

B. MAGOR.  
CAR TRUCK.

APPLICATION FILED APR. 23, 1909.

Patented Mar. 8, 1910.

3 SHEETS—SHEET 1.

951,253.

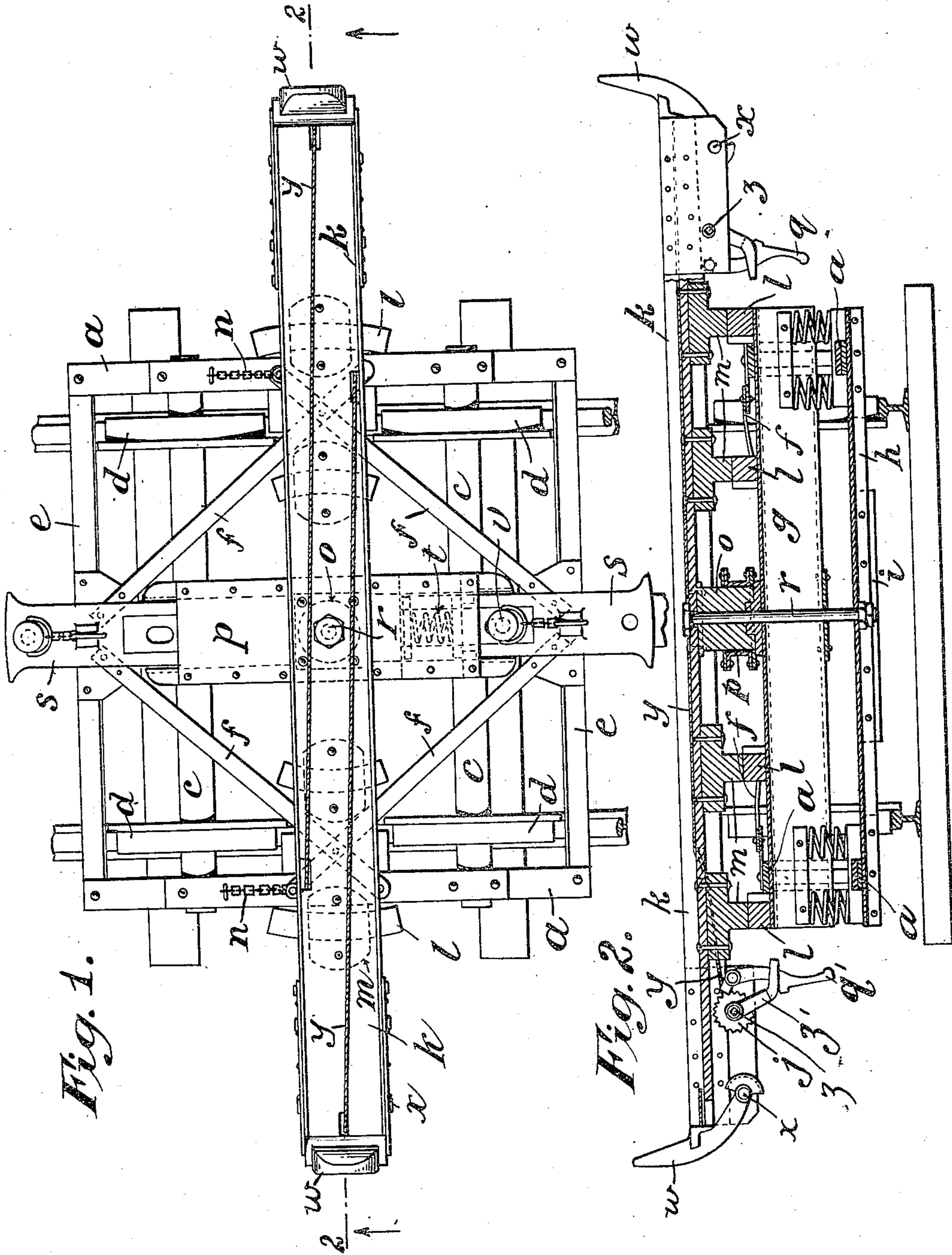


Fig. 1.

Fig. 2.

