

C. L. BUNDY.
FRICTION DRAFT RIGGING.
APPLICATION FILED JULY 27, 1909.

974,466.

Patented Nov. 1, 1910.

2 SHEETS-SHEET 1.

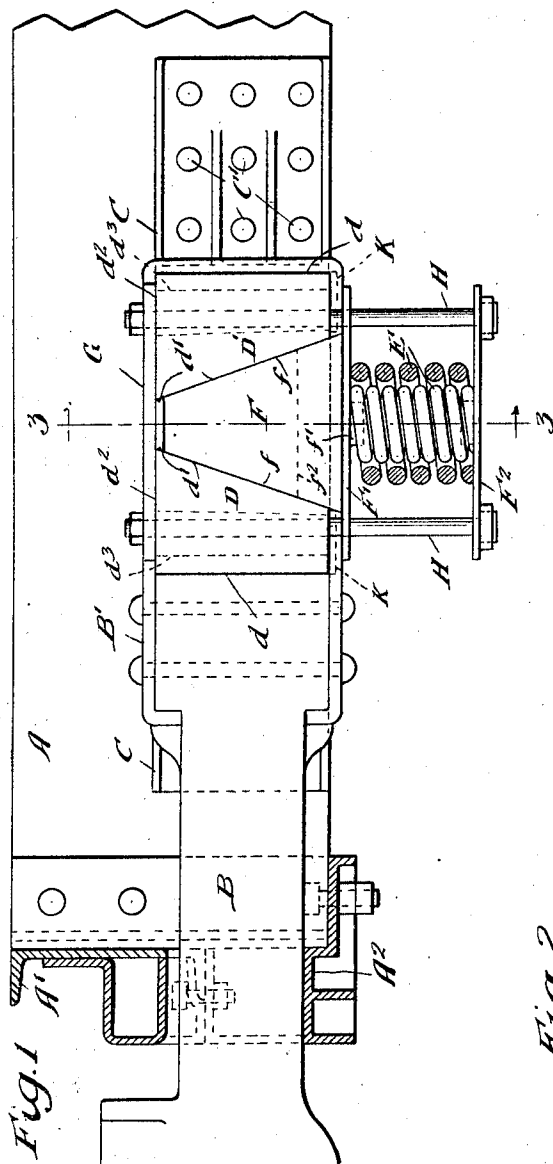


Fig. 1

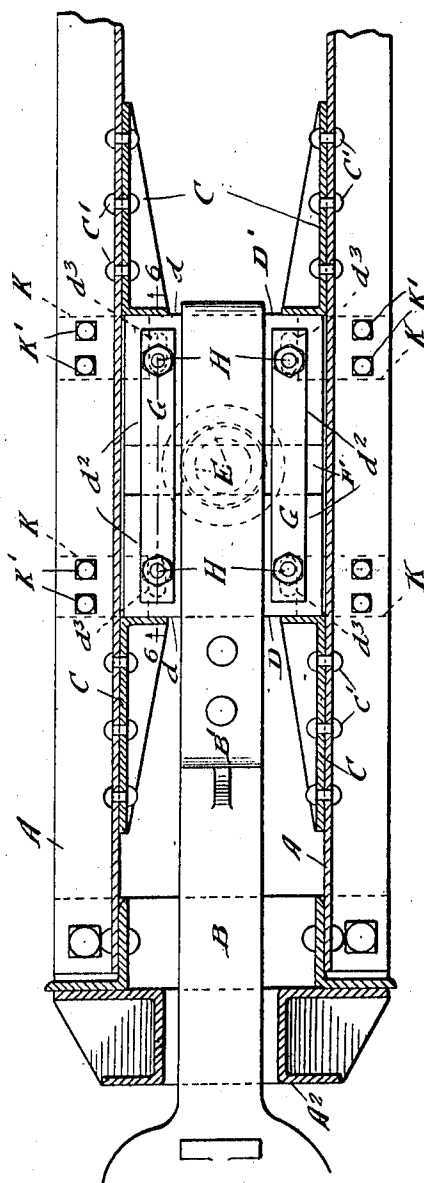


Fig. 2

Witnesses:

