

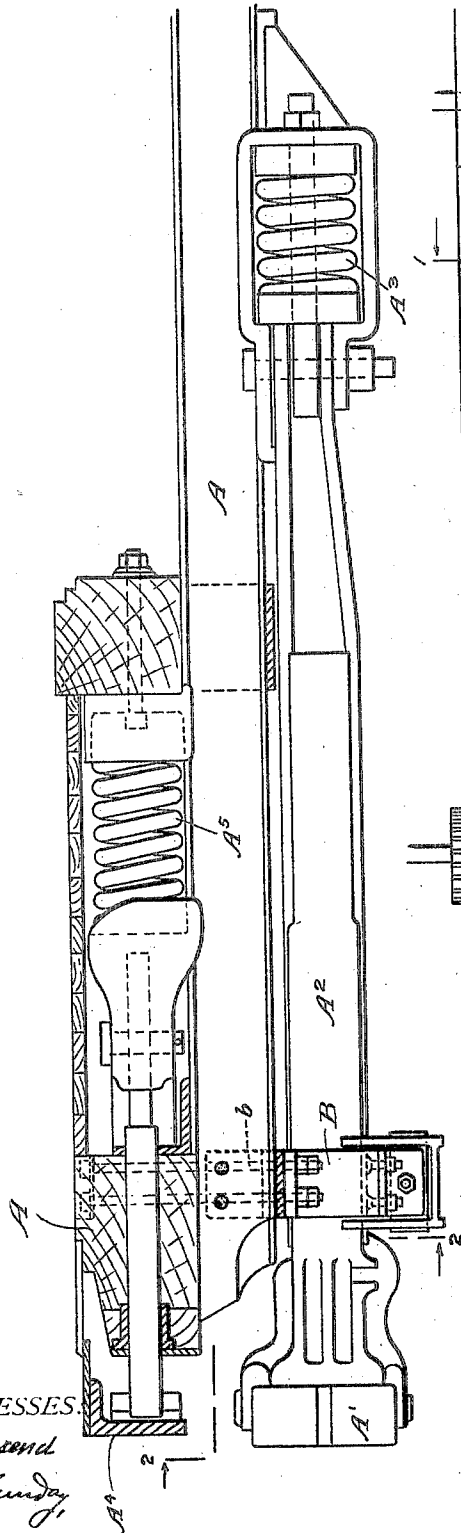
J. R. MITCHELL.

COUPLING CENTERING DEVICE AND CARRY IRON FOR RAILWAY CARS.

APPLICATION FILED OCT. 24, 1904.

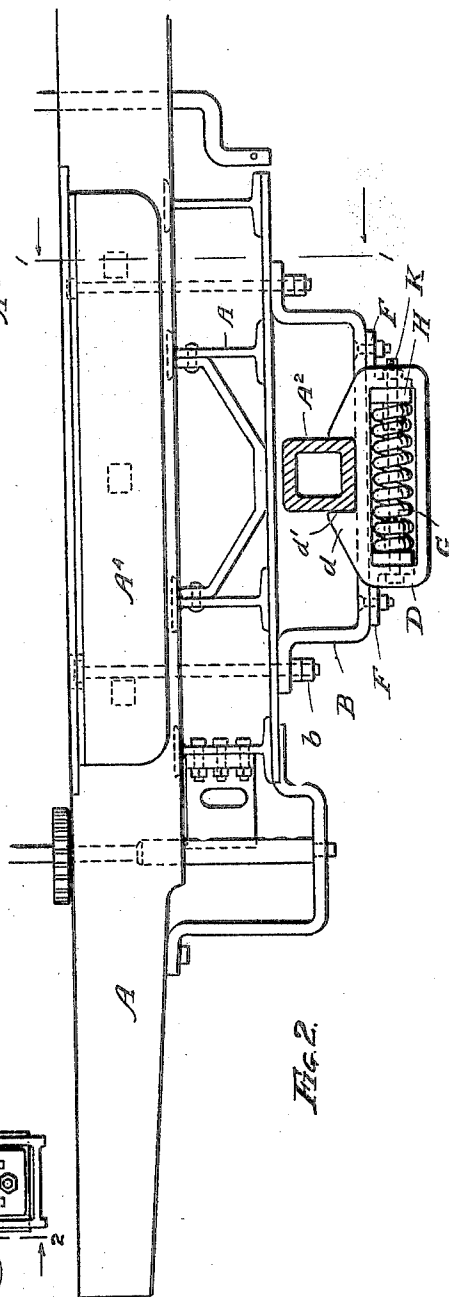
2 SHEETS—SHEET 1.

Fig. 1.