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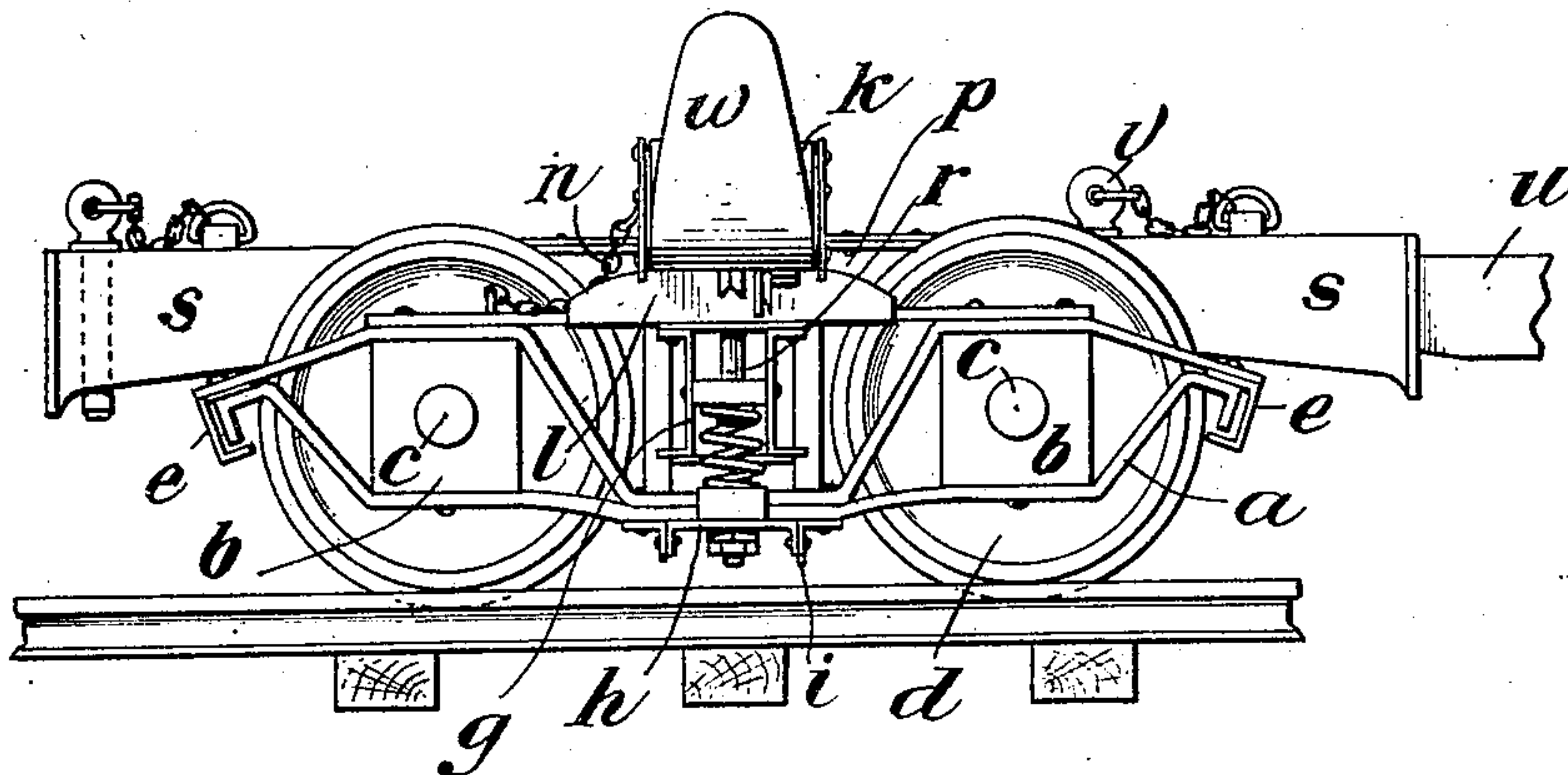
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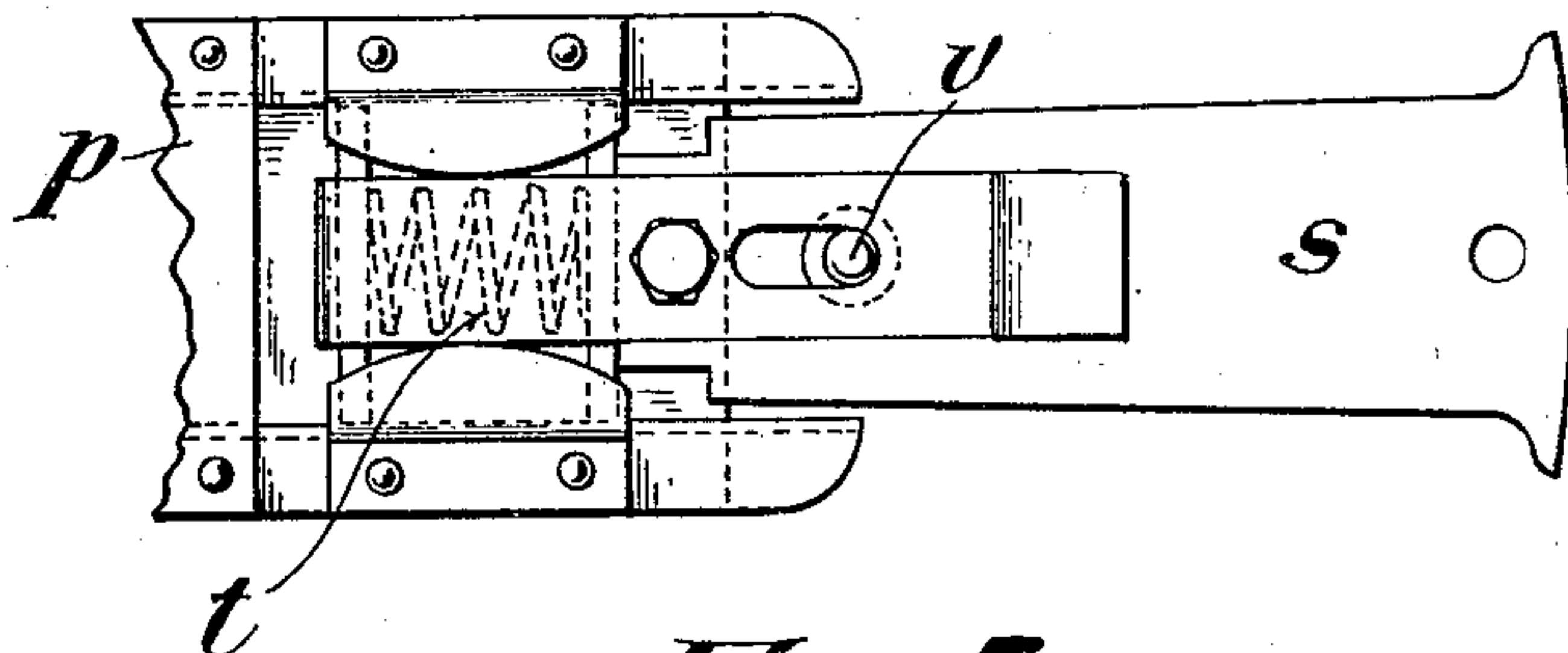
