

No. 706,437.

Patented Aug. 5, 1902.

G. E. & J. S. MYERS.
MACHINE FOR HANDLING VEHICLES.

(Application filed Feb. 5, 1901.)

(No Model.)

3 Sheets—Sheet 1.

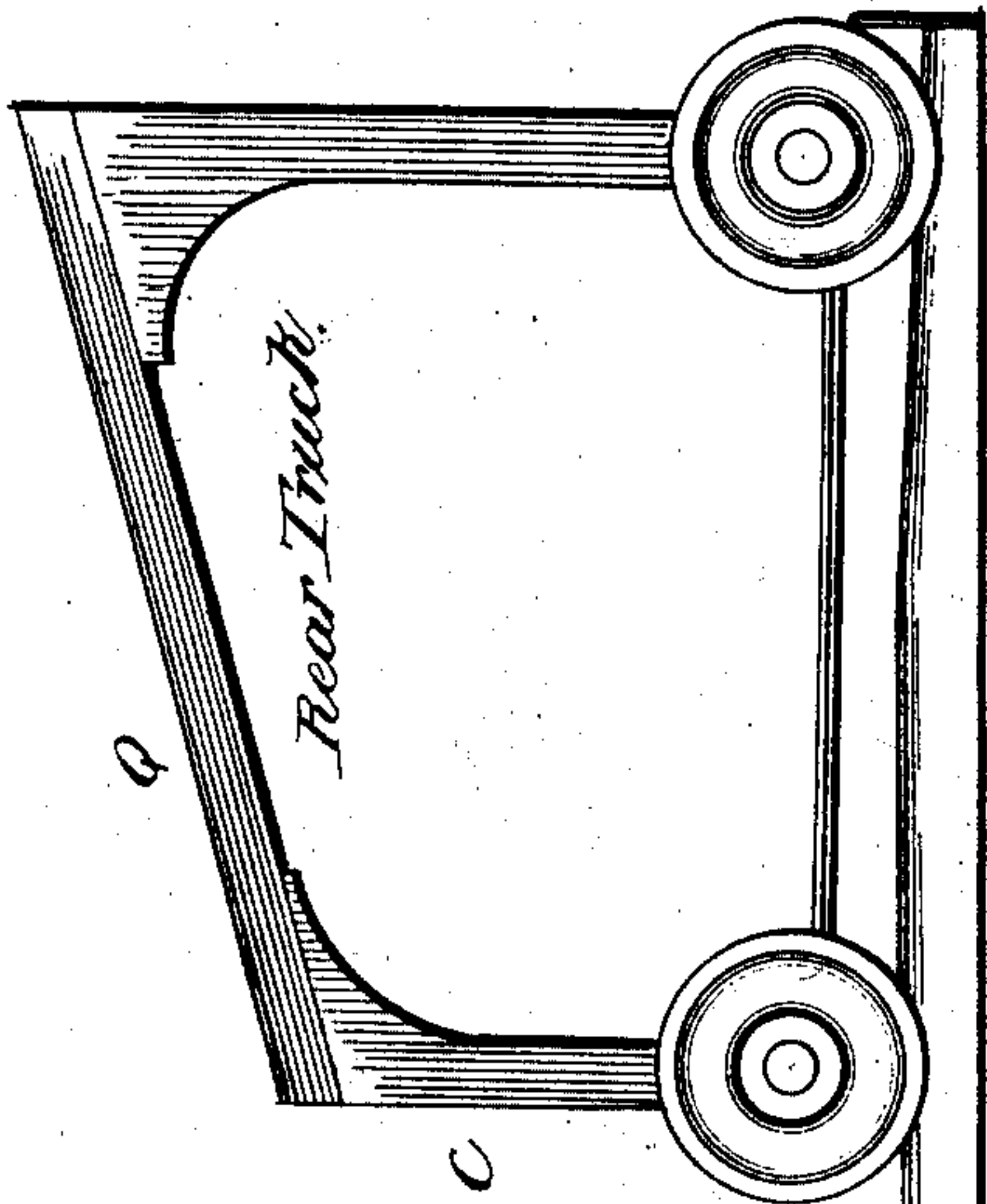


Fig. 1.

