

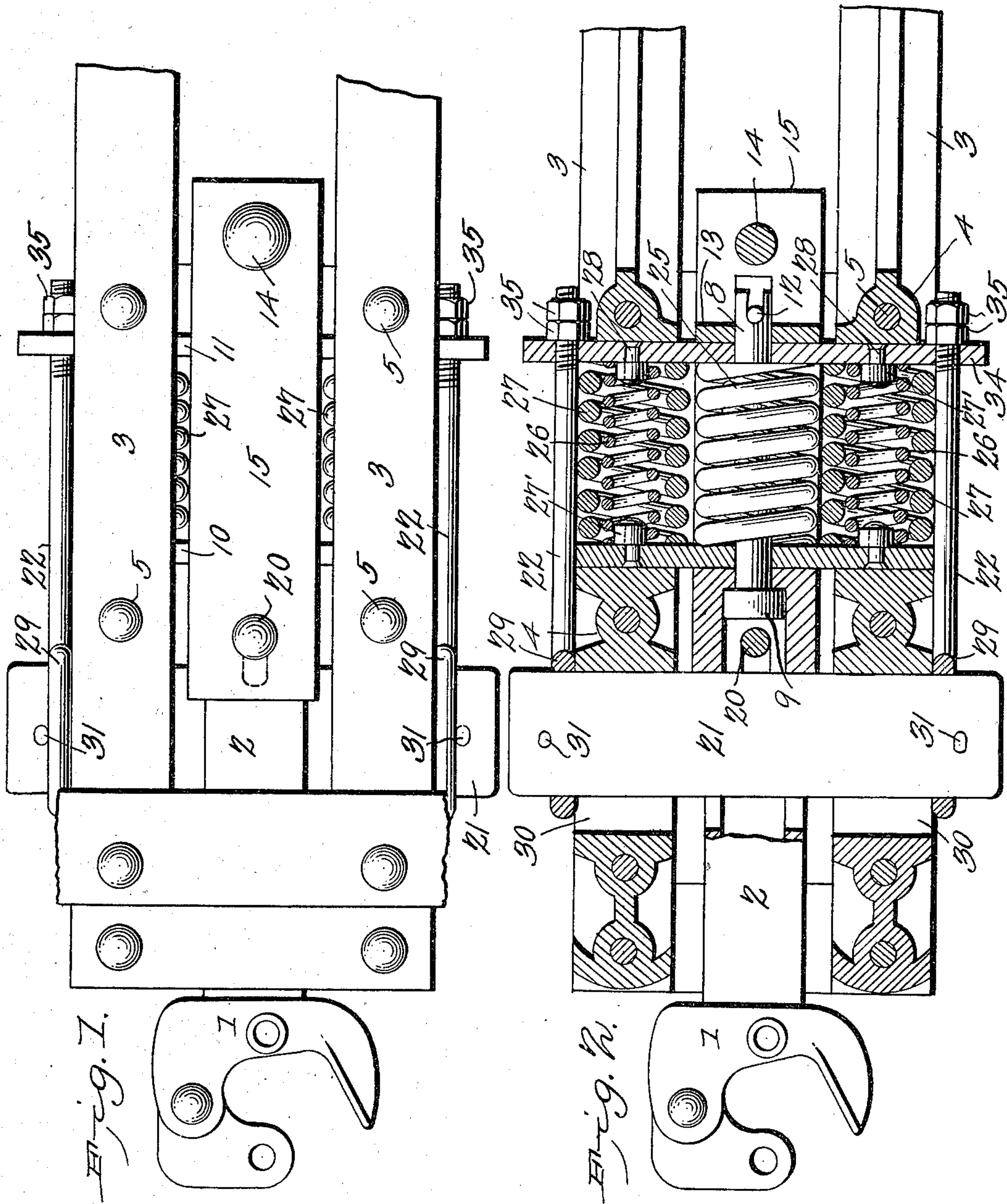
No. 735,302.

PATENTED AUG. 4, 1903.

