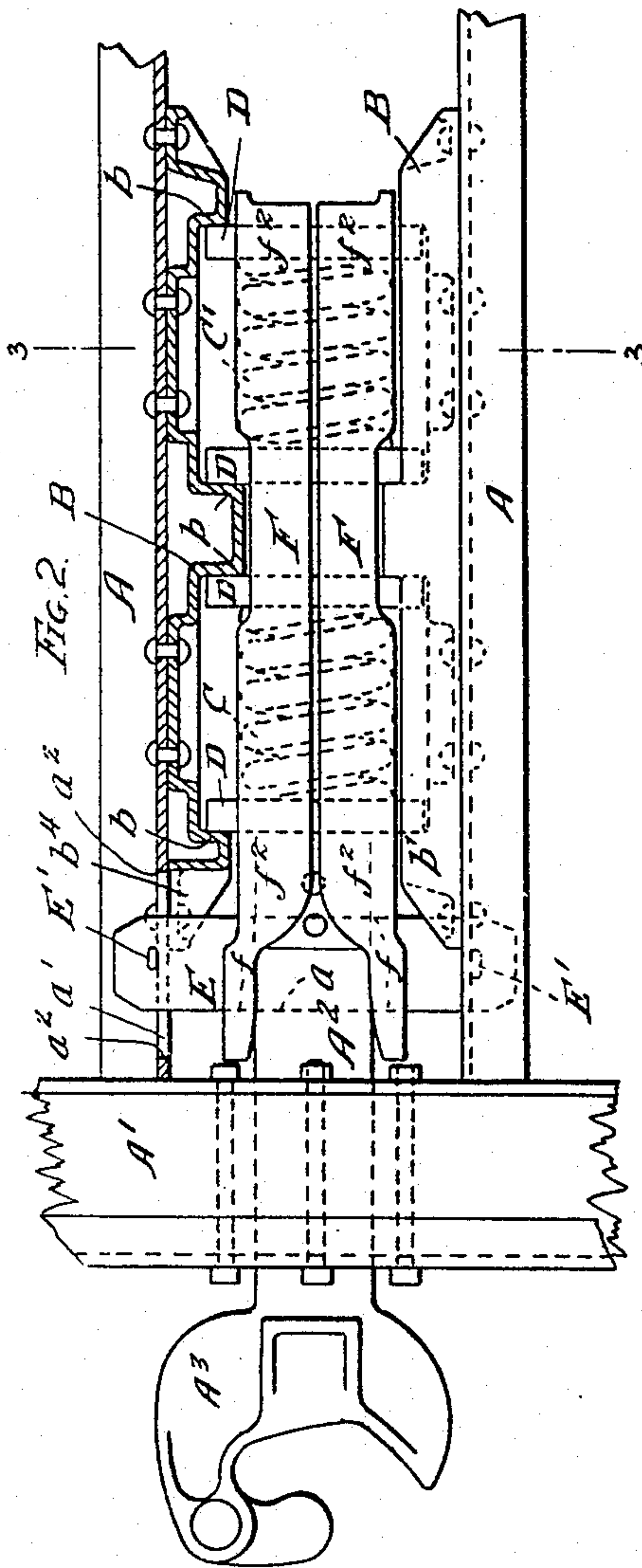
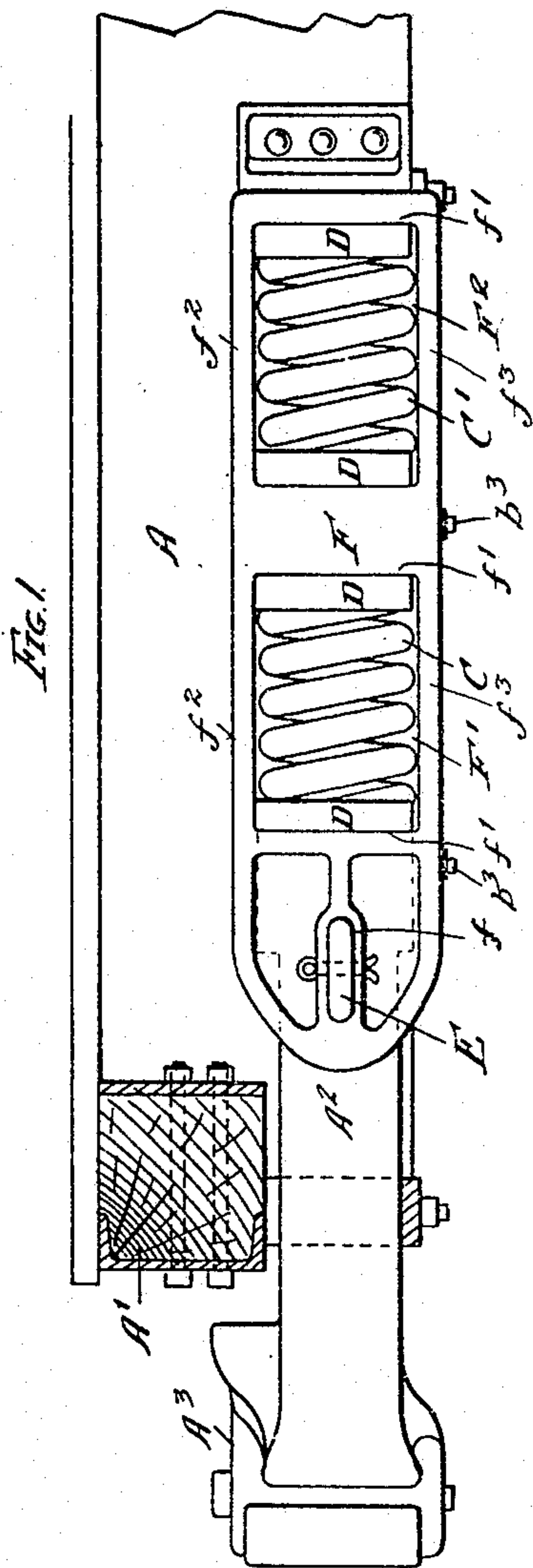


