

J.W. McClellan. Car Brake

Fig. 1.

117190

PATENTED JUL 18 1871

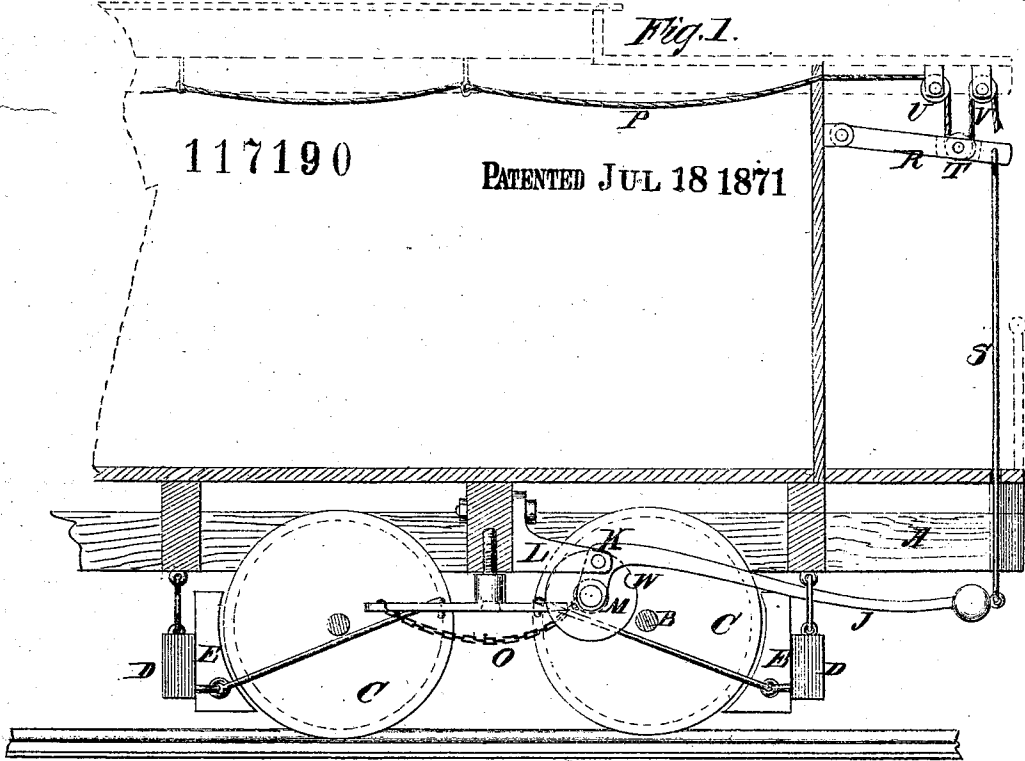
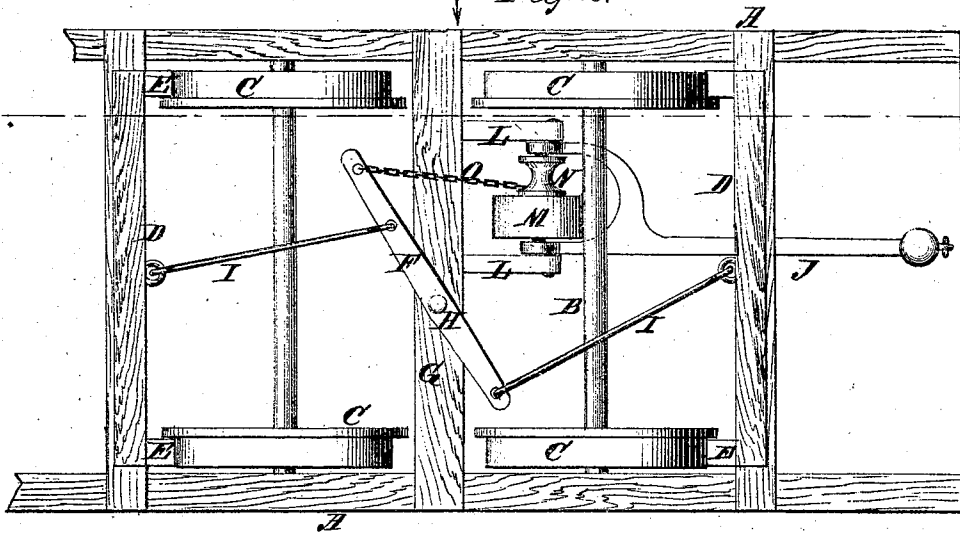


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN W. McGLASHAN, OF MONTREAL, CANADA.

IMPROVEMENT IN RAILWAY-CAR BRAKES.

Specification forming part of Letters Patent No. 117,190, dated July 18, 1871.

To all whom it may concern:

Be it known that I, JOHN W. McGLASHAN, of Montreal, in the Province of Quebec and Dominion of Canada, have invented a new and useful Improvement in Car-Brakes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention consists in a new and useful improvement in brakes for railroad cars; and consists in the construction of a friction-wheel whereby it is adapted to lock onto the axle for the purpose of preventing the brakes being applied with undue force. This device is hereinafter described in connection with others necessary to its perfect operation or to constitute a complete brake apparatus.

In the accompanying drawing, Figure 1 represents a vertical longitudinal section of a car provided with my improved brake, the section being taken on the line *xx* of Fig. 2, looking as indicated by the arrow. Fig. 2 is a view of the under side of the car, the car being reversed in order to show the brake to better advantage.

Similar letters of reference indicate corresponding parts.

A is the car-frame. B represents the car-axles; C, the wheels; D, the brake-beams; E, the shoes on the ends of the beams. F is the brake-bar, which has its fulcrum on the cross-timber G at the point H. I I are the rods which connect the lever with the brake-beams. J is a lever hung

in brackets L L, and carrying in its forked and bent end the friction-wheel M and chain-drum N, which are mounted on a short shaft arranged parallel to the axle. O is a chain connecting the drum N and bar F. The brakes are applied throughout the train by the chain or cord P, which is supported from the roof of the car and connected with the lever by a jointed bar, R', rod S, and pulleys T V.

By pulling down on any portion of the cord, or by pulling it endwise in either direction, the ends of all the levers J will be drawn upward, which will apply the brakes simultaneously throughout the train. By releasing or loosening the cord the ends of the working-levers drop down by their own gravity and the brakes are simultaneously released from the wheels.

W is a groove in the face of the friction-wheel M, which allows the wheel to lock onto the axle. This, of course, stops the revolution of the wheel and drum, and prevents the brakes being applied with greater force than is necessary, a single revolution or less being sufficient to apply the brakes with great force.

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

The groove W in the friction-wheel, substantially as and for the purposes described.

JOHN W. McGLASHAN.

Witnesses:

GEORGE CARTER, of Montreal,
Notarial Clerk.

J. S. HUNTER, of Montreal,
Notary Public.