

(No Model.)

F. P. ONZON.  
CAR COUPLING.

No. 438,484.

Patented Oct. 14, 1890.

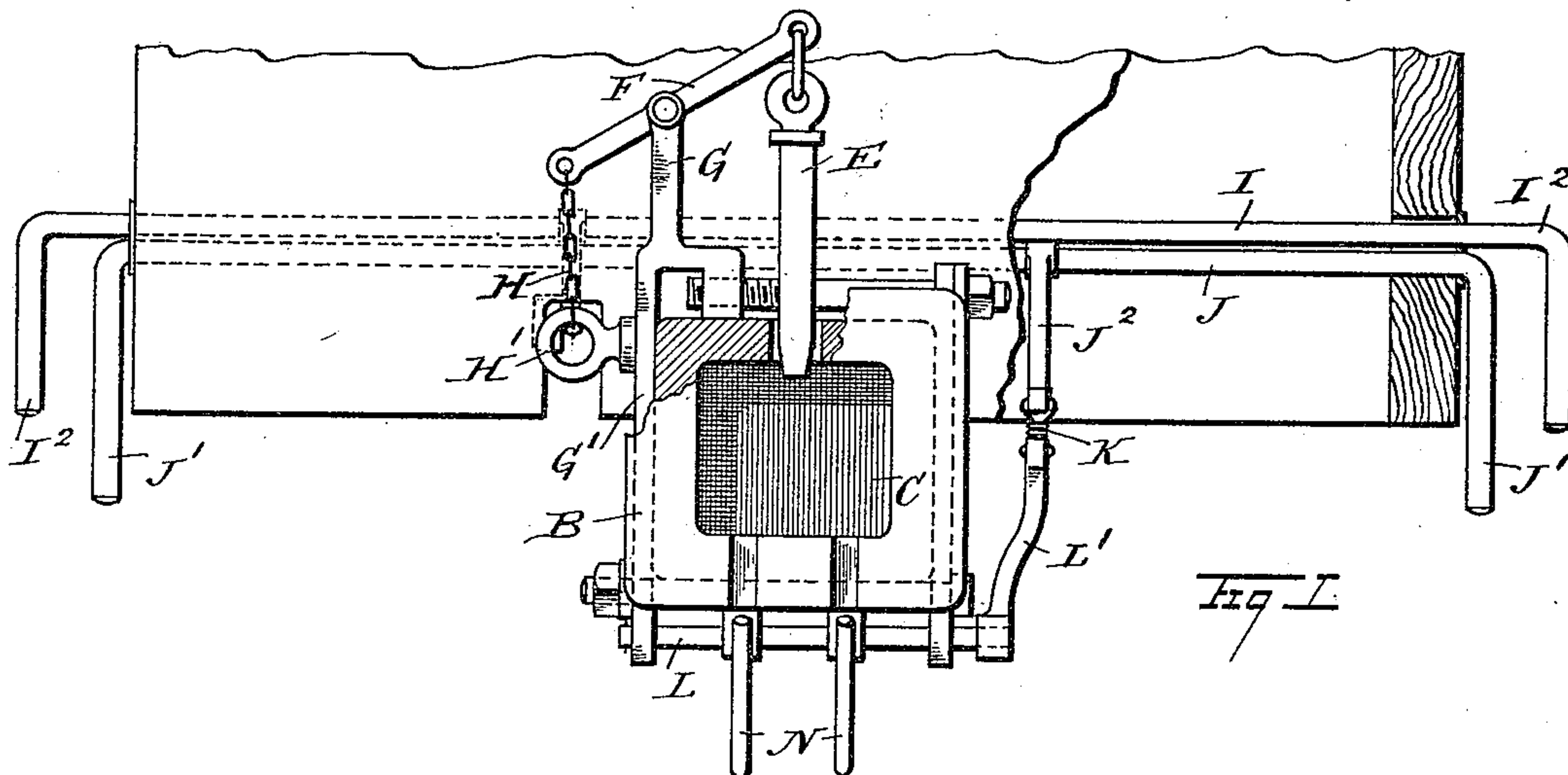


Fig 1

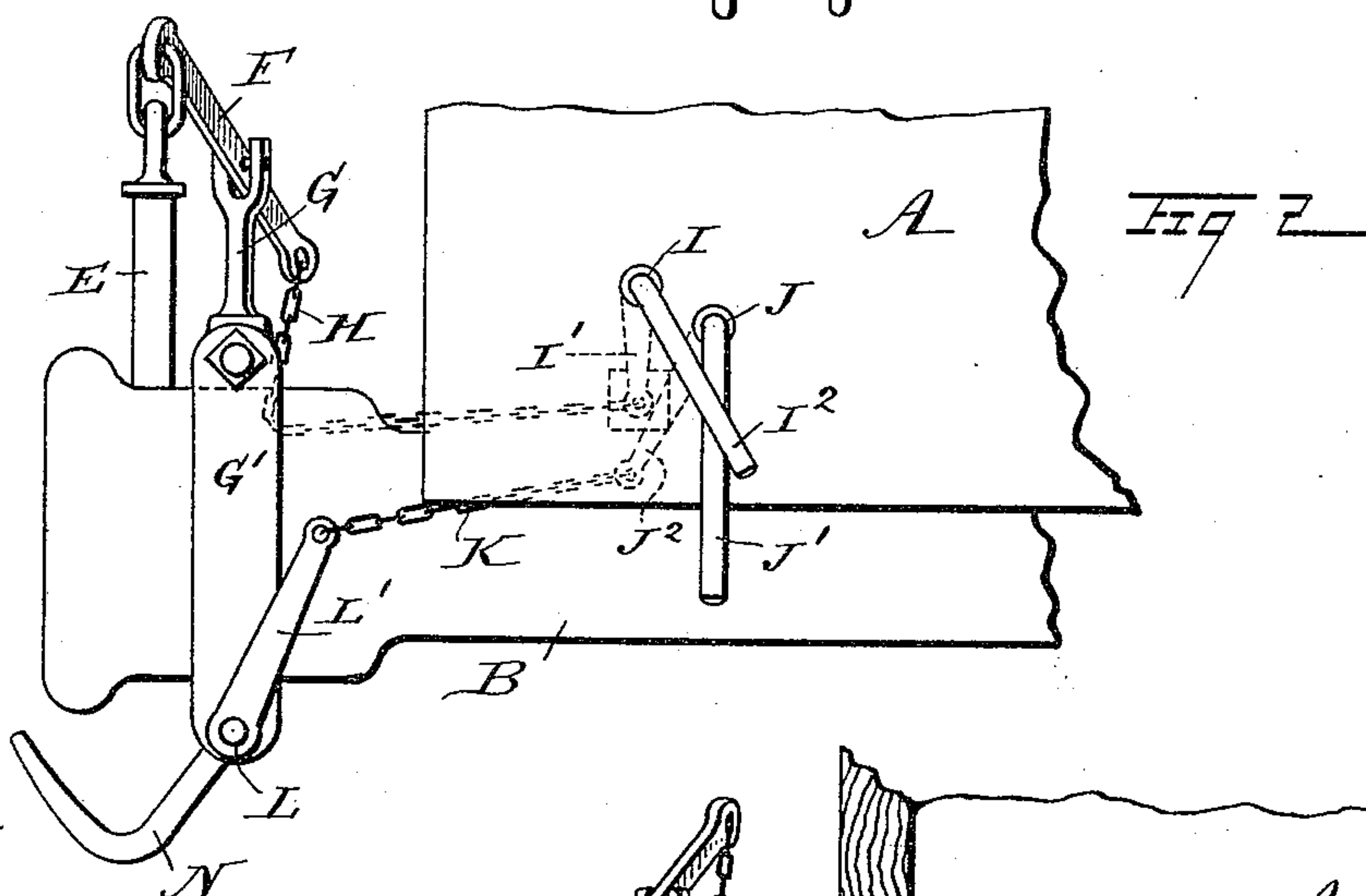


