No. 647,701.

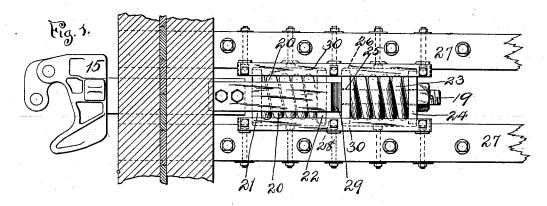
Patented Apr. 17, 1900.

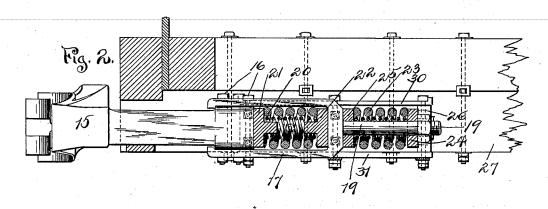
A. LIPSCHUTZ.

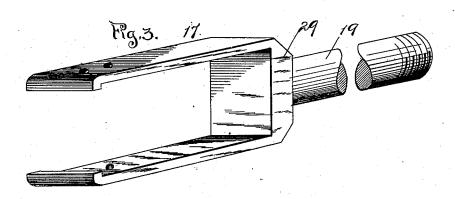
DRAFT APPLIANCE FOR RAILWAY CARS.

(Application filed Aug. 7, 1899.)

(No Model.)







Witnesses:

Inventor: Arthur Lipsehitz By Chas. & Bulkley Atty.

United States Patent Office.

ARTHUR LIPSCHUTZ, OF ST. PAUL, MINNESOTA.

DRAFT APPLIANCE FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 647,701, dated April 17, 1900.

Application filed August 7, 1899. Serial No. 726,371. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR LIPSCHUTZ, a subject of the Emperor of Germany, (but having made oath of my intention to become a 5 citizen of the United States of America,) and a resident of St. Paul, Ramsey county, Minnesota, have invented a certain new and useful Draft Appliance for Railroad-Cars, of which the following is a specification.

My invention relates to the draft-gear for freight-cars using two springs in tandem style and will be more fully explained by reference to the accompanying drawings, in which-

Figure 1 is a sectional view of my draft-rig-15 ging. Fig. 2 is a longitudinal section of the same. Fig. 3 shows a perspective view of the combination spring-yoke.

Similar figures refer to similar parts throughout the several views.

The constructions of this class of draft-gear as now used suffer from their liability to buckle and are uncertain in their action, caused by the great number of parts of which they consist. My present invention is de-25 signed to overcome this objection; and it consists of a combination spring-yoke consisting of a spring-pocket to take the first draft-spring and having at its rear end a spindle attached as an integral part of itself, which spindle is 30 designed to carry the followers and the second draft-spring. As the sprocket is no longer than the one in use for one draft-spring, it is obvious that no buckling can take place, and the spindle of the second draft-spring 35 being an integral part of the first spring-yoke the result is absolute certainty of action, as there are no bolts, rivets, or castings which can fail. The car-coupler 15 has attached to it by bolts 16 the spring-yoke 17, 40 with its spindle end 19. In the spring-yoke is placed the first draft-spring 20, having the followers 21 and 22 of the usual design. The second draft-spring 23 is placed on the spindle end 19 and is acted upon by the followers

24 and 25, which have holes through which 45 the spindle end can easily pass and which is locked by nut and key in the usual way. The spring-followers 21 and 22 and 24 and 25 engage in the stop-castings 26, which are bolted to the sides of the draft-timbers 27 27. Only 50 one casting at each side is employed. Casting 26 has three stops, the middle stop 28 serving for the back follower of draft-spring 20 and also for the front follower of draft-spring 23. As the back or vertical part 29 of the 55 spring-yoke 17 is thickened, it becomes possible, therefore, to give the center stop 28 the necessary thickness for its safety. Top straps 30 and bottom straps 31 are held by bolts passing vertically through the draw-bar stops and 60 serve to carry and guide the springs and yoke.

Having thus described my invention, what I claim as new therein, and desire to secure

by Letters Patent, is-

The combination with a draw-bar of a com- 65 bined spring-yoke and carrier consisting of a yoke portion and an extension therefrom, one draft-spring disposed in the pocket of the yoke portion, two movable followers one on either side of the said spring also disposed 70 within the pocket aforesaid, another draftspring mounted on the spindle extension from the yoke portion, a stop-casting arranged on each side of the yoke portion, movable followers also mounted upon said spindle exten- 75 sion, and arranged on either side of the spring thereon and the reinforced vertical part on the spring-yoke preserving the second and third followers separated the required distance by the center stop of the stop-casting. 80

Signed by me at St. Paul, in the county of Ramsey and State of Minnesota, this 31st day

of July, 1899.

ARTHUR LIPSCHUTZ.

Witnesses: W. B. Simonds, JAMES STODDART.