

No. 849,926.

PATENTED APR. 9, 1907.

W. SLAYDEN.  
DRAFT RIGGING FOR RAILWAY CARS.

APPLICATION FILED DEC. 13, 1906.

2 SHEETS—SHEET 1.

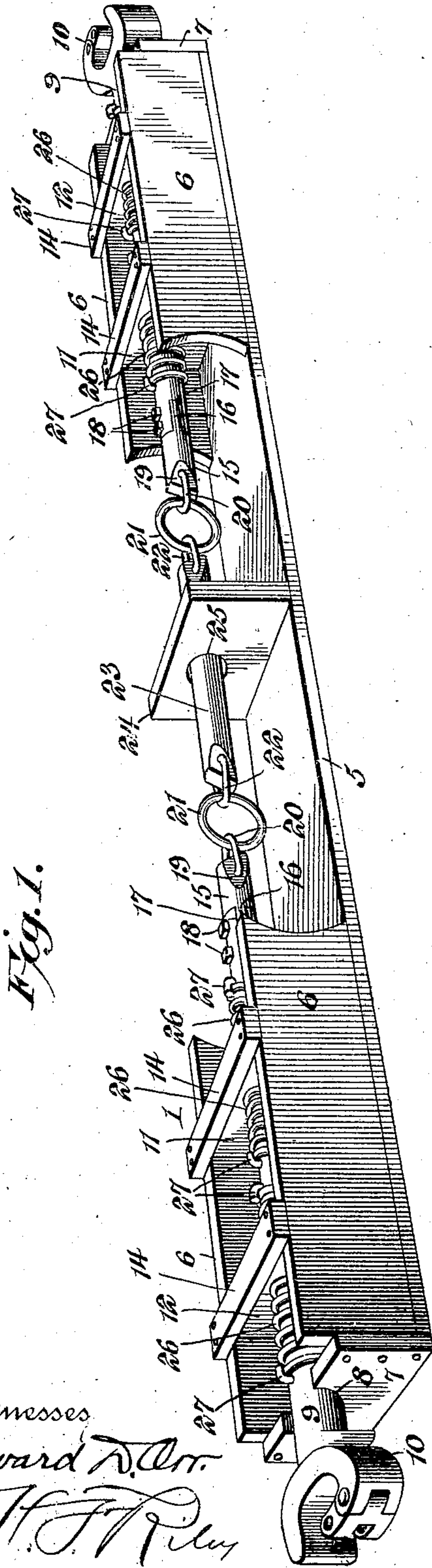


Fig. 1.

