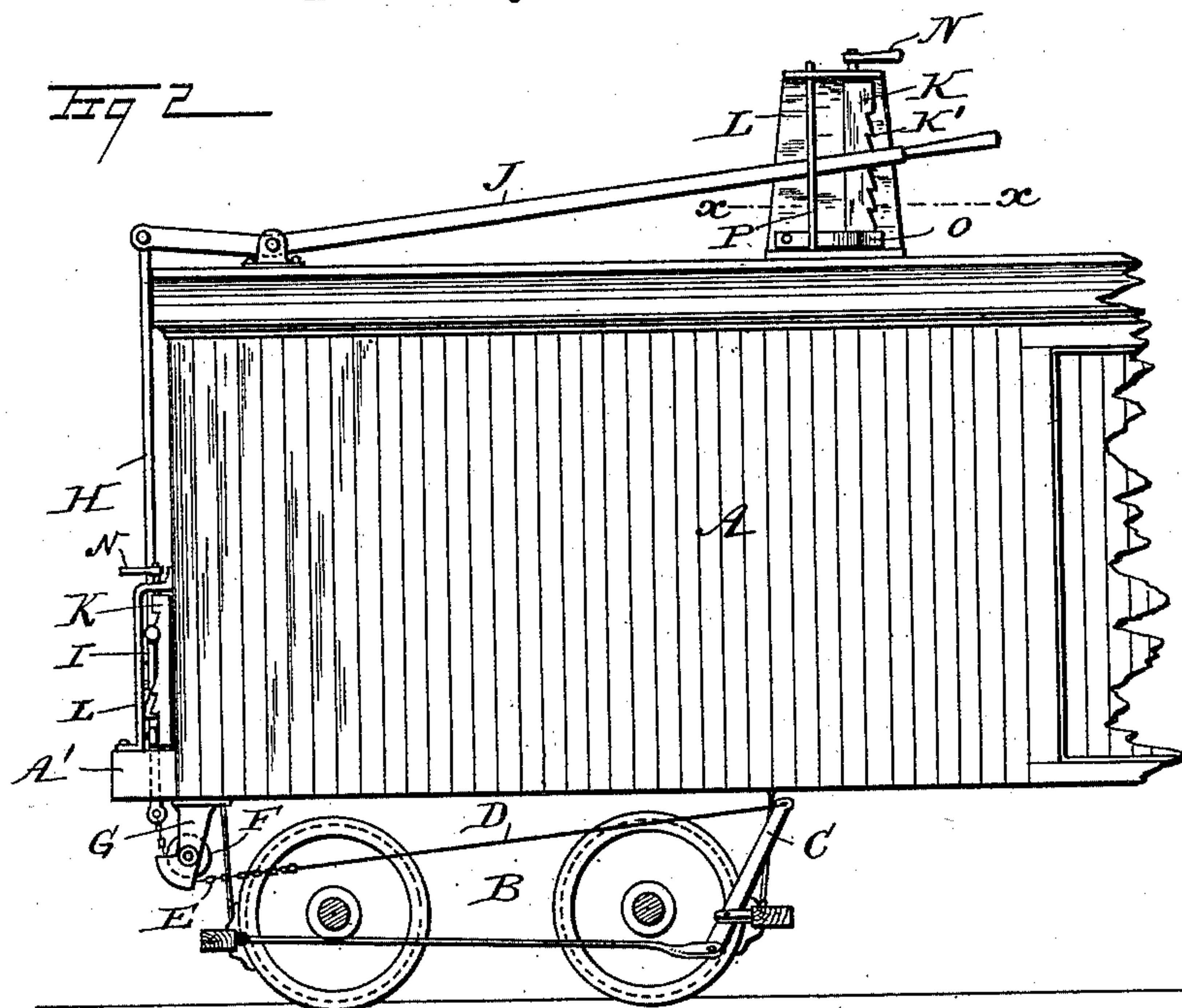
