No. 644,717. Patented Mar. 6, 1900.

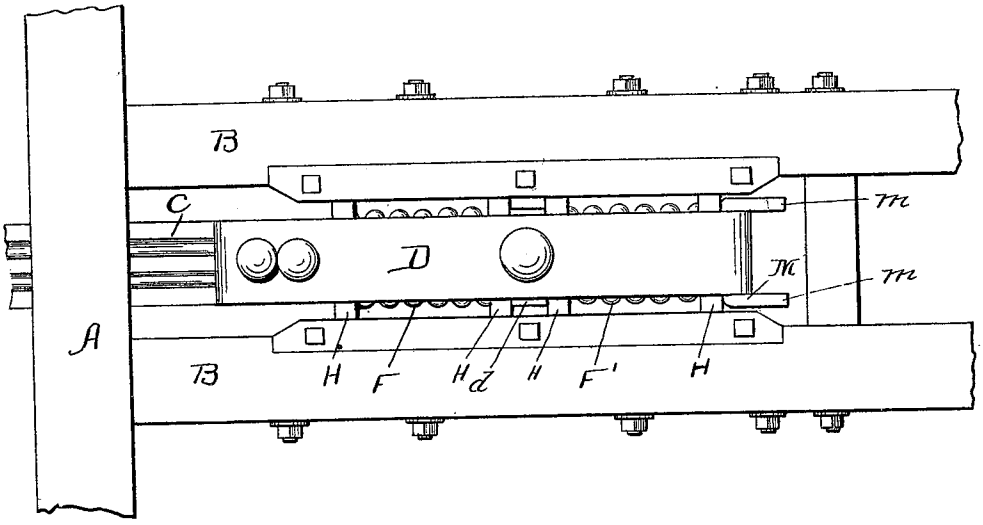
C. M. MILEHAM.

TANDEM SPRING DRAFT RIGGING FOR RAILWAY CARS.

(Application filed May 19, 1899.)

(No Model.)

FIG. 1



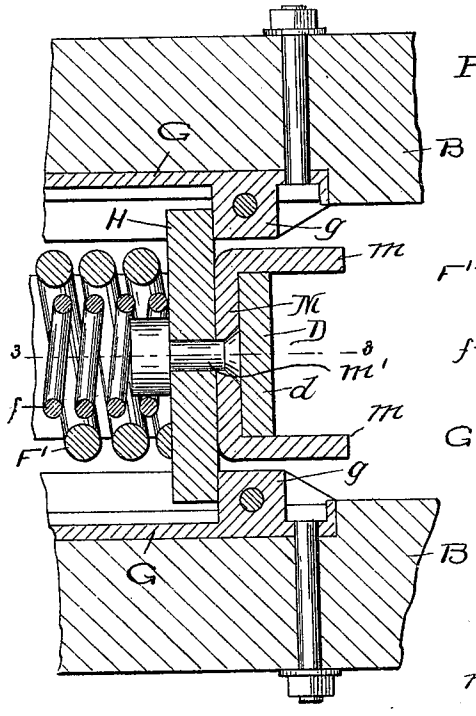


FIG. 2

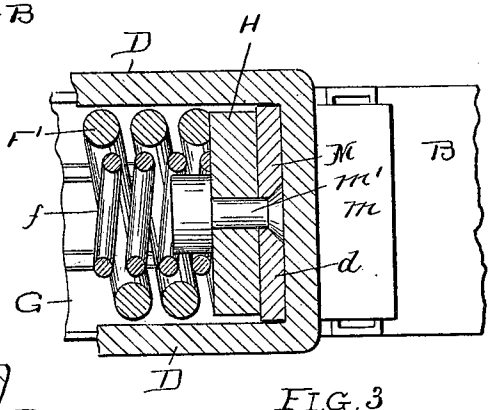


FIG. 3

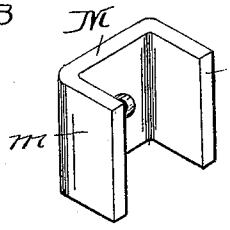


FIG. 4

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UNITED STATES PATENT OFFICE.

CHARLES M. MILEHAM, OF CHICAGO, ILLINOIS, ASSIGNOR TO WILLIAM H. MINER, OF SAME PLACE.

TANDEM-SPRING DRAFT-RIGGING FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 644,717, dated March 6, 1900.

Application filed May 19, 1899. Serial No. 717,405. (No model.)

To all whom it may concern:

Be it known that I, CHARLES M. MILEHAM, 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 Tandem-Spring Draft-Rigging for Railway-Cars, of which the following is a specification.

My invention relates to improvements in double or tandem spring draft-rigging of railway-cars.

The object of my invention is to provide a tandem-spring draft-rigging with proper means for centering the draw-bar extension or pocket between the stop-castings, while permitting the draw-bar and its extension or pocket to have the necessary lateral play or swinging movement to permit the cars of the train to pass around curves, and thus to secure a more direct and central draft on the followers and springs and prevent diagonal or side strains tending to throw the car from the track.