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PATENTED NOV. 6, 1906.

J. F. O'CONNOR.
DRAFT RIGGING FOR RAILWAY CARS.
APPLICATION FILED JUNE 6, 1906.

2 SHEETS—SHEET 1.



WITNESSES:

F. B. Townsend

A. W. Munday

INVENTOR

John F. O'Connor

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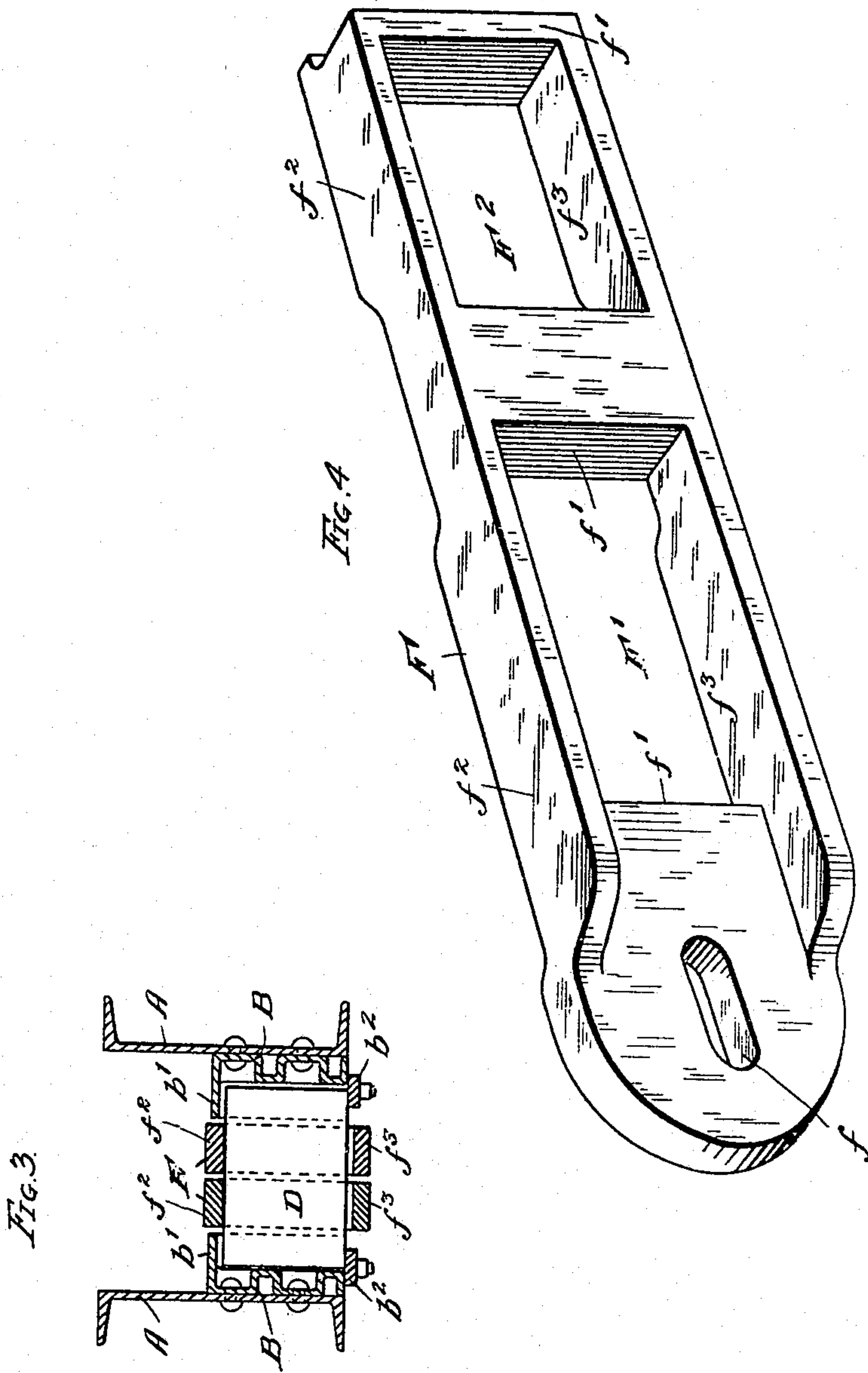
No. 335,249.