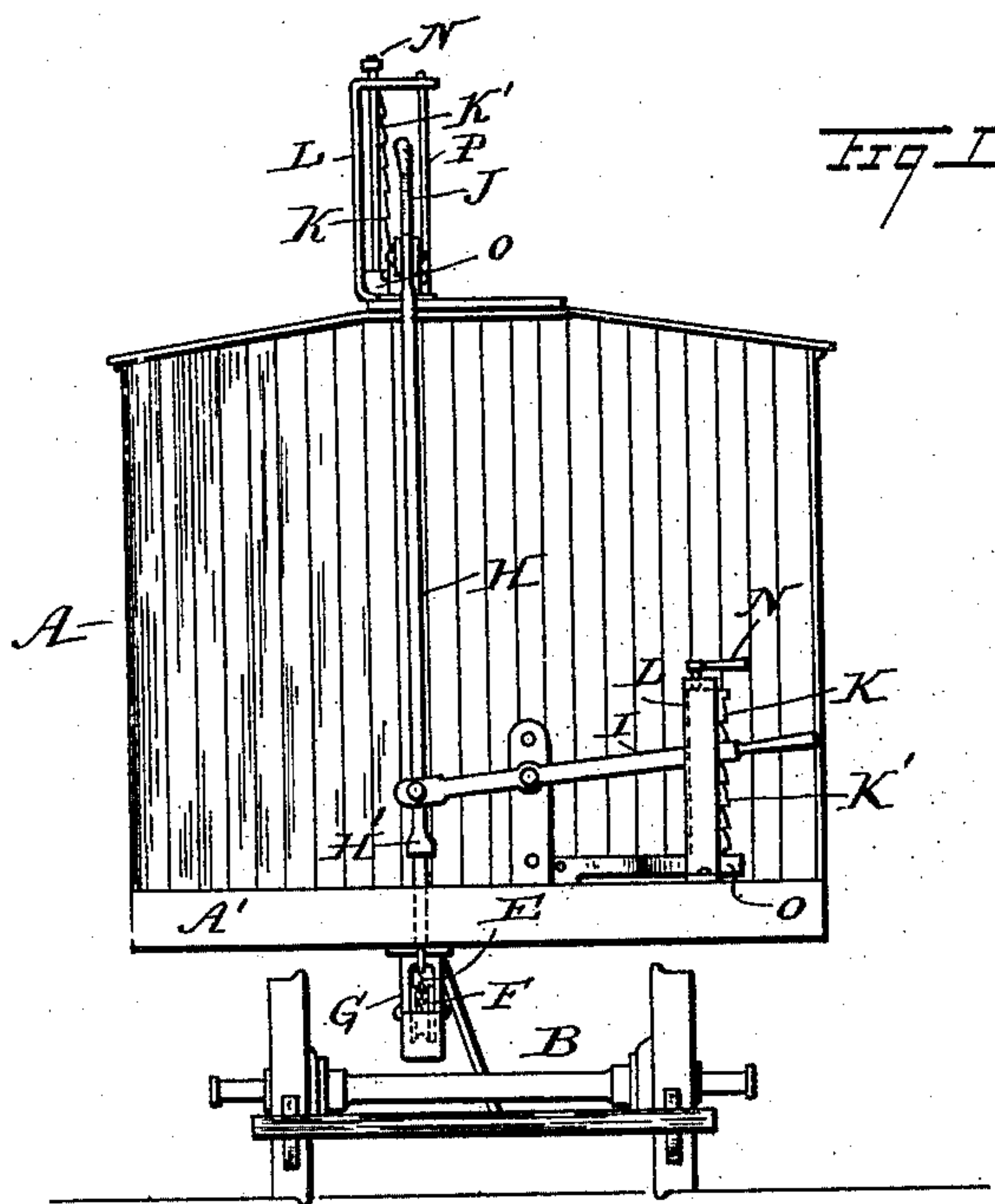


