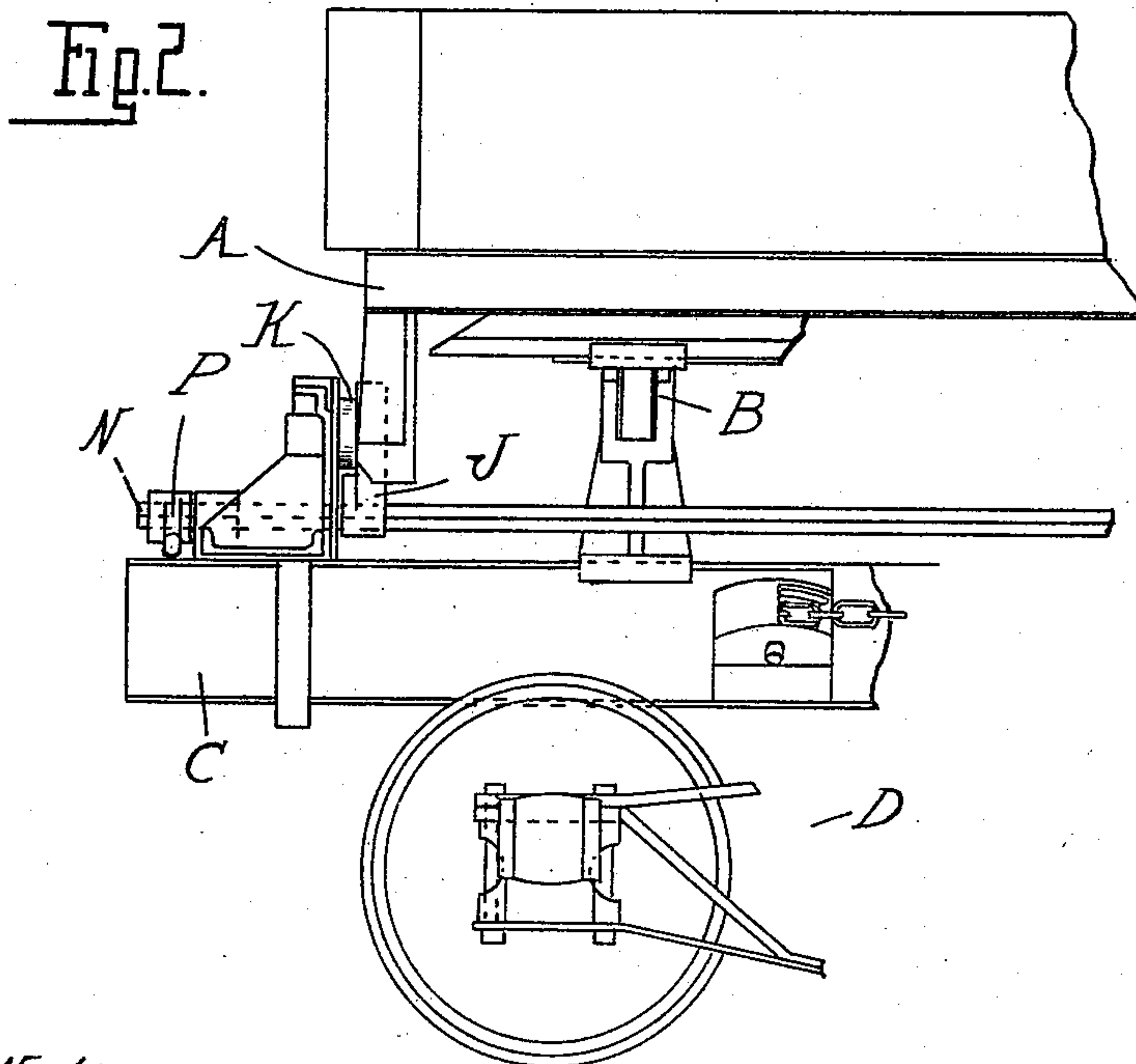