Fig 2

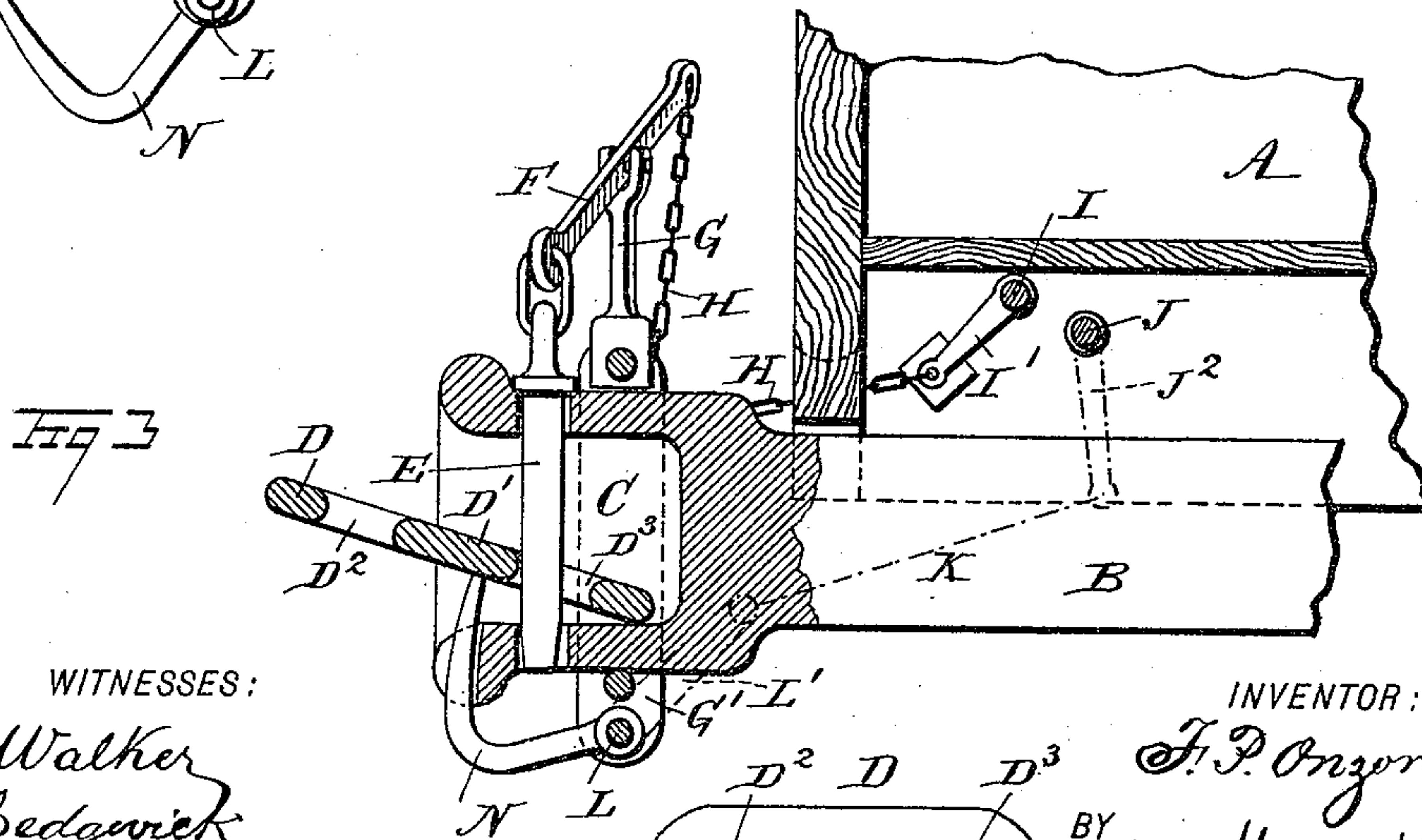


Fig 3

WITNESSES:

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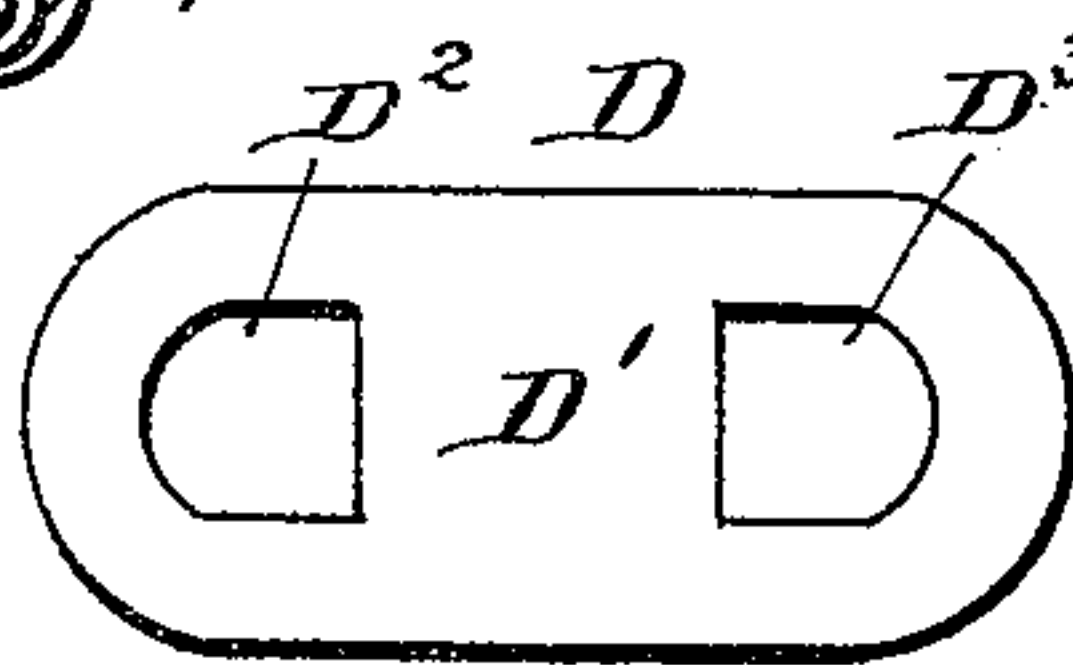
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BY

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ATTORNEYS

Fig 4





# UNITED STATES PATENT OFFICE.

FRANÇOIS P. ONZON, OF SAN ANTONIO, TEXAS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 438,484, dated October 14, 1890.

Application filed March 15, 1890. Serial No. 344,024. (No model.)

*To all whom it may concern:*

Be it known that I, FRANÇOIS P. ONZON, of San Antonio, in the county of Bexar and State of Texas, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved car-coupling which is simple and durable in construction, permits of coupling two cars of different heights, and obviates going between the cars to couple or uncouple.

The invention 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 a front view of the improvement with parts in section. Fig. 2 is a side elevation of the same. Fig. 3 is a sectional side elevation of the same, and Fig. 4 is a plan view of the link.

The car A of the usual construction is provided at each end with a draw-head B, having a front opening C, in which is adapted to pass the link D, preferably of the construction shown in the drawings, and in which a transverse bar D' forms two openings D<sup>2</sup> and D<sup>3</sup> near each end of the link for the reception of the coupling-pins.

In the draw-head B is held to slide vertically the ordinary coupling-pin E, preferably connected at its upper end with a lever F, fulcrumed on a standard G, fastened by means of a clip G' or other suitable device to the draw-head B. The lever F is connected with one end of a chain H, which passes through an eye H' and through an opening in the front end of the car A to a weighted arm I', secured on a transversely-extending shaft I, mounted to turn in suitable bearings in the end of the car below its floor. On each end of the transverse shaft I is held a handle I<sup>2</sup> for conveniently manipulating the said shaft I in order to raise or lower the pin E without the operators stepping between the cars. A second shaft J is also mounted in each end of the car parallel to the shaft I and in the immediate neighborhood of the same. This shaft

J is also provided on each outer end with a handle J', and an arm J<sup>2</sup> is secured on the said shaft between the sides of the car. The chain K connects the arm J<sup>2</sup> with an arm L', fastened on a transversely-extending shaft L, mounted to turn in suitable bearings on the lower ends of the clip G', so that the said shaft L extends under the front end of the draw-head B, as shown in the drawings.