T. W. SALING.
DRAFT RIGGING FOR RAILWAY CARS.
APPLICATION FILED NOV. 7, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses
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J. H. Riley

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Fig. 3

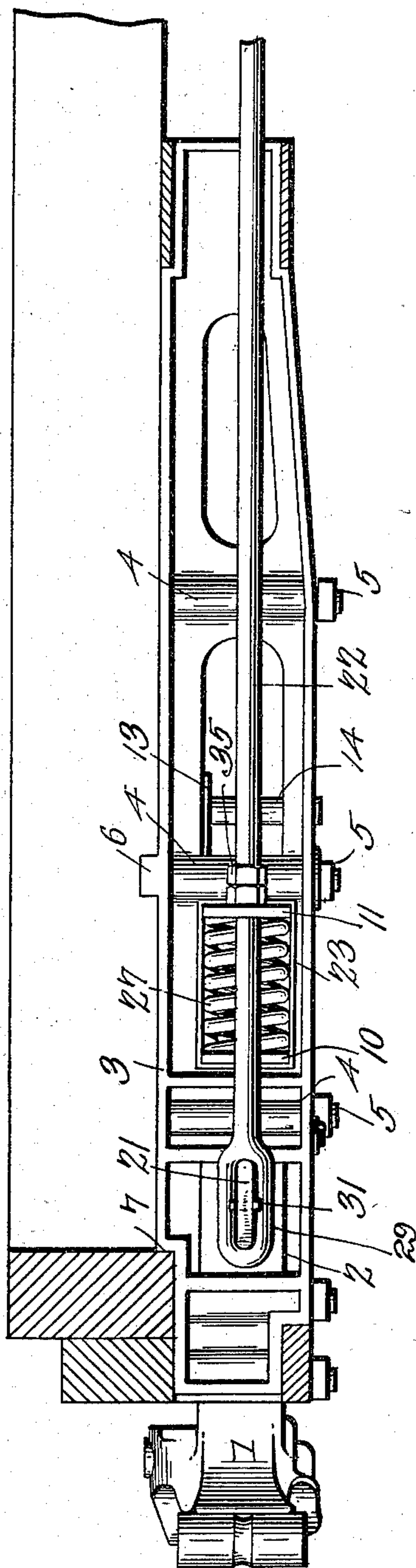
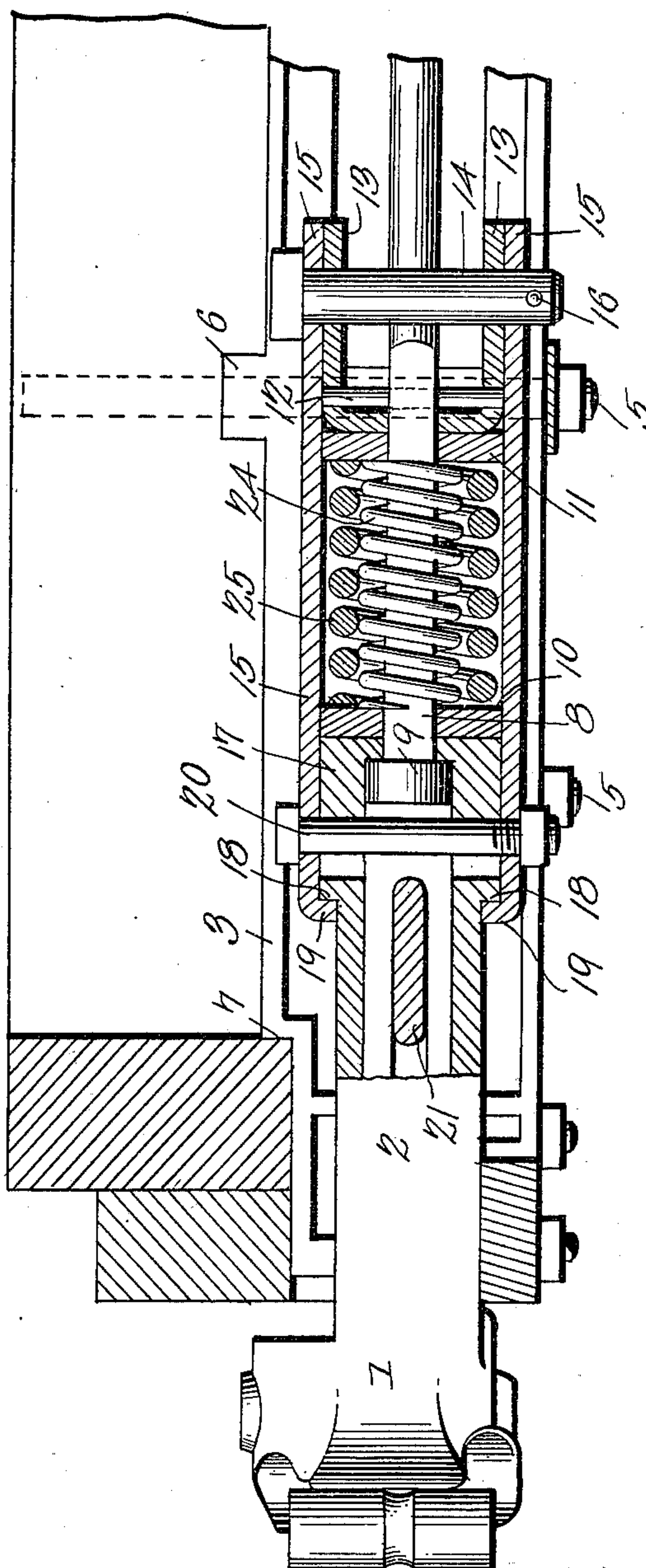


