

J. M. FOSS.  
Car-Truck.

No. 217,934.

Patented July 29, 1879.

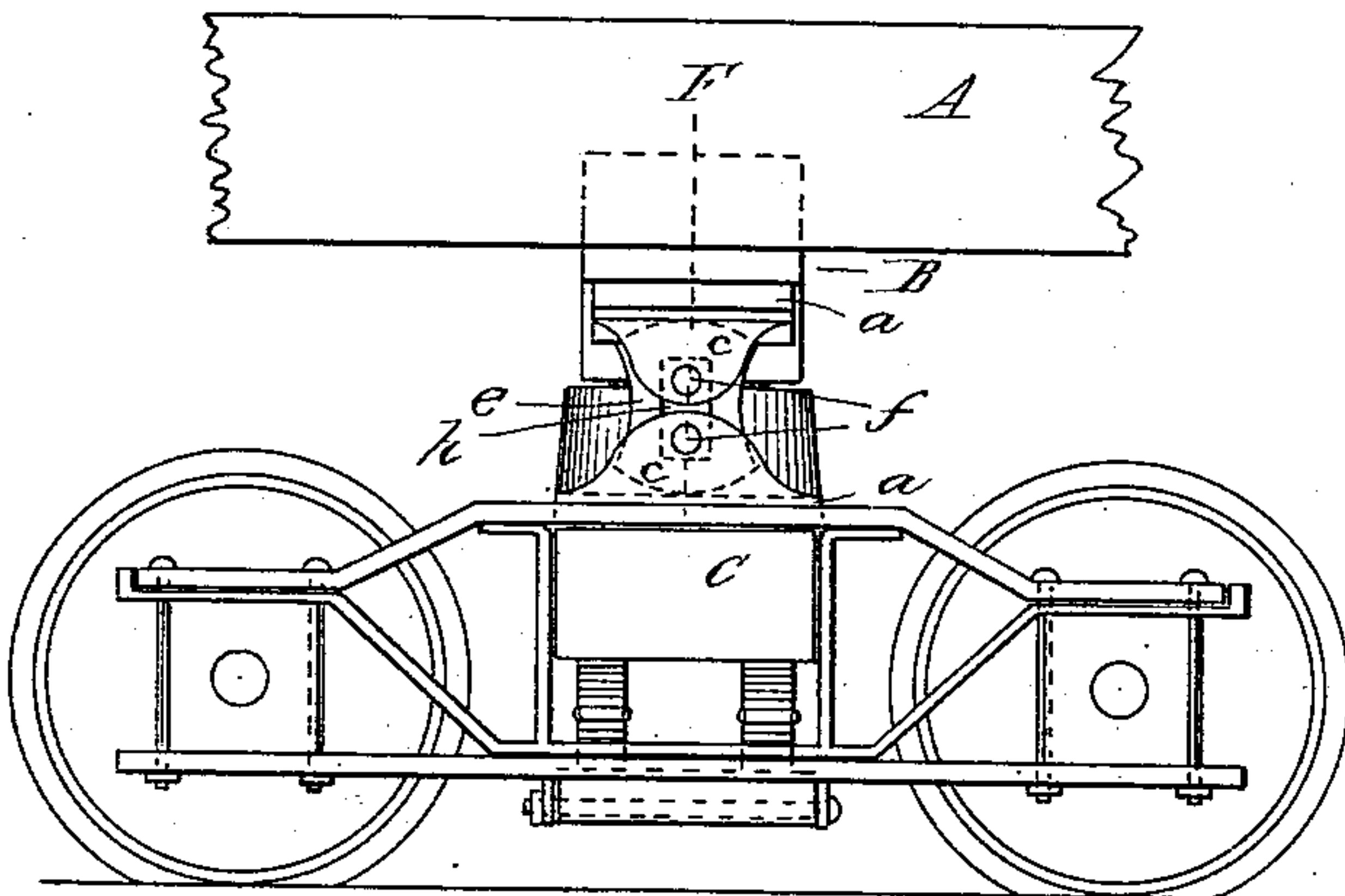


Fig. I

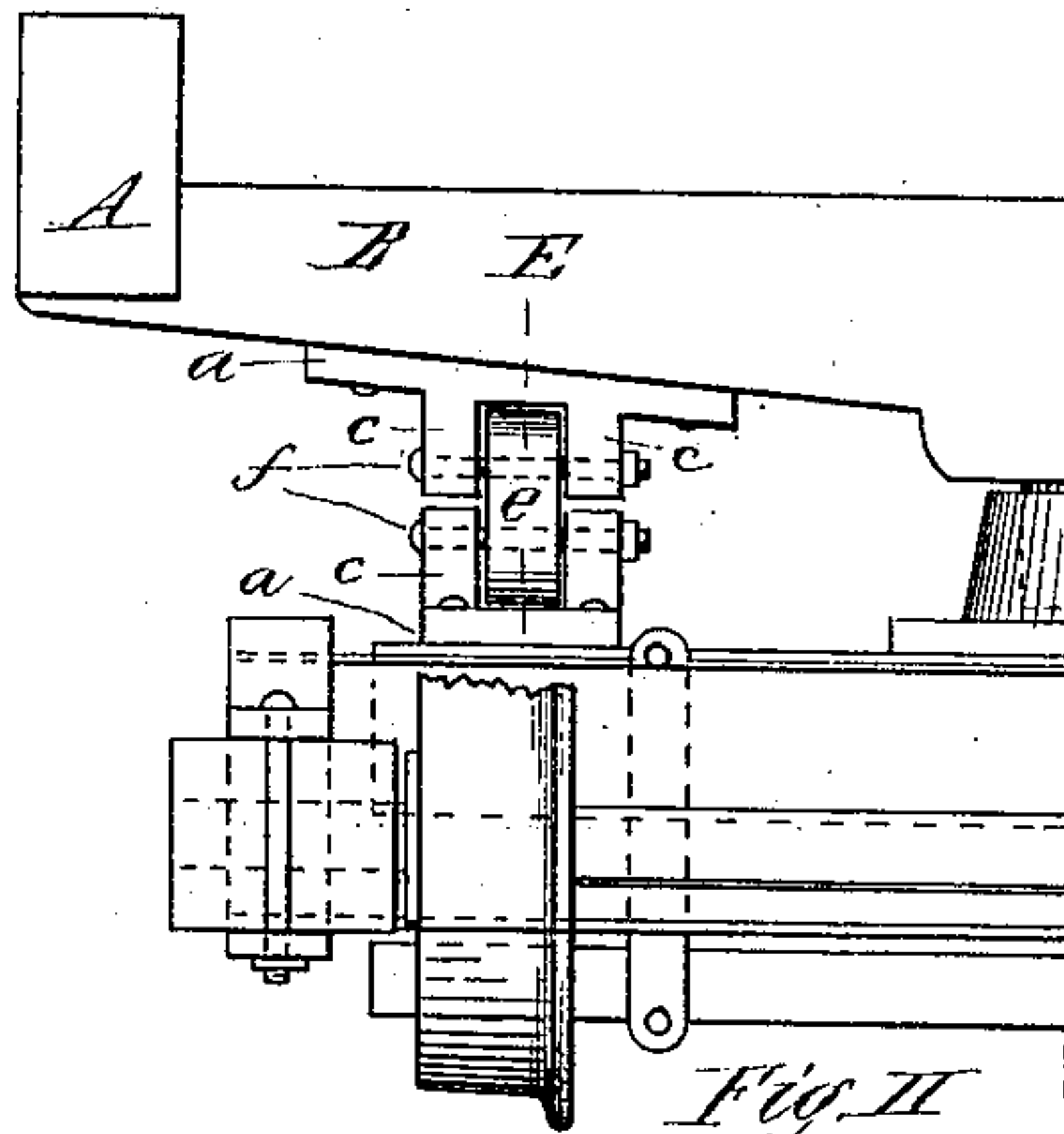


Fig. II

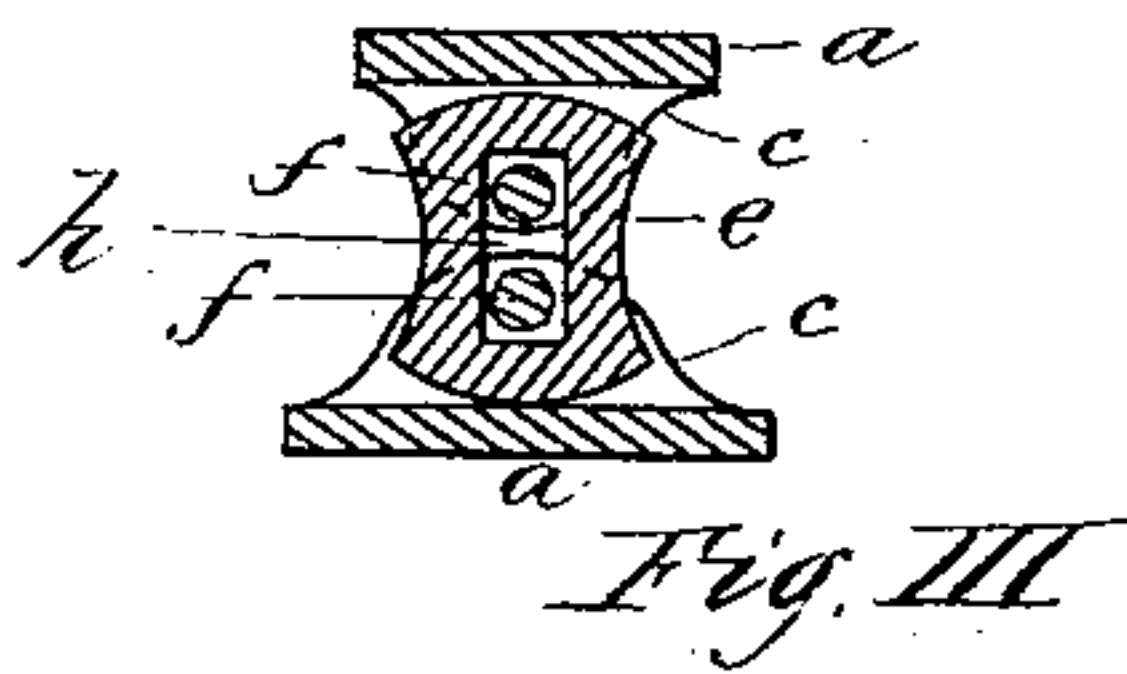


Fig. III

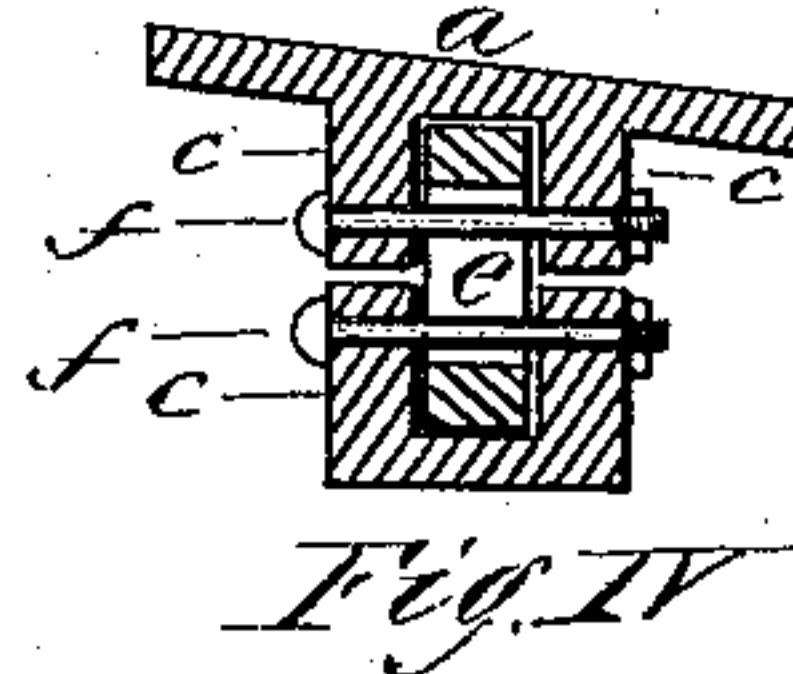


Fig. IV

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# UNITED STATES PATENT OFFICE

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## IMPROVEMENT IN CAR-TRUCKS.

Specification forming part of Letters Patent No. **217,934**, dated July 29, 1879; application filed May 12, 1879.

*To all whom it may concern:*

Be it known that I, JAMES M. FOSS, of St. Albans, in the State of Vermont, have invented a new and useful Improvement in Railway-Cars; and that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, and to the letters of reference marked thereon.

My invention has for its object a firm side bearing for a railway-car upon its trucks, and the provision of means to prevent the displacement of the trucks from their proper position beneath the car.

