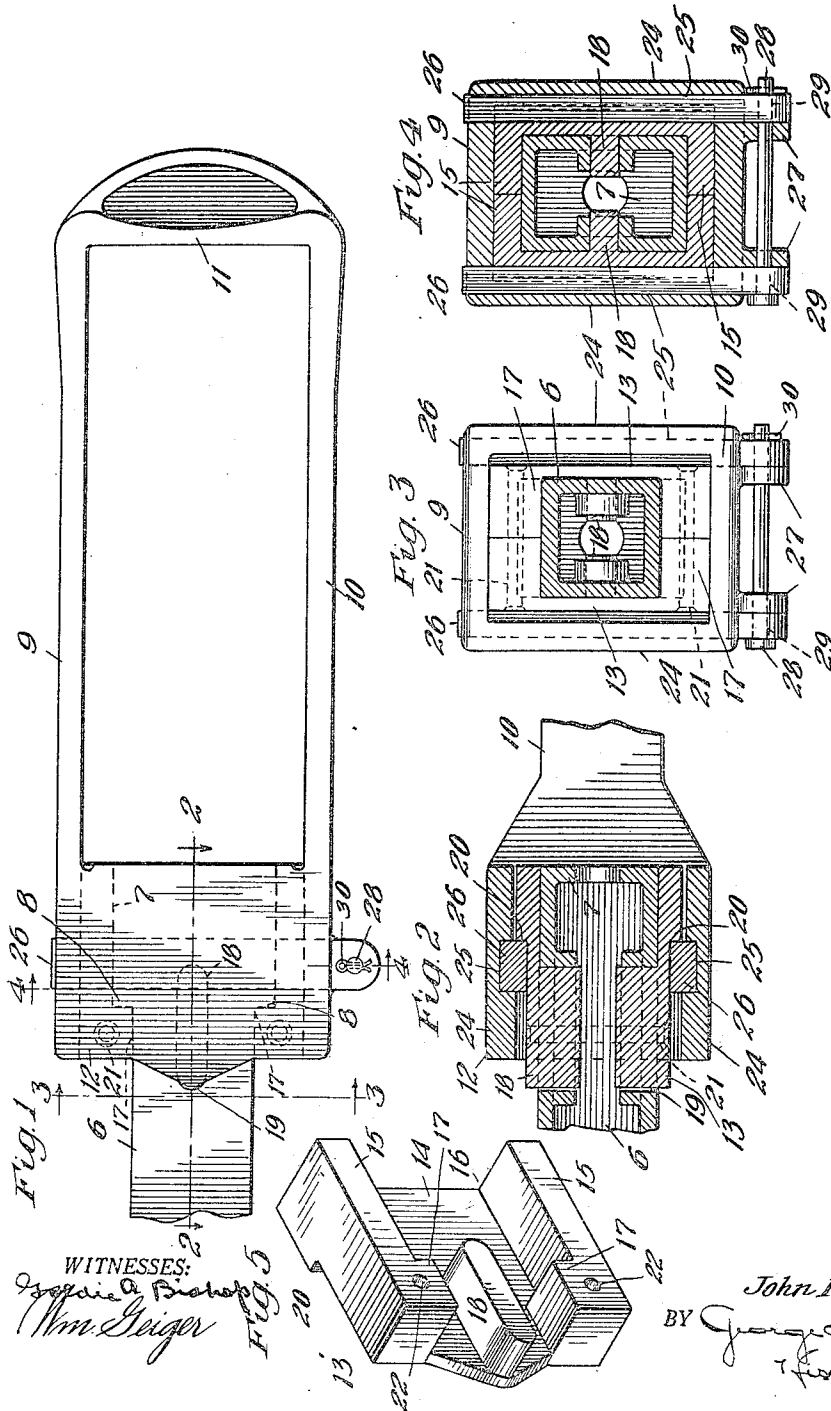


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 DRAFT RIGGING FOR RAILROAD CARS.
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1,225,162.