My invention consists in the means I employ to accomplish this result—that is to say, it consists, in a tandem-spring draft-rigging, in the combination, with the draw-bar and its extension or pocket, the draft-timbers, stop-castings, followers, and tandem springs, of a saddle on the rear end of the draw-bar extension or pocket fitting between the pocket and the stop-castings and substantially filling the space between the stop-castings and the pocket on each side, so that as the draw-bar extension or pocket reciprocates back and forth between the stop-castings the saddle will serve to hold the rear end of the draw-bar extension or pocket centrally between the stop-castings and against the rear follower and spring, thus securing a central bearing against the springs, while permitting the draw-bar of the coupler to have the necessary lateral play or swinging movement to enable the cars to pass around curves.

In the accompanying drawings, forming a part of this specification, Figure 1 is a plan view of a tandem-spring draft-rigging embodying my invention or improvement. Fig. 2 is a detail horizontal section showing the rear portion of the draft-rigging and to which my improvement is applied. Fig. 3 is a longitudinal vertical section on line 3 3 of Fig. 2, and Fig. 4 is a detail view of the centering-saddle.

In the drawings A, represents the cross-sill, and B B the draft-timbers, of a railway-car; C, the draw-bar of the coupler, and D its extension or pocket through which the car-coupler or its draw-bar is connected with the springs and their followers.

F F′ are tandem springs, and *f* graduated or smaller tandem springs within the larger ones.

G G are the stop-castings, securely bolted to the draft-timbers B and having stops *g* for the followers H to abut against. The draw-bar extension or pocket D is furnished with abutments *d* to bear against the followers.

M is a centering-saddle for centering the rear end of the draw-bar extension or pocket D between the stop-castings G G or the rear stops *g g* thereon. The limbs *m* of the saddle M are of sufficient length to permit the necessary forward-and-backward movement of the draw-bar and its extension or pocket without causing the saddle to move beyond the stops *g g* of the castings G. In every position, therefore, of the draw-bar and its extension or pocket the saddle M will properly center the rear end of said pocket or extension between the stop-castings, and thus cause it to bear against the rear follower and the spring properly and centrally, while at the same time permitting lateral and swinging movement of the draw-bar and its extension or pocket. The saddle M preferably fits astride the rear end or abutment *d* of the pocket D, and it is preferably secured to the rear follower H by a rivet or bolt *m′* passing through the saddle and through the follower. The rivet or bolt *m′* is preferably also furnished with a centering stud or head fitting inside the smaller spring *f* to hold the spring central with the follower.

While my invention is specially designed for use upon what is commonly known as "double" or "tandem" spring draft-rigging for railway-cars—such, for example, as illustrated in the drawings—it will be understood by those skilled in the art that my invention

may be used on other constructions of draft-riggings for railway-cars than those employing double or tandem springs.

I claim—

1. In a tandem-spring draft-rigging for railway-cars, the combination with the draw-bar and its extension or pocket, of draft-timbers, stop-castings, tandem springs and followers, there being open spaces for lateral play between the draw-bar extension or pocket and the stop-castings of a centering-saddle at the rear end of the draw-bar extension or pocket and fitting between the same and the stop-castings or the rear stops thereon, to center the rear end of said draw-bar extension or pocket by permitting the draw-bar to swing laterally substantially as specified.

2. In a tandem-spring draft-rigging for railway-cars, the combination with a draw-bar and its extension or pocket, of draft-timbers, stop-castings, tandem springs and followers, there being open spaces for lateral play between the draw-bar extension or pocket and the stop-castings of a centering-saddle at the rear end of the draw-bar extension or pocket and fitting between the same and the stop-castings or the rear stops thereon to center the rear end of said draw-bar extension or pocket by permitting the draw-bar to swing laterally, said centering-saddle having limbs extending rearwardly to compensate for the backward-and-forward movement of the draw-bar and its extension or pocket, substantially as specified.

3. In a draft-rigging for railway-cars, the combination with a draw-bar and its extension or pocket, of the stop-castings, spring and followers, there being open spaces for lateral play between the draw-bar extension or pocket and the stop-castings and a centering-saddle at the rear end of the draw-bar extension or pocket and fitting between the same and the stop-castings to center said extension or pocket between the stop-castings while permitting the draw-bar to swing laterally as required in passing around curves, substantially as specified.

4. In a draft-rigging for railway-cars, the combination with a draw-bar and its extension or pocket, of the stop-castings, spring and followers, there being open spaces for lateral play between the draw-bar extension or pocket and the stop-castings and a centering-saddle at the rear end of the draw-bar extension or pocket and fitting between the same and the stop-castings to center said extension or pocket between the stop-castings while permitting the draw-bar to swing laterally as required in passing around curves, said centering-saddle being secured to the rear follower of the draft-rigging and embracing said draw-bar extension or pocket, substantially as specified.

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Witnesses:
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