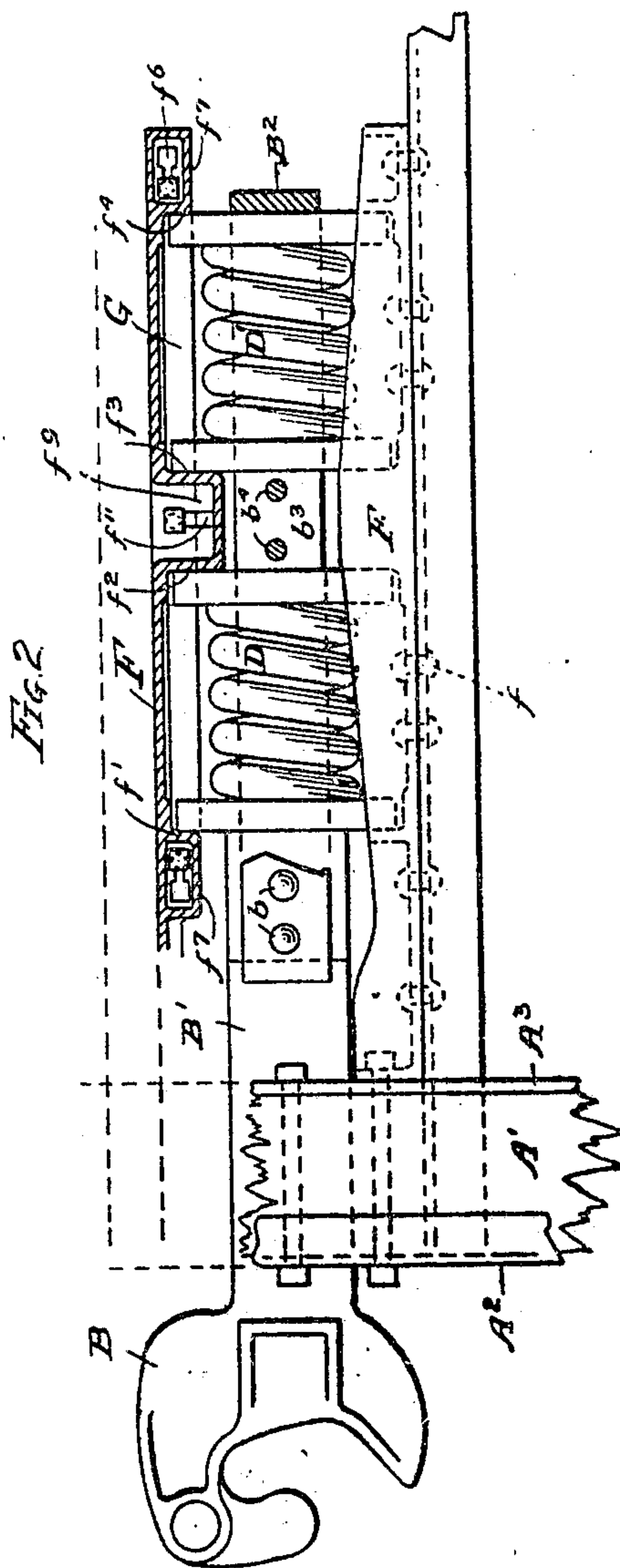