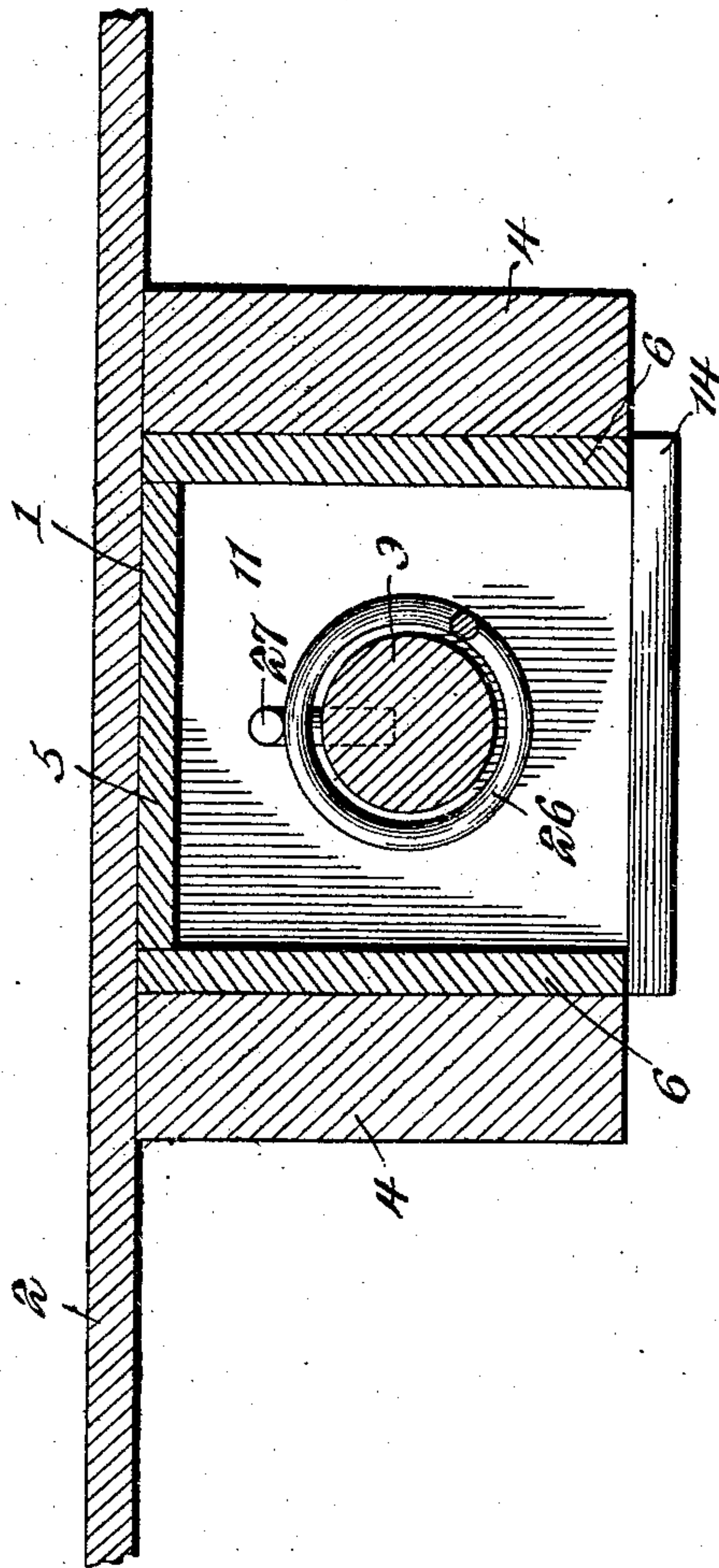


Fig. 5.

Witnesses  
Howard D. Carr  
J. F. Riley

Wesley Slayden, Inventor,  
By E. J. Siggers  
Attorney

No. 849,926.

PATENTED APR. 9, 1907.

W. SLAYDEN.  
DRAFT RIGGING FOR RAILWAY CARS.  
APPLICATION FILED DEC. 13, 1906.

2 SHEETS—SHEET 2.

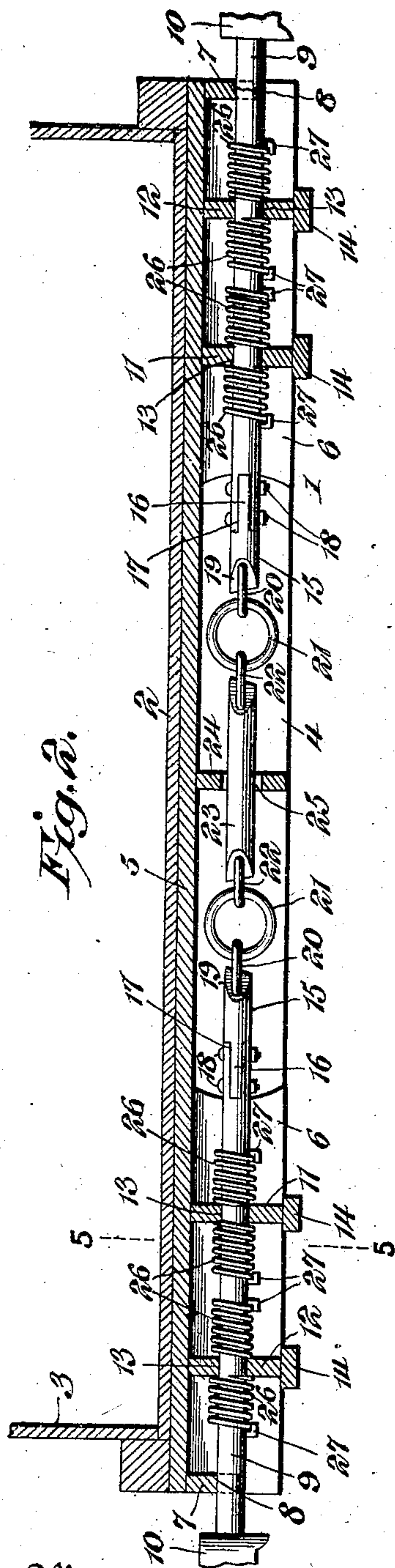


Fig. 2.

