

No. 654,333.

Patented July 24, 1900.

P. VASQUEZ.  
WAGON DUMPING GEAR.  
(Application filed May 2, 1900.)

(No Model.)

Fig. 1.

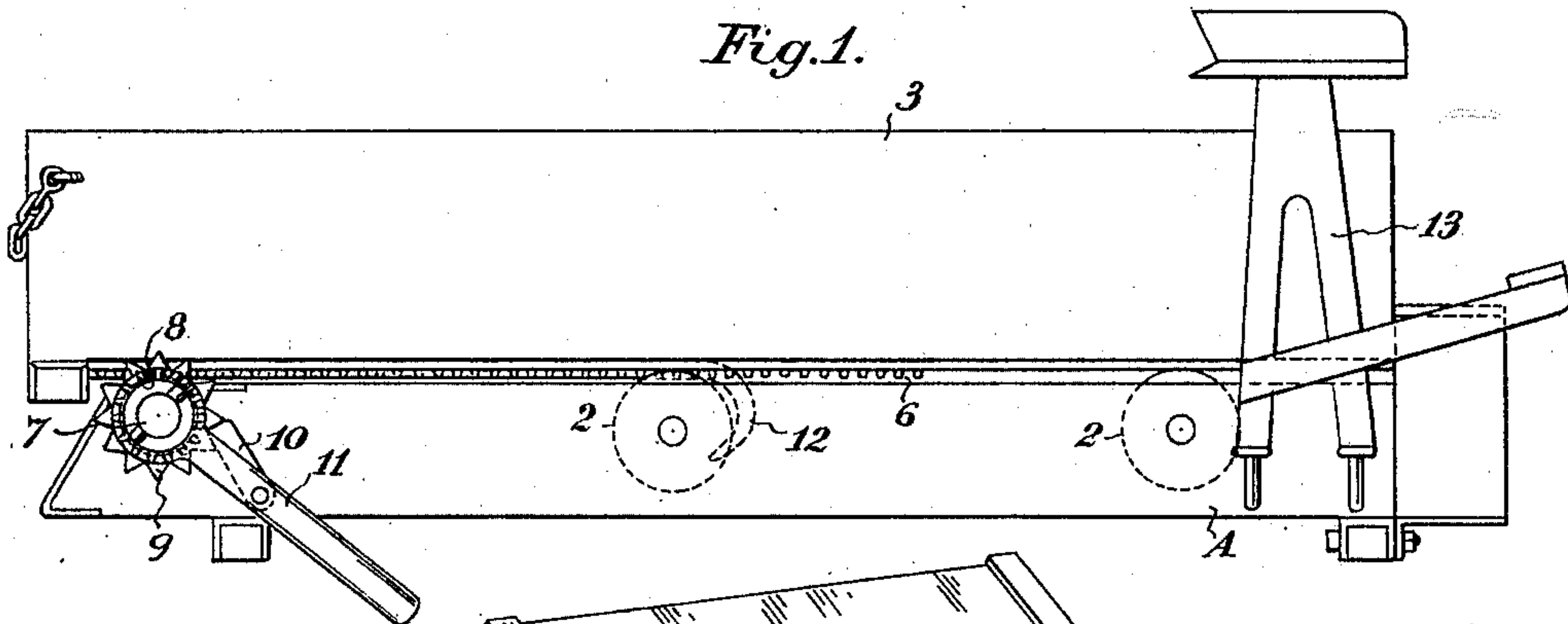
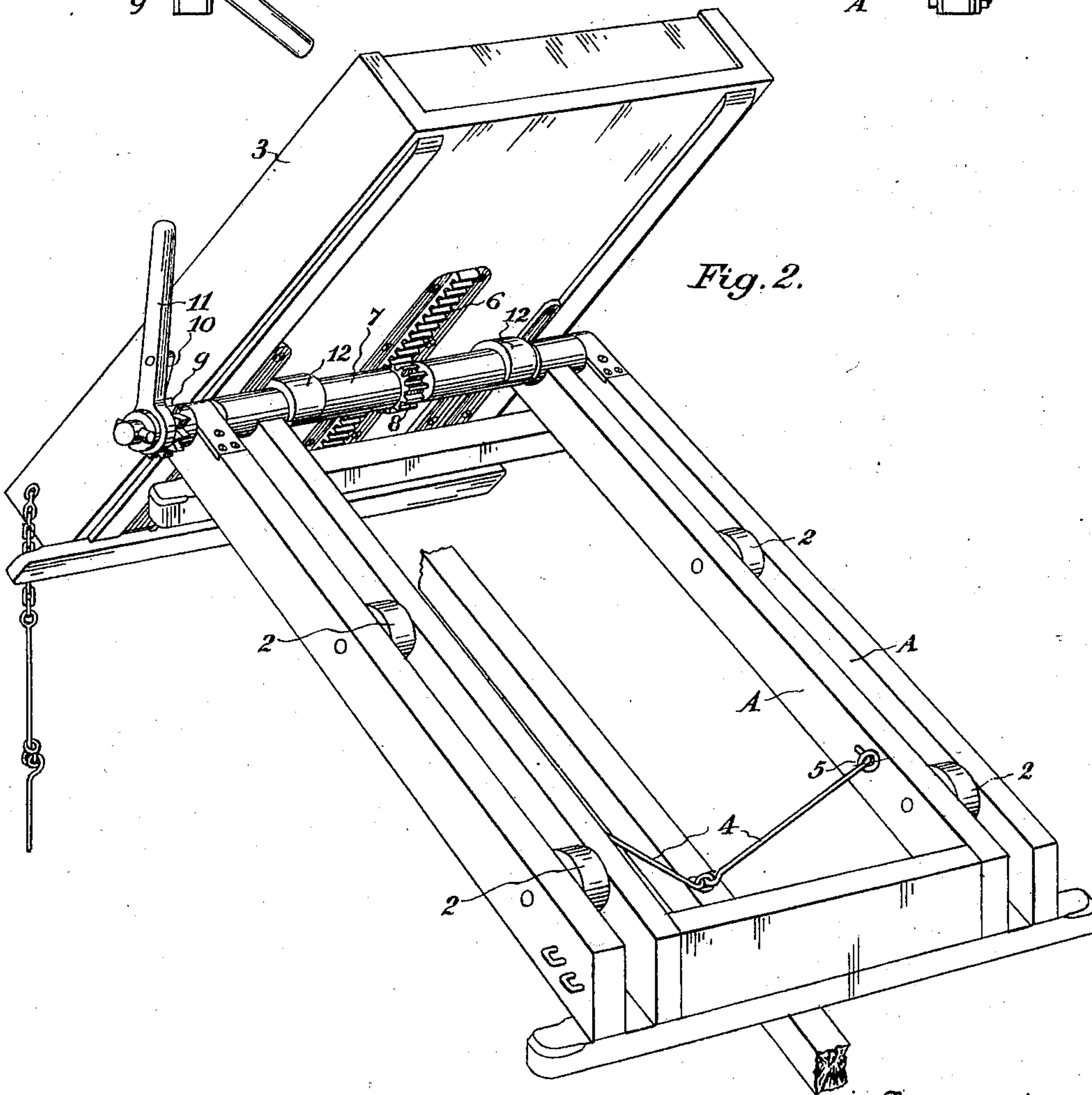