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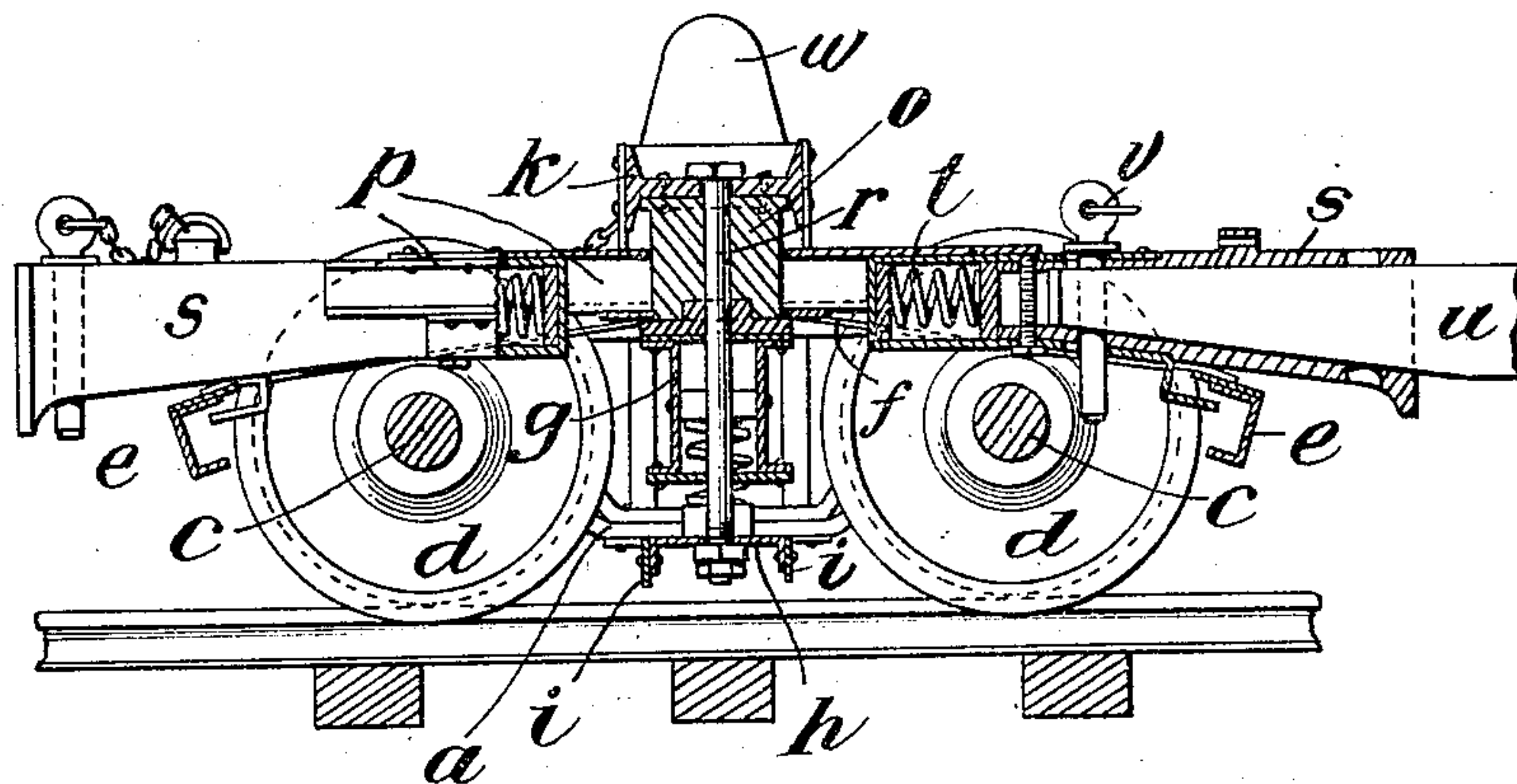
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