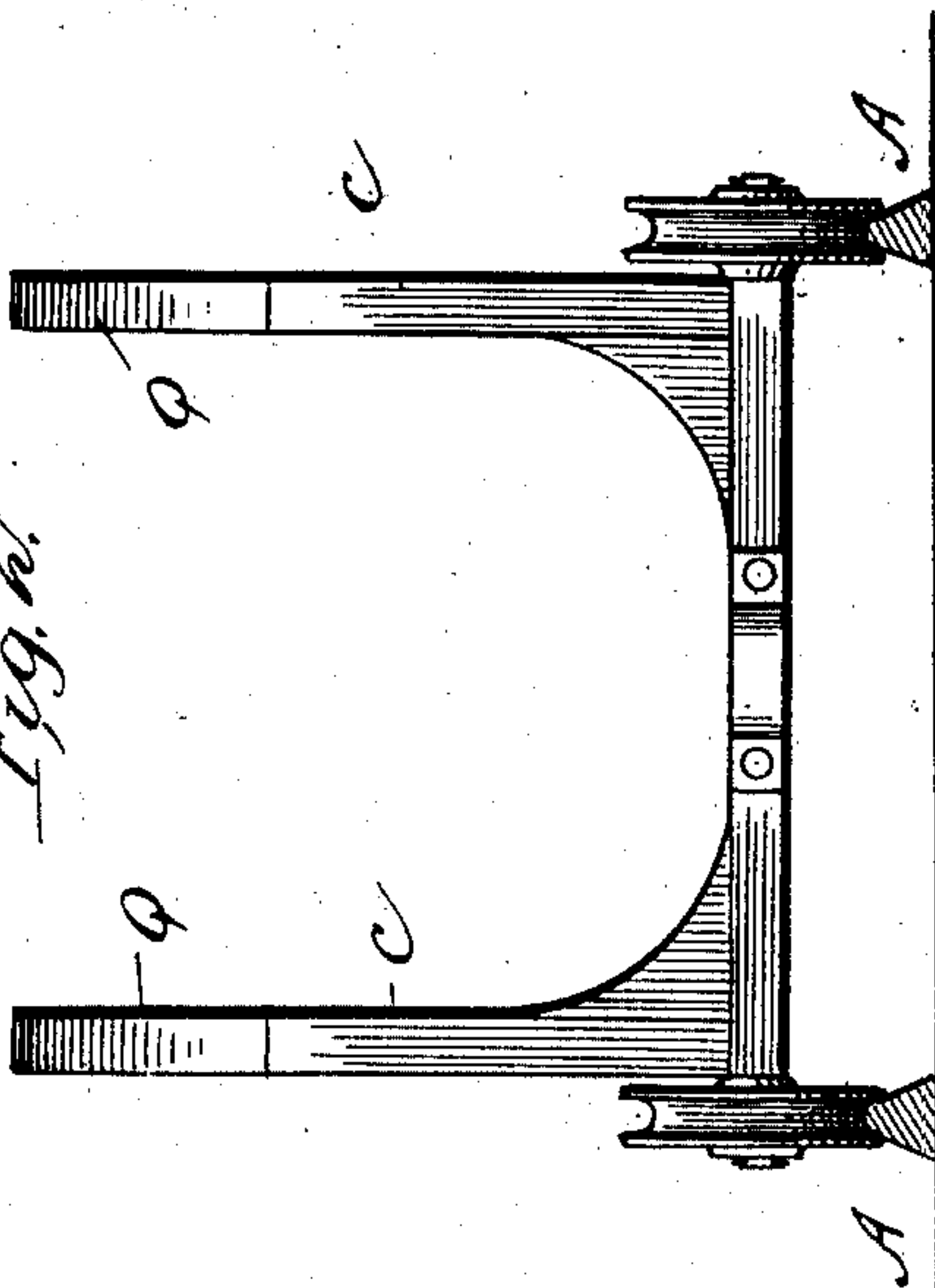
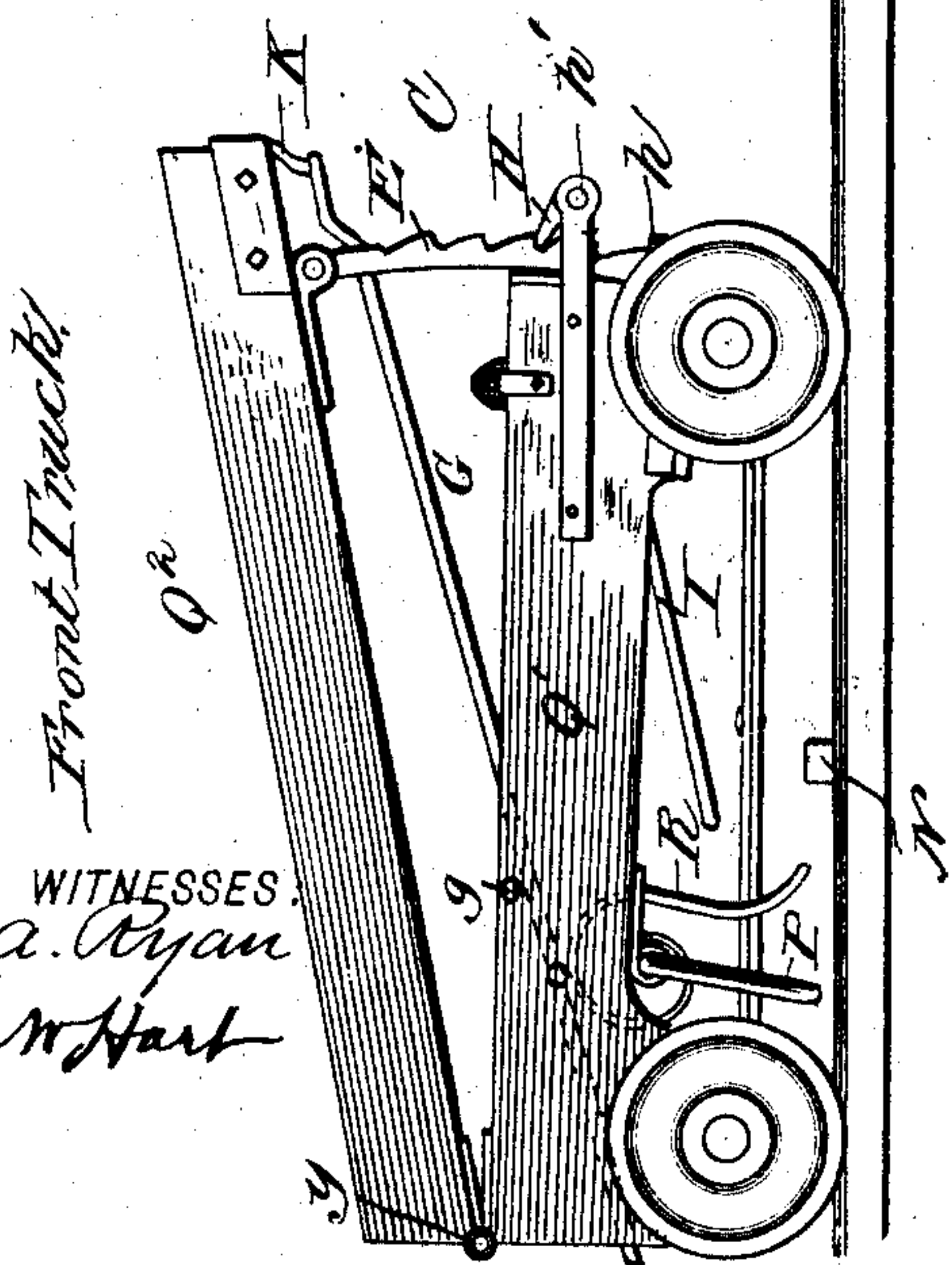


Fig. 2.