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A. W. Munday

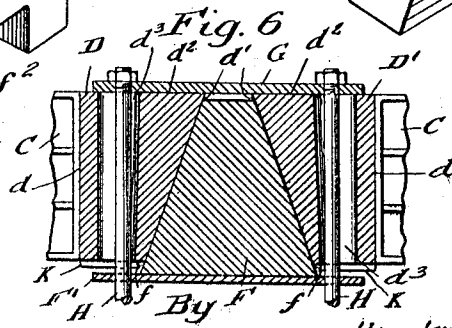
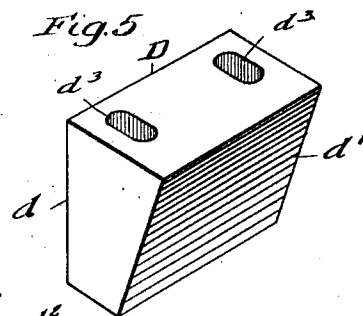
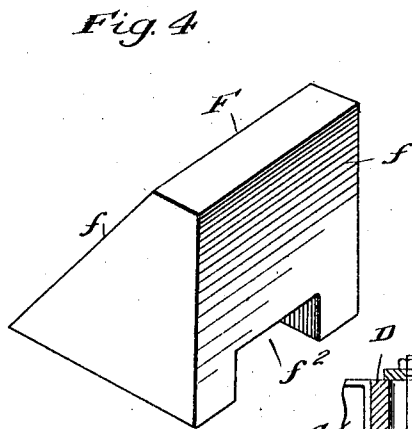
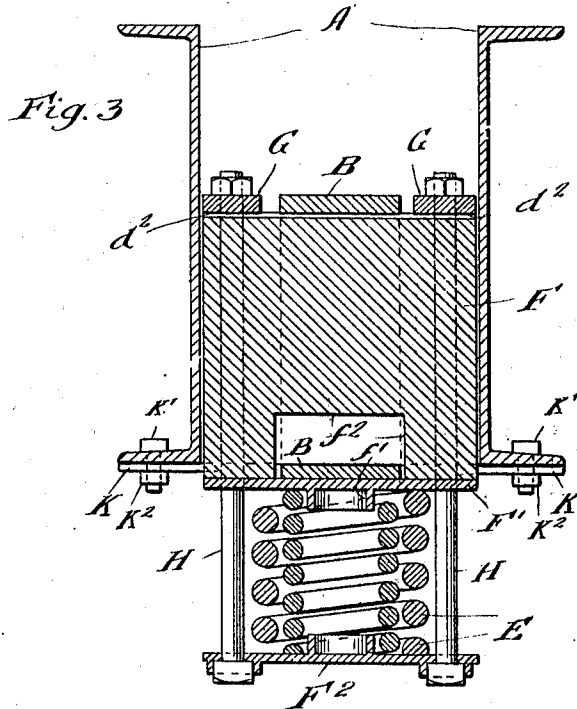
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3 SHEETS—SHEET 2.



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 A. W. Bundy

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UNITED STATES PATENT OFFICE.

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FRICITION DRAFT-RIGGING.

974,466.

Specification of Letters Patent.

Patented Nov. 1, 1910.

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To all whom it may concern:

Be it known that I, CYRUS L. BUNDY, a citizen of the United States, residing in Kingsland, in the county of Bergen and State of New Jersey, have invented a new and useful Improvement in Friction Draft-Rigging, of which the following is a specification.

My invention relates to improvements in friction draft rigging for railway cars.

My invention consists in the novel construction of parts and devices and in the novel combinations of parts and devices herein shown and described, and more particularly specified in the claims.

In the accompanying drawing forming a part of this specification, Figure 1 is a side elevation partly in vertical longitudinal section of a friction draft rigging embodying my invention. Fig. 2 is a plan view partly in horizontal section. Fig. 3 is a vertical cross section on line 3—3 of Fig. 1. Fig. 4 is a detail perspective view of the intermediate friction block and Fig. 5 is a detail perspective view of one of the end friction blocks or wedge faced followers and Fig. 6 is a detail vertical section on line 6—6 of Fig. 2.

In the drawing, A represents the center sills or draft members of the car to which the draft rigging is applied, A¹ the front sill and A² the carry-iron.

B is the coupler draw-bar, B¹ the draft yoke, and C the draft lugs or stop members secured to the draft sills A, preferably by rivets C¹.