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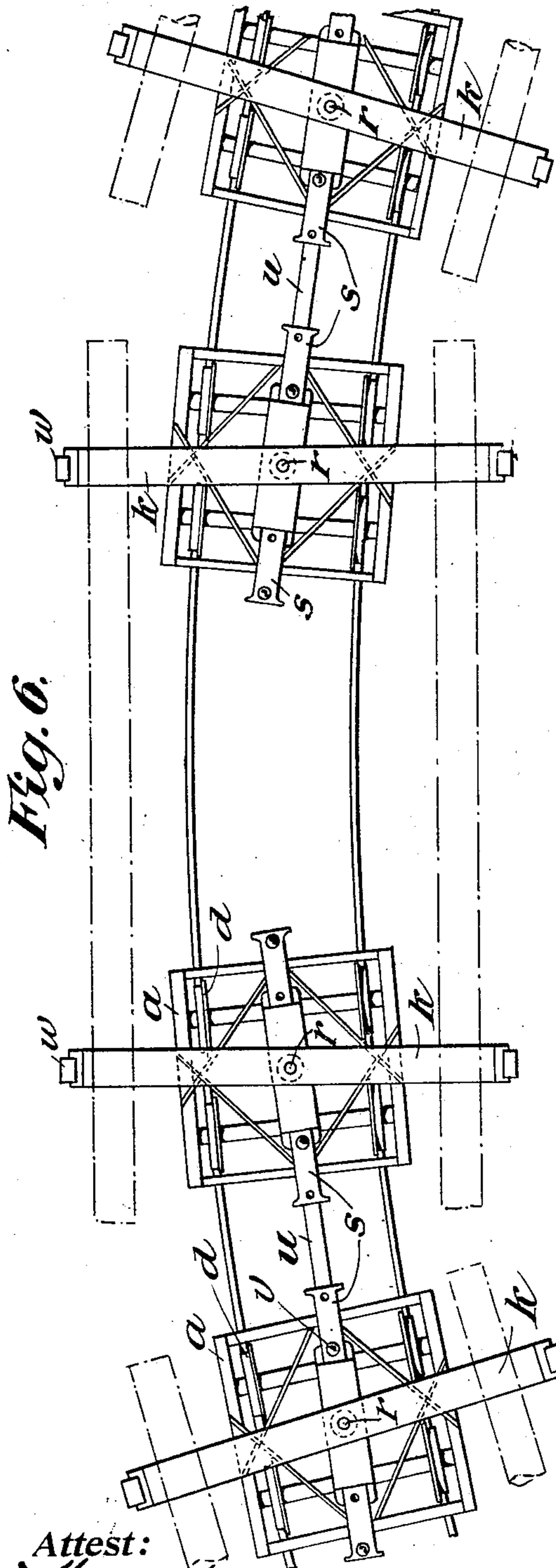


