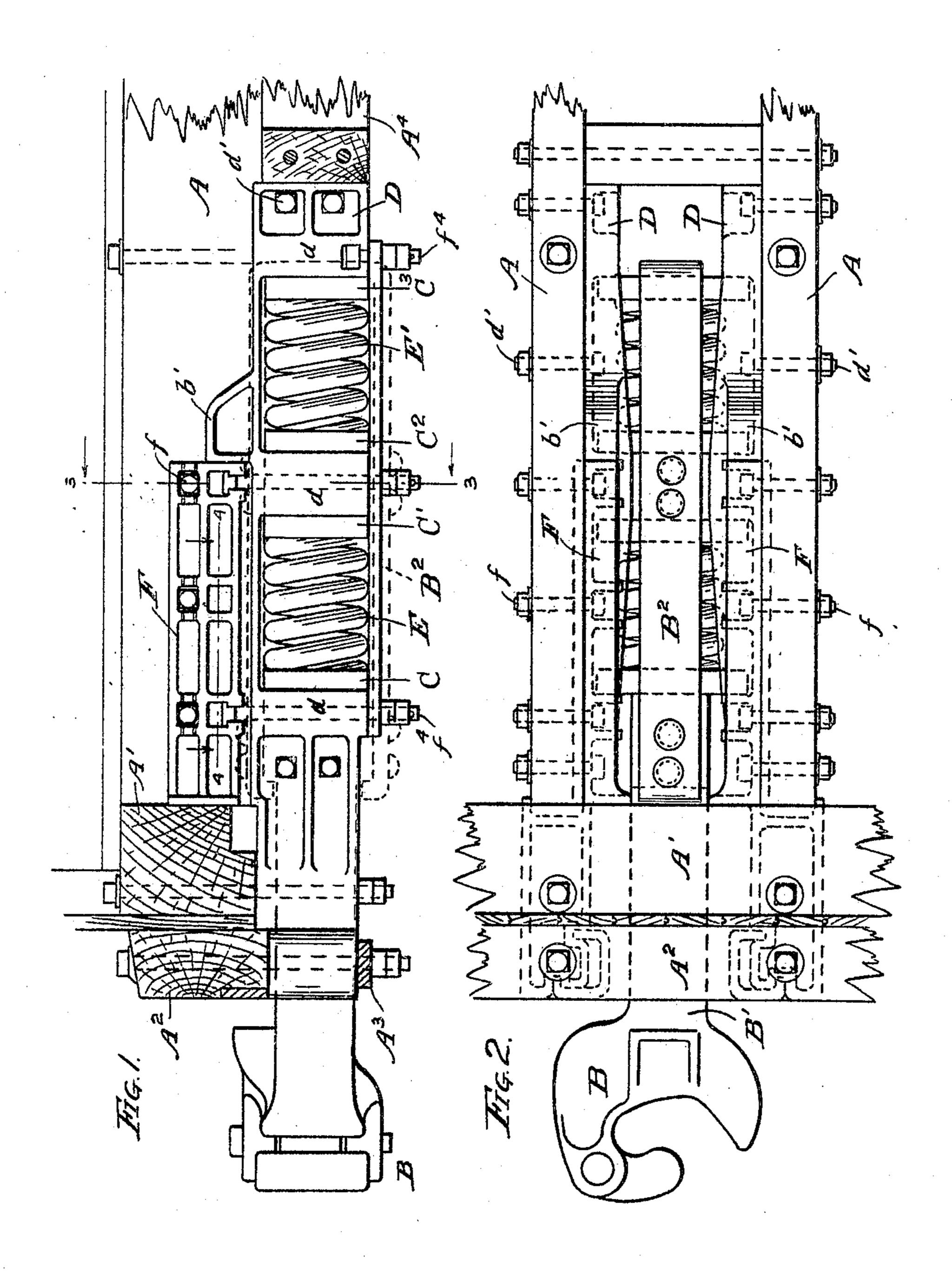
J. F. O'CONNOR. DRAFT RIGGING FOR RAILWAY CARS. APPLICATION FILED JUNE 8, 1905.