To this end my invention consists of a plate provided with ears secured to the car-body, with a similar plate with ears secured to the car-truck directly beneath, with a link curved at its upper and lower ends secured in said ears, with the car-body resting upon the link, and the latter adapted to roll to and fro by the direction given to the truck in passing around a curve, as will be more fully hereinafter described.

Figure I is a side elevation of a car-truck with a portion of the car-body above and my invention applied thereto. Fig. II is an end view of my device as applied to a car. Fig. III is a vertical section of my device at line E of Fig. II, and Fig. IV is a vertical section of the same at line F of Fig. I.

In the drawings, A represents a portion of the body of a car, and B the timber with which the pivot is connected, upon which the car turns to either one side or the other on the truck, and to this timber B, I secure a plate, *a*, provided with ears *c*. To the truck-beam C is secured a similar plate, *d*, provided with ears *c*, and between these upper and lower sets of ears *c* is placed a link, *e*, having its upper and lower ends curved, as shown clearly in Fig. III, and in dotted lines in Fig. I. This link stands upon its lower curved end, resting upon

the lower plate *a*, and the upper plate *a*, secured to the car-body, rests upon the upper curved end of the link; and two bolts, *f*, extend through this link, one being secured in the ears *c* of the upper plate *a*, and the other secured in the ears of the lower plate *a*.

I prefer to make the curve at the upper and lower ends of the link of a radius greater than one-half the extreme length of the link, and make the opening or slot in the link of such length that the upper bolt, *f*, will be quite near the upper end of the slot or opening, and the lower bolt quite near the lower end, so that as the truck turns out of its parallel position with reference to the car-body in passing around a curve the link on one side of the car will roll forward, and that on the other side will roll backward; and the links in this rolling movement will raise the car-body until the bolts *f* strike the ends of the opening or slot in the link, when the links will be prevented from rolling any farther in either direction, and the car will be prevented from rising any higher from the trucks, and the car-body will be held rigidly to the trucks, even without any other appliance of safety-chain.

This device provides a safe attachment of the car-body to the trucks, does not affect the easy motion of the car upon its springs, and prevents the trucks from leaving their position beneath the car-body, or becoming detached therefrom in case of accident.

Having thus described my invention, what I claim as new is—

The combination of the plates *a*, the ears *c*, the link *e*, and the fastenings or bolts *f*, forming a side bearing and safety-link for railway-cars, substantially as described.

JAMES M. FOSS.

Witnesses:

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