D D¹ are front and rear longitudinally movable friction blocks, preferably formed integral with and serving also as front and rear followers and adapted to abut against the front and rear draft lugs or stop members and extending through the draft yoke after the manner of ordinary followers. The friction blocks D have upright faces *d* to abut against the draw-bar or draft yoke and draft lugs or stop members and inclined or wedging friction faces *d'* which are in sliding frictional engagement with a transversely arranged and transversely and longitudinally movable intermediate friction block or wedge F which reacts against the transversely arranged and longitudinally movable spring or springs E. The springs E are arranged upright and preferably below instead of above the draw-bar. The in-

termediate friction block F has its wedge faces *f* in sliding frictional engagement with the friction faces *d'* of the friction blocks D D¹. A spring seat plate F¹ is preferably interposed between the wedge or intermediate friction block F and the spring or springs E. At the outer end thereof the spring or springs E bear against a spring seat plate F² which is supported by tension bolts or rods H which extend through and are secured to the friction plates or straps G which fit one on each side of the upper member of the draft yoke and bear against and frictionally engage the horizontal friction faces *d''* of the friction blocks D. These tension rods or bolts extend through longitudinal slots *d'''* in the friction blocks D so that each of the friction blocks may reciprocate longitudinally in respect to the tension rods or bolts H and the friction plates or straps G.

The draft rigging is removably supported in position between the draft sills by one or more removable guide plates K secured to the lower flanges of the draft sills A by removable bolts K¹ having threaded nuts K². The spring seat plate F¹ against which the inner ends of the spring directly bear is preferably provided with a centering boss *f'* for the springs. The intermediate friction block F is preferably furnished with a recess or channel *f''* to receive the adjacent limb of the draft yoke.

In operation, the intermediate friction block or wedge F, the springs E, tension bolts or rods H and friction plates or straps G move longitudinally with the draw-bar to the extent of one half the movement thereof, one of the combined follower and friction blocks D being held stationary by its abutment against the draft lugs or stop members while the other has the same longitudinal movement with the drawbar to the full extent of its movement.

I claim:—

1. In a friction draft rigging, the combination with a draw-bar, draft yoke and stop members, of a pair of wedge faced friction followers extending through the draft yoke and engaging one, the draft yoke and the other the draw-bar, an intermediate wedge faced transversely arranged and transversely and longitudinally movable friction block, an upright spring acting at its inner end against said intermediate friction block, and tension rods extending through said

wedge faced followers, one pair on each side of the draft yoke and two through each wedge faced follower, and a spring seat plate supported by said rods and against which the outer end of the spring bears, substantially as specified.

2. In a friction draft rigging, the combination with a draw-bar, draft yoke and stop members, of a pair of wedge faced followers, an intermediate friction block acting against said followers, a spring acting against said intermediate block, friction straps on each side of the draft yoke bearing against the horizontal friction faces of said wedge faced followers, a spring seat plate against which the outer end of the spring bears and tension rods connecting said spring seat plate with said friction straps, substantially as specified.
3. In a friction draft rigging, the combination with a draw-bar, draft yoke and stop members, of a pair of wedge faced followers, an intermediate friction block acting against said followers, a spring acting against said intermediate block, friction straps on each side of the draft yoke bearing against the horizontal friction faces of said wedge faced followers, a spring seat plate against which the outer end of the spring bears and tension rods connecting said spring seat plate with said friction straps, said in-

intermediate friction block, spring and friction straps having a movement longitudinally with the draw-bar, substantially as specified.

4. In a friction draft rigging, the combination with the draw-bar, draft yoke and stop members, of a pair of wedge faced friction followers extending through said yoke, and an intermediate friction wedge block, a spring acting against said wedge block, a plate against which the outer end of the spring bears, and connections between said plate and said wedge faced friction followers, substantially as specified.

5. In a friction draft rigging, the combination with the draw-bar, draft yoke and stop members, of a pair of wedge faced friction followers extending through said yoke, and an intermediate friction wedge block, a spring acting against said wedge block, a plate against which the outer end of the spring bears, friction straps, one on each side of the draft yoke bearing against said friction followers, and connections between said plate and said friction straps, substantially as specified.

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Witnesses:

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