

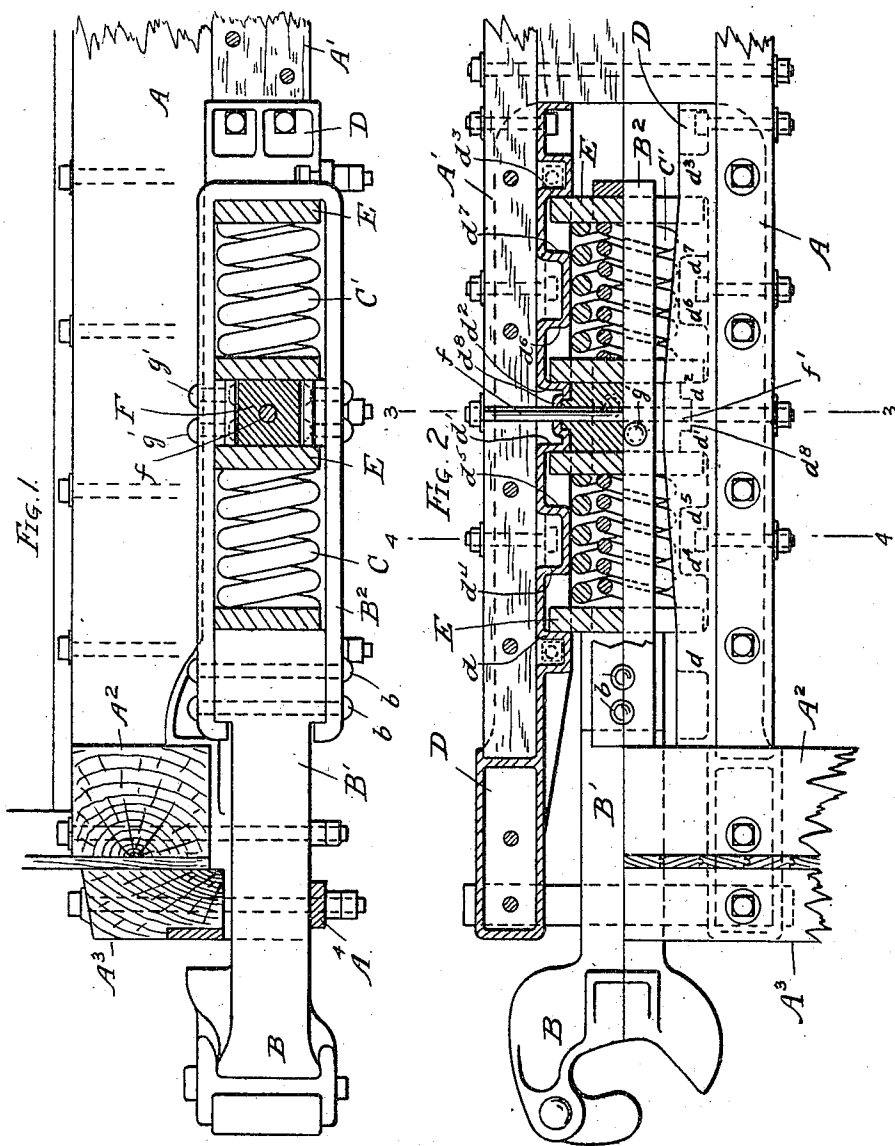
No. 838,530.

PATENTED DEC. 18, 1906.

F. L. ENGLEHARDT.
DRAFT RIGGING FOR RAILWAY CARS.

APPLICATION FILED NOV. 3, 1905.

2 SHEETS—SHEET 1.



WITNESSES:
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Pearl Abrams.

INVENTOR
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Fig. 4.

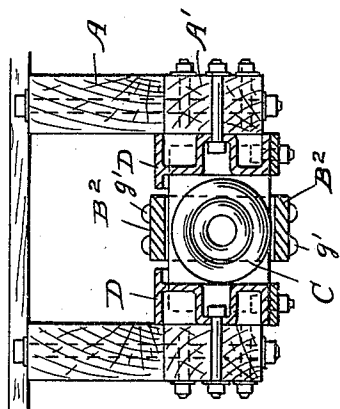


Fig. 3.

