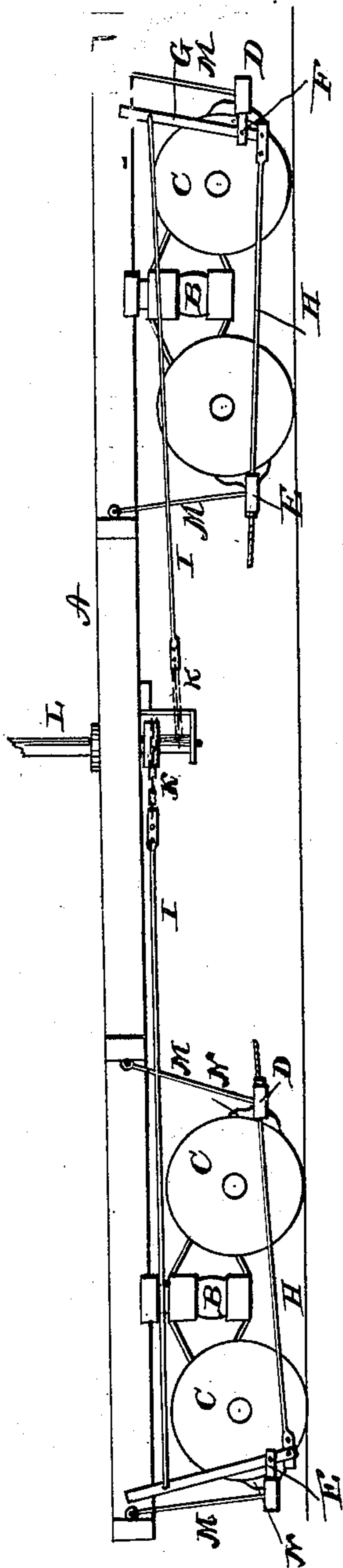


D. R. DWYER.
Car Brake.

No. 230,181.

Patented July 20, 1880.



Witnesses:

F. L. Curran,
E. H. Bradford.

Inventor:

D. R. Dwyer,
by H. E. Ennis,
att'y.

UNITED STATES PATENT OFFICE.

DENIS R. DWYER, OF MARSHALL, TEXAS.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 230,181, dated July 20, 1880.

Application filed February 12, 1880.

To all whom it may concern:

Be it known that I, DENIS R. DWYER, a citizen of the United States, residing at Marshall, in the county of Harrison and State of Texas, have invented certain new and useful Improvements in Brakes for Caboose-Cars; 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 appertains to make and use the same, reference being had to the accompanying drawing, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in brakes for cars; and it has for its object to provide a system of brakes for a caboose-car by means of which the car frame or body itself will be relieved of all strain in applying the brakes, and by means of which the brakes may be applied from within the car. I attain these objects by the mechanism illustrated in the accompanying drawing, in which is represented a longitudinal vertical section of my improvement.

The letter A indicates the body or frame of the car; B, the trucks, carrying the wheels C, which may be constructed in the ordinary or any approved manner.

The letters D E indicate two transverse brake-beams extending under the car at the outside of each set of wheels. The beam D has connected to it, by means of a connection, F, a lever, G, which is connected at its lower end or short arm, by means of a connecting-rod, H, with the brake-beam E, the upper end of said lever being connected, by means of a longitudinal connecting-rod, I, and chain K, to the brake-shaft L, which is journaled at the center of the car and projects through the floor of the same.

The brake-beams are loosely connected at each end to the body of the car by means of

hangers M, and are provided with brake-shoes N, adapted to bear against the respective wheels.

The operation of my invention is as follows: Upon turning the brake-shaft L the chains K will be taken up on the same in opposite directions, creating a draft on the rods I. By said rods the levers G will be operated to draw the brake-beams of each respective set of wheels together, causing the shoes to bear against said wheels and exerting the whole effective force upon the brakes without losing any of the same upon the body of the car, thus relieving the car of all injurious strain and rendering the brakes more effective.

I am aware that operating brakes upon the trucks at both ends of a car simultaneously by means of a system of connecting-rods and levers, as shown by the patents of Thompson and Bachelder, July 6, 1852, is old, and I do not therefore claim such an arrangement of devices for applying brakes.

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

The combination, in a caboose-car, of the trucks B at each end, the wheels C, the brake-beams D E, secured by loosely-connected hangers M to opposite ends of the respective trucks, the operating-levers G, connecting-bars H, and the connecting-bars I, secured to the levers G at one end and to the vertical brake-shaft L at their other ends, the said brake-shaft being located between the two trucks, whereby the body of the car is relieved of the usual strain in applying the brakes, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

DENIS R. DWYER.

Witnesses:

F. P. YOUNG,
C. H. MCGILL.