(No Model.)

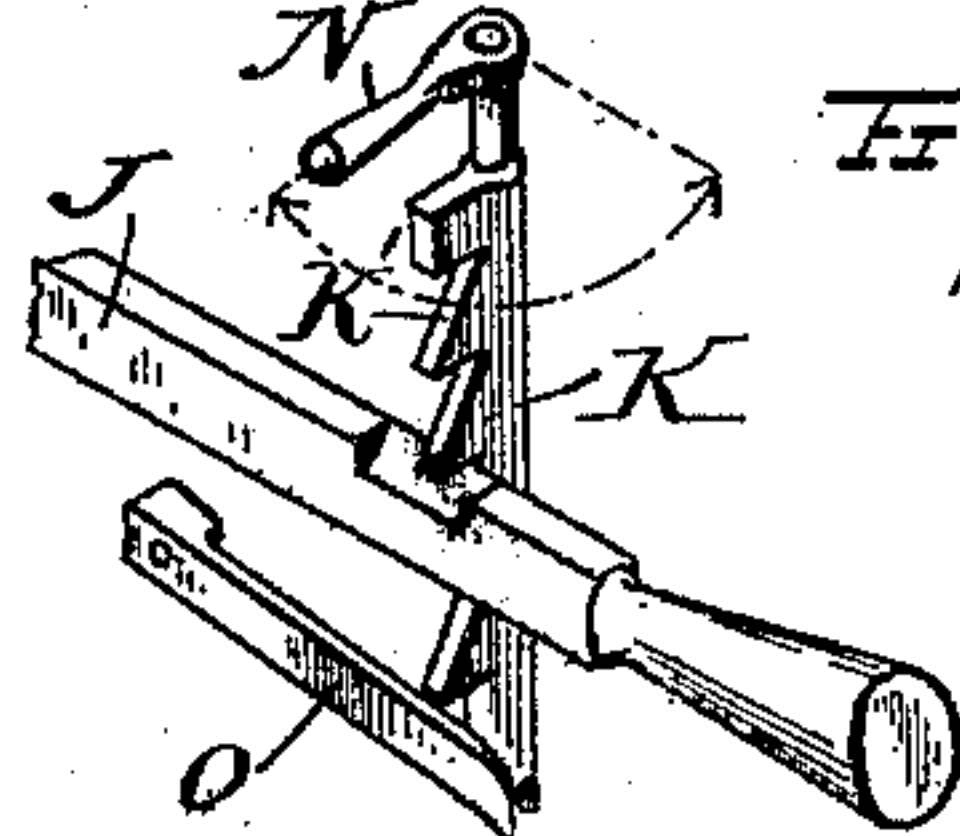
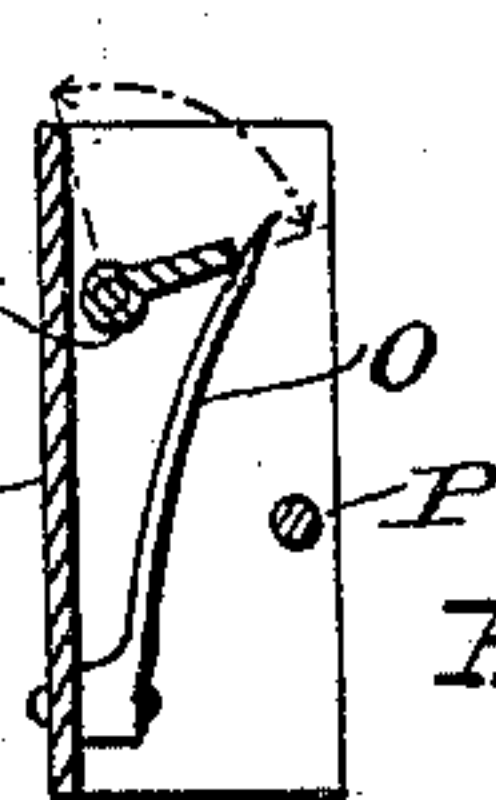
J. KINNEY.
CAR BRAKE.

No. 444,990.

Patented Jan. 20, 1891.



WITNESSES:
H. Walker
C. Sedgwick



INVENTOR:

J. Kinney
BY Munn & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN KINNEY, OF PHILIPSBURG, MONTANA.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 444,990, dated January 20, 1891.

Application filed May 15, 1890. Serial No. 351,896. (No model.)

To all whom it may concern:

Be it known that I, JOHN KINNEY, of Philipsburg, in the county of Deer Lodge and State of Montana, have invented a new and Improved Mechanism for Operating Railroad-Car Brakes, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved mechanism for operating railroad-car brakes, and specially designed for box and flat cars, being simple and durable in construction, very effective in operation, and arranged so as to enable the operator to quickly set or throw off brakes from either the side or the top of the car.

The invention consists of a rod mounted to slide on the end of the car and connected by a chain or rope with the brake mechanism proper and a lever or levers pivotally connected with the said rod and fulcrumed on the car.

The invention also consists of certain parts and details and combinations of the same, as will be hereinafter fully described, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is an end view of a car provided with the improvement; Fig. 2, a side elevation of the same with parts in section. Fig. 3 is a perspective view of the locking device of the lever, and Fig. 4 is a sectional plan view of the same on the line $x-x$ of Fig. 2.