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UNITED STATES PATENT OFFICE.

JOHN F. O'CONNOR, OF CHICAGO, ILLINOIS, ASSIGNOR TO W. H. MINER COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

DRAFT-RIGGING FOR RAILWAY-CARS.

No. 835,249.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed June 6, 1906. Serial No. 320,381.

To all whom it may concern:

Be it known that I, JOHN F. O'CONNOR, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Draft-Rigging for Railway-Cars, of which the following is a specification. My invention relates to improvements in draft-rigging for railway-cars.

10 The object of my invention is to provide a railway draft-rigging of a strong, simple, efficient, and durable construction, having provision for the necessary lateral movement of the draw-bar and which may be conveniently removed and replaced.

15 My invention consists in the means I employ to practically accomplish this object or result—that is to say, it consists, in connection with the center sills and side plates or stop-castings secured thereto, the draw-bar, tandem-arranged springs, and followers, of a pair of parallel side draw-bar extensions having pockets therein through which the followers extend and connected one on each 25 side of the draw-bar by a horizontal key extending through a suitable slot in the draw-bar and through suitable slots in the parallel side extensions of the draw-bar, whereby the side extensions are connected to the 30 draw-bar and adapted to have a slight independent longitudinal movement in respect to each other, thus permitting the draw-bar to have the necessary lateral movement at its front end.

35 My invention also consists in the novel construction of parts and devices and in the novel combinations of parts and devices herein shown and described.

40 In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation, partly in vertical section, of a railway-car draft-rigging embodying my invention. Fig. 2 is a plan view partly in horizontal section. Fig. 3 is a vertical cross-section 45 on line 3 3 of Fig. 2, and Fig. 4 is a detail perspective view of one of the parallel pocketed side extensions for the draw-bar.

50 In the drawings, A represents the center sills or the car-frame pieces to which the side plates or stop-castings B of the draft-rigging are secured.

A' is the front or cross sill, A² the draw-bar, and A³ the coupler.

