J. R. MITCHELL.

DRAW BAR CARRIER AND CENTERING DEVICE.

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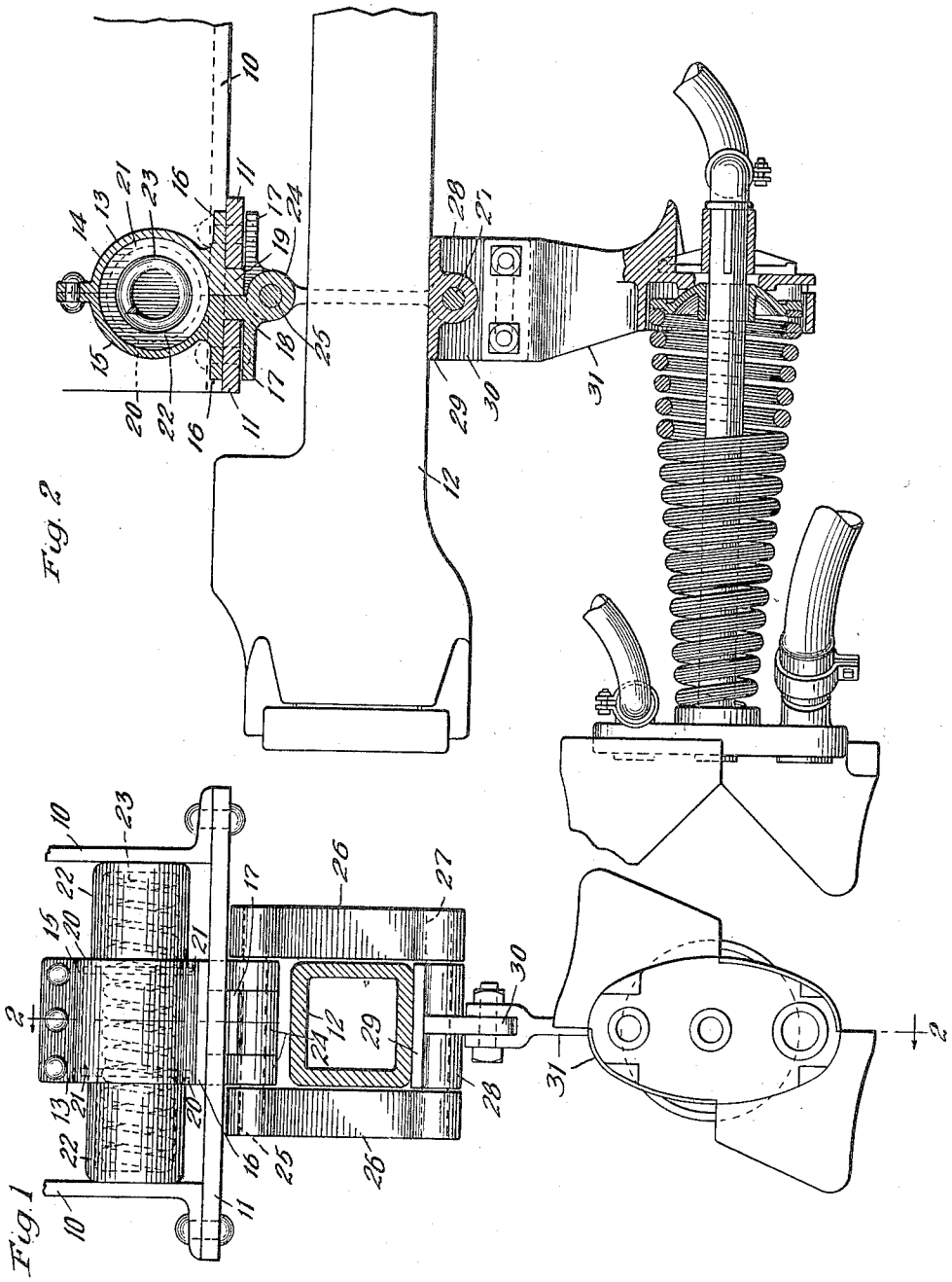


Fig. 2

Fig. 1

WITNESS

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

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DRAW-BAR CARRIER AND CENTERING DEVICE.