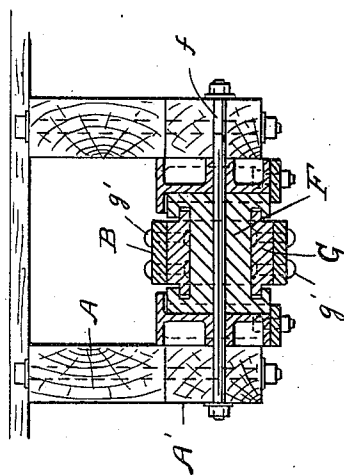


Fig. 6.

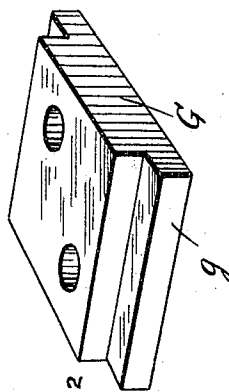
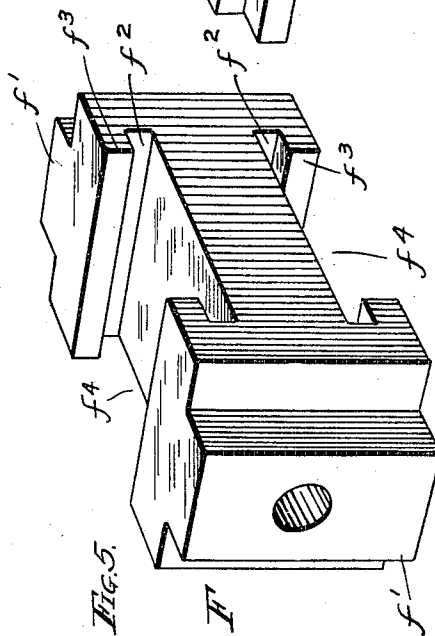


Fig. 5.



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UNITED STATES PATENT OFFICE.

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DRAFT-RIGGING FOR RAILWAY-CARS.

No. 838,530.

Specification of Letters Patent.

Patented Dec. 18, 1906.

Application filed November 3, 1905. Serial No. 285,755.

To all whom it may concern:

Be it known that I, FRANK L. ENGLEHARDT, 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.

In the draft-rigging heretofore in use difficulty is sometimes experienced from the draw-bar strap or yoke buckling or bending under severe buffing strains.

The object of my invention is to provide a railway draft-rigging of a simple, efficient, and durable construction in which the draw-bar strap or yoke will be effectually protected against liability to buckle or bend under buffing strains or blows.

My invention consists in the means I employ to practically accomplish this object or result—that is to say, it consists in connection with the draw-bar, draw-bar strap or yoke, tandem-arranged springs and followers, and side plates or stop-castings, of a stationary guide-block secured to and extending between the side plates or stop-castings, and provided with guide-grooves having overhanging guide-flanges and guide-blocks secured to the upper and lower members of the draw-bar strap and having guide-flanges fitting in the guide-grooves on the stationary guide-block which is secured to the side plates or stop-castings.

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

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation, partly in longitudinal vertical section, of a draft-rigging embodying my invention. Fig. 2 is a plan view partly in horizontal section. Figs. 3 and 4 are vertical cross-sections on lines 3-3 and 4-4 of Fig. 2, respectively. Fig. 5 is a detail perspective view of the stationary guide-block which fits between and is secured to the side plates or stop-castings, and Fig. 6 is a perspective view of one of the longitudinally-movable guide-blocks which is secured to and moves with the draw-bar strap or yoke.

In the drawings, A represents the center sills, A' the draft-timbers, A² the cross-sill, A³ the buffer-block, and A⁴ the carry-iron, of a car. B is the coupler, B' the draw-bar, and B² the draw-bar strap or yoke, secured to the draw-bar by the customary bolts or rivets *b*. C C' are tandem-arranged springs, D D the side plates or stop-castings, and E the followers, the stop-castings having stops *d*, *d'*, *d²*, and *d³* for the followers to abut against, and also stops or shoulders *d⁴*, *d⁵*, *d⁶*, and *d⁷* to limit the movement of the followers and the compression of the springs. All these parts are or may be of any suitable or well-known construction familiar to those skilled in the art.