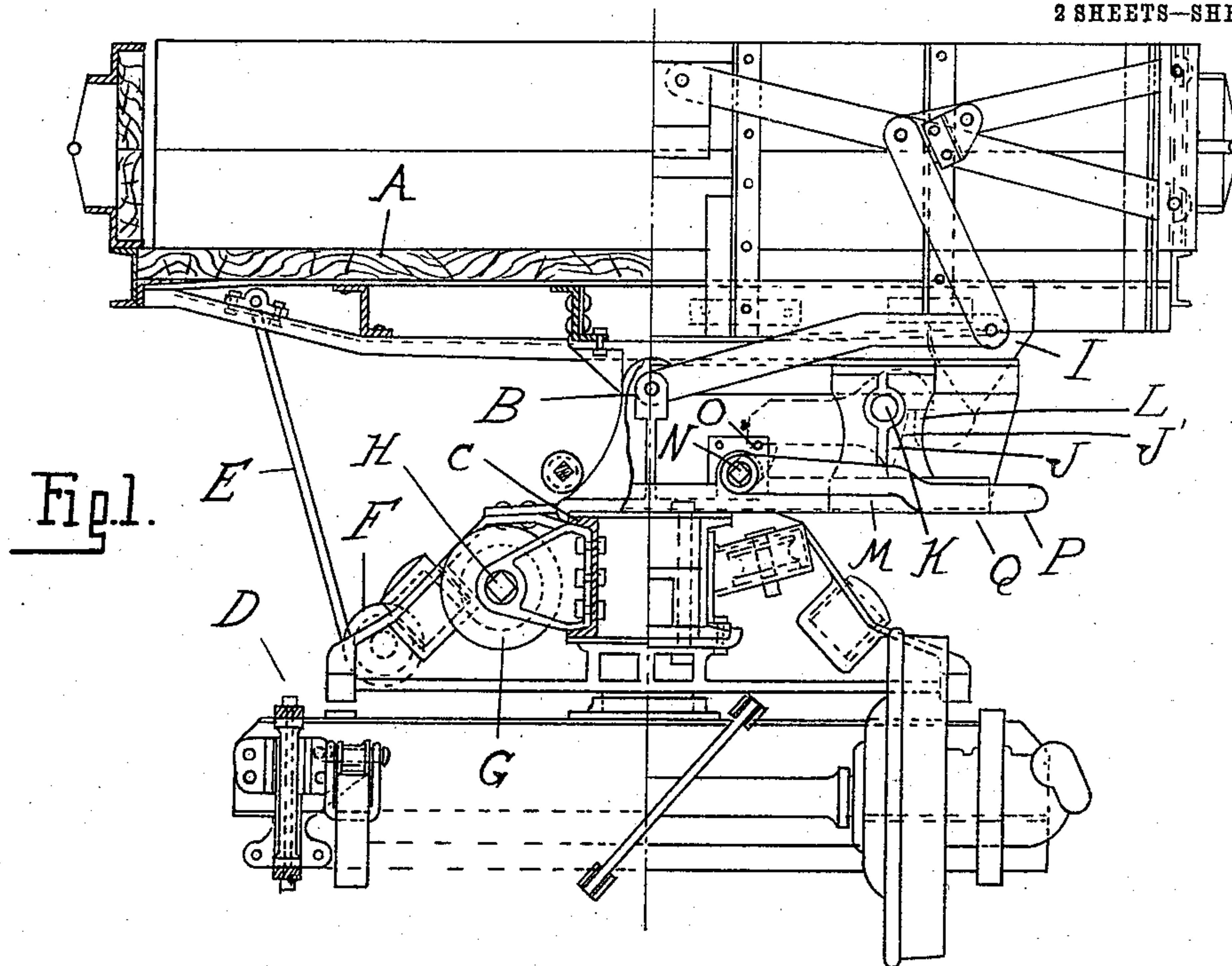