1,232,364. Specification of Letters Patent. **Patented July 3, 1917.**

Application filed May 10, 1915. Serial No. 27,009.

To all whom it may concern:

Be it known that I, JOHN R. MITCHELL, a citizen of the United States, residing at Evanston, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Draw-Bar Carriers and Centering Devices, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to improvements in draw-bar carriers and centering devices.

One object of the invention is to provide means for automatically centering the draw-bar of a railway car, which means also serve the function of supporting or carrying the draw-bar.

The invention furthermore consists in the improvements in the parts and devices and in the novel combinations of the parts and devices herein shown, described or claimed.

In the drawing forming a part of this specification, Figure 1 is an end elevation of a portion of the end of a car showing my improvements in connection therewith, the draw-bar being shown in section, and Fig. 2 is a vertical sectional view taken on the line 2—2 of Fig. 1.

In said drawing 10—10 denote sills or other members rigid with or forming a part of the car under-frame, and to the latter are secured the tie bars 11. To support and center the draw-bar 12, I have provided a spring case 13 which consists of two halves 14 and 15 preferably riveted along their top edges and having spaced horizontal flanges 16 and 17 connected by sections 18 and 19. The tie bars 11—11 are spaced apart and form a slot therebetween through which said sections 18 and 19 extend, the spring case 13 being slidably supported on said tie bars by the upper set of horizontal flanges 16—16. At each end of the spring case 13 on its interior there is provided a shoulder 20 with which coöperates a corresponding shoulder 21 formed on the inner end of a spring cap 22, there being two caps 22, one at each side of the spring case, the outer ends of the caps 22 engaging the sills 10—10. Mounted within the spring case and the caps 22 is a spring 23.

Below the lower horizontal flanges 17, the two members of the spring case are provided with interfitting perforated ears 24, arranged to form a hinge, the same being locked by means of a bearing pin 25 which at its outer ends supports a pair of links 26—26, the latter at their lower ends having another pin 27 extending therebetween on which is supported a bracket or plate 28 having a broad horizontal surface 29 on which is supported the coupler 12. The member 28 is provided with a depending centrally located flange 30 to which may be bolted the carrier 31 for the automatic connector for air, steam and electric conductors.

In the drawing, I have shown a well-known form of said automatic connector and do not deem it necessary to describe the same in detail in this application.

From the preceding description, it will be seen that as the draw-bar is swung to one side the automatic connector will also be swung in the same direction so that the coupler and connector will always be in vertical alinement, thus facilitating automatic connections when two cars are brought together. In addition, the coupler will always be returned to central position due to the spring case 13 being automatically held central because of the spring 23. In addition, the link connection between the spring case and the supporting bracket 28 permits the latter to accommodate itself to a limited extent to the back and forth movements of the draw-bar.

As will be obvious to those skilled in the art, many changes and variations may be made without departing from the spirit of the invention and all such changes and variations are contemplated as come within the scope of the claims appended hereto.

I claim:

1. In a device of the character described, the combination with a supporting member at the end of a car, of a combined draw-bar carrier and centering device movably mounted on said member, said device including a spring case slidably mounted on and above said member and having a depending support for the draw-bar, and spring means, disposed above said supporting member for centering said spring case.

2. In a device of the character described, the combination with a supporting member at the end of a car, of a spring centering member slidably mounted on said supporting member, links pivotally attached to said slidable member, said links being adapted to

straddle a draw-bar and a plate mounted between and supported by said links and adapted to support the draw-bar.

3. In a device of the character described, the combination with a fixed bar at the end of a car, and a draw-bar, of a member slidable with respect to said bar, and having portions depending therefrom arranged to engage the sides of said draw-bar, and spring means located above said bar, coöperating with said member to maintain the same in central position and thereby the draw-bar.

4. In a device of the character described, the combination with a fixed bar at the end of a car and a draw-bar, of a member slidably mounted on said bar and having depending elements arranged to engage the sides of the draw-bar, and spring means, located above the draw bar for automatically maintaining said member in central position.

In witness that I claim the foregoing I have hereunto subscribed my name this 22nd day of April, 1915.

JOHN R. MITCHELL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."