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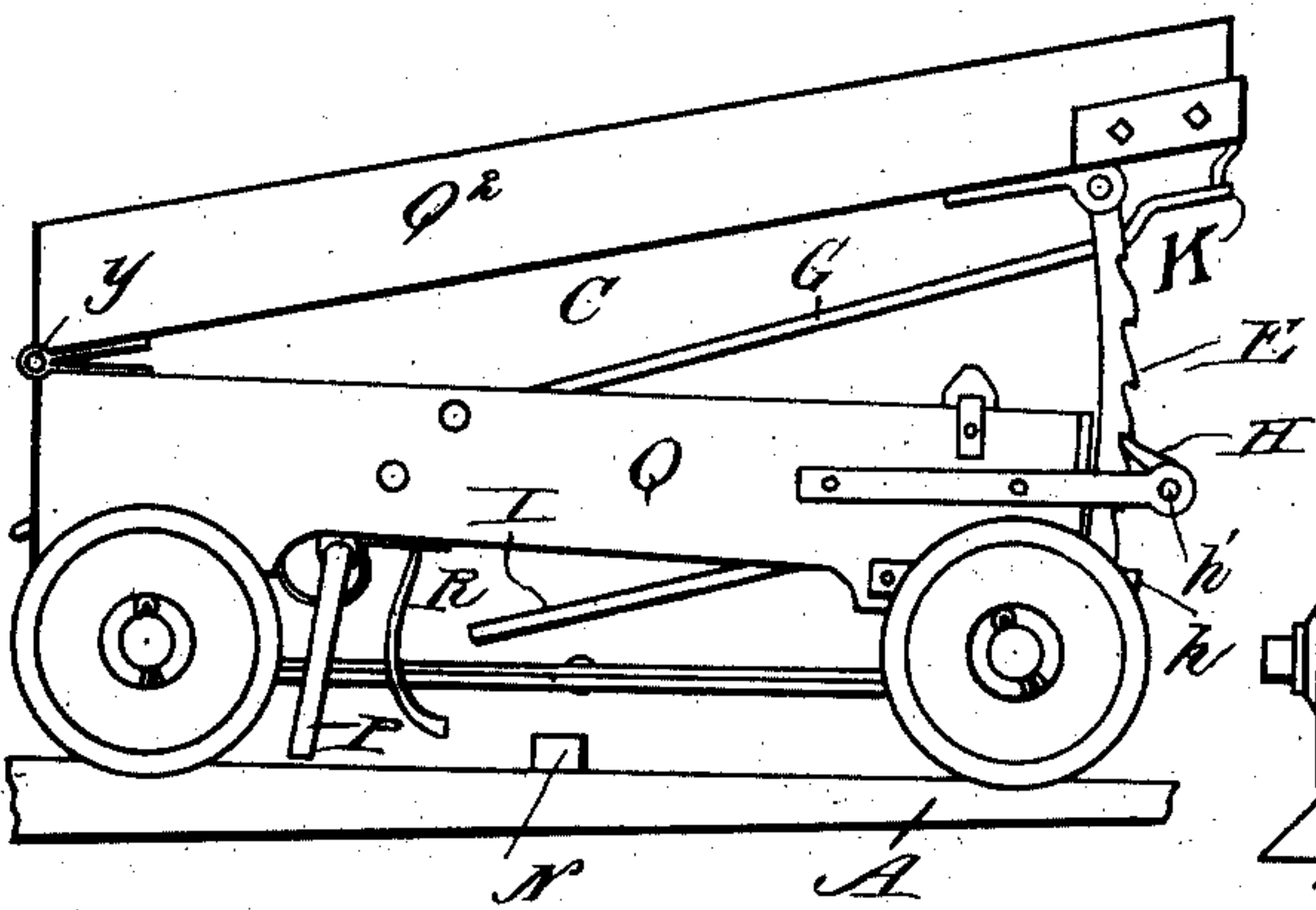


Fig. 3.