2 SHEETS-SHEET 1.



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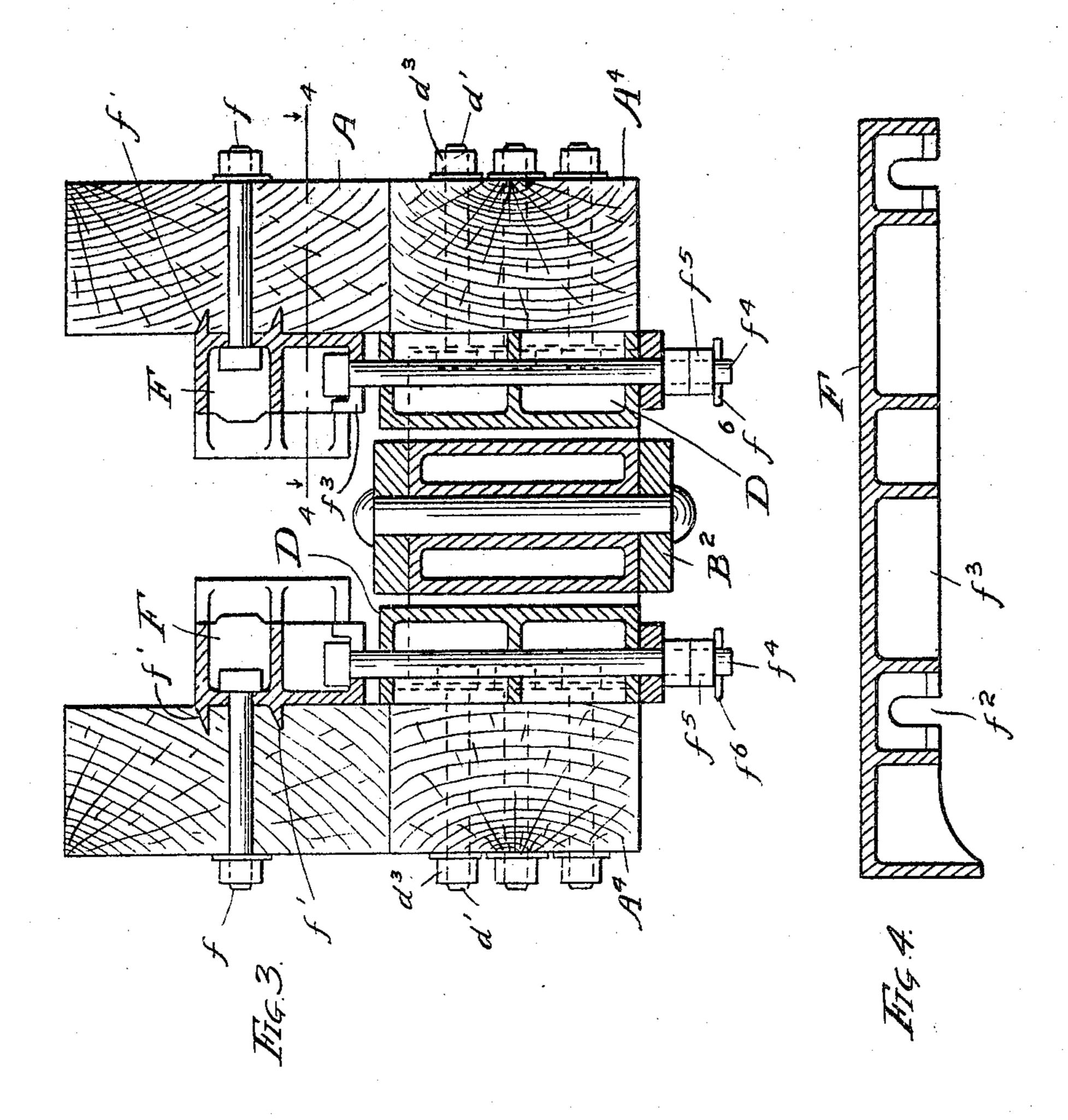
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UNITED STATES PATENT OFFICE.

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. 798,111.

Specification of Letters Patent.

Patented Aug. 29, 1905.

Application filed June 8, 1905. Serial No. 264,212.

To all whom it may concern:

Be it known that I, John F. O'Connor, 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 Draft-Rigging for Railway-Cars, of which the following is a specification.

My invention relates to improvements in

draft-rigging for railway-cars.

of the draft-rigging have ordinarily been secured to the draft-timbers and center sills in part by vertical bolts extending centrally through the draft-timbers and center sills in connection with the customary horizontal bolts; but in many car constructions great difficulty and inconvenience has heretofore been experienced by reason of these vertical bolts extending through the center sills because of the fact that the structure of the car above the center sills renders their removal very difficult or impossible without great labor and expense.

The object of my present invention is to provide a means for securely and rigidly anchoring the side plates or stop-castings in place without the necessity of employing bolts extending vertically through the draft-

timbers or center sills.

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 draw-bar, springs and followers, and side plates or stop-castings, of the draft-rigging, of anchor blocks or pieces fitting above the side plates or stop-castings and against the inner face of the center sills and to which the anchor-blocks are secured by bolts extending horizontally through the center sills, the side plates or stop-castings being secured to the anchor-blocks by vertical bolts extending through the same.

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.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation, partly in vertical section, of a draft-rigging embodying my invention. Fig. 2 is a plan view. Fig. 3 is a vertical section on line 3 3 of Fig. 1, and Fig. 4 is a detail horizontal section of one of the anchor blocks or pieces on line 4 4 of Fig. 3.

In the drawings, A represents the center 55 sills; A', the end or cross sill; A², the buffer-block; A³, the carry-iron, and A⁴ the draft-timbers.

