No. 709,210. Patented Sept. 16, 1902.

J. J. EAGEN.

DUMPING WAGON.

(Application filed July 15, 1902.)

(No Model.)

Fig. 1

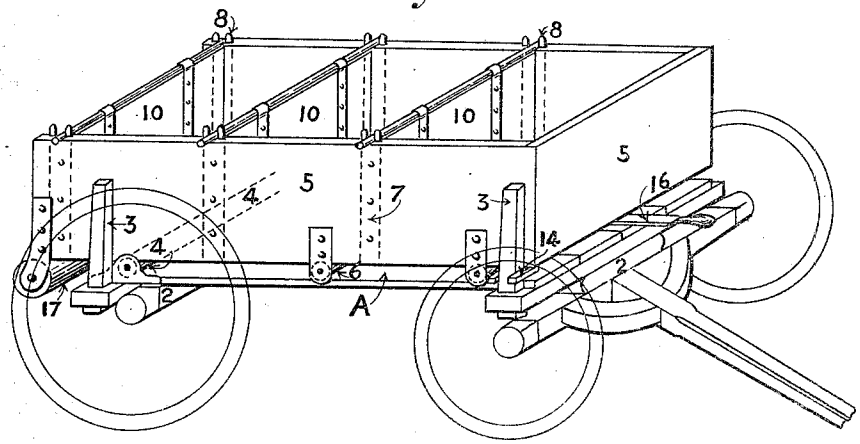


Fig. 3

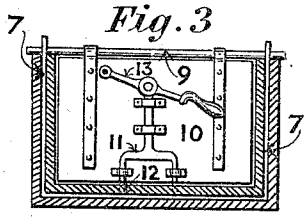


Fig. 2

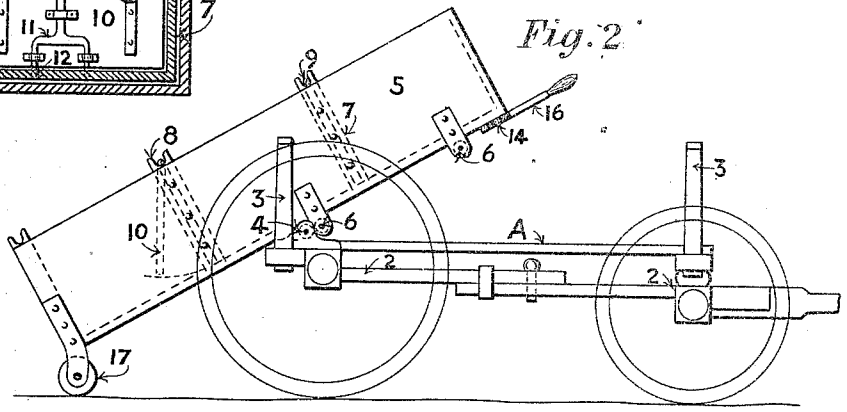
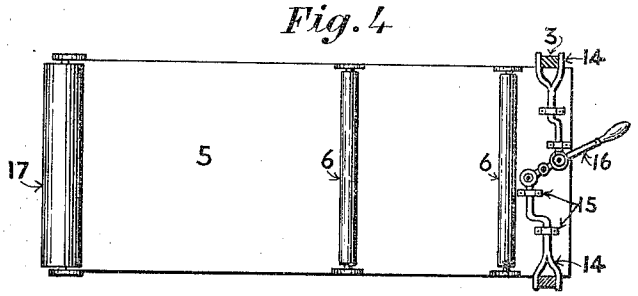


Fig. 4



Witnesses,
F. F. S. Kelsey

Inventor,
John J. Eagen
By Dewey Strong & Co
Attys

UNITED STATES PATENT OFFICE.

JOHN J. EAGEN, OF OAKLAND, CALIFORNIA.

DUMPING-WAGON.

SPECIFICATION forming part of Letters Patent No. 709,210, dated September 16, 1902.

Application filed July 15, 1902. Serial No. 115,613. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. EAGEN, a citizen of the United States, residing at Oakland, county of Alameda, State of California, have invented an Improvement in Dumping-Wagons; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to improvements that class of four wheeled wagons having their beds adapted to be tilted longitudinally to discharge their loads.

The object of my invention is to provide a simple economically-constructed dumping mechanism which is applicable to the running-gear of ordinary wagons.

The invention includes a flat platform mounted on the running-gear, a longitudinally-tilting body or box having a plurality of compartments, and means for locking the box in a horizontal position.

It also comprises details which will be more fully set forth hereinafter, having reference to the accompanying drawings, in which—

Figure 1 shows general view of dumping-wagon. Fig. 2 shows position of box when tipped. Fig. 3 shows section of box and elevation of door. Fig. 4 shows locking arrangement or under side of box.