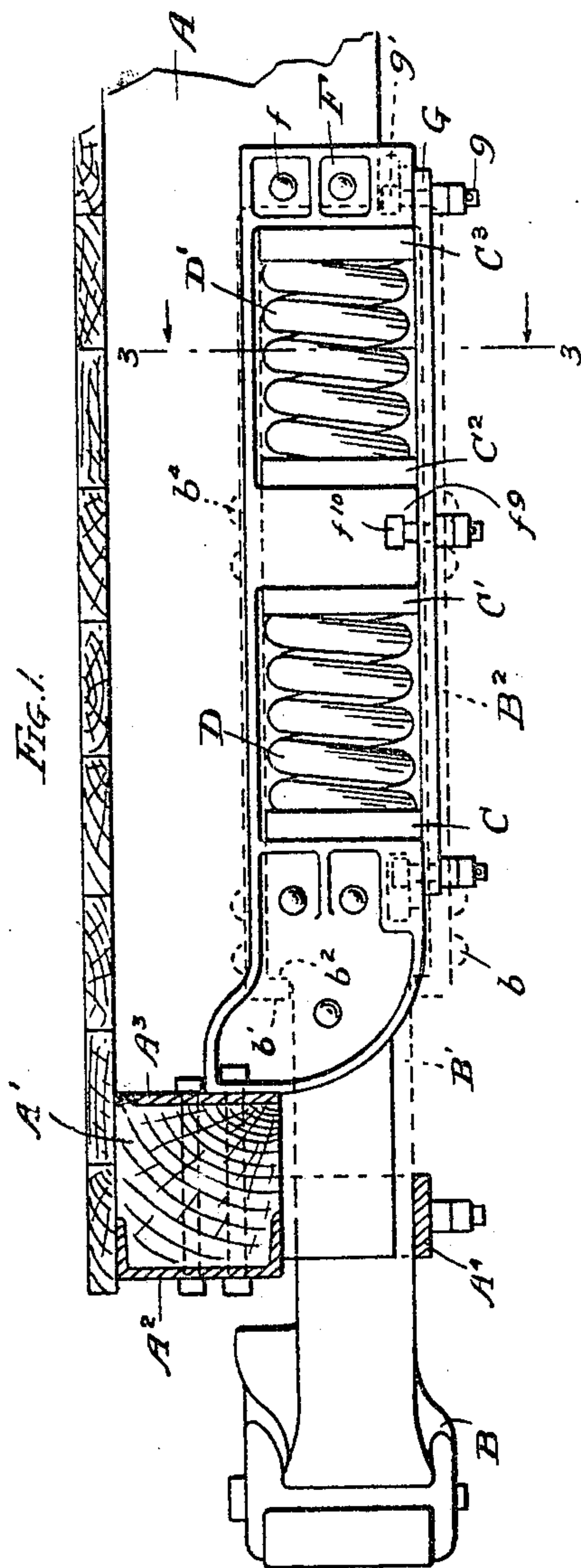


