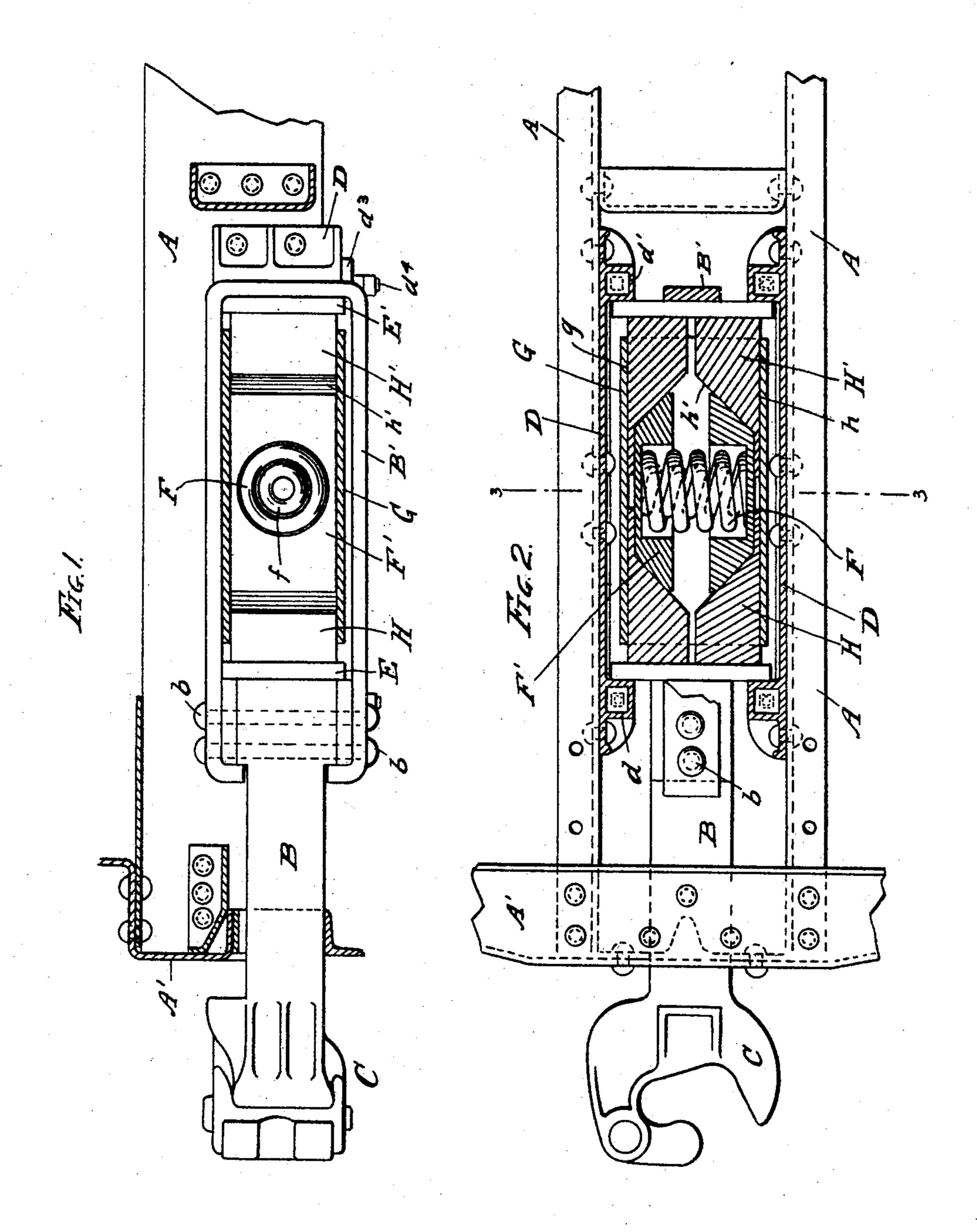
### P. N. MOORE.

# FRICTION DRAFT RIGGING FOR RAILWAY CARS. APPLICATION FILED SEPT. 8, 1904.

2 SHEETS-SHEET 1.



WITNESSES: F. B. Townsend Mm. Geiger

INVENTOR.