C. W. RUSSELL.  
 LOCKING MECHANISM FOR RAILWAY DUMP CARS.  
 APPLICATION FILED FEB. 18, 1909.

966,603.

Patented Aug. 9, 1910.

2 SHEETS—SHEET 1.



Witnesses  
*H. B. Ford*  
*M. B. Knapp*

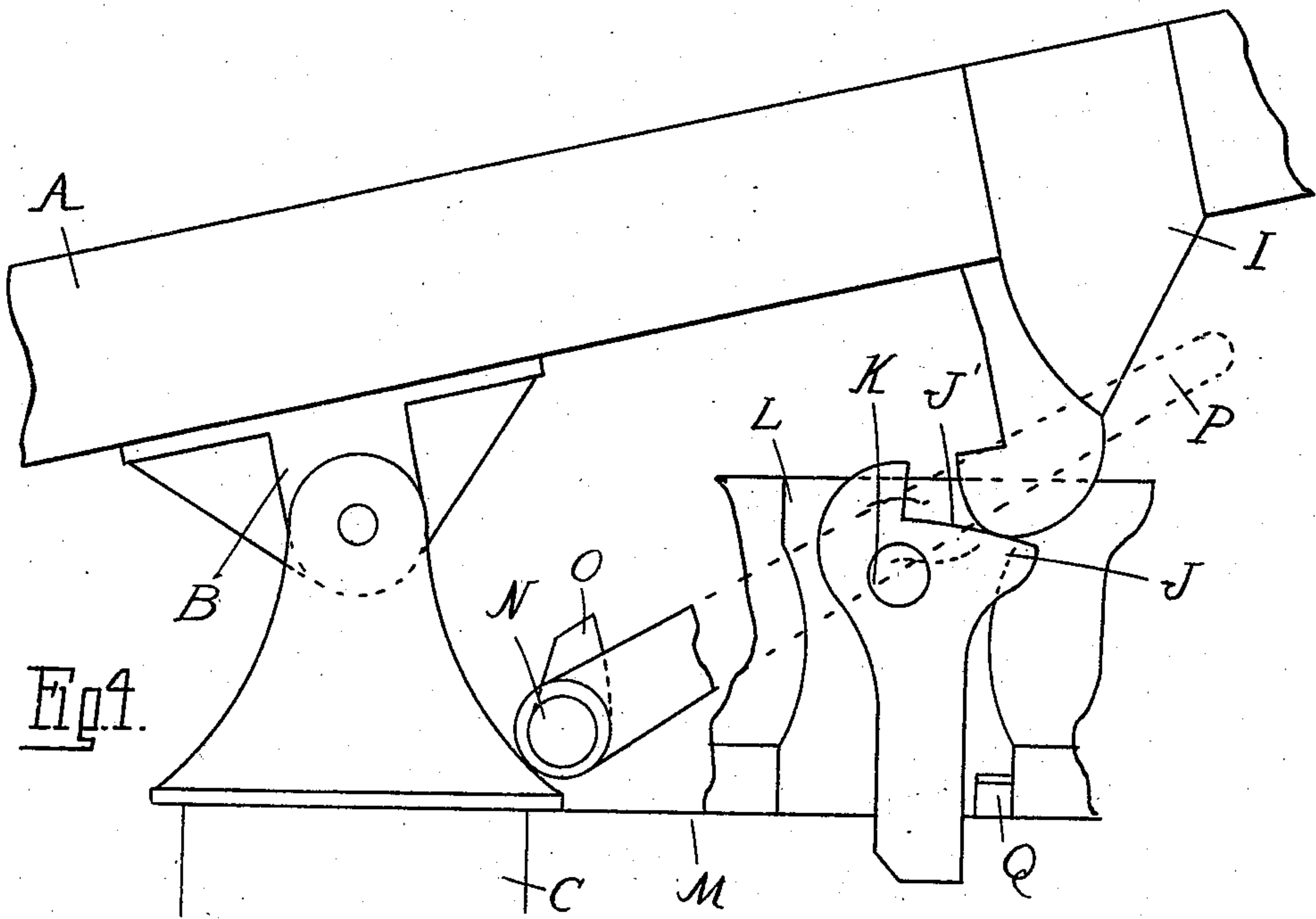