J. R. MITCHELL.
DRAFT RIGGING FOR RAILWAY CARS.

APPLICATION FILED NOV. 29, 1904.

2 SHEETS—SHEET 1.



WITNESSES:
J. B. Townsend
H. W. Munday

INVENTOR.
John R. Mitchell.
BY
Munday, Evans & Adcock
His ATTORNEYS

J. R. MITCHELL.
DRAFT RIGGING FOR RAILWAY CARS.

APPLICATION FILED NOV. 29, 1904.

2 SHEETS—SHEET 2.

Fig. 3.

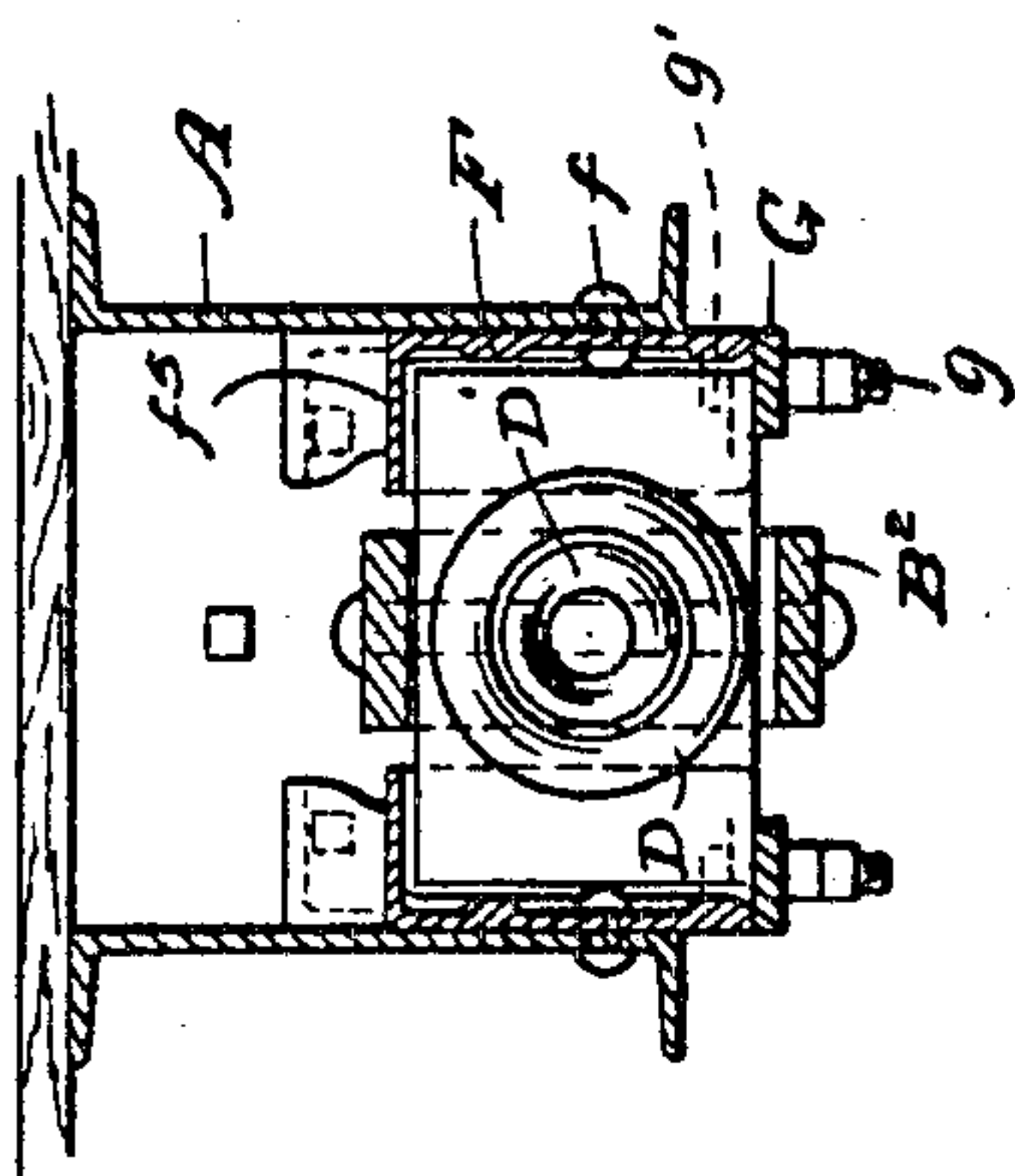


Fig. 4.