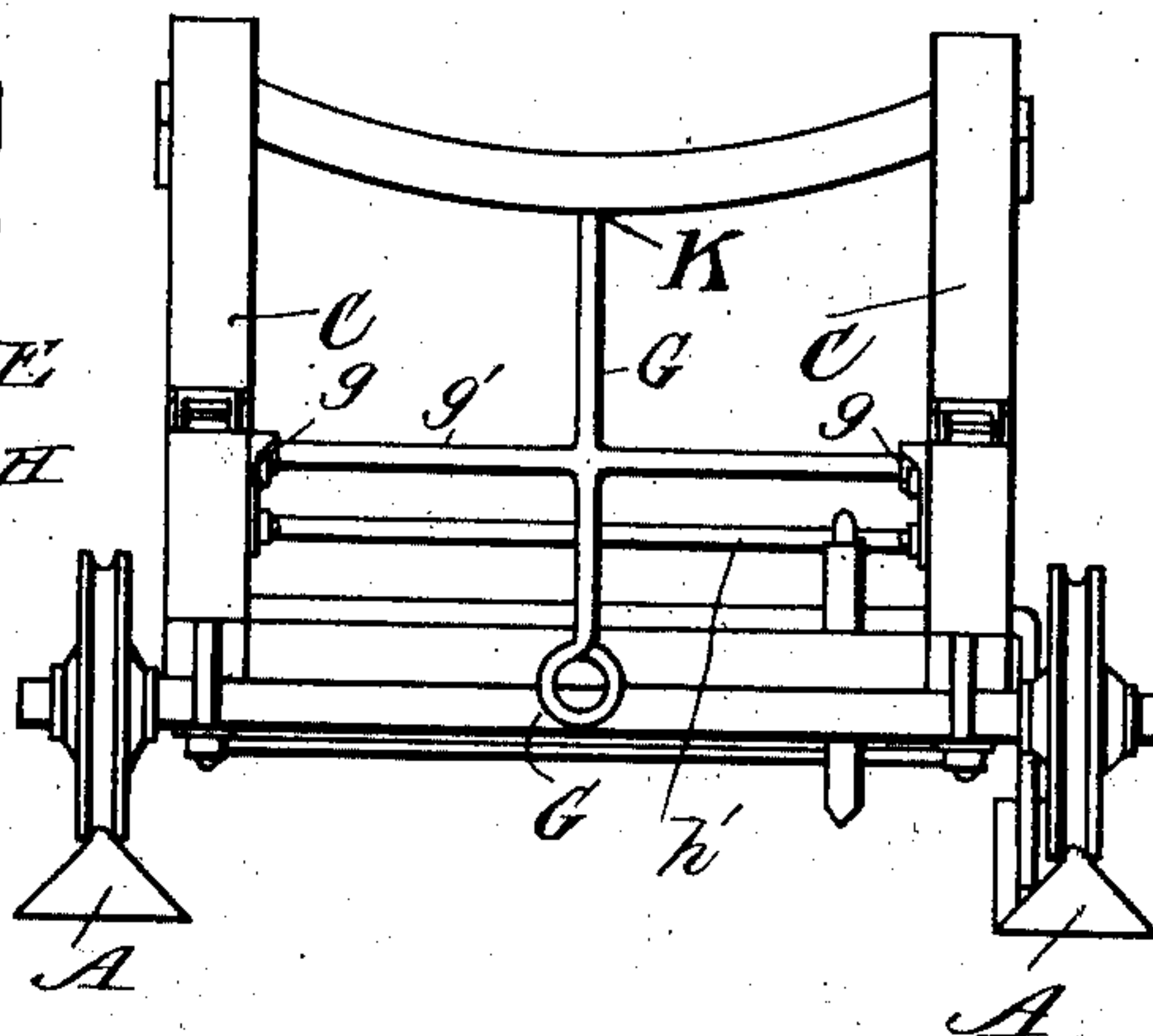


Fig. 4.

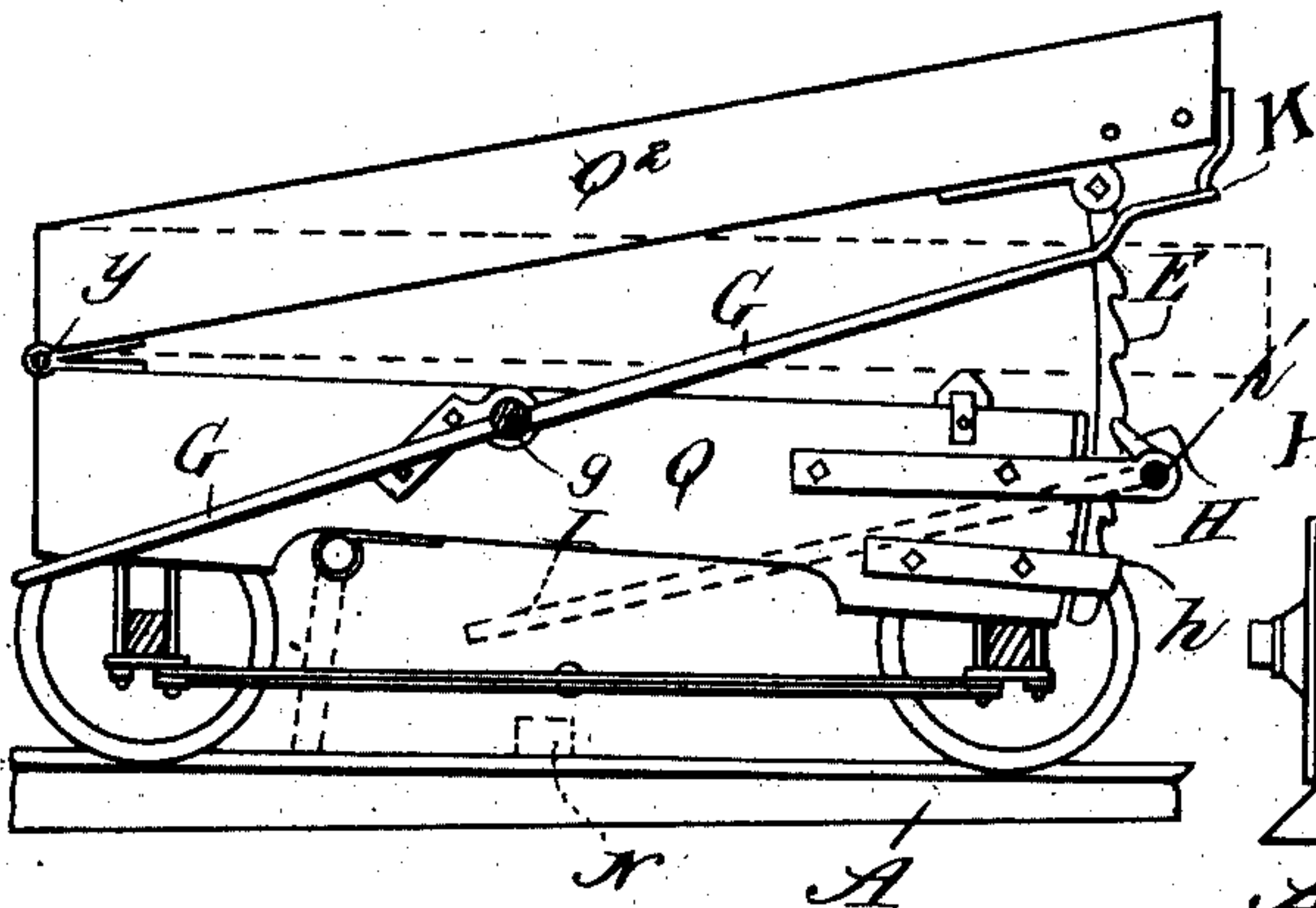


Fig. 5.

