(Model.)

S. LŸKKE.

CAR BRAKE.

No. 263,925. Patented Sept. 5, 1882.

Fig. 1

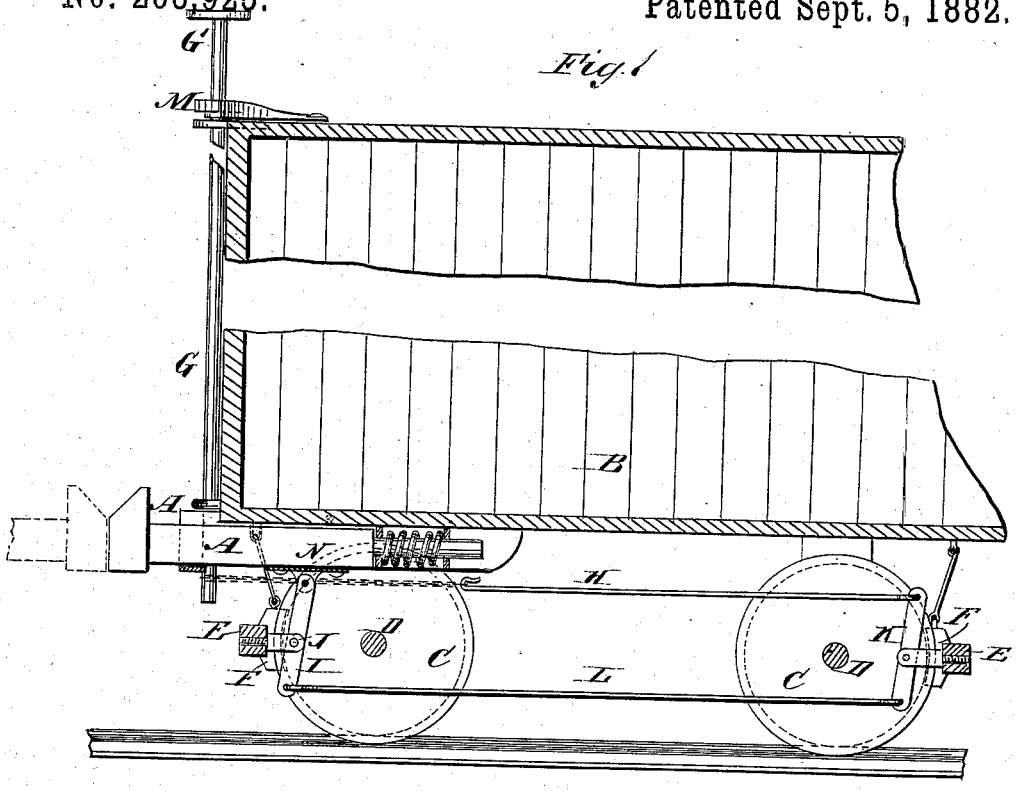
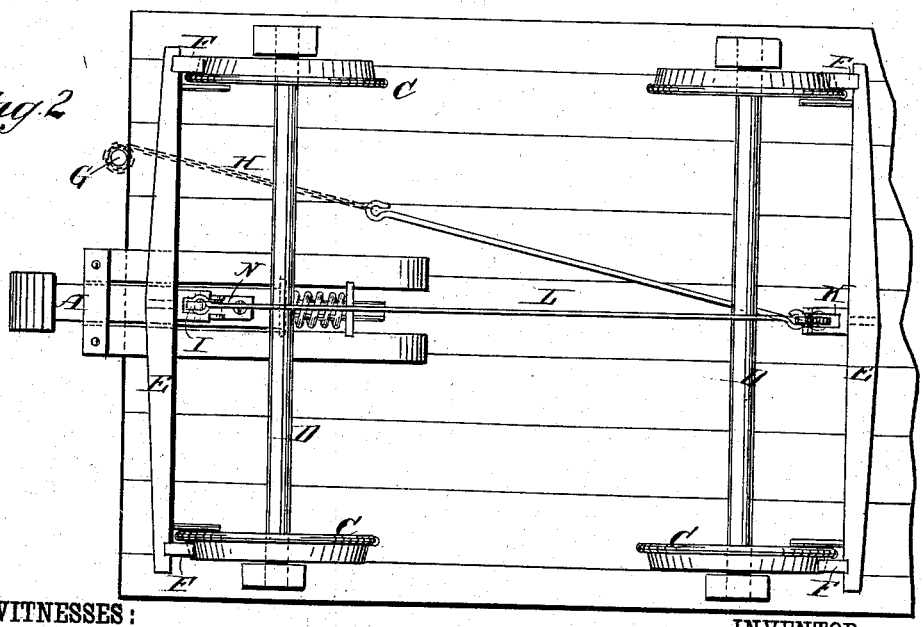