Peter N. Moore

BY Munday Evants

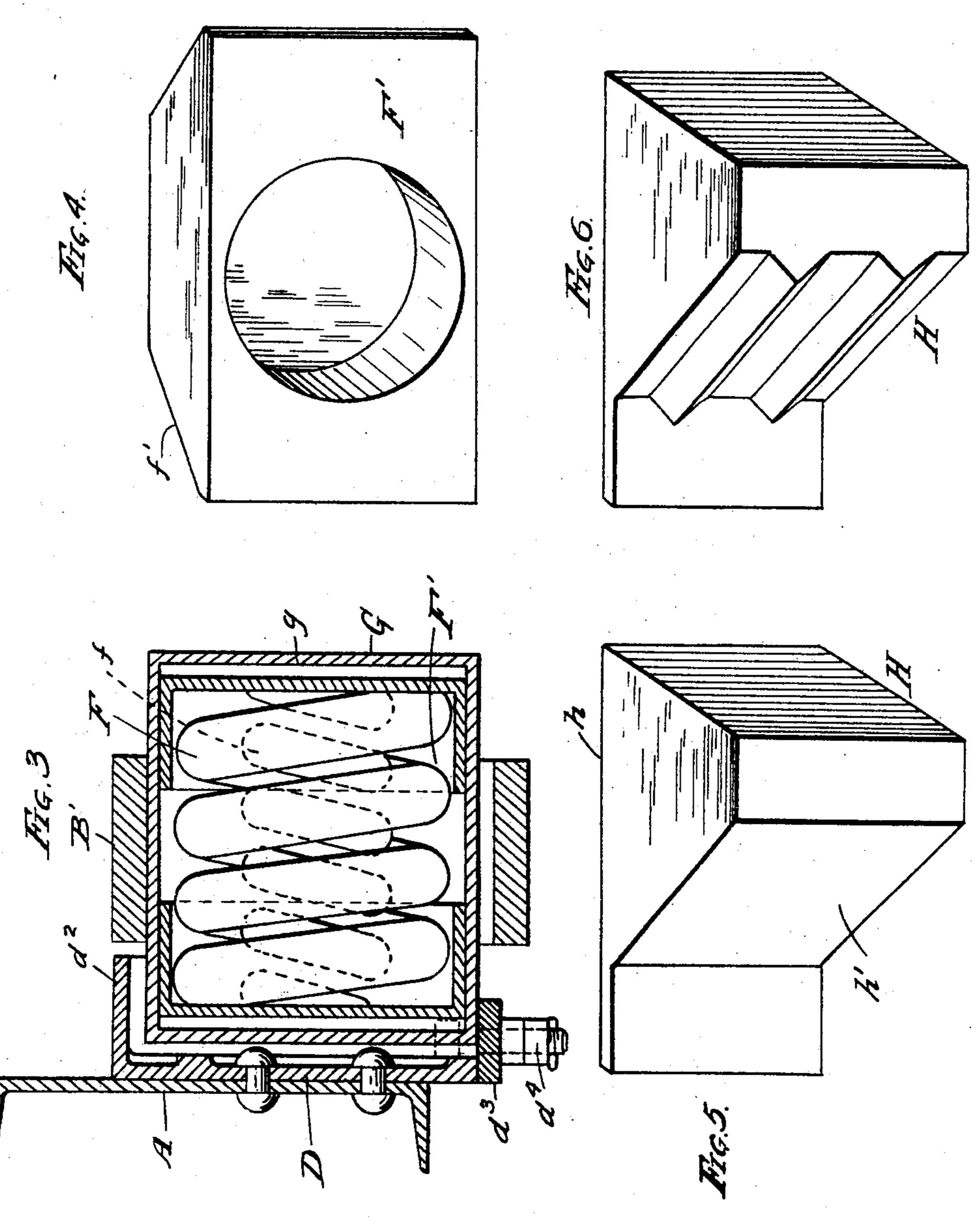
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## United States Patent Office.

PETER N. MOORE, OF MILWAUKEE, WISCONSIN.

#### FRICTION DRAFT-RIGGING FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 782,794, dated February 14, 1905.

Application filed September 8, 1904. Serial No. 223,720.

To all whom it may concern:

Be it known that I, Peter N. Moore, a citizen of the United States, residing in Milwaukee, in the county of Milwaukee and State of 5 Wisconsin, have invented a new and useful Improvement in Friction Draft-Rigging for Railway - Cars, of which the following is a specification.

My invention relates to improvements in 10 friction draft-rigging for railway-cars.

The object of my invention is to provide a friction draft-rigging of a simple, strong, efficient, and durable construction capable of exerting a great frictional resistance and which 15 may be arranged between the ordinary followers and stop-castings customarily employed in railway draft-rigging.