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DRAFT-RIGGING FOR RAILROAD-CARS.

1,225,162.

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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 certain new and useful Improvement in Draft-Rigging for Railroad-Cars, 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.

My invention relates to improvements in draft rigging for railroad cars, and more particularly to the means for connecting a draw-bar to a draft yoke.

The object of my invention is to provide a readily detachable connection between a draw-bar and a draft yoke.

In the drawings forming a part of this specification, Figure 1 is a side elevation of a draw-bar (only the rear end thereof being shown) and a draft yoke embodying my invention. Fig. 2 is a horizontal section taken on line 2—2 of Fig. 1. Fig. 3 is a transverse section taken on line 3—3 of Fig. 1. Fig. 4 is a transverse section taken on line 4—4 of Fig. 1. Fig. 5 is a perspective view of one of the draw-bar shoulder blocks.

Referring to the drawings, the numeral 6 indicates a draw-bar, (only the shank and butt thereof being shown) the butt being referenced 7 and having the usual top and bottom draw-bar shoulders 8, 8. The yoke comprises an upper limb 9, a lower limb 10, a rear connecting member 11, and has at its forward end a hollow head 12, preferably integral therewith, to receive the rear end of the draw-bar. The yoke is adapted to employ locking mechanism to secure the same to the draw-bar, which engages the draw-bar at its sides and which may be conveniently removed from underneath; and my invention is adapted to be employed either with draw-bars specially made with shoulders at either side, or it may be used with the usual draw-bar with top and bottom shoulders, by reason of the special structure which I will now describe.

I provide on either side of the draw-bar the draw-bar shoulder blocks 13, 13. These blocks are counterparts of each other, and therefore I will describe only one. It consists of a side plate 14 having upper and lower inwardly extended members 15, 15 which together with the side plate 14 form

a recess 16 within which the butt of the draw-bar is received. The members 15, 15 are provided near their forward ends with the shoulders 17, 17 that engage the shoulders 8, 8 of the draw-bar, and the plate 14 is provided with a lug or short key 18 which is adapted to enter the usual transverse slot 19 with which the draw-bar is provided. The outer face of the draw-bar shoulder block is provided with a vertical shoulder 20. When the shoulder blocks are placed in position upon the coupler, they are fastened together by a rivet 21 or similar suitable means passing through the perforations 22, 22 in the blocks. When thus arranged, the draw-bar is provided through the medium of the said blocks with vertical shoulders 20 at its sides, and the inner faces of the side plates 24, 24 of the yoke head are provided with the vertical grooves 25, 25 which receive from underneath each a key 26, the said keys each engaging the adjacent shoulder 20 provided upon the draw-bar. The yoke head is provided with a pair of dependent lugs 27, 27 transversely perforated for the passage of the pin 28 which extends through the perforation 29 found in the lower ends of each of the keys in order to hold the same against accidental displacement from their position in the yoke head.

In assembling the draw-bar and yoke, the draw-bar is inserted through the forward opening of the yoke, the keys are slipped into their position from underneath and locked therein by means of the pin 28, which is held against accidental loss by suitable means such as the cotter 30; and to remove the draw-bar, the reverse operation is employed.

I claim:

1. In a draft rigging, the combination with a draw-bar having shouldered sides, of a draft yoke having a hollow head to receive the draw-bar, and keys, the sides of the head being provided with vertical grooves, the keys entering said grooves and engaging the shoulders of the draw-bar, said keys being removable downwardly when the yoke and draw bar are in position on a car.

2. In a draft rigging, in combination: a draw-bar, a yoke having sides adjacent the sides of the draw-bar, vertical keys interposed between the said sides of the yoke and the draw-bar to secure the draw-bar within the yoke, said keys being removable down-

wardly when the yoke and draw bar are in position on a car.