Fig. 2.



Witnesses,  
E. A. Brandau,  
J. H. Hourse.

Inventor,  
Pablo Vasquez  
Dewey Thong Ho.  
attys



# UNITED STATES PATENT OFFICE.

PABLO VASQUEZ, OF HALF MOON BAY, CALIFORNIA.

## WAGON DUMPING-GEAR.

SPECIFICATION forming part of Letters Patent No. 654,333, dated July 24, 1900.

Application filed May 2, 1900. Serial No. 15,213. (No model.)

*To all whom it may concern:*

Be it known that I, PABLO VASQUEZ, a citizen of the United States, residing at Half Moon Bay, county of San Mateo, State of California, have invented an Improvement in Wagon Dumping-Gears; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a mechanism for dumping the load of wagon or vehicle boxes of that class which are mounted upon four wheels and have considerable length.

It consists of a rack-bar or equivalent device carried upon the wagon-body, a pinion mounted upon a journal-shaft having teeth engaging the rack, and means for rotating the pinion, so that by its engagement with the rack it will draw the latter and the wagon-body rearwardly upon the bed until it arrives at the point where it will tilt and discharge its load at the back. In conjunction with this are stops which engage with the shaft or roller and form a bearing about which the wagon-box tilts and which prevent its sliding farther to the rear. In conjunction with these devices are rollers journaled on the bed, upon which rollers the box travels easily as it moves forward and back.

My invention also comprises details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a side elevation of my device. Fig. 2 is a perspective view showing the wagon in a dumped position.

The object of my invention is to provide a mechanism for easily moving the containing box or body of a wagon or similar vehicle in a longitudinal direction and tilting the same, so as to discharge any load which it may contain.