Witnesses  
Howard D. Art.  
J. F. Riley.

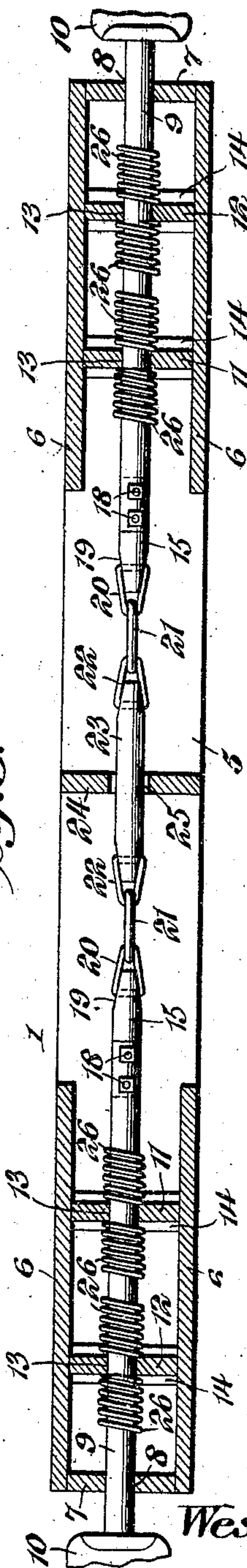
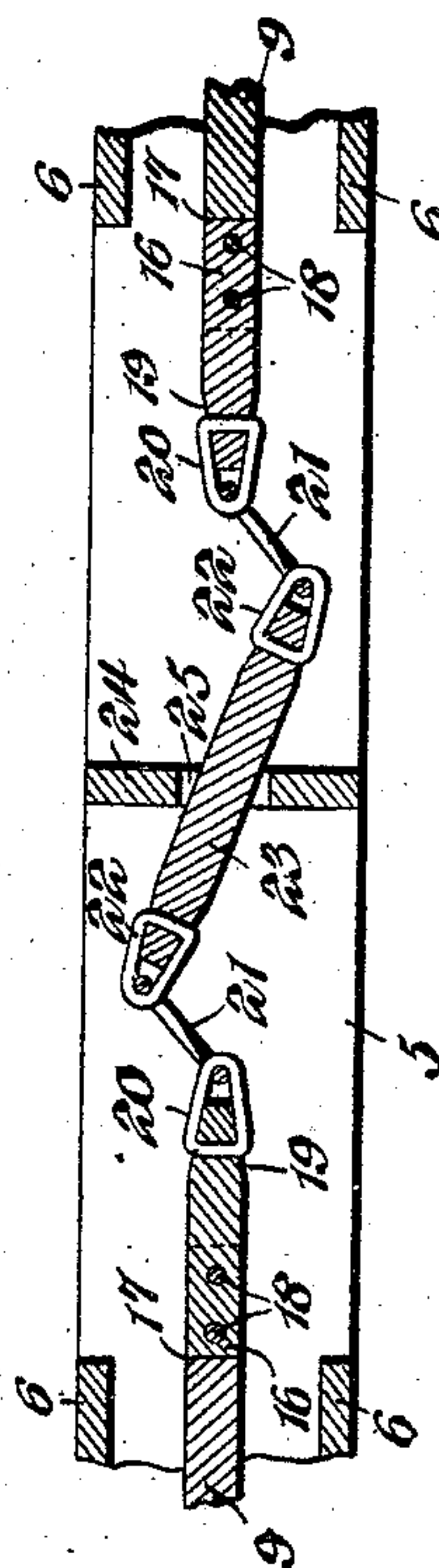


Fig. 3.

Fig. 4.