Fig. 6.

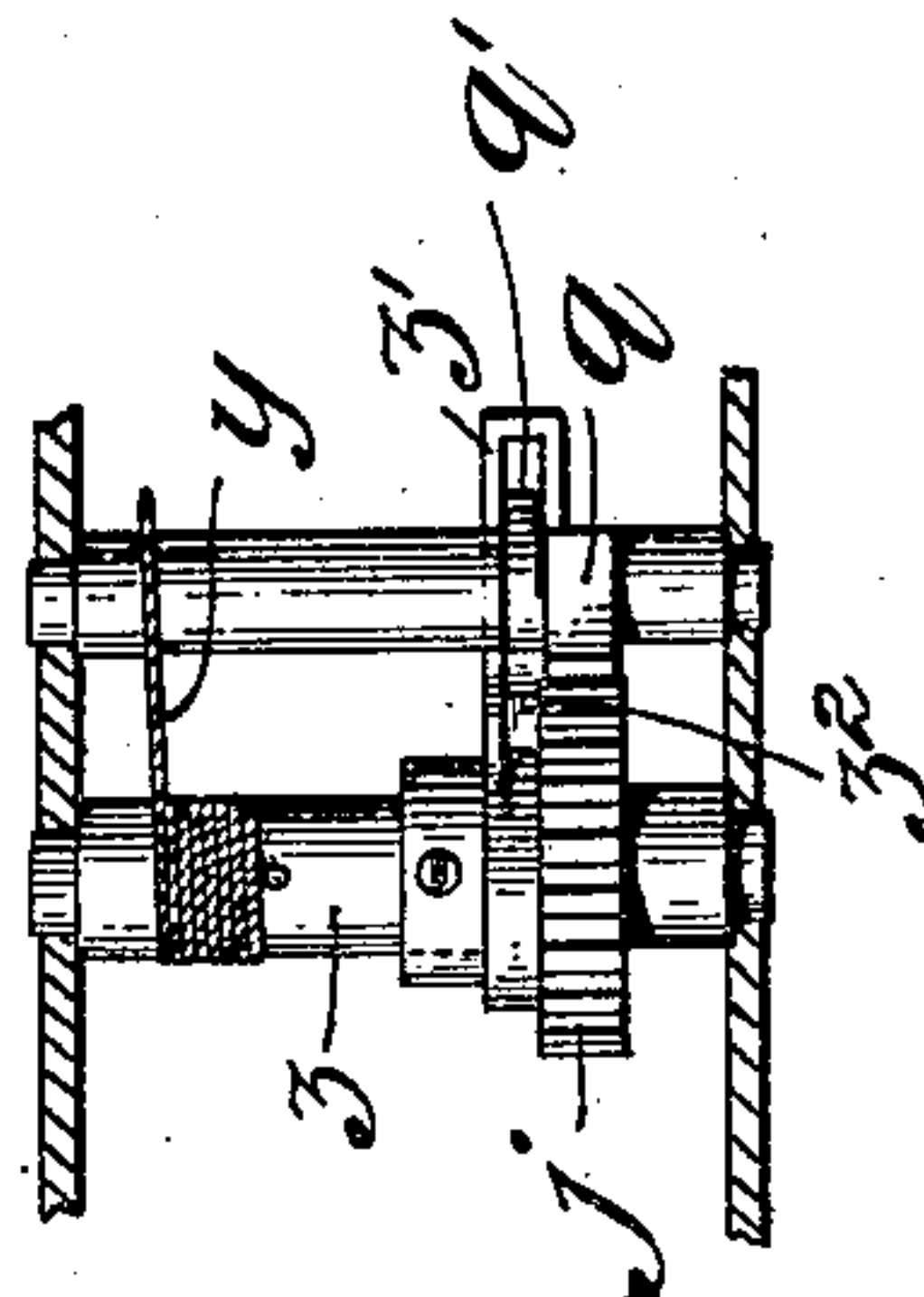


Fig. 8.

