

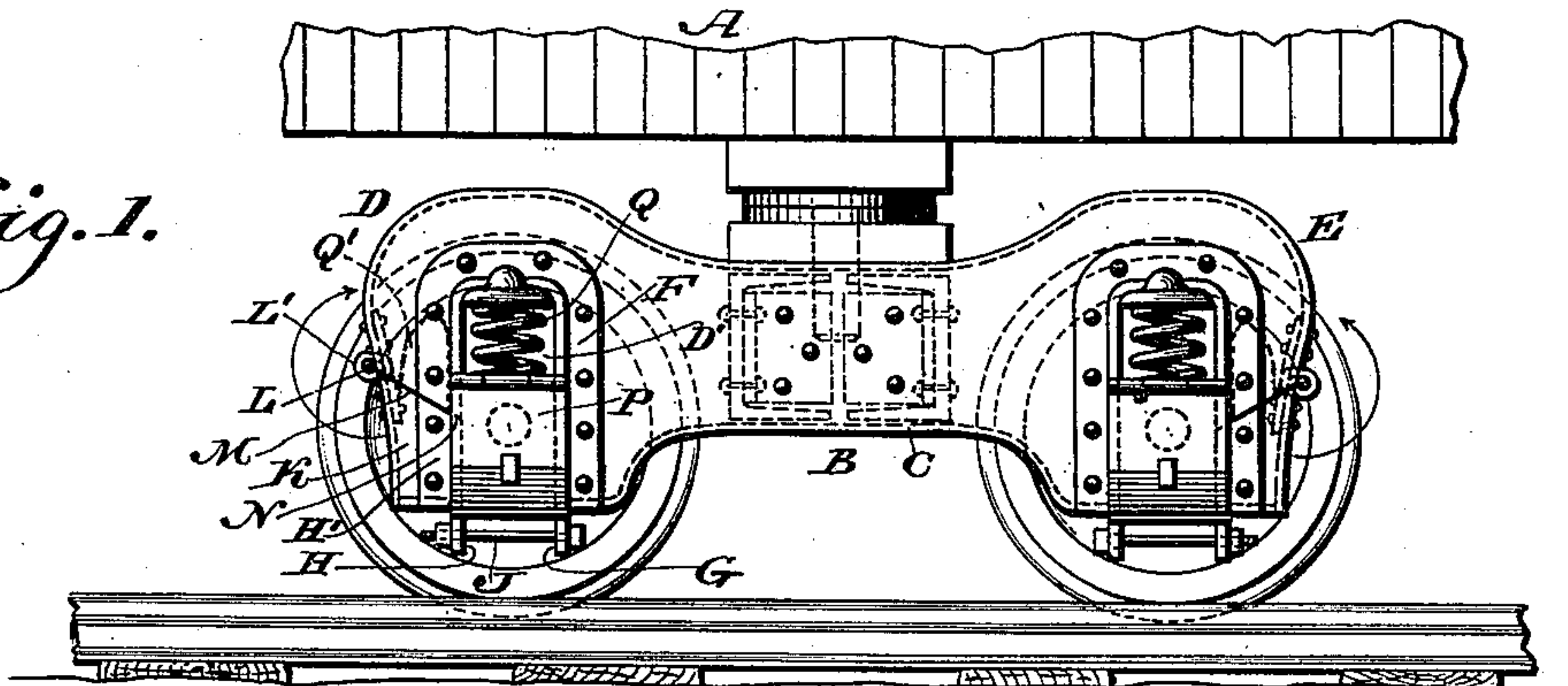
(No Model.)