Fig. 4



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UNITED STATES PATENT OFFICE.

THOMAS W. SALING, OF MARSHALL, TEXAS, ASSIGNOR OF ONE-FOURTH
TO R. A. BELL, OF MARSHALL, TEXAS.

DRAFT-RIGGING FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 735,302, dated August 4, 1903.

Application filed November 7, 1902. Serial No. 130,455. (No model.)

To all whom it may concern:

Be it known that I, THOMAS W. SALING, a citizen of the United States, residing at Marshall, in the county of Harrison and State of Texas, 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 mechanism of great strength and durability adapted to be readily applied to the framework of a car and capable of effectively cushioning the car-coupling and of relieving the body of a car of shocks and strains.

A further object of the invention is to increase the cushioning effect of such mechanism and to provide a draft-rigging which may be connected with a car-body at the end only and also with the draft mechanism at the other end of the car when desired.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a plan view of a portion of the frame of a car provided with draft mechanism constructed in accordance with this invention. Fig. 2 is a horizontal sectional view of the same. Fig. 3 is a side elevation of the draft mechanism, the frame of the car being in section. Fig. 4 is a central longitudinal sectional view.

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

1 designates a car-coupling provided with a shank or draw-bar 2, arranged between a pair of metallic draft-beams 3, consisting of open-work metallic frames or castings having flanged tops and bottoms and provided at intervals with vertical eyes or openings 4 for the reception of bolts or other suitable fastening devices for securing the draft-beams to the car-frame. The draft-beams are pref-

erably provided between their ends with vertically-disposed lugs or extensions 6 to fit in corresponding recesses of the timbers of the car, and the front ends of the draft-beams are provided at their upper faces with recesses 7 to receive the end sills of the car, as clearly shown in Figs. 3 and 4. By this construction the draft-beams are firmly secured to the frame of a car. The inner or rear ends of the draft-beams are provided with upper and lower recesses to receive the transverse bars or braces of the car, as shown in Fig. 3.

Extending from the rear end of the shank or draw-bar 2 of the car-coupling is a tail-pin 8, provided at its front end with a head 9, located within the draw-bar and engaging the rear end thereof, as clearly shown in Figs. 2 and 4; but the tail-pin may be secured to the rear end of the draw-bar in any other desired manner. The tail-pin extends through a pair of front and rear follower-plates 10 and 11, having central and side springs interposed between them, as hereinafter explained, and the rear end of the tail-pin is slotted to receive a key 12 or other suitable fastening device for securing the tail-pin to a yoke 13. The yoke 13, which is approximately U-shaped, has upper and lower horizontal portions and a front connecting portion, which is perforated for the reception of the rear portion of the tail-pin. The upper and lower sides of the yoke are perforated to receive a vertical bolt or pin 14, which also passes through upper and lower connecting plates or bars 15 and which is secured to the same by a key 16 or other suitable fastening device. The rear end of the shank or draw-bar is enlarged, and this enlarged portion 17, which is rectangular in cross-section, forms upper and lower shoulders 18, which are engaged by flanges 19 of the front ends of the connecting plates or bars 15. The connecting plates or bars 15 have their front ends extended vertically to form the flanges 19, and they are perforated for the reception of a vertical bolt 20, which secures the connecting bars or plates to the shank or draw-bar. The bolt 20 passes through a slot in the enlargement of the shank of the draw-bar

and is located between the tail-pin and a transverse key 21, which connects the draw-bar with a pair of draft-rods 22.