Wesley Slayden, Inventor,

By

E. J. Siggers

Attorney



# UNITED STATES PATENT OFFICE.

WESLEY SLAYDEN, OF WICHITA, KANSAS.

## DRAFT-RIGGING FOR RAILWAY-CARS.

No. 849,926.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed December 13, 1906. Serial No. 347,664.

*To all whom it may concern:*

Be it known that I, WESLEY SLAYDEN, a citizen of the United States, residing at Wichita, in the county of Sedgwick and State of Kansas, have invented a new and useful Draft-Rigging for Railway-Cars, of which the following is a specification.

The invention relates to improvements in draft-rigging for railway-cars.

The object of the present invention is to improve the construction of draft-rigging for railway-cars and to provide a simple and comparatively inexpensive draft-rigging adapted to be readily applied to various railway-cars and capable of effectually preventing the draw-bars and other parts of the draft mechanism from pulling out and dropping to the track, and thereby causing the wreckage of the cars.

A further object of the invention is to provide a draft-rigging having a plurality of cushioning-springs adapted to mutually contribute to the cushioning of a car whereby no one of the springs will be subjected to excessive strain.

With these and other objects in view the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in the form, proportion, size, and minor details of construction, within the scope of the claims may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is an inverted perspective view of a draft-rigging constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view showing the draft-rigging applied to a car. Fig. 3 is a horizontal sectional view. Fig. 4 is an enlarged horizontal sectional view of the central portion of the draft-rigging, illustrating the construction of the flexible connections between the intermediate and outer draw-bar members. Fig. 5 is a transverse sectional view taken substantially on the line 5 of Fig. 2.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a combined guide and support designed to be secured by bolts or other suitable fastening means to the bottom 2 of

a car-body 3 and preferably arranged between the center sills 4; but any suitable means may be employed for supporting the combined guide and support in its position along the median line of the bottom of the car-body.

The combined guide and support is provided with a continuous top wall or portion 5, and it has terminal side walls 6, arranged in pairs and extending inwardly from the ends of the combined guide and support and terminating short of the center thereof. The outer ends of the terminal side walls are connected by end walls or portions 7, which have central recesses 8 at their lower edges to receive the outer sections 9 of the outer draw-bar members. The outer draw-bar members are composed of inner and outer sections, the said outer sections 9 being preferably cast integral with and constituting the shanks of draw-heads 10, which constitute end stops for the draft-rigging.

The terminal side walls 6 are connected at intermediate points by inner and outer cross-pieces 11 and 12, having alined openings 13 for the outer sections 9 of the outer draw-bar members. The combined guide and support is reinforced at the cross-pieces by transverse bars 14, fitted against the lower edges of the side walls and cross-pieces.

The inner sections 15 of each outer draw-bar member has a reduced portion or tongue 16, which fits within a recess or perforation 17 of the proximate end of the other section 9, and the contiguous ends of the sections 9 and 15 are secured together by bolts 18 or other suitable fastening devices which enable the sections to be readily separated when it is desired to remove the car-couplings. The inner sections 15 are also provided with tapered ends 19, to which are secured approximately triangular links 20, arranged in suitable perforations of the inner sections 15 and receiving rings or circular links 21. The circular links or rings 21 are also linked into approximately triangular links 22 of an intermediate draw-bar member 23, which connects the outer draw-bar members and which is flexibly connected with the same to permit the necessary longitudinal play of the draft-rigging.

The intermediate draw-bar member is provided with tapered ends, and the approximately triangular links 22, which are arranged in suitable perforations of the ta-



pered ends of the intermediate member 23, project beyond the same, as clearly illustrated in Fig. 4 of the drawings.

The combined guide and support is provided with a central guide consisting of a cross-piece 24, depending from the top portion or wall 5 and provided with a central opening 25, through which the intermediate member passes. The opening 25 is of sufficient size to permit the intermediate member to swing laterally, as indicated in Fig. 4 of the drawings, and the said combined guide and support 24 forms a fulcrum on which the intermediate member is adapted to swing.