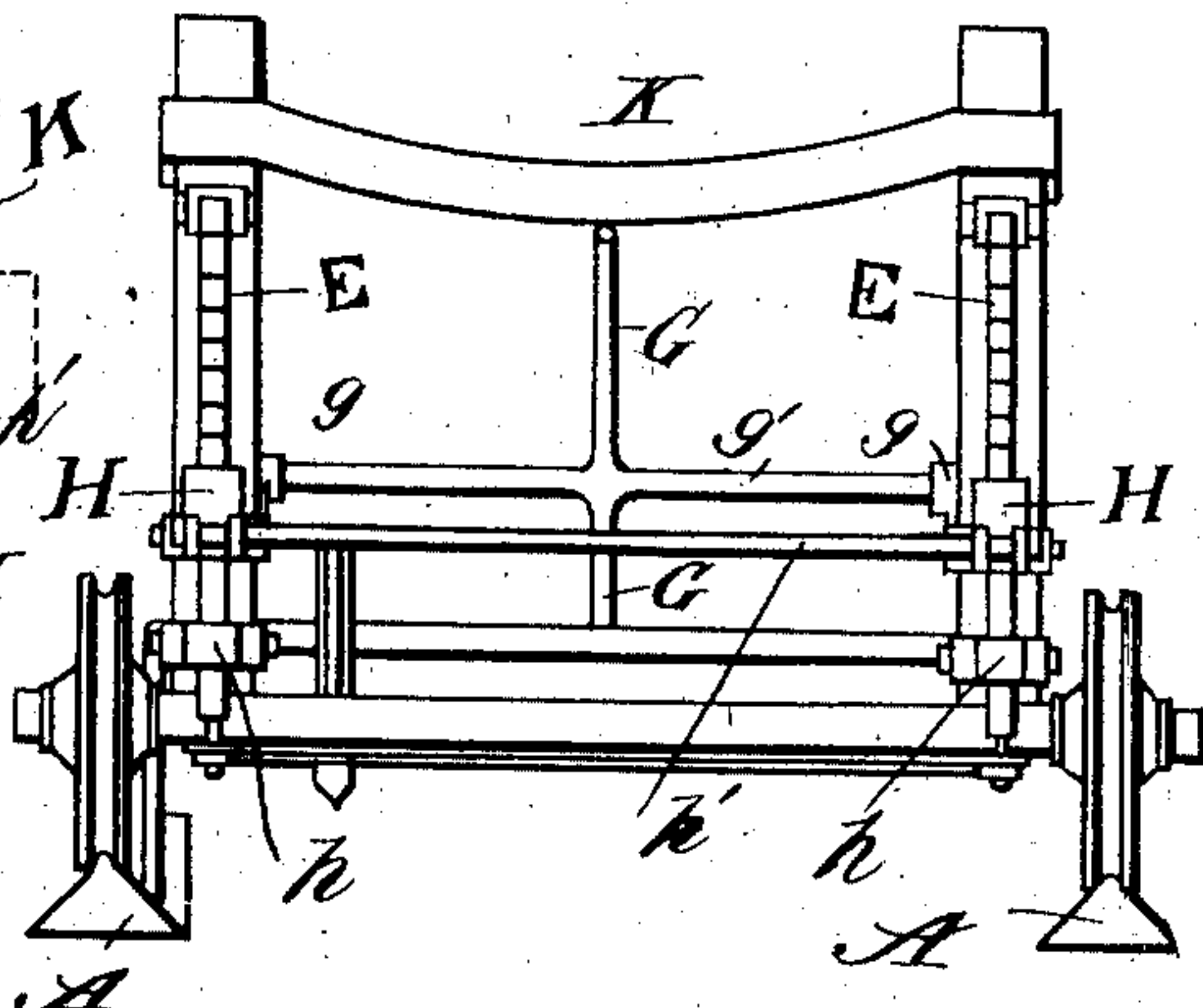


Fig. 6.

Witnesses.

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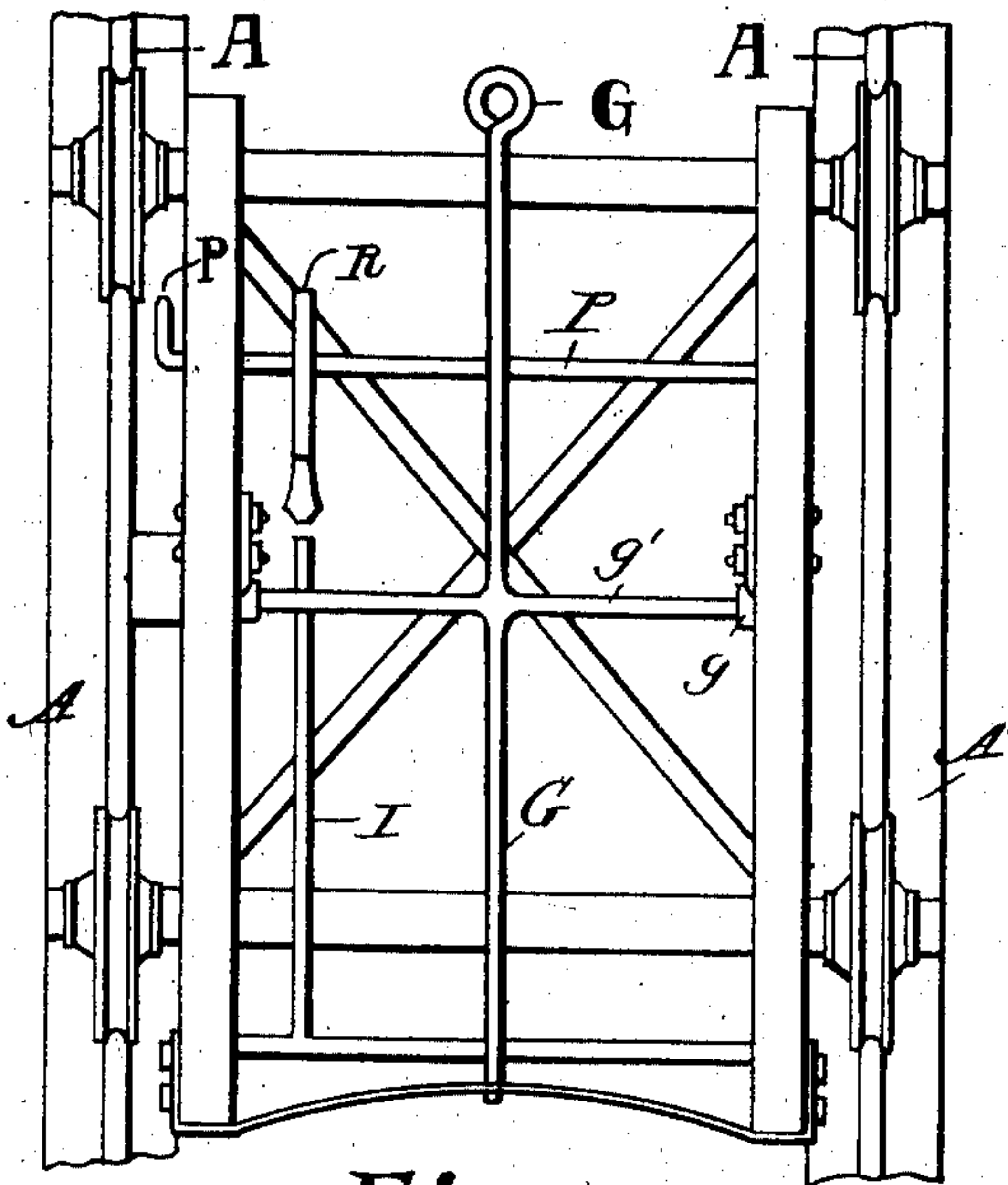


