

J. W. GLOVER.
Railway-Car Brakes.

No. 156,284.

Patented Oct. 27, 1874.

Fig. 1.

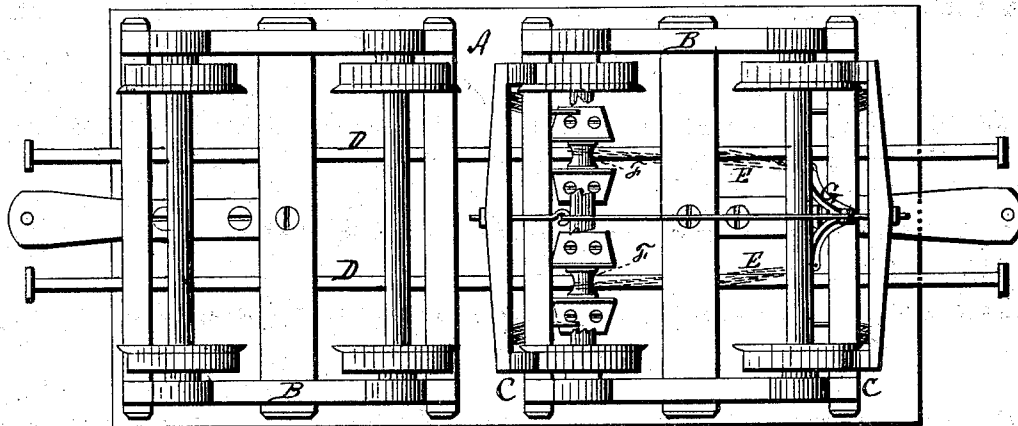
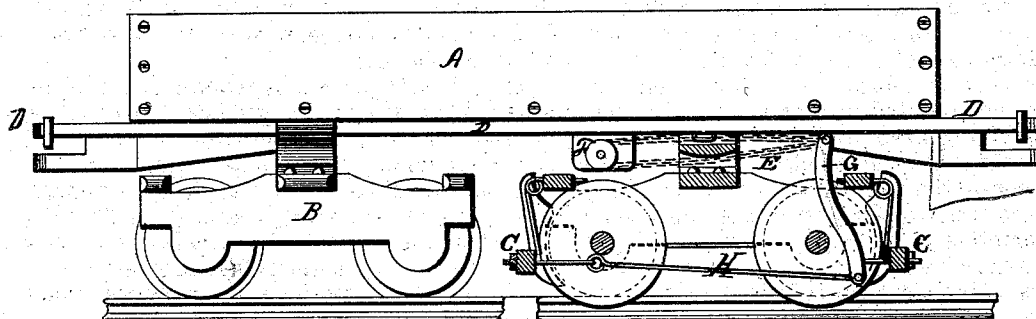


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN W. GLOVER, OF ROCKTON, ILLINOIS, ASSIGNOR OF TWO-THIRDS HIS
RIGHT TO M. D. KEENEY AND E. KINGSLEY, OF SAME PLACE.

IMPROVEMENT IN RAILWAY-CAR BRAKES.

Specification forming part of Letters Patent No. **156,284**, dated October 27, 1874; application filed
August 21, 1874.

To all whom it may concern:

Be it known that I, JOHN W. GLOVER, of Rockton, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Car-Brakes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improved car-brake to be operated by steam from the locomotive; and consists in a series of brake-rods which extend the whole length of each of the cars beneath the same, and are actuated by the direct action of a piston located at or near the locomotive.

In the drawings, Figure 1 is a plan view, and Fig. 2 is a side elevation, of my invention, exhibiting my improvement attached to a car.

A is the body of the car, B the trucks, and C the brake-shoes. D are rods extending the whole length of the cars and its couplings, and provided at its ends with enlarged heads or butters. E are chains attached to the rods D, passing over pulleys F at one end and attached to the brake-lever G at the other end. The extremity of the short arm of the lever G is attached to the straining-rod H, which draws one set of shoes against the wheels. The same lever G acts as a lever of the second order, to operate the other set of brake-shoes.

The brake-rods D rest loosely underneath the car, and are attached to chains for operating the brakes. When the cars are in the train the rods D under the successive cars will butt against each other at their ends, so as to form

a continuous brake-bar extending from the rear of the train under one or both sides of the cars to the locomotive. At this latter point a piston in a secondary cylinder is made to deliver a blow against the ends of the rods D adjacent to the locomotive, so that, when it is desired to brake the cars, the engineer lets steam into the cylinder, thereby driving out its piston, which in turn pushes all of the rods D longitudinally, and thereby brakes every wheel on the train.

The advantages of this invention are as follows: A steam-brake is provided without the necessity of couplings between the cars or of the employment of a cylinder upon each car. The cars are always ready as soon as coupled, work equally well from either end, and the device is simple and effective, placing the entire train under the control of the engineer.

Having thus described my invention, what I claim is—

The device for operating car-brakes, consisting of the rods D, placed beneath the car and projecting a slight distance from each end, and the single chain E attached to the brake-lever, carried back and attached to the rod D, and passed around a pulley, F, and the end attached to the brake-lever, all combined to operate the brakes by pressure upon either end of the rods D, substantially as and for the purposes described.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of August, 1874.

JOHN W. GLOVER.

Witnesses:

D. BUSHORE,
THOMAS FARMER.

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