms 7 are short arms 8′. These short arms at the top ends are connected to the body A. The shaft 1, bars 3 and 4, and arms 7, 8, and 8′ are plainly shown in Figs. 9 and 10.

From the cross-bars 5 and 6 on shaft 2 rise arms 9 and 10. The upper ends are connected to bars 12. The bars 12 support a platform 11, carrying a turn-table 13. (Shown in Fig. 2 by dotted lines and by edge view in Figs. 8 and 11.) The turn-table 13 is pivoted by a center pin 14, Figs. 7 and 8. From the long

arms 9 and 10 are short arms 9′ and 10′. The lower ends of these arms are pivoted on fixed studs that are connected to each corner of the bed D.

The right-hand ends of the screw-shafts 1 and 2 are made square, as shown at 15. Upon these squares a movable crank is fitted.

The operation of my invention is as follows: If the vehicle be backed to the curb of the sidewalk, as shown in Fig. 1, a crank is placed on the square end 15 of shaft 1 and turned so as to draw cross-arms 3 and 4 together. This will elevate the front end (the rear end being hinged) of body A, as shown in Figs. 1 and 5. This elevation of the front of the body A will in all cases give an inclination to the bottom of the body A, such as will cause the coal to discharge through the gate in the tail-board and shoot the coal into the coal-bin by the trough 16.

Should there not be sufficient elevation to give the coal gravity to shoot the trough, the shaft 2 may be turned so as to cause the bars 5 and 6 to retreat one from the other. This will cause the intermediate frame B and body A to rise bodily until a sufficient elevation has been reached to give pitch to the trough 16, such as will shoot the coal into the bin.

If the vehicle is run up a narrow alley or the load is to be discharged on a street where street-cars are run, the vehicle is run parallel with the curb and the load is discharged over the side, as shown in Fig. 2.

The drawings show the screw-shafts 1 and 2 operated direct by a crank; but it is obvious a counter-shaft and bevel-gears may be used and operated at the side of the vehicle.

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

1. In a coal-dumping wagon, the combination of a body for carrying coal, intermediate frame, elevating mechanism to elevate the front of the body, and a bed with elevating mechanism to elevate the frame and body, said body being pivoted upon the intermediate frame, so that the load may be discharged at the rear or at the side, substantially as shown and described.

2. In a coal-dumping wagon, the combination of a shaft carrying a right and a left hand screw, two cross-bars, and two lifting-arms, each arm consisting of three links, for elevating the front of the body to give such inclination to the body as will discharge the load from the rear, as shown and described.

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Witnesses:
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WILLIAM S. LACKEY.