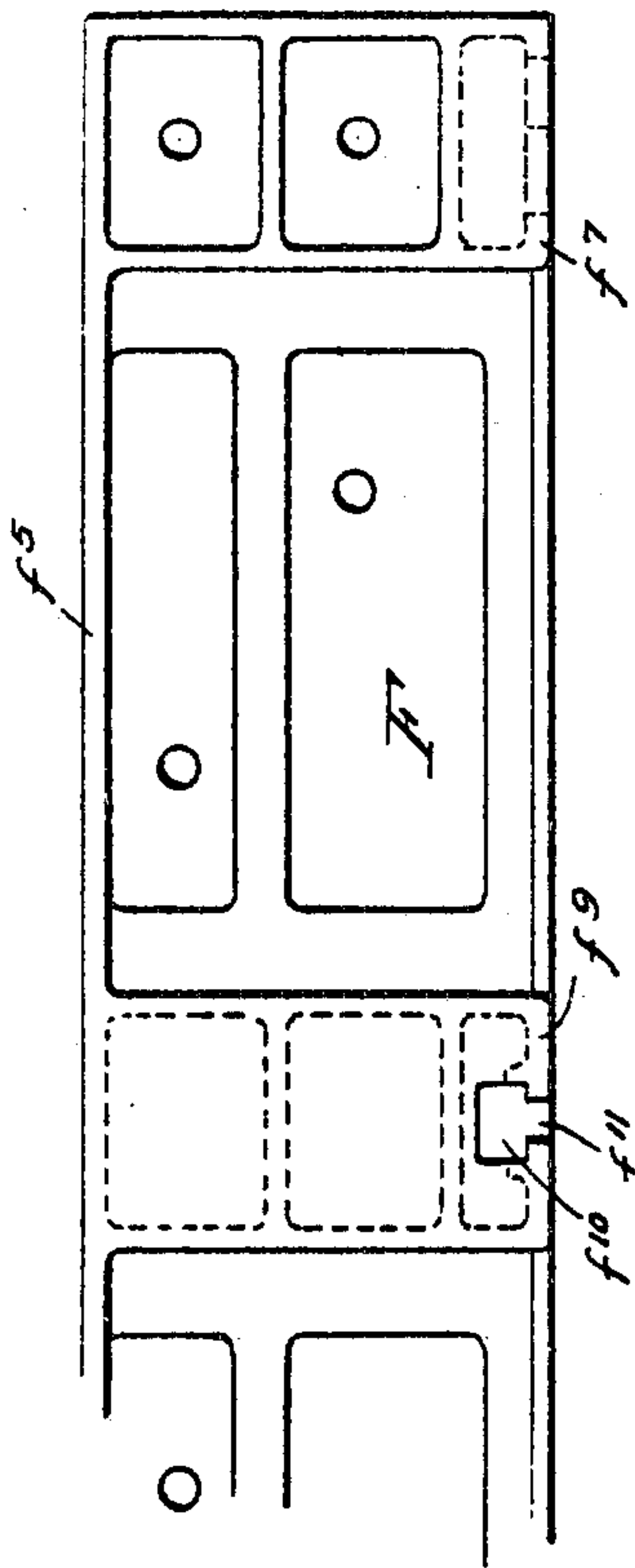
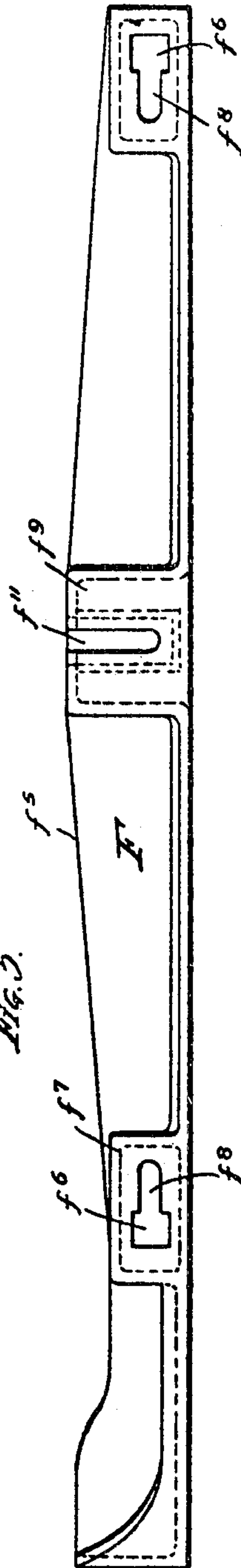


Fig. 5.



WITNESSES:
F. B. Townsend
H. W. Munday

INVENTOR.
John R. Mitchell.
BY
Munday, Evans & Adcock
his ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN R. MITCHELL, OF CHICAGO, ILLINOIS, ASSIGNOR TO W. H. MINER COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

DRAFT-RIGGING FOR RAILWAY-CARS.

No. 799,070.

Specification of Letters Patent.

Patented Sept. 12, 1905.

Application filed November 29, 1904. Serial No. 234,717.

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 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 vertical section, of a draft-rigging embodying my invention. Fig. 2 is a plan view, partly in horizontal section. Fig. 3 is a vertical section on line 3-3 of Fig. 1. Fig. 4 is a detail partial side elevation of one of the side plates or stop-castings, and Fig. 5 is a bottom view.

In said drawings, A A are the center sills or draft-sills of a car; A', the front or cross sill; A², the buffer-plate; A³, the rear face-plate of the front sill, and A⁴ the carry-iron.

