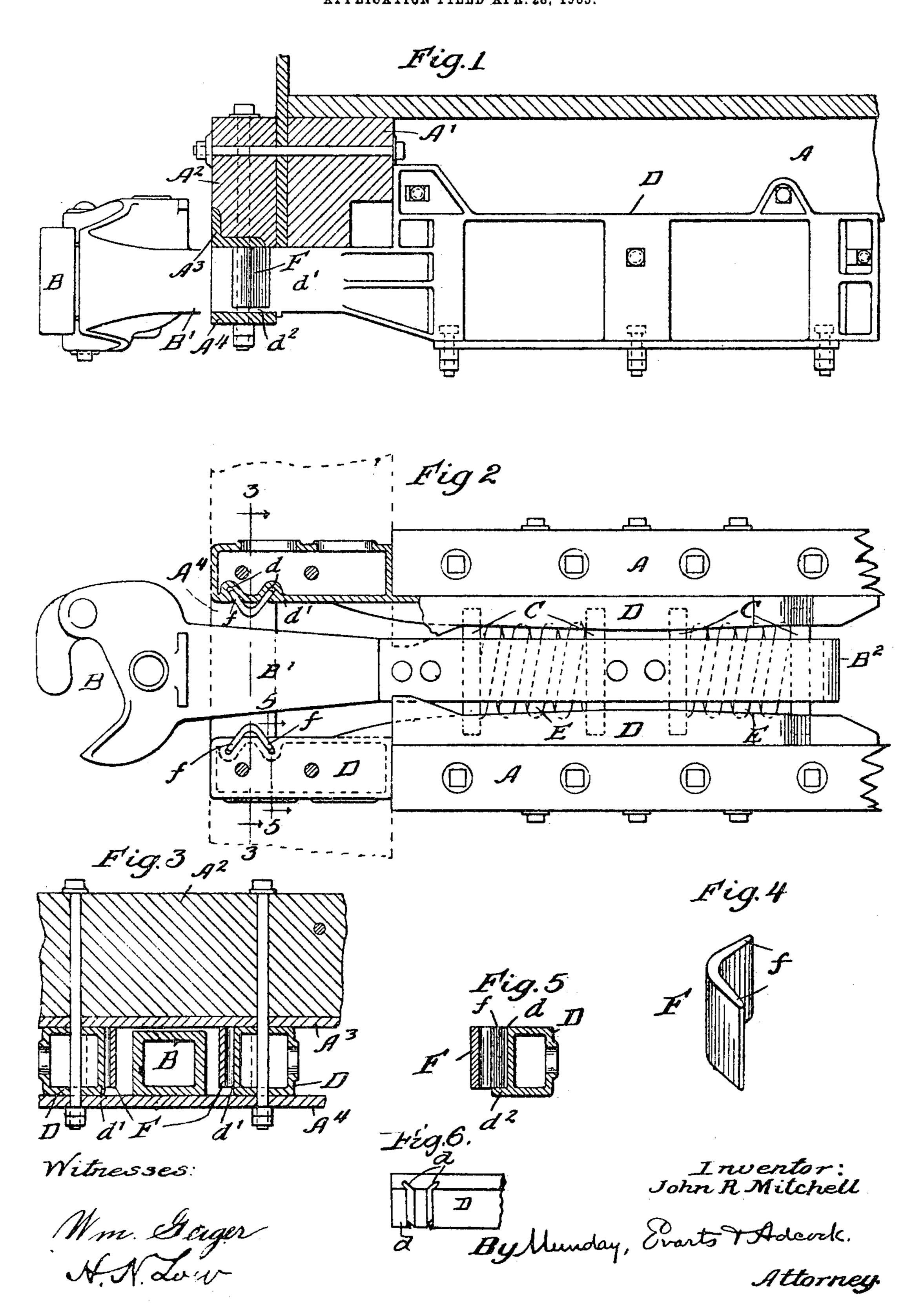
## J. R. MITCHELL.

## DRAFT RIGGING FOR RAILWAY CARS. APPLICATION FILED APR. 28, 1905.



## UNITED STATES PATENT OFFICE.

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## DRAFT-RIGGING FOR RAILWAY-CARS.

No. 799,071.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, John R. Mitchell, 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.