WITNESSES.  
F. B. Townsend  
A. W. Sunday

Fig. 2.



INVENTOR.  
John R. Mitchell  
BY  
Mundy, Pratt & Holbrook.  
his ATTORNEYS

J. R. MITCHELL.

COUPLING CENTERING DEVICE AND CARRY IRON FOR RAILWAY CARS.

APPLICATION FILED OCT. 24, 1904.

2 SHEETS—SHEET 2.

Fig. 4.

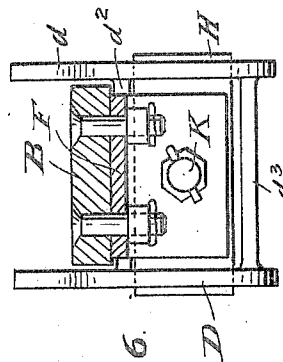
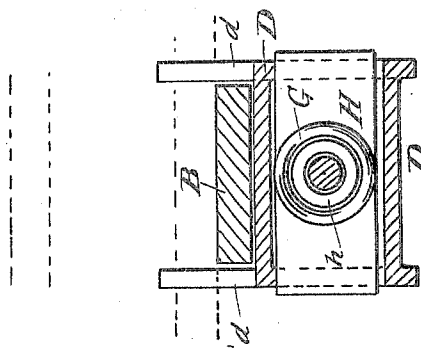


Fig. 6.

Fig. 3.

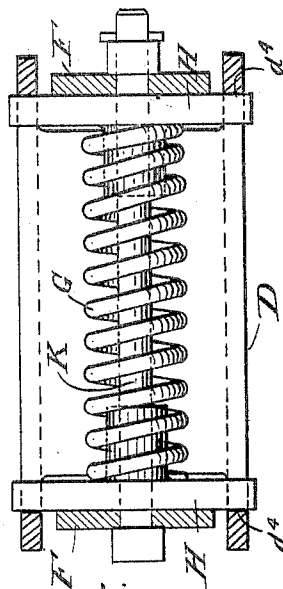
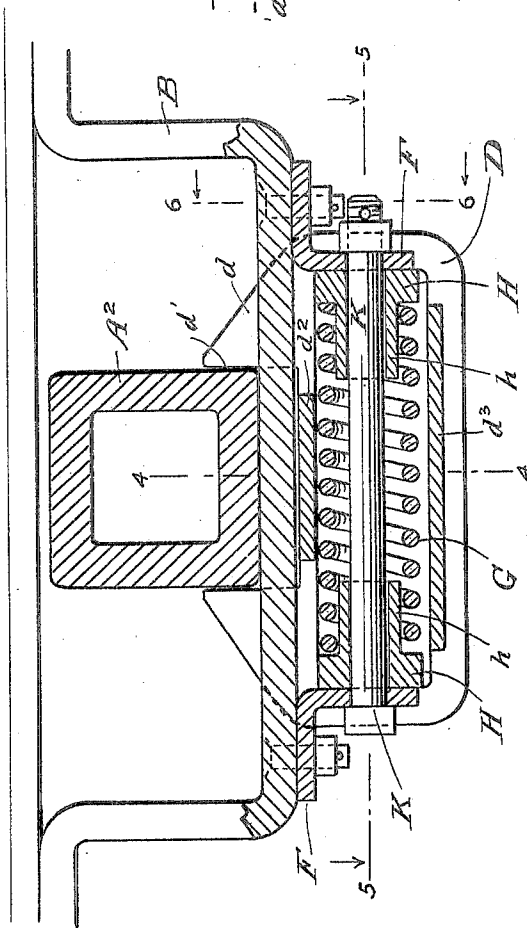


Fig. 5.

WITNESSES:

F. B. Townsend  
A. W. Munday

INVENTOR.

John R. Mitchell  
BY  
Munday, Evans & Adams  
his ATTORNEYS

# UNITED STATES PATENT OFFICE.

JOHN R. MITCHELL, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE W. H. MINER COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

## COUPLING-CENTERING DEVICE AND CARRY-IRON FOR RAILWAY-CARS.

No. 802,464.

Specification of Letters Patent.

Patented Oct. 24, 1905.

Application filed October 24, 1904. Serial No. 229,789.

*To all whom it may concern:*

Be it known that I, JOHN R. MITCHELL, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Coupler Centering Devices and Carry-Irons for Railway-Cars, of which the following is a specification.

My invention relates to improvements in centering devices and stirrups or carry-irons for railway-car couplers.

The object of my invention is to provide a coupler centering device and carry-iron of a simple, efficient, strong, and durable construction which will properly support the coupler and permit it to have the necessary swinging or lateral movement in passing around curves and at the same time hold the coupler normally in its proper central position in respect to the car.