O. L. STERNER & R. W. O'DONNELL.  
RAILWAY CAR TRUCK.

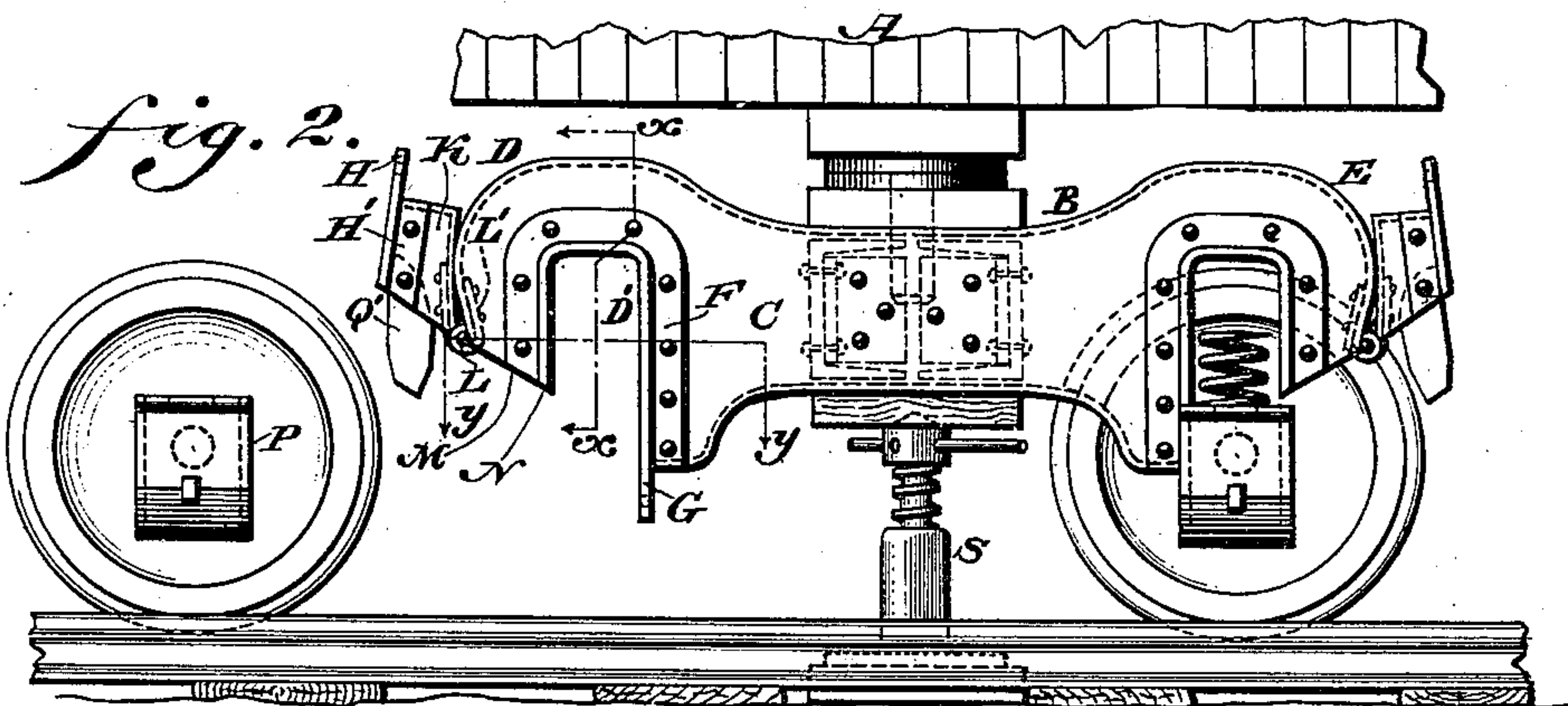
No. 579,904.

Patented Mar. 30, 1897.