Fig. 7.

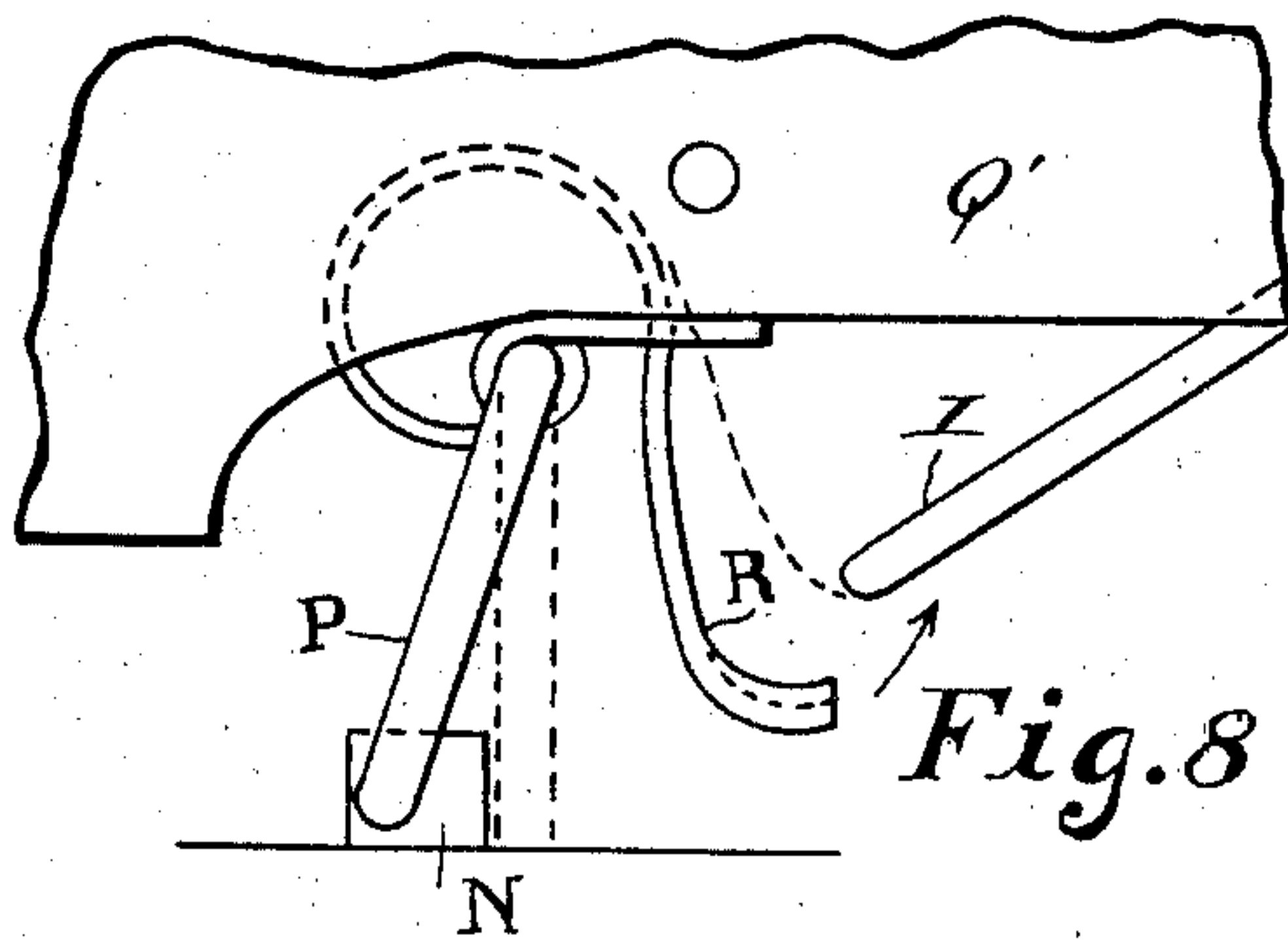
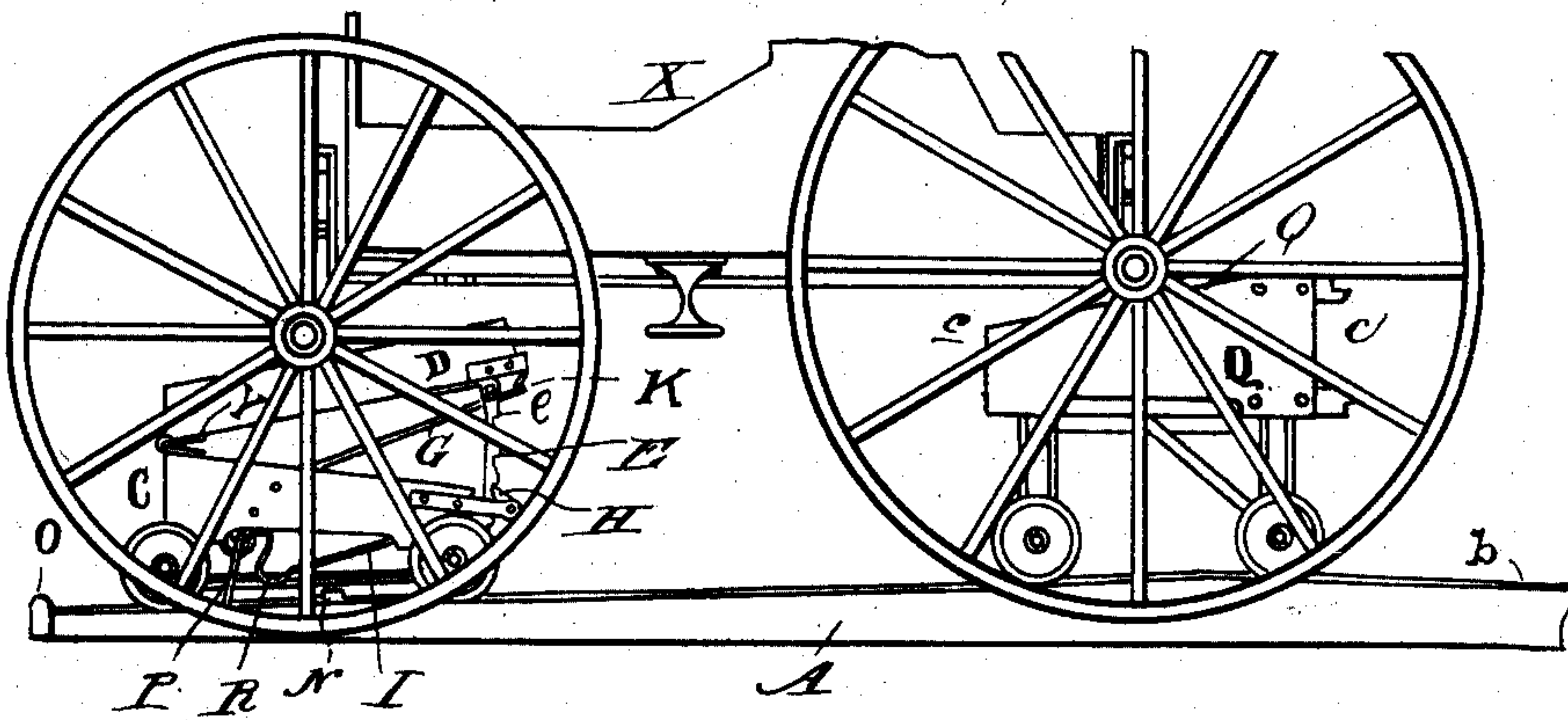