B is the coupler; B', the draw-bar; B², the draw-bar strap or yoke; C C' C² C³, the fol- 60 lowers; D, the side plates or stop-castings, and E E' the tandem-arranged springs of the draft-rigging. The side plates or stop-castings D D have stops d for the followers to abut against and are secured to the draft-tim- 65 bers A⁴ by horizontally-extending bolts d'.

F F are anchor blocks or castings secured by horizontally-extending bolts f to the center sills A of the car and each abutting at its front end against the end or cross sill A' and 70 at its rear end against an integral shoulder or projection b', with which each of the side plates or stop-castings D is provided on its upper edge. The anchor blocks or castings F may be made of any desired length, but are 75 preferably somewhat over half the length of the side plates or stop-castings, this being ordinarily sufficient to give them the necessary strong and rigid anchorage to the center sills. Each of the anchor blocks or castings F is 80 provided with sharp-edged toes or flanges f', adapted to enter the center sills, and thus aid in securing the anchor blocks or castings to the center sills. Each of the anchor blocks or castings F is provided with slots f^2 in their 85 lower webs or flanges f^3 to receive the upright bolts f^4 , which extend through the side plates or stop-castings D, and thus secure the side plates or stop-castings D to the anchor blocks or castings F and to the center sills 90 through said anchor blocks or castings F. As the vertical bolts f^4 fit in open slots f^2 in the anchor blocks or castings F, these vertical bolts may be readily removed laterally from the anchor-blocks with the side plates or stop- 95 castings D by simply removing the nuts d^{*} from the horizontal bolts d', which secure the side plates or stop-castings D to the drafttimbers A⁴. The upright bolts f^4 are furnished with nuts \mathcal{F}^5 and keys \mathcal{F}^6 .

I claim—

1. In a draft-rigging for railway-cars, the combination with the center sills, end sill and draft-timbers, of a draw-bar, draw-bar strap or yoke, springs, followers and side plates or stop-castings having horizontal bolts securing the same to the draft-timbers, and anchor blocks or castings fitting above the side plates

or stop-castings and having horizontal bolts securing the same to the center sills and upright bolts securing the side plates or stopcastings to said anchor blocks or castings,

5 substantially as specified.

2. In a draft-rigging for railway-cars, the combination with the center sills, end sill and draft-timbers, of a draw-bar, draw-bar strap or yoke, springs, followers and side plates or 10 stop-castings having horizontal bolts securing the same to the draft-timbers, and anchor blocks or castings fitting above the side plates or stop-castings and having horizontal bolts securing the same to the center sills and up-15 right bolts securing the side plates or stopcastings to said anchor blocks or castings, said anchor blocks or castings having open slots in their lower webs or flanges to receive said upright bolts, substantially as specified.

3. In a draft-rigging for railway-cars, the combination with the center sills, end sill and draft-timbers, of a draw-bar, draw-bar strap or yoke, springs, followers and side plates or stop-castings having horizontal bolts securing 25 the same to the draft-timbers, and anchor blocks or castings fitting above the side plates or stop-castings and having horizontal bolts securing the same to the center sills, and upright bolts securing the side plates or stop-30 castings to said anchor blocks or castings, said anchor blocks or castings having sharp-edged toes or flanges entering the center sills, substantially as specified.

4. In a draft-rigging for railway-cars, the 35 combination with the center sills, end sill and draft-timbers, of a draw-bar, draw-bar strap or yoke, springs, followers and side plates or stop-castings having horizontal bolts securing the same to the draft-timbers, and anchor 40 blocks or castings fitting above the side plates or stop-castings and having horizontal bolts securing the same to the center sills and upright bolts securing the side plates or stopcastings to said anchor blocks or castings, said

anchor blocks or castings abutting at their 45 front ends against the front sill, and at their rear ends against shoulders on the stop-cast-

ings, substantially as specified.

5. In a draft-rigging for railway-cars, the combination with the side plates or stop-cast- 5° ings furnished with shoulders or projections on their upper edges, of anchor blocks or castings fitting above the side plates or stopcastings, and abutting at their front ends against the front sill of the car, and at their 55 rear ends against said shoulders or projections on the stop-castings, substantially as

specified.

6. In a draft-rigging for railway-cars, the combination with the side plates or stop-cast- 60 ings furnished with shoulders or projections on their upper edges, of anchor blocks or castings fitting above the side plates or stopcastings, and abutting at their front ends against the front sill of the car, and at their 65 rear ends against said shoulders or projections on the stop-castings, and upright bolts extending through the side plates or stopcastings and securing the same to said anchor blocks or castings, substantially as specified. 7°

7. In a draft-rigging for railway-cars, the combination with the side plates or stop-castings furnished with shoulders or projections on their upper edges, of anchor blocks or castings fitting above the side plates or stop- 75 castings, and abutting at their front ends against said shoulders or projections on the stop-castings, and upright bolts extending through the side plates or stop-castings and securing the same to said anchor blocks or 80 castings, said anchor blocks or castings having open slots to receive said upright bolts, substantially as specified.

JOHN F. O'CONNOR.

Witnesses:

H. M. Munday,

P. Abrams.