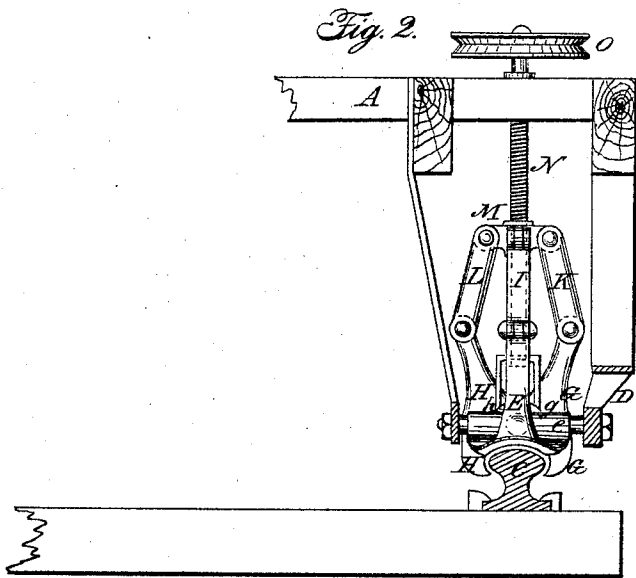
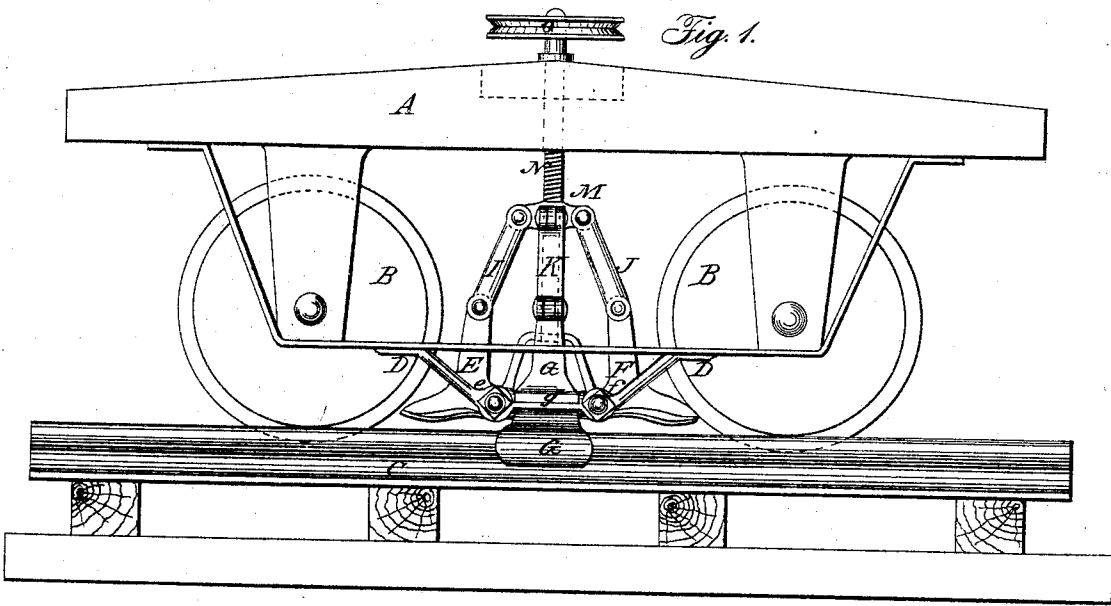


E. WHITEHEAD.

Car Brake.

No. 56,302.

Patented July 10, 1866.



Witnesses:

V. Millward
J. H. Layman

Inventor:

Edward Whitehead
Knight & Potts
Attys

UNITED STATES PATENT OFFICE.

EDWARD WHITEHEAD, OF CINCINNATI, OHIO.

IMPROVED CAR-BRAKE.

Specification forming part of Letters Patent No. 56,302, dated July 10, 1866.

To all whom it may concern:

Be it known that I, EDWARD WHITEHEAD, of Cincinnati, Hamilton county, State of Ohio, have invented certain new and useful Improvements in Railroad-Car Brakes; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My invention consists of certain devices by which pressure and consequent friction are brought to bear upon the sides and tops of the rails of the track to produce the necessary braking effect upon the car or cars, the appliance being designed to act in conjunction or not with the ordinary brakes in time of expected collision, &c.

In the accompanying drawings, Figure 1 is a side view of the frame of a car embodying my improvements. Fig. 2 is a transverse section of the same.

A and B are, respectively, the frame and wheels of the car, and C represents the rails.

To the braces D of the frame four clamps or brakes, E F G H, are hinged at *e f g h*, respectively. The clamps are connected by means of jointed links I J K L to a nut, M. The nut M is adapted to receive a reciprocating vertical motion by means of the screw and pulley N O, suitably journaled in the frame.

The clamps E F are adapted, by the depression of the nut M, to press upon the tops of the rails, and the clamps G H, by the same movement, to embrace the rails at the sides, as seen in Fig. 2, the whole acting to clasp the rails so tightly that the motion of the car or cars can be reduced until the train is stopped within the shortest space possible.

In the accompanying drawings the clamps are seen as applied to but one side of the track. To equalize the strain they are applied to both, the apparatus, as described, being merely re-

peated and connected so as to be worked simultaneously.

This improvement is designed to be used on cars which are also provided with the customary hand-brake, and only to be employed in an emergency where the latter would not exert sufficient power to check up the train at a moment's notice.

The pulley O may be operated by a chain or rope passing around another pulley located on the opposite side of the car-platform to that of the hand-brake.

The brakes of an entire train may be made to operate simultaneously in the following manner: A chain may pass around all the pulleys O of a train, and be wound on a drum under the locomotive-cab, and said drum may be rotated by the engineer bringing it in contact with one of the driving-wheels, thus checking up the train at once, and not losing a moment's time in sounding the whistle and waiting for the brakeman to attend to the brakes.

The device can be so arranged as to bring the upper clamp in contact with the top of the rails before the lower ones operate at all, and the latter may then only impinge against the lower part of the rail-head, and not bear against the sides of the rail.

I claim herein as new and of my invention—

A car-brake adapted to embrace the rails of the track, constructed, substantially as described, of clamps E F G H, hinged as shown, and operated simultaneously by means of nut M and screw N, as set forth.

In testimony of which invention I hereunto set my hand.

EDWARD WHITEHEAD.

Witnesses:

GEO. H. KNIGHT,
JAMES H. LAYMAN.