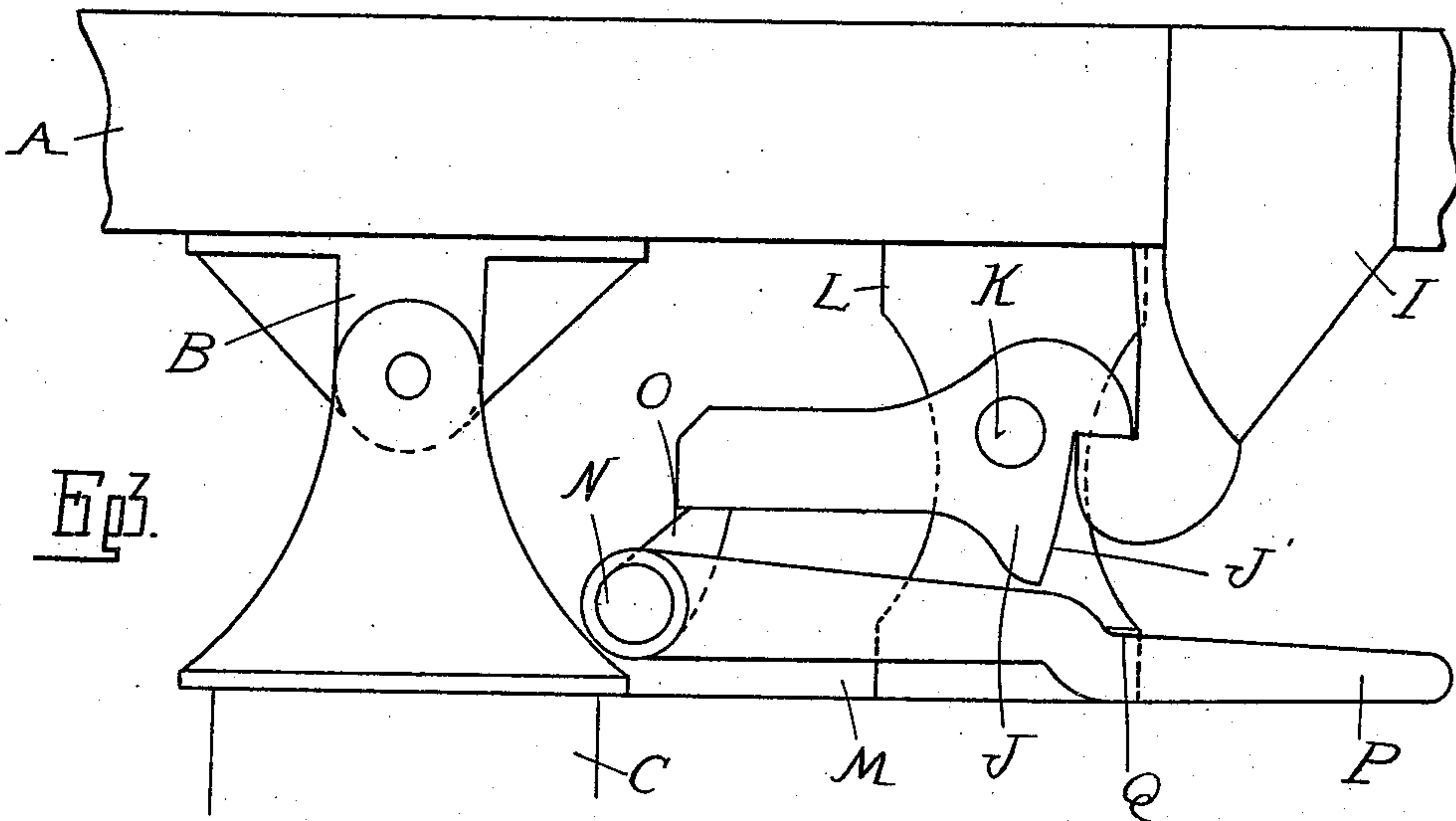
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 By *Whitman, Hubert M. Whitman*

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2 SHEETS—SHEET 2.