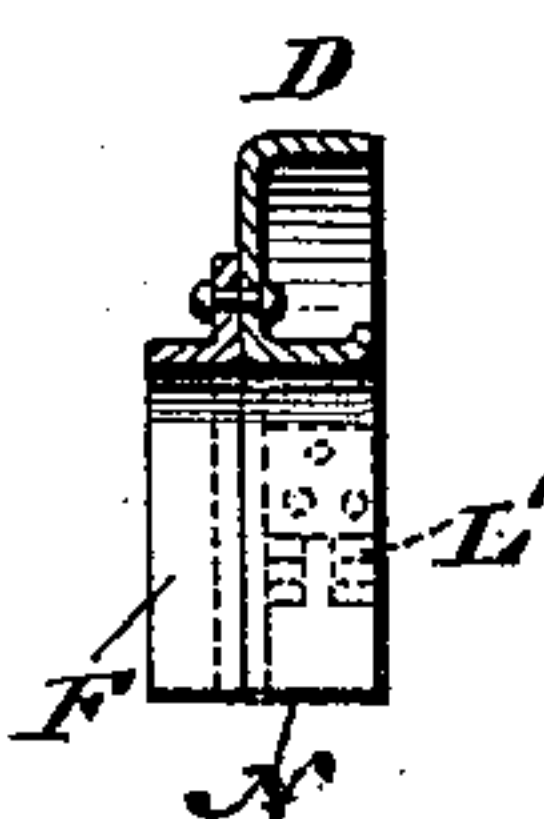
*fig. 1.*



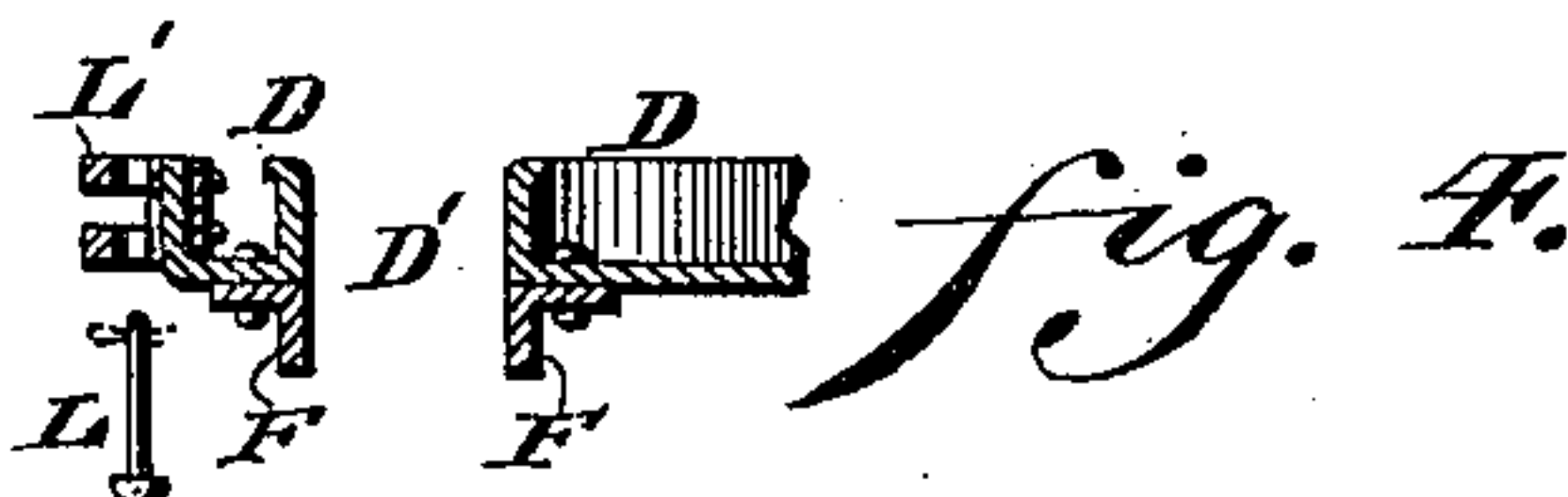
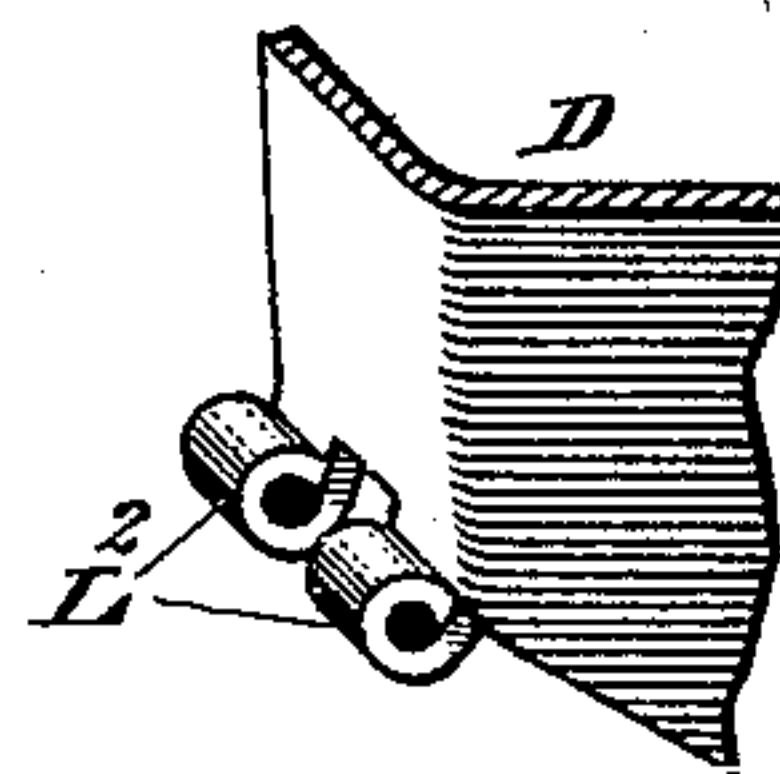
*fig. 2.*