My invention consists in the means I employ to practically accomplish this object or re-20 sult—that is to say, it consists, in connection with the draw-bar, draw-bar strap or extension, side plates or stop-castings, and front and rear followers, of a sliding friction-shell, preferably rectangular in cross-section, a trans-25 versely-arranged spring inside the shell, spring-caps or bearing-blocks for the spring having oppositely-inclined or wedging faces, and two pairs of friction-slides having longitudinal friction-faces engaging the interior 30 longitudinal friction-faces of the shell and provided with inclined or wedging faces engaging the inclined or wedging faces of the springcaps or bearing-blocks.

My invention also consists in the novel con-35 struction 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 central 40 vertical longitudinal section of a friction draft-rigging embodying my invention. Fig. 2 is a horizontal section. Fig. 3 is a partial cross-section on line 3 3 of Fig. 2. Fig. 4 is a detail perspective view of one of the spring-45 caps or bearing-blocks. Figs. 5 and 6 are detail perspective views of the sliding frictionblocks.

In the drawings, A represents the draft or center sills of a car; A', the front or cross sill;

draw-bar strap or extension, secured to the draw-bar by bolts or rivets b.

D D are the side plates or stop-castings, having front stops d and rear stops d' for the front and rear followers E and E' to abut 55 against and upper and lower guides  $d^2 d^3$  for the followers to reciprocate on or between. The upper guide  $d^2$  is preferably integral with the side plate or stop-casting D, and the lower guide  $d^3$  is preferably a separate bar or plate 60 secured in place by bolts  $d^4$  to permit the ready insertion and removal of the draft-rigging.

F and f are transversely-arranged springs abutting at their ends against the spring-caps 65 or bearing-blocks F' F', each of which is furnished with oppositely-inclined wedgingfaces f'.

G is a sliding friction-shell, preferably rectangular in cross-section, having interior lon- 70 gitudinal friction-faces g.

H H and H' H' are two pair of sliding friction-blocks, each having an exterior longitudinal friction-face h in sliding frictional engagement with the interior friction-surface of 75 the friction-shell G. Each of the sliding friction-blocks H H' is also furnished with an inclined or wedging face h', engaging the correspondingly inclined or wedging face f' of the spring-cap or bearing-block F'.

The operation is as follows: In buffing the front follower E and front pair of sliding friction-blocks H H move with the draw-bar, while the rear follower E' and rear pair of friction-blocks H' H' are held stationary by the 85 rear stops on the side plates or stop-castings D, thus causing the transversely-arranged spring to be compressed by reason of the interengaging or inclined wedging-faces on the sliding friction-blocks HH' and on the spring- 90 caps or bearing-blocks F', and thereby produce powerful frictional resistance between the interengaging frictional surfaces on the friction-blocks and friction-shell G, the friction-shell G moving backward in respect to 95 the rear friction-blocks H' H' to a less extent than the front pair of friction-blocks H H. In pulling the operation is the same, but the reverse, the front follower and front pair of 5° C, the coupler; B, the draw-bar; and B', the I friction-blocks H H being now held station- 100 ary, while the rear follower and rear pair of friction-blocks H' H' move with the draw-bar, and the friction-shell G also moving forward with the draw-bar, but only to half the extent of the forward movement of the rear follower E' and rear pair of sliding friction-blocks H' H'.

I claim---

1. In a friction draft-rigging, the combination with the draw-bar, draw-bar extension, side plates or stop-castings, and followers, of a sliding friction-shell having interior longitudinal friction-surfaces, two pair of sliding friction-blocks having longitudinal frictional surfaces in frictional engagement with said shell, each of said sliding friction-blocks being provided with an inclined or wedging face, a transversely-arranged spring inside said shell, and a pair of spring-caps or bearing-blocks for the

spring, having inclined or wedging faces en- 20 gaging the inclined or wedging faces on said sliding friction-blocks, substantially as specified.

2. In a friction draft-rigging, the combination with the draw-bar, draw-bar extension, 25 side plates or stop-castings and followers, of a sliding friction-shell, a pair of sliding friction-blocks having longitudinally-extending friction-faces engaging said shell, a transversely-arranged spring and caps or bearing-blocks for said spring, having inclined or wedging faces engaging correspondingly inclined or wedging faces on said sliding friction-blocks, substantially as specified.

PETER N. MOORE.

Witnesses:

PEARL ABRAMS,
WILLIAM A. GEIGER.