3. In a draft rigging for railway cars, the combination with a draw bar, of blocks on the sides of said draw bar and detachably secured thereto, said blocks having vertically extending shoulders on the outer faces thereof, and a yoke having a hollow hood at its forward end within which are adapted to be received the draw bar and said blocks, and vertically extending removable members between the side walls of the hood and said blocks, said members engaging said shoulders on the blocks.

4. In a draft rigging for railroad cars, in combination: a draw-bar having upper and lower shoulders, a yoke having a hollow head to receive the draw-bar, draw-bar shoulder blocks, and keys, the said blocks having internal shoulders to engage the shoulders of the draw-bar, and also having external vertical shoulders, the yoke head being provided with vertical grooves to receive the keys, the said keys engaging the external shoulders of the blocks.

5. In a draft rigging for railroad cars, in combination: a draw-bar having upper and lower shoulders, a draft yoke having sides adjacent the sides of the draw-bar, blocks mounted upon the said draw-bar, and keys, the draw-bar being provided with openings at its sides, the blocks having lugs entering said openings, the said blocks being further provided with vertical shoulders at its sides, the keys engaging the sides of the yoke and the said vertical shoulders of the blocks.

6. In a draft rigging for railroad cars, in combination: a draw-bar having openings in its sides, a yoke having sides adjacent the sides of the draw-bar, blocks mounted upon the draw-bar, and keys, the said blocks being provided with lugs entering the openings in the draw-bar, said blocks being engaged to the sides of the yoke by means of the keys.

7. In a draft rigging for railroad cars, in combination: a draw-bar having openings on its sides, a yoke having sides adjacent the sides of the draw-bar, a pair of blocks mounted on the sides of the draw-bar, and keys, the said blocks being each provided with a lug to enter an opening in the draw-bar, and each having a shoulder adjacent a side of the yoke, the sides of the yoke being provided with vertical grooves to receive the keys, the said keys engaging the shoulders on the blocks.

8. In a draft rigging for railroad cars, in combination: a draw-bar having upper and lower shoulders, a yoke having a hollow head to receive the draw-bar, a pair of blocks mounted upon the draw-bar, and

keys, the draw-bar being provided with openings at its sides, the blocks being provided each with a lug to enter one of said openings, the said blocks being further provided with transverse shoulders to engage the shoulders of the draw-bar and with lateral shoulders, the sides of the yoke head being provided with vertical grooves, the said keys entering said grooves and engaging the lateral vertical shoulders of the blocks.

9. In a draft rigging, the combination with a draw bar having a transversely extending slot, of blocks mounted on the sides of the draw bar and having portions entering said slot to prevent movement of said blocks rearwardly with respect to the draw bar, said blocks having vertically extending shoulders on the outer faces thereof, a yoke having a hollow hood at the forward end within which are adapted to be received said draw bar and blocks, and keys extending vertically within the hood and engaging said shoulders on the blocks, said keys being removable from the under side of the yoke.

10. In a draft rigging, the combination with a draw-bar having upper and lower shoulders, of means for providing vertical shoulders on the sides of the draw-bar, said means comprising blocks mounted upon the draw-bar, the said blocks having lateral vertical shoulders and means for securing said blocks to the draw-bar.

11. In a draft rigging for railroad cars, a draw-bar and means for providing lateral vertical shoulders thereon, said means comprising blocks mounted upon the draw-bar, said blocks having lateral vertical shoulders and rivet-like means to secure said blocks to the draw-bar.

12. In a draft rigging for railroad cars, the combination with a draw-bar having upper and lower shoulders, of means for providing lateral vertical shoulders thereon, said means comprising a pair of blocks having internal shoulders to engage the shoulders of the draw-bar and external vertical shoulders.

13. In a draft rigging, in combination: a draw-bar having a transverse slot therein, and means for providing vertical shoulders thereon, said means comprising blocks mounted upon the draw-bar, said blocks having lugs entering the transverse slot in the draw-bar and being provided with lateral vertical shoulders.

In witness that I claim the foregoing I have hereunto subscribed my name this 6th day of July 1916.

JOHN F. O'CONNOR.

Witnesses:

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