*fig. 3.*



*fig. 5.*



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# UNITED STATES PATENT OFFICE.

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## RAILWAY-CAR TRUCK.

SPECIFICATION forming part of Letters Patent No. 579,904, dated March 30, 1897.

Application filed October 20, 1896. Serial No. 609,417. (No model.)

*To all whom it may concern:*

Be it known that we, OSCAR L. STERNER and RICHARD W. O'DONNELL, citizens of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Railway-Car Trucks, which improvement is fully set forth in the following specification and accompanying drawings.

Our invention consists of a truck-frame composed of plates of steel or wrought-iron, preferably pressed into shape and provided with suitable reinforcing-flanges, said frame having an outer member or jaw pivoted to its body, so as to be swung upwardly and outwardly and to permit the removal of the car-axle boxes and axles without necessitating the jacking up of the car to the extent ordinarily required.

It further consists in placing the jaw or pivotal member in such position relative to the car-axle box that an integral portion of the frame will always bear upon said box, on either side thereof, and thus hold said box firmly in position without exerting undue strain on said jaw.

It further consists of novel details of construction, all as will be hereinafter set forth, and specifically pointed out in the claims.

Figure 1 represents a side elevation of a railway-car truck embodying our invention and a portion of a car to which the same is applicable. Fig. 2 represents a side elevation similar to Fig. 1, showing a car-axle and its box in the act of being removed from position. Fig. 3 represents a section on line *x x*, Fig. 2. Fig. 4 represents a section on line *y y*, Fig. 2. Fig. 5 represents a perspective view of a portion of a truck-frame having the hinges for the pivotal member or jaw integral with the body of said frame.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a portion of a car, which is mounted upon the truck-frame B in any suitable manner, said frame consisting of the body portion C, having the end portions D and E, and as the construction of each is substantially the same the description of one will suffice for both, reference being had to the left-hand portion D.

The truck-frame is preferably constructed of pressed iron or steel, which in the present instance is given substantially the contour seen in Fig. 1, said frame having substantially a U-shaped opening D' therein for the reception of the axle-box P, between which and the top of said opening is a spring Q.