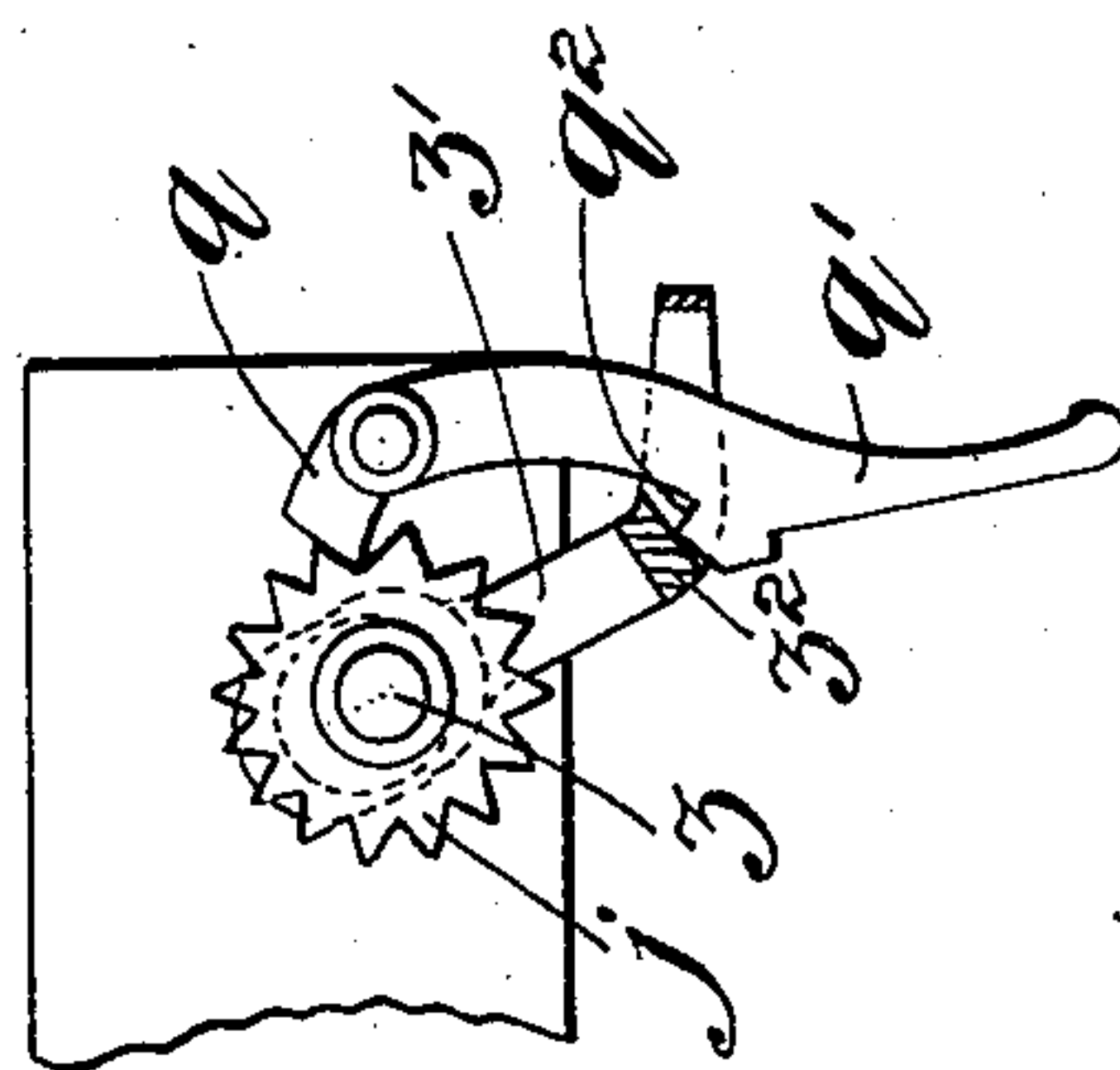


Fig. 7.

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# UNITED STATES PATENT OFFICE.

BASIL MAGOR, OF NEW YORK, N. Y.

## CAR-TRUCK.

951,253.