The front and rear follower-plates 10 11, 5 which are arranged between the bars or plates 15, extend laterally from the same and have their end portions located within openings 23 of the draft-beams, and the central and side springs are interposed between 10 the follower-plates, as clearly shown in Fig. 2. The central cushioning-springs 24 and 25 are disposed on the tail-pin, as clearly shown in Fig. 4, and the side springs 26 and 27 are located within the openings 23 of the draft- 15 beams, the inner coiled springs 26 being supported by suitable studs or plugs 27', secured to the end portions of the follower-plates by bolts 28 and extending into the inner springs 26, as clearly shown in Fig. 2. When the 20 car-coupler is drawn outward, the rear follower-plates will engage the springs and compress the same, and thereby cushion the draw-head, and when the car-coupler is pushed inward the front follower-plate will engage the 25 springs and cushion the movement.

The draft-bars 22, which are located at the outer sides of the draft-beams, are provided at their outer ends with enlargements or heads 29 to receive the transverse draw-bar 30 key 21, which extends through slots of the draft-beams, the slots 30 of the draft-beams being of sufficient length to permit the necessary play of the draw-bar. The heads of the draft-rods are secured to the 35 ends of the key by means of suitable fastening devices 31, which may consist of pins or be constructed in any other desired manner. The draft-rods extend through slots or openings of the ends 34 of the inner or rear fol- 40 lower-plate and are threaded to receive nuts 35; but any other desired form of stop may be provided for engaging the follower-plates, and, as shown in Fig. 3 of the drawings, the draft-rods may be extended to enable the 45 draft mechanism at each end of a car to be connected.

It will be seen that the draft mechanism is exceedingly simple and inexpensive in construction, that it is adapted to be readily applied to a car, and that it possesses great 50 strength and durability. It will also be apparent that the cushioning-springs are compactly and effectively arranged and that the draft-rods, which are located at opposite 55 sides of the draft mechanism, may extend to the inner follower-plates only or be made continuous to permit the draft mechanism at each end of a car to be connected.

What is claimed is—

60 1. In a device of the class described the combination of a draw-bar, connecting-plates secured to the draw-bar and extending inward therefrom, a yoke interposed between and connecting the inner portions of the con- 65 necting-plates, follower-plates arranged be-

tween the connecting-plates, a cushion interposed between the follower-plates, and a tail-pin connected with the draw-bar and with the yoke and extending through the follower-plates, substantially as described. 70

2. In a device of the class described the combination with a draw-bar, of draft-beams located at opposite sides of the draw-bar and provided with openings, connecting-plates 75 extending rearward from the draw-bar, follower-plates arranged between the connecting-plates and having their end portions located within the openings of the draft-beams, central and side cushions interposed between 80 the follower-plates and located between the connecting-plates and in the openings of the draft-beams, and means for connecting the inner follower-plates with the connecting-plates, substantially as described.

3. In a device of the class described the 85 combination with a draw-bar, of draft-beams located at opposite sides of the draw-bar and provided with openings, connecting-plates secured to the draw-bar and extending inward therefrom, a yoke interposed between 90 and secured to the connecting-plates, follower-plates extending through the space between the connecting-plates having their end portions arranged in the openings of the 95 draft-beams, and central and side cushions interposed within the follower-plates and located in the space between the connecting-plates and in the openings of the draft-beams, substantially as described.

4. In a device of the class described the 100 combination with a draw-bar, of draft-beams located at opposite sides of the draw-bar and provided with openings, connecting-plates secured to and extending from the draw-bar, a yoke secured to the inner portions of the 105 connecting-plates and interposed between the same, transverse follower-plates extending through the space between the connecting-plates and having their end portions located in the openings of the draft-beams, 110 central and side springs interposed between the follower-plates, a tail-pin extending from the draw-bar and passing through the central springs, and studs mounted on the fol- 115 lower-plates and fitting in the central springs and supporting the same, substantially as described.

5. In a device of the class described the combination with a draw-bar, of draft-beams located at opposite sides of the same, con- 120 necting-plates secured to and extending from the draw-bar, a yoke secured to and interposed between the connecting-plates, follower-plates arranged within the connecting-plates, a tail-pin extending from the draw- 125 bar to the yoke and passing through the latter, and a key engaging the tail-pin and arranged within the yoke, substantially as described.

6. In a device of the class described the 130

combination of a draw-bar provided with a slot, draft-beams located at opposite sides of the draw-bar and having slots, a key extending through the said slots, connecting-plates
5 extending rearward from the draw-bar, follower-plates, means for connecting the inner follower-plate with the connecting-plates, a cushion interposed between the follower-plates, and draft-rods extending from the in-

ner follower-plate to the key and secured to the latter, substantially as described.

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

THOMAS W. SALING.

Witnesses:

JAMES L. BIRDSONG,
J. F. NANNST.