On the shaft L are secured hooks N, the free ends of which extend to the front of the draw-head into slots formed in the bottom of the latter, and the said hooks are adapted to engage the under side of the coupling-link D, preferably across the bar D', so as to raise or lower the said link to any desired position to couple cars of different heights.

The operation is as follows: When the operator desires to couple several cars, the link D is placed in one draw-head and the shaft I is turned from one side of the car, so as to lower the coupling-pin E to engage the innermost opening D<sup>2</sup> or D<sup>3</sup> of the coupling-link. The operator then turns one of the handles J' on the side of the car, so as to operate the shaft L to move the hooks N in such a position as to engage the link D to raise or lower the latter according to the height of the draw-head of the car to be coupled. It will be seen that by thus manipulating the shaft J from either side of the car the link D may be moved into any desired inclined or horizontal position, according to the height of the draw-head of the opposite car. When the two cars come together, the outer end of the link D is coupled to the car in the usual manner—that is, if it is a car provided with the improvement, as shown, the operator turns the respective arm I<sup>2</sup>, so as to lower its pin E to complete the coupling. If it is a car with the ordinary pin-coupling, the pin is inserted in the usual manner.

It will be seen that by the arrangement shown and described cars of different heights can be very conveniently coupled, and at the same time the setting of the pin or link can be accomplished from either side of the car, so that the operator need not step between the cars, thus avoiding accidents which so frequently occur in coupling cars provided with the ordinary link-and-pin coupling. It will further be seen that the improved car-



coupling can be readily attached to cars provided with the ordinary pin-and-link coupling.

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

5 Patent—

1. In a car-coupling, the combination, with a draw-head, of a shaft mounted to turn on the under side of the said draw-head, hooks secured on the said shaft, their free ends being  
10 adapted to swing in front of the said draw-head to hold the link in position, and means, substantially as described, for operating the said shaft from either side of the car, substantially as shown and described.

15 2. In a car-coupling, the combination, with a draw-head and a pin held to slide vertically therein, of a lever pivotally connected with the said link and fulcrumed on the draw-head, a chain connected with the said lever,  
20 an eye through which passes said chain, an arm connected with the inner end of the said chain, and a transversely-extending shaft mounted to turn in suitable bearings in the car-body and carrying the said arm, substan-  
25 tially as shown and described.

3. In a car-coupling, the combination, with a draw-head and a pin held to slide vertically therein, of a lever pivotally connected with the said link and fulcrumed on the draw-  
30 head, a chain connected with the said lever, an eye through which passes said chain, an

arm connected with the inner end of the said chain, a transversely-extending shaft mounted to turn in suitable bearings in the car-body and carrying the said arm, and handles held  
35 on the outer ends of the said shaft to conveniently turn the shaft from either side of the car, substantially as shown and described.

4. In a car-coupling, the combination, with a shaft mounted to turn on the under side of  
40 the draw-head, of hooks secured to the said shaft and adapted to swing in front of the draw-head to hold the link in position, an arm secured on the said shaft, a chain connected with the said arm and also connected with a  
45 second arm, and a transversely-extending shaft carrying the said second arm and provided at each outer end with a handle for manipulating the said shaft, substantially as shown and described.

5. In a car-coupling, the combination, with a transversely-extending shaft mounted to turn in bearings on the under side of the draw-head, of hooks secured on the said shaft and extending in front of the draw-head and  
55 a coupling-link having a transverse bar adapted to be engaged by the said hooks, substantially as shown and described.

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Witnesses:

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