My invention consists in providing the side plates or stop-castings of the draft-rigging, near the front ends thereof, with a pair of grooves or recesses in combination with a Vshaped shim - casting, the legs or limbs of 15 which fit in the grooves in the upright side of the side plate or stop-casting and operating to limit the lateral or swinging movement of the draw-bar, so that the wear and abrasion incident to the draw-bar striking 20 against the same may be taken by these Vshaped shim-castings, which may be removed and replaced when worn, thus greatly increasing the life and durability of the side plates or stop-castings of the draft-rigging. 25 When the shim-castings are inserted in the grooves of the side plates or stop-castings, they may be readily tightened or secured in place by blows or pressure thereon, which will operate to spread the legs of the shim-3° castings and tighten them in the grooves for the same in the stop-castings. Ordinarily, however, the lateral movement of the drawbar in striking against the shim-castings will itself serve to tighten them in place.

My invention also consists in the novel construction of parts and devices and in the novel combinations of parts and devices herein

shown or described.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation, partly in section, of a 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. 2.

45 Fig. 4 is a detail perspective view of one of the V-shaped shim castings or plates, and Fig. 5 is a detail section on line 5 5 of Fig. 2. Fig. 6 is a detail perspective view showing the grooves in the upright face of the side plate 5° to receive the shim-castings.

In the drawings, A A represent the center sills or draft-sills of a car to which the side plates or stop-castings are secured; A', the

end or cross sill; A<sup>2</sup>, the buffer-block; A<sup>3</sup>, the buffer-plate, and A<sup>4</sup> the carry-iron. All these 55 parts are or may be of any ordinary suitable or desired construction, as may also be the coupler B, its draw-bar B', and draw strap or yoke B<sup>2</sup>.

The side plates or stop-castings D extend to 60 the front of the car and are furnished with the customary stops or shoulders for the fol-

lowers C to abut against.

E are the springs of the draft-rigging. Each of the side plates or stop-castings D 65 is provided near its front end with a pair of upright grooves or recesses d in its upright front face d', this groove extending, preferably, to near the lower edge of the side plate or stop-casting, thus forming a stop or shoul-70 der  $d^2$  at the lower end of each upright groove or recess.

F F are a pair of removable or replaceable V-shaped shim castings or plates, preferably of malleable iron or steel or other bendable 75 metal, the legs or  $\limsup f f$  of which fit in the upright grooves or recesses d d in the longitudinal upright face of the side plates or stop-castings D. These V-shaped plates or castings FF, thus inserted on the side plates or 80 stop-castings D D, serve to limit the lateral or swinging movement of the draw-bar and receive the wear and abrasion incident thereto, and thus relieve the side plates or stopcastings D D therefrom. By having the up- 85 right grooves d d in the longitudinal upright faces of the side plates or stop-castings closed or contracted at their bottom ends the shim plates or castings F F will be held in place independently of the carry-iron and prevent 90 the shim plates or castings from falling out when the carry-arm should through any cause be removed.

I claim--

1. In a draft-rigging, the combination with 95 the draw-bar, of side plates or stop-castings provided each on its upright longitudinal face with a pair of upright grooves or recesses, and removable or replaceable V-shaped shim plates or castings fitting in said grooves or recesses for the draw-bar to strike against in its lateral or swinging movement, substantially as specified.

2. In a draft-rigging, the combination with the draw-bar, of side plates or stop-castings 105 extending to the front end of the car, and

provided each with upright grooves in its longitudinal face and removable or replaceable V-shaped shims or bearing-pieces fitting in said upright grooves or recesses, substantially

5 as specified.

3. In a draft-rigging, the combination with the draw-bar, of side plates or stop-castings extending to the front end of the car, and provided each with upright grooves in its longitudinal face and removable or replaceable V-shaped shims or bearing-pieces fitting in said upright grooves or recesses, said upright grooves or recesses being closed or contracted at their lower ends to form stops or shoulders to prevent the V-shaped shims or bearing-

pieces from falling out when the carry-iron is removed, substantially as specified.

4. In a draft-rigging, the combination with a side plate or stop-casting furnished with upright grooves to receive a V-shaped shim or bearing-piece, and a V-shaped shim or bearing-piece having its legs or limbs fitting in said upright grooves and adapted to be locked in position by the spreading of its legs or limbs, substantially as specified.

JOHN R. MITCHELL.

Witnesses:

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