Fig. 8.

Fig. 9.



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UNITED STATES PATENT OFFICE.

GEORGE E. MYERS AND JESSE S. MYERS, OF ST. JOSEPH, MISSOURI.

MACHINE FOR HANDLING VEHICLES.

SPECIFICATION forming part of Letters Patent No. 706,437, dated August 5, 1902.

Application filed February 5, 1901. Serial No. 46,142. (No model.)

To all whom it may concern:

Be it known that we, GEORGE E. MYERS and JESSE S. MYERS, citizens of the United States, residing at St. Joseph, in the county of Buchanan and State of Missouri, have made certain new and useful Improvements in Apparatus for Jacking Carriages and Wagons, of which the following is a specification.

In the accompanying drawings, three sheets, Figure 1 is a side view of the two trucks and the tracks constituting the apparatus employed for carrying out our invention. Fig. 2 is an end view of the rear truck. Fig. 3 is a side view of the front truck. Fig. 4 is a front end view of the front truck. Fig. 5 is a vertical section of the front truck. Fig. 6 is a rear end view of the front truck. Fig. 7 is a plan view of the front truck. Fig. 8 is a detail view illustrating a portion of the front truck. Fig. 9 is a side view illustrating the practical use of our invention in connection with a buggy.

In carrying out our invention we employ two trucks of peculiar construction and two rails for said trucks, which are inclined for the purpose hereinafter stated. The details of construction, arrangement, and operation are as hereinafter described.

In the drawings, A indicates two rails constituting a short track, the same being so arranged that the front end is lower than the rear end *b*—that is to say, the track is inclined from the front end to a certain point, as shown. We employ two independent trucks C and *c*.