The draft-rigging is provided with spiral cushioning-springs 26, arranged in pairs at each of the cross-pieces 11 and 12 and interposed between the same and substantially L-shaped stops or keys 27, having their shank portions mounted in suitable perforations of the outer sections 9. The L-shaped stops or keys receive the adjacent end coils of the springs and effectually prevent the same from slipping out of engagement during the longitudinal movement of the draw-bar members. The springs mutually contribute to the operation of cushioning the cars, and no one of the springs will be subjected to excessive strain. The draw-heads or coupler-heads form stops for limiting the longitudinal movement of the draw-bar members, and when one of the draw-heads is in engagement with the end of the combined guide and support the spring at one side of each of the cross-pieces 11 and 12 will be compressed and the strain will be distributed throughout the length of the car. The continuous draft connections from one end of the car to the other effectually prevent the outer sections 9 or shanks of the draw-heads from pulling out and falling upon the track, and the wrecks incident to such accidents will be avoided. Instead, however, of mounting the continuous draft connections and the cushioning-springs on a car by means of the combined guide and support any other suitable means may be employed, and the guiding and supporting means for the draft connections may constitute a portion of the framework of the car.

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

1. A device of the class described comprising intermediate and outer draw-bar members flexibly connected at their adjacent ends, the intermediate draw-bar member being movable laterally, a guide arranged at a point intermediate of the length of the intermediate draw-bar member and forming a fulcrum on which the intermediate draw-bar member is adapted to swing in its lateral movement, and car-couplings connected with the outer draw-bar members.

2. A device of the class described compris-

ing outer draw-bar members, car-couplings connected with the outer ends thereof, an intermediate draw-bar member flexibly connected with the inner ends of the outer draw-bar members and movable laterally, said intermediate draw-bar member consisting of a bar, a guide receiving the intermediate draw-bar member at a point between the ends thereof and forming a fulcrum on which the intermediate draw-bar member is adapted to swing in its lateral movement, and coiled springs disposed on the outer draw-bar members for cushioning the car-couplings.

3. A device of the class described comprising outer draw-bar members, car-couplings connected with the outer ends thereof, an intermediate draw-bar member consisting of a bar flexibly connected at its ends to the inner end of the outer draw-bar members, a central guide having an opening through which the intermediate draw-bar member passes, said guide forming a fulcrum on which the intermediate draw-bar member is adapted to swing in the lateral movement thereof, and cushioning means for the car-couplings.

4. A device of the class described comprising intermediate and outer draw-bar members having their proximate ends tapered, approximately triangular links mounted on the tapered ends of the said members, rings linked into the said links, and car-couplings connected with the outer members.

5. A device of the class described comprising intermediate and outer draw-bar members, the outer draw-bar members being composed of separate sections detachably secured together, flexible coupling members connecting the draw-bar members and permitting the intermediate member to move laterally, draw-heads connected with the outer ends of the outer draw-bar members, and cushioning means connected with the latter.

6. In a device of the class described, the combination of a combined guide and support comprising a top wall or portion, terminal side walls extending inward from the ends of the combined guide and support, cross-pieces connecting the side walls and having guide-openings and a central guide, an intermediate draw-bar member arranged in the central guide, outer draw-bar members mounted in the openings of the cross-pieces and flexibly connected with the intermediate draw-bar member, draw-heads connected with the outer draw-bar members, and coiled springs mounted on the outer members and arranged at the opposite faces of the cross-pieces.

7. In a device of the class described, the combination of a combined guide and support comprising a top wall, terminal side walls, cross-pieces connecting the side walls and having guide-openings, an end wall having guide-recesses, intermediate and outer draw-bar members, the outer members being



mounted in the openings of the cross-pieces and the recesses of the end walls, draw-heads connected with the outer members and forming stops for engaging the end walls, and  
5 cushioning-springs mounted on the outer members and engaging the cross-pieces.

8. In a device of the class described, the combination of a combined guide and support having cross-pieces provided with openings,  
10 draw-bar members mounted in the openings of the cross-pieces, springs disposed on the

said members and engaging the cross-pieces, and substantially L-shaped keys mounted on the said members and forming stops for engaging the springs.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WESLEY SLAYDEN.

Witnesses:

A. K. KEMP,

THOS. OUTLAND.

15