F is a stationary guide-block fitting and extending between the side plates or stop-castings D between the two intermediate followers and rigidly and firmly secured to the side plates or stop-castings by a bolt *f*, which preferably also extends through the draft-timbers. The stationary guide-block F is further anchored to the side plates or stop-castings by tongues or projections *f'*, which fit in vertical grooves *d⁸* in the side castings D at the middle portion thereof. The stationary guide-block F is provided with upper and lower channels *f¹* and guide-grooves *f²*, each having an inwardly-projecting flange *f³* to embrace the corresponding cooperating flanges *g* of the movable or reciprocating guide-blocks G, which are secured to and reciprocate with the draw-bar strap B². The guide-blocks G are secured one to the upper member of the strap B² and the other to the lower member of said strap B² on the inside of the strap by rivets *g'*. As the draw-bar reciprocates the guide-blocks G, with their tongues or flanges *g* snugly fitting in the guide-grooves *f²*, effectually prevent all liability or danger of the draw-bar strap buckling or bending. By thus providing the side plates or stop-castings of the draft-rigging with guides or flanges which embrace and confine the upper and lower members of the draw-bar strap or guide devices rigidly secured thereto I am enabled to effectually prevent all danger of the draw-bar strap buckling or bending, while at the same time permitting it to properly reciprocate in respect to the side plates or stop-castings, and at the same time I do not materially increase

the cost of the draft-rigging or its dimensions.

I claim—

1. In a draft-rigging, the combination
5 with the draw-bar strap or yoke, tandem-
arranged springs and followers, of stop-cast-
ings, guide-blocks secured to the upper and
lower members of the draw-bar strap or yoke
and a stationary guide-block rigidly secured
10 to and extending between the side plates or
stop-castings and having guide-flanges em-
bracing the guide-blocks on said strap or
yoke and supporting and guiding said strap
or yoke, and a bolt extending through said
15 guide-block and stop-castings, substantially
as specified.

2. In a draft-rigging, the combination
with the draw-bar strap or yoke having
guide devices secured thereto, of a stationary
20 guide-block having guide devices embracing
the guide devices on the draw-bar strap to
prevent the strap from bending or buckling
under buffing strains or blows, and stop-
castings between which said guide-block ex-
25 tends and to which it is rigidly secured, and
a bolt extending through said guide-block
and stop-castings, substantially as specified.

3. In a draft-rigging, the combination
with the draw-bar strap or yoke having
30 guide-blocks secured thereto furnished with
guide-flanges, of a stationary guide-block
having guide-grooves in which the guide-
flanges of the guide-blocks on the draw-bar
strap fit and reciprocate, and stop-castings
35 between which said guide-block extends and
to which it is rigidly secured, and a bolt ex-

tending through said guide-block and stop-
castings, substantially as specified.

4. In a draft-rigging, the combination
with a stationary guide-block F, having 40
guide-grooves f^2 , of a draw-bar strap having
guide-blocks G furnished with guide-flanges
 g fitting and reciprocating in said guide-
grooves of said stationary guide-block F,
stop-castings between which said guide- 45
block extends and to which it is rigidly se-
cured, and a bolt extending through said
guide-block and stop-castings, substantially
as specified.

5. In a draft-rigging, the combination 50
with the side plates or stop-castings having
upright grooves d^8 , of a stationary guide-
block F having tongues or projections f'
fitting in said grooves d^8 , a bolt f extending 55
through said block F and the side plates or
stop-castings, and a draw-bar strap provided
with guide-blocks G having tongues or
flanges g fitting in the guide-grooves f^2 of
said stationary guide-block F, substantially 60
as specified.

6. In a draft-rigging, the combination
with a stationary guide-block F having
channels in its upper and lower faces, and
horizontally-extending guide-grooves f^2 and
inwardly-projecting flanges f^3 and a draw- 65
bar strap having guide-blocks G furnished
with guide tongues or flanges g , substan-
tially as specified.

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Witnesses:

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