A represents a flat rigid rectangular platform or bed-frame, preferably made of several planks laid side by side and fixed to or supported upon the running-gear 2 of an ordinary wagon, such as is commonly used for hauling lumber and the like. The front and rear bolsters are provided with the usual stanchions 3. Upon the rear end of the platform A and projecting above the upper surface thereof is a transverse fulcrum-roller 4. The box or body 5 rests upon this roller and is supported, when in a horizontal position, on the platform between the stanchions. Rollers 6 are suitably journaled on the under side of the box, which permit the latter to be moved easily longitudinally on the bed. This longitudinal movement is effected by turning the roller 4 by any suitable lever or crank mechanism, either to carry the box rearward beyond its center of gravity to dump or to move it forward into its normal horizontal position. The rollers 6 are placed upon the box rather than on the bed or supporting-frame, for the reason that it may be frequently desired to use the flat bed without the tilting body portion—as, for instance, in hauling hay or lumber.

The particularly novel feature of this invention lies in the construction of the box or body 5. This is preferably made with double walls and bottom, as shown, braced and reinforced by means of the metal straps or U-shaped bands 7, interposed at suitable intervals between and bolted to the wall and bottom sections, so that the box possesses great strength and rigidity and presents a smooth inner and outer surface. The ends of the bands 7 project above the walls of the box and certain of them are slotted, as at 8, to receive the ends of the rods 9, upon which are hung the doors 10. Only the rearmost band may be slotted and there may be but a single door or tail-board to the wagon, or there may be two or more of these hinged or swinging doors having suitable means to secure them in vertical position to divide the box into a number of separate compartments.

Coal dealers have frequently to make several trips to deliver small orders for coal in bulk to different people, whereas the entire quantity could be hauled at a single trip were it not for the necessity of segregation. I have accordingly devised the above plan by which the bed may be divided off into a number of compartments, in each of which the quantity for any one customer may be contained and the contents of each compartment dumped successively.

The doors 10 swing flush with the walls and bottom of the box and are locked in vertical position by means of the bifurcated slide bars or bolts 11, fitting in suitable keepers 12 on the box. A lever 13, pivoted on the door, has one end adapted to engage the slide-bolt 11 to open the latter and release the door. As the slots 8 are open at their upper ends the doors can easily be removed at any time, as in case it is desired to throw all the compartments into one or it is necessary to take out a door to let the load discharge more easily.

The box is locked and prevented from shifting when once it has been moved into proper horizontal position on the bed A by means of the forked bars 14 engaging the forward stanchions and slidable in guide-straps 15 on

the under side of the box. The adjacent ends of these bars are pivotally connected to a lever-arm 16, projecting beyond the front end of the body, by which the bars are moved into and out of engagement with said stanchions. The further backward movement of the body after dumping is limited by means of the rearmost roller 6 on the body engaging the fulcrum-roller 4 and so serving as a stop. The hind end of the body carries a large roller 17, which is adapted to rest upon the ground when the body is in the inclined dumping position. It is not always possible to determine accurately the exact spot the end of the body is going to strike when tilted and the team may move forward or may back and carry the end of the tilted bed too far one way or the other. By providing the roller 17 it is possible to move the still loaded but tilted body till the end is in just the position desired, when by opening the door the contents are discharged.

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

1. The combination in a wagon, of a platform, a roller on the rear end thereof, a longitudinally-movable box resting on said roller and platform, forked bars carried on said box and engaging the stanchions of said wagon whereby the longitudinal movement of said box is limited, and connections of the inner ends of said forked bars with a lever whereby said bars may be operated in unison.

2. The combination in a wagon, of a platform, a fulcrum-roller, a box resting on said roller and platform, means including forked bars carried on the box and engaging the stanchions of the wagon, means for operating the forked bars, and a roller-bearing between the platform and box.

3. The combination in a dumping-wagon, of a platform, a box movable longitudinally on antifrictional bearings on said platform, slotted connections at the upper edge of the box and a door having a rod the ends of which are pivotally hung in said slotted connections, and locking means for said door including a vertically-reciprocable forked slide-bolt, and a lever pivoted on the door and engaging one end of said bolt.

4. In a wagon, a longitudinally-movable tilting box, transverse partitions and means whereby they are detachably hinged to the box, said partitions dividing the box into compartments, and independent locking means for each partition whereby any one or more of the partitions may be released without disturbing the others, substantially as described.

5. The combination in a wagon, of a box having double walls and bottom, U-shaped bands encircling the box between said wall and bottom sections, the ends of said bands slotted and projecting above the upper edge of the sides of the box, transverse rods supported at their ends in said slots, and doors hinged to said rods and movable in the space between the sides and bottom of the box and means for locking said doors.

In witness whereof I have hereunto set my hand.

JOHN J. EAGEN.

Witnesses:
S. H. NOURSE,
JESSIE C. BRODIE.