Fig. 2



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CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 263,925, dated September 5, 1882.

Application filed April 18, 1882. (Model.)

To all whom it may concern:

Be it known that I, SVEND LÝKKE, of Omaha, Douglas county, Nebraska, have invented a new and Improved Car-Brake, of which the following is a full, clear, and exact description.

This invention consists of the brake-beams coupled to the draw-bar in such manner that when the hand-wheel brake is properly set for the purpose the back-pressure on the draw-bars when the engine slows will apply the brakes, the arrangement being such that such application of the brakes is prevented whenever it is required to "back up" by letting off the hand-brakes, the object being to provide a simple contrivance whereby the engineer can have the control of the brakes without the complicated and expensive air and steam brakes, and especially one that can be cheaply and practically applied to freight-cars, all as hereinafter more fully described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both figures.

Figure 1 is a longitudinal sectional elevation of part of a freight-car, showing the application of the said improved brake; and Fig. 2 is a plan of the said portion of a car inverted.

A represents the draw-bar of a freight-car, of which B represents the box or body, C the wheels, D the axles, E the brake-bars, and F the brake-shoes.

The common arrangement of the hand-wheel brake-shaft G and chain H is to extend the latter to a lever under the car having connection with the brake-bars E, so that the shoes of both bars are brought up against the wheels by the brake-chain H pulling on one end of the said lever, the latter having its fulcrum on the car body or truck. What I propose is to practically establish this fulcrum on the draw-bar in such manner that when the draw-bar is shifted backward by the resistance of the car ahead it will draw the brakes on whenever the hand-brake wheel has been properly set for the purpose. For this purpose I connect the front brake-bar E to the draw-bar A by the bar I, having its fulcrum on said draw-bar and pivoted at J to said brake-bar. To the other end of said lever I, I connect a similar lever, K, on the other brake-bar E by rod L, and connect lever K by chain H with the hand-brake shaft G. The brake thus connected works by the hand-wheel brake-shaft G, the same as the common arrangement, and, besides, by tightening up chain H a little and setting the hand-wheel shaft by its ratchet M any back action on draw-bar A will apply the brakes. When chain H is slackened by letting off the brake-shaft G the back action on the draw-bar will have no effect on the brakes, so that no obstruction will be in the way of backing the cars at will.

In applying the apparatus to cars already built the lever I will be pivoted to the draw-bar A by a lug-plate, N, attached to it; but provision may be made in building new cars to pivot the lever in a slot in the draw-bar. It will be understood that by a proper system of levers the same effect may be produced with only one of the brake-bars E of a truck, although it is more efficient with both included; but I do not mean to limit myself to an arrangement including both brake-bars.

I am aware that a car-brake consisting of a sliding block in the draw-bar fulcrumed to a lever and indirectly pivoted to the front brake-bar and connected to a lever on the rear brake-bar, the upper end of the lever being connected to the brake-shaft, has heretofore been employed, and I therefore lay no claim broadly to such construction, my invention being confined to the precise construction and arrangement of parts pointed out in the claim, whereby greater simplicity and cheapness of construction are obtained.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

In a car-brake, the combination, with the spring-actuated sliding draw-bar A, the brake-bars E, and the brake-shaft G, of the lever I, fulcrumed on the draw-bar and pivoted to the front brake-bar, the lever K, pivoted to the rear brake-bar, the rod L, connecting the lower ends of the levers I K, and the chain H, secured to the upper end of the lever K at one end and to the brake-shaft G at its other end, substantially as and for the purpose set forth.

SVEND LÝKKE.

Witnesses:
P. BOYER,
WARREN SWITZLER.