F designates a reinforcing-flange, which is also of substantially U-shaped contour, being angular in cross-section, and continues around the opening D' to substantially the extent best seen in Fig. 2, a portion H' of the outer leg of the reinforcing-flange being cut away and attached to the pivotal member or jaw K.

G designates a lug which projects downwardly below the flange F and has passing therethrough the bolt J, the other end of said bolt passing through an opposite lug H, which is attached to the flange H', the latter being secured to the member K, as above stated.

The joint M, between the member K and the end body portion D, is in the present instance inclined downwardly, so that the integral point N of the body portion D will always contact with the upper portion of the axle-box P, as indicated in Fig. 1, whereby said box will always have a bearing on either side upon an integral and rigid portion of the truck-frame, the member K being pivotally attached by means of the pin L to the hinges L', attached to the end portion D, said hinges being made separate therefrom and attached to the truck-frame, as indicated in Figs. 1 and 4, inclusive, or, if desired, they may be struck up integral with the end portion D, as indicated at L<sup>2</sup> in Fig. 5.

Q' designates an arm or tongue which is attached to the movable member or jaw K, so that when the latter is in closed position said arm Q' will have a bearing within the end portion D of the truck-frame.

The operation is as follows: The car and truck-frame normally appear as indicated in Fig. 1, the member K being swung into the position therein seen and being rigidly held by means of the bolt J, which passes through the lugs G and H.

When for any reason it is desired to remove the axle-boxes P and their adjuncts from the truck-frame, as indicated at the left of Fig.



2, it is only necessary to remove the bolt J and jack the car and truck-frame up a slight distance, which can be done by means of the lifting-jack S or other suitable means, after  
5 which the jaw K is swung outwardly and the axle-boxes P, with their axles, wheels, and adjuncts, can be readily removed, as is evident.

We desire to call especial attention to the  
10 fact that there is normally always a solid or integral portion N of the truck-frame having a bearing against the back and front of the axle-box P, so that excessive strain is to a great extent removed from the bolt J.

15 Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a railway-car truck, a truck, an outer member pivotally attached thereto, whereby  
20 the same may be swung upwardly without being detached from said frame, an integral portion of said truck-frame on either side being adapted to always bear against a car-axle box when the parts are assembled, and means  
25 for holding said member in operative position.

2. In a railway-car truck, a truck-frame composed of pressed steel or iron, and having substantially U-shaped openings in its end portions, a reinforcing-flange secured around  
30 said U-shaped openings, a lug depending from said flange, a jaw pivotally attached to the outer portion of said frame and having an inclined joint, a reinforcing-flange attached to said jaw and forming a continuation of said first-mentioned flange, a lug projecting from said jaw, and a bolt adapted to  
35 pass through said lugs.

3. The combination of a car-axle box with a truck-frame, the latter having a U-shaped opening in an end thereof, a portion of the  
40 outer leg of said member being removed, and its end inclined downwardly and inwardly, a jaw pivotally attached to said frame and provided with a tongue, a U-shaped reinforcing-flange surrounding said opening, a reinforce  
45 for said jaw, lugs depending from said jaw and frame, and a fastening device common to said lugs, said axle-box having an integral portion of the frame always bearing thereon  
50 in front and rear when said parts are assembled.

4. A truck-frame consisting of pressed metal plates having reinforcing-flanges and provided with an outer pivoted member adapted to swing upwardly and outwardly,  
55 said frame having an integral portion thereof adapted to always bear against a car-axle box when the parts are assembled.

5. A truck-frame having a metal plate with an opening therein, an axle-box in said opening, having a spring between it and the top  
60 of the opening, a reinforcing-flange for said plate having a cut-away portion, a pivotal jaw member attached to said cut-away portion,  
65 the joint between said member and frame being inclined and an arm attached to the said jaw member and having a bearing within the plate.

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