B is the car-coupler, B' the draw-bar, and B² the draw-bar extension strap or yoke secured to the draw-bar at its front end by bolts or rivets *b* and interengaging shoulders *b'* *b*².

C C' C² C³ are the followers.

D and D' are tandem-arranged springs between the followers.

The draw-bar strap or yoke B² has an abutment-block *b*³ secured thereto by bolts or rivets *b*⁴ for the two middle followers C' C² to bear against in buffing and pulling.

F F are the side plates or stop-castings secured to the draft-sills by bolts or rivets *f* and provided each with stops or shoulders *f'* *f*² *f*³ *f*⁴ for the followers to abut against. Each of the side plates or stop-castings F is provided with an upper guide *f*⁵ for the followers, the same consisting, preferably, of an integral inwardly-projecting flange. Each of the side plates or stop-castings are also provided with a removable lower guide G for the followers, preferably consisting of a flat bar or plate and removably secured to the side plates or stop-casting F by short or stud bolts *g*, the heads *g'* of which are inserted through holes *f*⁶ in the integral feet or

projections *f*⁷ on the side plates or stop-casting F at the lower edge thereof. Said bolt-head openings *f*⁶ connect with longitudinal slots *f*⁸ in said feet *f*⁷, so that the bolts after being inserted may be slipped longitudinally of the side plate F, and thus cause the head of the bolt to properly engage the side plate. The bolt-head opening *f*⁶ and longitudinally-extending slot *f*⁸ are near each end of the side plate or stop-casting F. Each side plate or stop-casting F is further provided with a middle foot or projection *f*⁹, having a transversely-extending slot *f*¹⁰ to receive the head *g'* of the middle bolt *g* and a narrower slot *f*¹¹ to receive the shank of said bolt. By this construction of the side plates or stop-castings F with feet or bearings *f*⁷ for the removable guide G and with bolt-head openings *f*⁶ and with longitudinally-extending slots *f*⁸ the guide G may be very readily and easily removed and replaced when required, and at the same time the side plates are not weakened at either end by transversely-extending slots.

I claim—

1. In a draft-rigging, the combination with a draw-bar, draw-bar extension, followers and springs, of side plates or stop-castings furnished with stops or shoulders for the followers to abut against, and with an upper integral guide, and with a lower removable guide for the followers, said side plates or stop-castings having each feet or projections provided with bolt-head openings through which the bolt-heads may be inserted and longitudinally-extending slots connecting with said openings and short or stub bolts for removably securing said removable guide to the side plate or stop-casting, substantially as specified.

2. In a draft-rigging, the combination with a draw-bar, draw-bar extension, followers and springs of side plates or stop-castings furnished with stops or shoulders for the followers to abut against, and with an upper integral guide, and with a lower removable guide for the followers, side plates or stop-castings having each feet or projections provided with bolt-head openings through which the bolt-heads may be inserted and longitudinally-extending slots connecting with said openings and short or stub bolts for removably securing said removable guide to the side plate or stop-casting, said side plates or stop-

castings having also each a middle foot or bearing at its lower edge, furnished with a transversely-extending slot to receive the head and shank of a middle stub-bolt, substantially as specified.

3. In a draft-rigging for cars, a side plate or stop-casting furnished at its lower edge with feet or bearings for a removable guide-plate provided with bolt-head openings through which the bolt-heads may be inserted and longitudinally-extending slots connecting with said openings, a removable guide-plate and short or stub bolts for securing said removable guide-plate to the side plate or stop-casting, substantially as specified.

4. In a draft-rigging for cars, a side plate or stop-casting furnished at its lower edge

with feet or bearings for a removable guide-plate provided with bolt-head openings through which the bolt-heads may be inserted and longitudinally-extending slots connecting with said openings, a removable guide-plate and short or stub bolts for securing said removable guide-plate to the side plate or stop-casting, said side plate or stop-casting having also a middle foot or bearing furnished with a transversely-extending slot to receive the head and shank of a middle bolt, substantially as specified.

JOHN R. MITCHELL.

Witnesses:

H. M. MUNDAY,
EDMUND ADCOCK.