Specification of Letters Patent.

Patented Mar. 8, 1910.

Application filed April 23, 1909. Serial No. 491,767.

*To all whom it may concern:*

Be it known that I, BASIL MAGOR, of the borough of Manhattan of the city of New York, in the county and State of New York, have invented certain new and useful Improvements in Car-Trucks, of which the following is a specification, reference being had to the accompanying drawings, forming a part hereof.

10 The principal object of the invention is to provide a form of car truck which shall be particularly adapted for the transportation of logs. For such work, it is common practice to provide each car truck with a long transverse member, known as the bunk, supported above the car trucks upon the bolster and adapted to receive the ends of the logs; and two such trucks, when thus joined together by a load of logs, constitute a single car or element of the logging train and require no other connection between them than the logs themselves. In these logging trains, it is desirable that the pull upon the draft rigging of the trucks be communicated as directly as possible to the load in order to take as much of the draft strain as possible from the trucks themselves. In the present case, the draft rigging is connected directly to the bunk and, in accordance with the present improvements, is pivoted thereto so that as the logging train takes a curve the two bunks of each cooperating pair of bunks may remain parallel while the draft rigging on each truck may swerve sufficiently to preserve its alinement with the cooperating draft rigging and the connecting rod between the two. Moreover, in accordance with the present improvements, the ends of a connecting rod are received in relatively long connecting heads upon the trucks so that the ends of these rods are brought as near the center of the car trucks as possible, whereby, as the train is backed there will be the less tendency to push the connecting rods and the cooperating draft bars out of alinement.

Another feature of the improvements consists in providing an underhung member upon the frame of the truck which member is so arranged above the rails as to support the frame thereupon whenever the wheels accidentally leave the track. This member, moreover, is placed low enough to prevent the wheels from striking the ties and thereby from running over the ties and destroying the track whenever the truck jumps the

track, the truck, in such a case, sliding upon the track through the medium of said member which overhangs the track on each side.

Still another feature of the improvement consists in the provision of stakes pivoted upon each side of the bunk to retain the load and means on each side of the bunk to control the stake on the other side, whereby the load may be dropped on either side of the track by workmen stationed upon the other side of the track.

The improvements referred to will now be described in connection with the drawings and together with other features of improvements which need not be particularly alluded to at this point.

In the drawings: Figure 1 is a plan view of a truck embodying the improvements. Fig. 2 is a view in transverse section, the plane of section being indicated by the line 2—2 in Fig. 1. Fig. 3 is a side view. Fig. 4 is a detail view in plan of one end of the draft bar. Fig. 5 is a view in longitudinal section. Fig. 6 is a view on a smaller scale illustrating the application of the trucks to the carrying of logs. Figs. 7 and 8 are detail views of means for controlling the stakes upon the ends of the bunks.

The frame of the truck will be seen to consist of the two side members *a* provided with suitable bearings *b* to receive the axles *c* of the wheels *d*, and transverse members *e* connecting the ends of the side members which extend, at each end, beyond the wheels. In addition to these side and transverse members, the frame includes diagonal bracing members *f* each of which extends from the center of one of the transverse members to a point near the center of one of the side members. The bolster *g* is spring supported as usual upon the spring-carrying plank *h* which extends transversely across the frame. In the present case, this plank is arranged underneath the frame, being of a sufficient length to overlie the track on each side, and is hung low enough so that when the wheels leave the track it will strike the track before the wheels have dropped to the ties, thus leaving the frame supported upon the track and preventing the wheels from running over the ties and tearing up the tracks. In order to limit the sidewise motion of the truck when it is thus supported through the medium of this elongated plank, the latter is provided with a cleat or cleats *i* arranged intermediate its ends and projecting down-



wardly so as to come in contact with the track on either side in case the truck tends to run off the track at that side.

The bunk *k* is supported upon the bolster through the medium of side bearing pieces *l* arranged thereupon and cooperating bearing pieces *m* arranged upon the underside of the bunk. The latter is pivoted at its center and may thus twist about upon the side bearings on the bolster, its range of movement however being limited by stop chains *n* which prevent the bunk from working off from the side bearings. Projecting downwardly from the center of the bunk is a cylindrical bracket *o* which is rigidly secured to the bunk and forms a pivot for the attachment of the draft rigging *p* which is arranged between the bunk and the bolster. A fastening pin or bolt *r* is passed through the bunk, cylindrical bracket, draft rigging, bolster and spring plank and fastens all of these parts together.