Witnesses  
*W. C. Ford*  
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*Attys*



# UNITED STATES PATENT OFFICE.

CLINTON W. RUSSELL, OF DETROIT, MICHIGAN.

LOCKING MECHANISM FOR RAILWAY DUMP-CARS.

966,603.

Specification of Letters Patent.

Patented Aug. 9, 1910.

Application filed February 18, 1909. Serial No. 478,669.

*To all whom it may concern:*

Be it known that I, CLINTON W. RUSSELL, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Locking Mechanism for Railway Dump-Cars, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to railway dump cars, and consists in the means employed for normally locking the car in upright position.

In the drawings—Figure 1 is an end elevation of the car; Fig. 2 is a partial side elevation thereof; Fig. 3 is a view similar to Fig. 1 of the locking mechanism; and Fig. 4 is a similar view with the parts in unlocked position.

A is the box or body of the car, which is centrally pivotally supported by brackets B so as to be capable of tilting sidewise in either direction. The brackets B are mounted upon the longitudinally-extending sills C which in turn are mounted upon the trucks D. Any suitable means for tilting the car may be employed, but, as shown, E is a cable which passes around a sheave F and engages a drum G upon a shaft H.

Usually cars of this type are held normally in upright position by chains arranged on opposite sides thereof, which are connected to the truck and are provided with a detachable link which when opened will permit of the dumping of the car. An objection to this chain locking means is that it is practically impossible to take up all the lost motion and consequently when the cars are in transit there will be more or less oscillation, frequently resulting in the breaking of the chains and the dumping of the load. Furthermore, the chains can only be disengaged when the car is standing still.

With the present invention, a locking means is provided in which all lost motion may be eliminated, and which may be disengaged by an operator upon the side of the track while the car is in motion.

I are hooks depending from the car body, preferably at opposite ends thereof and upon opposite sides of the center.

J are dogs for engaging the hooks I, which are pivotally attached by pins K to brackets L. These brackets are mounted upon the stationary frame of the car, being directly attached to a cross bar M, which is

mounted upon the longitudinal sills C at the end thereof.

N is a rock shaft extending longitudinally of and journaled in bearings on the bar M, and O is a finger or detent upon this rock shaft for engaging the inner end of the dog J and holding the same in engagement with the hooks O.

P is a lever secured to the rock shaft N and extending adjacent to the bar M toward the side of the car into a position where it may be operated by a person at the side of the track.

With a construction as shown and described, in the normal position of the parts, as illustrated in Figs. 1 and 3, the dogs J are in engagement with the hooks I, and are themselves held from movement by the detents O. As these parts are arranged upon opposite sides of the car, they will effectually hold the body from tilting in either direction. To unlock the car the operator adjusts the lever P, which is normally held from movement by any suitable holding device, such as indicated at Q. This adjustment of the lever disengages the detent O from the dog J, permitting the latter to swing by gravity into the position indicated in Fig. 4. This will release the hooks I and permit that side of the car to tilt upward. Upon the restoration of the car body to its normal position the hooks I will first engage the projecting shoulder J' of the dog J, and will swing the latter into a position where it may again be engaged by the detent O. Thus by raising the lever P and engaging it with the holding device Q the parts will again be securely locked, and during this movement the detent O will take up all lost motion.

What I claim as my invention is:

In a dump car, the combination with a frame and a tilting body mounted thereon, of a cross sill on said frame beyond the end of said body, a hook depending from said body, a dog pivotally mounted upon said cross sill in engagement with said hook, and a rockable detent having a wedging engagement with said dog.

In testimony whereof I affix my signature in presence of two witnesses.

CLINTON W. RUSSELL.

Witnesses:

W. J. BELKNAP,  
JAMES P. BARRY.