C indicates the front truck, and *c* the rear truck, each provided with four flanged wheels adapted to run on the rails A. The rear truck *c* (see Figs. 1 and 9) is provided with an inclined top Q, which is fixed or immovable as to the body of the truck. It will be seen that the inclination of the top Q is toward the front truck C. The latter is constructed of the fixed frame Q' and an adjustable top portion Q², which is hinged to the base or fixed portion at Y. This adjustable top portion Q² may be raised and lowered at its free end, where it is provided with two pivoted ratchet-bars E, that work in keepers *h*, secured to the fixed frame Q'. Pawls H are adapted to engage these ratchet-bars, the same being mounted upon a transverse shaft

h', which is journaled in the keepers *h*. A lever I projects from the shaft *h'* beneath the truck-frame Q'. The said lever and the pawls H being rigidly connected with the shaft *h'*, it is apparent that by raising the free end of said lever the pawls will be disengaged from the ratchets E, so that the adjustable frame Q² may be lowered at will. This operation may be effected automatically by rocking lever P, which is journaled beneath the fixed frame Q' and provided with a curved spring-arm R, (see Figs. 1 and 8,) which extends downward and is made of such width that when raised it may engage and lift the free end of the pawl-lever I. The rocking lever P is tripped—that is to say, rocked in its bearings—and the curved spring-arm R is drawn up, so as to release the pawls from the ratchets when the front truck C passes down the incline of the track A, so that the lever P engages or strikes upon a projection N, located beside one of the rails. When the truck passes far enough to carry the lever-arm P over the stop N, the lever resumes its normal position, (shown in full lines, Figs. 1 and 9,) and the weight of the pawl-lever I causes it to drop, so as to reengage the pawls H with the ratchets E.

The top portion Q² of the front truck C may be raised by any suitable means; but we prefer to employ for this purpose a foot-lever G, whose rear end projects beneath an attachment K of frame Q², while its front end is accessible at the front end of the truck. The said lever G is pivoted at *g*, it being provided with a transverse axis *g'*, as shown in Figs. 4 and 7. It is apparent that by depressing the front end of the lever G the rear end of the truck-frame Q² may be raised to any required height, and that in such operation the ratchets E will be automatically engaged and locked by the pawls H. When the lever G is relieved of pressure at its front end, its overbalanced rear end falls by gravity to a horizontal position, in which it is ready for reengagement with the frame Q².

The practical use of our invention is as follows: The trucks C and *c* being placed upon the track A at a distance apart corresponding to the distance between the axles of the vehicle which is to be oiled or cleaned, &c., and the frame Q² of the front truck be

ing lowered to the horizontal position, (indicated by dotted lines, Fig. 5,) a vehicle X (see Fig. 9) is run over the trucks and track A until its rear axle strikes upon the incline Q of the rear truck c, when the lever G of the front truck is operated to raise the frame Q² into contact with the front axle, as shown in Fig. 9. Then the vehicle X being pushed rearward a gradual rise of the trucks upon the track A will raise the wheels of the vehicle off the ground or floor. The trucks may then be blocked or chocked to hold them in position while the vehicle is oiled or cleaned, &c. When the latter operation is completed, the chocks are removed and the vehicle drawn forward, the trucks moving with it and carrying it until the wheels strike the ground or floor; and thus raise the axles out of contact with the trucks. As the front truck moves forward the rocking lever P engages the stop N, and thus automatically causes the release of the frame Q², as before described, so that it falls, and thus offers no obstruction to the passage of the rear axle over it. A stop O at the front end of the track A arrests the front truck C, so that it cannot run off.

Thus the vehicle is automatically released from the trucks in pulling it off the same, and the trucks are left in position for jacking another without requiring any manipulation other than that already described.

Instead of the trucks C and c being placed a certain distance apart before the vehicle is run over them, as above stated, the trucks may be placed close together at the front end of the track, and then when the vehicle is run over the front truck its rear axle will strike upon the inclined upper portion of the rear truck, and the latter will thus be pushed rearward along with the vehicle until the rear vehicle-wheels are lifted and the front axle of the vehicle comes over the front truck, when the frame Q² is elevated to raise the front axle to the required height.

What we claim for our invention, and desire to secure by Letters Patent, is—

1. The improved apparatus for the use specified, comprising parallel tracks which gradually increase in elevation from front to rear, two separate trucks, adapted to run on said tracks one immediately in front of the other, side supports for wheels of vehicles to be run on the said trucks, such supports being lower than the highest elevation of said tracks, and the trucks having top portions with which the vehicle-axles come into contact as the vehicle is pushed over the trucks, substantially as shown and described.

2. An apparatus for handling and cleaning vehicles, comprising tracks resting upon ground or floor, two separate sets of trucks, each set bearing a framework of its own, the

one set of trucks running on the tracks immediately in front of the other set, and unconnected with each other in any way, and having inclined top portions as described, whereby vehicles of different lengths may be elevated as and for the purpose specified.

3. An apparatus for handling and cleaning vehicles consisting of track and front and rear trucks, the upper framework of rear truck being stationary or fixed, and inclined with lower end to front of track, adapted for having vehicles whose rear axles may be of different heights readily accommodated thereon, substantially as described.

4. An apparatus for handling and cleaning vehicles consisting of track and front and rear trucks, the one set of trucks immediately in front of the other, the front truck so constructed, that the framework forming the upper part thereof is free to move up and down at rear end, and is provided with suitable contrivances for raising and lowering and holding in place, and adapted for collapsing so as to allow the rear axle of vehicle to clear it and to be raised to allow front axle to rest thereon and held there while vehicle is being handled, substantially as shown and for the purpose specified.

5. An apparatus for handling and cleaning vehicles consisting of track and trucks, the one set of trucks immediately in front of the other, and the front set being provided with an automatic release, adapted for tripping and causing the upper framework of front truck, when elevated at rear end to collapse, thereby releasing front axle of vehicle and allowing rear axle to pass over front truck unobstructed, substantially as shown and for the purpose specified.

6. In an apparatus for the purpose specified, the combination, with a track gradually increasing in height, of a truck adapted to run thereon and having a hinged top portion which is vertically adjustable at one end, a ratchet-bar pendent from the latter, a pivoted lever having a pawl adapted to engage said ratchet-bar, and a releasing device or trip pivoted to the truck and having a projecting arm, and a fixed obstruction on the track with which the trip comes in contact in the manner described.

7. In an apparatus for the purpose specified, the truck having a hinged top which is free at one end, a ratchet and pawl for locking the same in different elevations, and a pivoted lever one end of which is adapted to engage said free end of the adjustable top, for raising it, as shown and described.

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