The draft rigging is provided with connecting heads *s* which work against the draft rigging springs *t* as usual. The heads, however, as will be seen, are considerably elongated so that the ends of the connecting rods *u* may be carried well in toward the center of the truck where they are secured through the medium of connecting pins *v*. Thus will the alinement of any two cooperating draft bars and their connecting rod be preserved whether the train is moving forward or backward. On each side of the bunk stakes *w* for retaining the load are pivoted, the pivots *x* being beneath the center of gravity of these stakes when they are in their normal positions, so that when released the stakes will drop automatically. The stakes are retained in their normal positions through the medium of a chain or cable *y*, each such chain or cable being connected to means upon the opposite side for raising the corresponding stake into operative position. Such means may consist, for instance, of a roller *z* to wind the cable on and a ratchet *j* secured to the roller and controlled by a pawl *q*. (Figs. 2, 7 and 8). The cable may be wound up by a key inserted into one end of the roller *z* (Fig. 2); and by moving the pawl handle *q'* to the left in Fig. 2, the pawl is disengaged from the ratchet and the stake upon the opposite side drops by its own weight. A loose arm *z'* is provided upon the roller *z* and has a shoulder *z''* which fits into a notch *q''* on the pawl *q* in order to hold the pawl in a particular position and to prevent the ratchet *j* and roller *z* from moving in either direction.

In Fig. 6, it will be seen what the relative arrangement of the parts is in a logging train made up of the improved trucks, when such train takes a curve. The logs are indicated in broken lines, being stretched across the respective bunks of cooperating trucks.

The forward truck of each pair of trucks is connected to the rear truck of the pair in advance through the medium of a connecting rod *u*. The two connecting rods shown in Fig. 6 are relatively somewhat shorter than might be employed in actual practice but they sufficiently illustrate the point to be brought out in this figure. Such point is the alinement of the draft riggings on the trucks connected by the rods *u*; and it will be seen that the pull upon the forward trucks in each case is applied at the center of the corresponding bunk and that said pull is in the direction in which the track extends at that point and not necessarily normal to the position of the bunk, the latter, as is obvious, being always parallel to the cooperating bunk.

I claim as my invention:

1. The combination with the truck frame, bolster and wheels, of the spring-carrying plank elongated so as to extend beyond the wheels on each side and projecting below the truck frame to a level less than the height of the track from the wheel base.
2. The combination with the truck frame, bolster and wheels, of the spring-carrying plank elongated so as to extend beyond the wheels on each side and projecting below the truck frame to a level less than the height of the track from the wheel base, and means upon the underside of said spring-carrying plank to limit the lateral movement of the truck when supported upon the rails through the medium of said spring-carrying plank.
3. In a car truck, the combination of a bunk to receive the load, and draft rigging pivoted thereto.
4. In a car truck, the combination of a long transverse member to receive the load, a downwardly projecting member secured to the central part of said transverse member, and draft rigging pivoted to said downwardly projecting member.
5. In a car truck, the combination of a bolster, a bunk carried thereby for receiving the load, and draft rigging between the bunk and the bolster and pivoted to the bunk.
6. In a car truck, the combination of a bolster, a bunk carried thereon to receive the load, a downwardly projecting bracket secured near the center of the bunk, draft rigging between the bolster and the bunk and pivoted upon said bracket, and a fastening member extending through the bunk, bracket, draft rigging and bolster.
7. In a car truck, the combination of a bunk pivoted to the truck, side bearings for the bunk, and a stop chain to limit the relative movement between the bunk and truck.
8. In a car truck, the combination of a bolster, a bunk pivoted near the center of the bolster, side bearings upon the bolster for



the bunk to rest upon, and a stop chain to limit the relative movement between the bunk and bolster and prevent the bunk from moving off from the side bearings upon the  
5 bolster.

9. The combination of a car truck having pivoted draft bars provided with connecting heads, and a connecting rod for connecting two car trucks, the ends of the connecting  
10 rod being adapted to be inserted well into

the corresponding connecting heads of the two trucks, whereby the alinement of the connecting rod and draft bars may be preserved under all conditions.

This specification signed and witnessed 15  
this 20th day of March A. D., 1909.

BASIL MAGOR.

Signed in the presence of—

RALPH SAWYER,  
PETER P. BECK.