My invention consists in the novel construction of parts and devices and in the novel combinations of parts and devices herein shown and described and by which this object or result is accomplished.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation, partly in longitudinal vertical section, of a passenger-car coupler embodying my invention. Fig. 2 is a vertical cross-section on the broken line 2 2 of Fig. 1, showing the coupler centering device and carry-iron in elevation. Fig. 3 is a vertical central cross-section through the centering device. Fig. 4 is a vertical section on line 4 4 of Fig. 3. Fig. 5 is a horizontal section on line 5 5 of Fig. 3, and Fig. 6 is a vertical section on line 6 6 of Fig. 3.

In the drawings, A represents a portion of the car-frame; A', the coupler; A<sup>2</sup>, the draw-bar; A<sup>3</sup>, the draft-rigging spring; A<sup>4</sup>, the buffer; A<sup>5</sup>, the buffer-spring, these parts being of any ordinary or customary construction.

B is the coupler carry-iron, the same being preferably of the usual or customary form and secured to the car-frame by bolts b b in the usual manner. The coupler centering device comprises a transversely-reciprocating saddle D, having upwardly-projecting guide wings or lugs d, which fit and reciprocate on each side of the carry-iron B and which are

furnished with shoulders d', fitting on each side of the coupler draw-bar A<sup>2</sup>, a pair of stops or angle-plates F F, bolted to the carry-iron, a spring G, a pair of followers H H, and a bolt or guide-stem K, secured to the stops and extending through the spring. The spring abuts at each end against the followers, and each follower is adapted to engage the stops and also the transversely-reciprocating saddle D, so that when the draw-bar swings or moves to either side the spring will be compressed, thus causing the spring to return the draw-bar to its central position. The followers H H are preferably provided with integral thimble portions h to guide the spring. The transversely-reciprocating saddle D is preferably of malleable iron or other cast metal and is furnished with an upper integral web d<sup>2</sup>, which fits beneath the carry-iron B, and with a lower integral web d<sup>3</sup> below the spring G. The spring G is thus embraced and inclosed between the transversely-reciprocating saddle D and the carry-iron B. The transversely-reciprocating saddle D of the centering device has integral shoulders d<sup>4</sup> to engage the followers.

In my invention the coupler draw-bar is supported by the carry-iron B in the usual manner, and the transversely-reciprocating saddle is mounted beneath the carry-iron and supported therefrom through the connecting brackets or angle plates F F, which serve also as stops for the followers to abut against.

The saddle D is supported from the brackets F through the connecting-bolt K and followers H, the saddle resting directly upon the followers and the followers resting upon the connecting-bolt K. My centering-saddle is thus entirely relieved from the weight of the draw-bar and from any binding strains to which the draw-bar may be subjected from the cars coupled thereto.

I claim—

1. The combination with a coupler draw-bar and a carry-iron supporting the same and upon which the draw-bar rests, of a centering device for the draw-bar, comprising a transversely-reciprocating saddle fitting under the carry-iron and having upwardly-projecting wings fitting on each side of the carry-iron, and furnished with shoulders engaging the draw-bar, and having also shoulders to en-

gage a pair of followers, a pair of stops or angle-plates secured to the carry-iron, a pair of followers adapted to abut against said stops and to engage said shoulders and said transversely-reciprocating saddle, a spring between said followers and a supporting pin or bolt extending through said spring, followers, stops and saddle, the carry-iron fitting between the draw-bar and said saddle and leaving the saddle free from the weight of the draw-bar, substantially as specified.

2. The combination with a coupler draw-bar and carry-iron upon which the draw-bar rests, of a pair of stops or angle-plates secured to said carry-iron, a pair of followers between said stops, a spring between said followers and a transversely-reciprocating saddle fitting under the carry-iron and having upwardly-projecting wings engaging the draw-bar and shoulders to engage the followers, the carry-iron fitting between the draw-bar and said saddle and leaving the saddle

free from the weight of the draw-bar, substantially as follows.

3. The combination with a coupler draw-bar and carry-iron upon which the draw-bar rests, of a pair of stops or angle-plates secured to said carry-iron, a pair of followers between said stops, a spring between said followers and a transversely-reciprocating saddle fitting under the carry-iron and having upwardly-projecting wings engaging the draw-bar, and shoulders to engage the followers, and a connecting-bolt extending through said saddle and said stops or angle-plates, the carry-iron relieving the saddle from the weight of the draw-bar and the carry-iron being furnished with a lower integral web below the spring and inclosing the same, substantially as specified.

JOHN R. MITCHELL.

Witnesses:

H. M. MUNDAY,  
EDMUND ADCOCK.