The car A is provided with a car-brake B, of any approved construction, and provided with the brake-lever C, connected with the rod D, extending to one end of the car and connected with one end of a rope or chain E, passing under a pulley F, mounted to turn in a suitable keeper G, secured to the under side of the car near each end. The upwardly-extending end of the chain E is connected with a vertically-arranged rod H, passing through the transverse beam A' of the car A at its end, the said rod being adapted to slide vertically and provided with a collar H', adapted to rest on the top of the cross-beam A' when the brake mechanism B is off or released from the wheels of the car.

The rod H is pivotally connected with a lever I and with a lever J. The lever I extends transversely and is fulcrumed at the end of the car, as is plainly illustrated in Figs. 1 and 2, while the lever J extends longitudinally and is fulcrumed on top of the car, as is also plainly shown in the said figures. A locking device is connected with each of the levers I and J, and is provided with a flat notched bar K, extending vertically and mounted to turn in suitable bearings in a keeper L, secured either to the end of the car for the lever I or on top of the car for the lever J, as is plainly shown in the drawings. A handle N is secured to the upper pivot end of the flat bar K, so as to conveniently turn the latter in such a manner that the notches K' extend either toward the respective lever J or I, as illustrated in Fig. 3, or from the same, as shown in Fig. 2.

A spring O is secured on the keeper L and is adapted to press with its free end on the flat bar, so as to throw the latter to one side when either of the levers J or I is pressed downward out of contact with the respective tooth on the notched bar K. By pressing one lever the other is released from its bar K, which latter is then turned to one side and clear out of contact with the respective bar K, so that the levers can move freely up or down without catching on any of the teeth or notches on the bars K.

The operation is as follows: When the notched bar K stands in the position shown in Fig. 2, the levers J and I extend loosely in the keepers L, the rod H being in its lowermost position, so that the brake mechanism B is off or disengaged. Now, when the operator desires to apply the brakes while standing on the ground or while on the top of the car, he presses either the lever I or J downward at its handle end, so that the rod H is raised and exerts a pull on the chain E, connected with the rod D, which, by pulling on the brake-lever C, applies the brakes. When the operator has pressed the respective lever I or J downward, the handle N is turned so as to bring the notches K' to the front, the lever I or J being then thrown into the corresponding notch in a lowermost position, so as to lock the respective lever in place and

holding the brakes applied. When the operator desires to throw off the brakes quickly, he simply presses on the lever I or J, and the spring O swings the bar K to disengage the
 5 respective notch K' from the lever I or J. As the latter is then released, the rod H slides downward, being sufficiently heavy for this purpose, so that the brake mechanism B is thrown off. In order to conveniently lock
 10 the lever I or J in place in one of the notches K' of the bar K, the said lever is provided on its top with a bevel, as is plainly illustrated in Fig. 3. The teeth of the bar K are slightly undercut.

15 It will be seen that this mechanism for actuating railroad-car brakes is very simple and durable in construction, requires very little power for operating it, and is within convenient reach of the operator standing either on
 20 the ground or on top of the car. It will further be seen that as the position of the top lever J can be readily seen by the engineer or conductor in charge of a train he can readily detect whether all the brakes of the train
 25 are on or off.

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

30 1. A locking device for brake-operating levers, comprising a pivoted and notched bar provided with a handle for turning it to bring its notches into engagement with the lever, substantially as described.

35 2. A locking device for brake-operating levers, comprising a pivoted and spring-pressed

notched bar provided with a handle for turning it to bring its notches into engagement with the lever, substantially as herein shown and described.

3. In a mechanism for operating railroad-car brakes, the combination, with a rod mounted to slide vertically at the end of the car and adapted to be connected with the brake mechanism proper, of a lever pivotally connected with the said rod and fulcrumed on the car, 40
 45 a locking device connected with the said lever and comprising a notched bar mounted to turn and adapted to engage by means of one of its notches the said lever, and a handle held on the said notched bar for conveniently 50
 turning the same, substantially as shown and described.

4. In a mechanism for operating railroad-car brakes, the combination, with a rod mounted to slide vertically at the end of the car and 55
 adapted to be connected with the brake mechanism proper, of a lever pivotally connected with the said rod and fulcrumed on the car, a locking device connected with the said lever and comprising a notched bar mounted to turn 60
 and adapted to engage by means of one of its notches the said lever, a handle held on the said notched bar for conveniently turning the same, and a spring for turning the said notched bar to relieve the brake, substantially as shown 65
 and described.

JOHN KINNEY.

Witnesses:

FRANK D. BROWN,
 JOE. H. JONES.