The device may be so constructed as to be applicable to vehicles already built.

As shown in the drawings, A A are a rectangular frame fixed to or supported upon the running-gear of the vehicle, and I have here shown this frame as provided with rollers 2, suitably journaled, so that the box or body 3 rests upon these rollers and is easily movable longitudinally thereon.

In order to secure the frame A in its place, I have shown hook-bars 4 fixed to the reach

or other part of the running-gear and adapted to engage with eyes or staples 5 upon the frame A.

The wagon body or box 3 has one or more rack-bars 6 fixed along its under surface. I have found that one extending along the center of the bottom of the box is sufficient for all ordinary purposes.

Upon the rear of the frame A is journaled a shaft 7, which in the present case is in the form of a roller, the upper surface of which is essentially on the same plane with the upper edges of the journaled rollers 2 to act in conjunction therewith as a bearing for the box. In the center of this journaled shaft is the pinion 8, which engages with the rack-bar 6, and when the shaft is turned in either direction the rack-bar and the box to which it is affixed will be correspondingly moved, riding upon the rollers. At the end of the shaft 7 is a ratchet-wheel 9, and a pawl 10 is carried by a lever 11, which has its end fitted to turn loosely about the reduced end of the shaft, so that the pawl will move over the teeth of the ratchet, and when thrown into engagement with these teeth by moving the lever the shaft and pinion will be turned so as to advance the wagon-body. The teeth of the ratchet-wheel and the end of the pawl are so constructed that the pawl may be reversed to either side of the lever, and thus act to first move the box back until it is discharged and then to advance it into its normal position on the wagon-bed.

12 represents hook-shaped stops fixed to the under side of the box and adapted to engage with the shaft or roller 7 when the box has been moved back far enough to tilt and discharge its load, and these hooks act as fulcrums about which the box turns until the rear end is sufficiently depressed to discharge the load. When the load is discharged, the box can be again moved forward by reversing the movement of the ratchet-wheel until it overbalances and falls upon the bed, when it can be run forward to its normal position. A toolbox located beneath the footboard of the driver's seat serves as a stop to limit the movement toward the front, or any other suitable stop may be employed.

The seat and footboard are mounted upon standards 13, which are here shown as fitting



into loops or eyes on the side of the frame A, so as to be easily removable. This construction allows the box to be moved backwardly to a considerable distance to discharge the load at some distance behind the wagon. Thus when a load of coal or other material to be dumped is in the wagon the wheels are run against the curb, and the body can be run back so far as to discharge the load into the coal-opening in the sidewalk or other place of deposit.

This apparatus can be easily applied to any wagon in ordinary use.

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

1. The combination in a vehicle of a bed having rollers journaled upon each side, a box adapted to rest and move upon said rollers, a shaft journaled across the rear of the bed having a pinion fixed thereto, and a lever by which the shaft may be turned, and a rack-bar upon the box with the teeth of which the pinion remains engaged when the bed is dumped.

2. The combination in a vehicle of a bed having antifrictional bearings, a box resting upon said bearings having a rack-bar fixed to its lower side, a shaft journaled across the rear of the bed having a pinion fixed thereon, the teeth of which are constantly engaged with those of the rack-bar, means for rotating the shaft and pinion to move the box rearwardly, hook-shaped lugs fixed to the box

so as to engage the shaft and act as stops and fulcrums about which the box tilts to discharge its load.

3. The combination in a wagon of a bed having antifrictional bearings, a box supported and movable upon said bearings and having a rack-bar fixed to its lower side, a shaft journaled across the rear of the bed having a pinion fixed thereto, the teeth of which constantly engage those of the rack-bar, a ratchet-wheel fixed upon the outer end of the shaft, a lever loosely turnable with relation to the shaft and a pawl pivoted to the lever and adapted to engage the teeth of the ratchet to rotate the shaft and advance the box.

4. The combination in a wagon of a bed, a box resting thereon, a rack-bar fixed to the bed, a pinion fixed to a shaft journaled at the rear of the bed and constantly engaging the rack-bar, pawl-and-ratchet mechanism by which the shaft and pinion may be revolved to move the box, fulcrum-hooks to limit the rearward movement of the box about which it is tiltable, a stop to limit the movement of the box to the front and hooks by which the bed is removably attached to the running-gear.

In witness whereof I have hereunto set my hand.

PABLO VASQUEZ.

Witnesses:

S. H. NOURSE,

JESSIE C. BRODIE.