C C' are the tandem-arranged springs of the draft-rigging; D the followers, and F F a pair of parallel side extensions of the draw-bar, the same fitting at their front ends one on each side of the draw-bar and connected thereto by a horizontal key E, which extends through a horizontal slot *a* in the rear 60 end of the draw-bar and through corresponding slots *f* at the front ends of the side extensions F F. The parallel side extensions F F are furnished each with pockets or openings F' F², through which the followers D 65 extend, the ends or shoulders *f'* of these openings engaging the followers and causing the same to move with the draw-bar. The openings F' F² in the side extensions F F are rectangular in form and enable the springs to 70 be introduced laterally into position between the followers and between the flat horizontal strap or plate-like upper and lower members *f*² *f*³ of the side extensions F F. The upper horizontal strap or plate-like members *f*² *f*² of 75 the adjacent side extensions F F fit between the upper guides or flanges *b'* *b'* of the side plates or stop-castings B, so that said upper guide *b'* *b'* of the stop-castings can properly guide the draw-bar and its side extensions. 80 The horizontal key E preferably extends through the center sills A, which are furnished with slots *a'* to receive said key and permit of the necessary longitudinal movement of the key with the draw-bar. The key E is preferably furnished with keepers E' at each end 85 to keep the same in place and permit the key to be removed in either direction when it is desired to disconnect the coupler or draft-rigging from the car. 90

The side plates or stop-castings B are furnished with the customary shoulders or stops *b* for the followers to abut against, with an upper integral flange or guide *b'* at their upper edges and with a removable guide *b*² at 95 their lower edges removably secured thereto by bolts *b*³ to support and guide the followers and through them the draft-rigging.

As the connection between the draw-bar and the followers is through a pair of independent side extensions F F, each independently connected to the draw-bar and adapted to have a slight longitudinal movement independent of each other, the draw-bar at its front end is permitted to move laterally, as 105 required, when the train passes around

curves, and the draft-rigging springs themselves also thus tend to center the draw-bar or restore it to position.

The side plates or stop-castings B at the front end thereof are provided with slots b^4 to permit of the necessary backward and forward movement of the key E, as their front ends, preferably, project forward of the rear-most position of the key.

As the key E, which connects the parallel side extensions with the draw-bar, also projects through slots in the center sills, the key itself affords, in connection with the ends or shoulders a^2 , a means for limiting the compression of the springs, and also a further means for connecting the draw-bar with the center sills independent of the side plates or stop-castings and the connecting parts of the draft-rigging proper.

I claim—

1. In a draft-rigging, the combination with the center sills, side plates or stop-castings, tandem-arranged springs and followers, of a draw-bar, and a pair of parallel side extensions for the draw-bar, having pockets or openings through the same to receive the followers and admit the springs laterally and provided with upper and lower horizontal integral flat strap-like members and a horizontal key extending through the draw-bar and said parallel side extensions and connecting the same, substantially as specified.

2. In a draft-rigging, the combination with the center sills, side plates or stop-castings, tandem-arranged springs and followers, of a draw-bar, and a pair of parallel side extensions for the draw-bar, having pockets or openings through the same to receive the followers and admit the springs laterally and provided with upper and lower horizontal integral flat strap-like members and a horizontal key extending through the draw-bar and said parallel side extensions and connecting the same, said center sills having slots to receive said key and the key extending through said slots in the center sills, substantially as specified.

3. In a draft-rigging, the combination with side plates or stop-castings, springs and fol-

lowers, of a draw-bar and a pair of parallel, independently-movable, side extensions for the draw-bar having pockets to receive the followers and admit the springs laterally and provided with upper and lower horizontal integral flat strap-like members, substantially as specified.

4. In a draft-rigging, the combination with side plates or stop-castings, springs and followers, of a draw-bar and a pair of parallel, independently-movable, side extensions for the draw-bar having pockets to receive the followers and admit the springs laterally and provided with upper and lower horizontal integral flat strap-like members, and a key connecting the same, substantially as specified.

5. In a draft-rigging, the combination with the draw-bar, of a pair of parallel, independently-movable, side extensions for the draw-bar, furnished with pockets or openings to receive the followers and admit the springs laterally and provided with upper and lower horizontal integral flat strap-like members, substantially as specified.

6. In a draft-rigging, the combination with the draw-bar, of a pair of parallel, independently-movable, side extensions for the draw-bar, furnished with pockets or openings to receive the followers and admit the springs laterally and provided with upper and lower horizontal integral flat strap-like members, and a horizontal key connecting the same with the draw-bar, substantially as specified.

7. In a draft-rigging, the combination with the draw-bar, of a pair of parallel, independently-movable, side extensions for the draw-bar, furnished with pockets or openings to receive the followers and admit the springs laterally and provided with upper and lower horizontal integral flat strap-like members, and a horizontal key connecting the same with the draw-bar, and center sills having slots through which said key extends, substantially as specified.

JOHN F. O'CONNOR.

Witnesses:

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