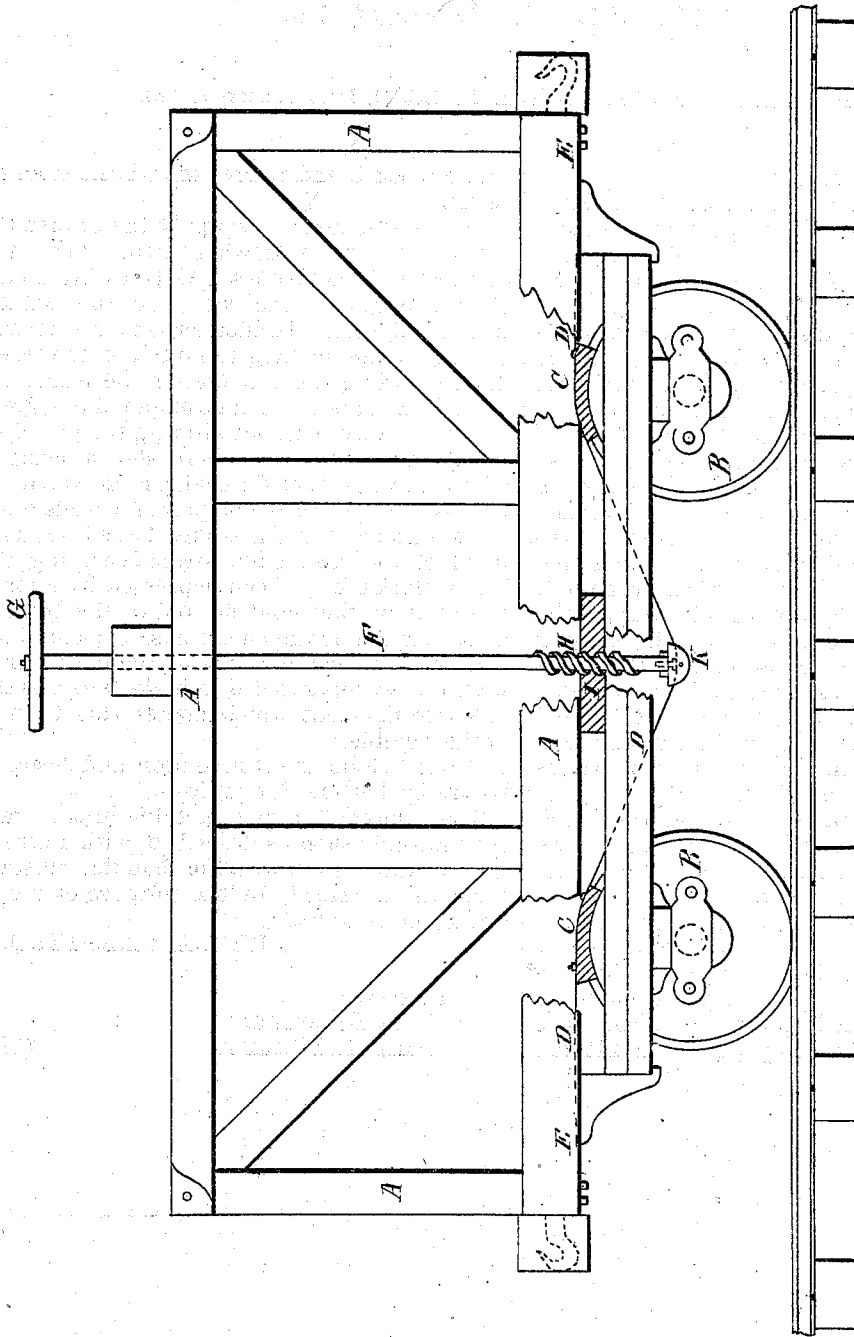


F. A. CANFIELD.

Improvement in Car Brakes.

No. 122,564.

Patented Jan. 9, 1872.



Witnesses

Philip R. Jones
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Inventor

Fred A. Canfield
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UNITED STATES PATENT OFFICE.

FREDERICK A. CANFIELD, OF DOVER, NEW JERSEY.

IMPROVEMENT IN CAR-BRAKES.

Specification forming part of Letters Patent No. 122,564, dated January 9, 1872.

To all whom it may concern:

Be it known that I, FREDERICK A. CANFIELD, of Dover, New Jersey, have invented a certain new and useful Improvement in Brakes for Railroad Cars, of which the following is a specification:

In the accompanying drawing, A represents a car-body of ordinary construction, such as is used for the transportation of coal. B B are the wheels, of which the car has four. C C are the brake-blocks, which may be of wood or any other material used for that purpose. These blocks are attached to the flexible iron strap D, the ends of which are fastened to the frame of the car at the points E E. This strap may be three inches wide and a quarter of an inch thick, more or less. F is a vertical brake-rod, which is operated by the wheel G, upon the lower end of which is a screw, H, passing through a nut, I, which is fixed to the frame of the car. On the extreme end of this brake-rod is a block, K, having a groove or channel cut in it lengthwise, of the width of the iron strap D, through which groove the strap passes and is secured by a pin from falling out. The end of the brake-rod is inserted in this block in a socket, so arranged that the rod can revolve without turning the block, and can raise the block with it as it is raised.

When the brake is not in use the brake-rod is screwed upward, carrying with it the block K, and lifting also the strap D, which is secured in the block by a pin or otherwise, so that it will be carried up with the block. The effect of raising the strap will be to lift the

brake-block C and relieve the wheels from all restraint.

When it is desired to apply the brakes the wheel G is screwed down, carrying with it the strap D and the blocks C C, throwing a part of the weight of the car upon the brakes, which weight can be increased to any desired extent by diminishing the pitch of the screw and increasing the diameter of the wheel G.

This arrangement can be modified in a great variety of ways without altering the principle of operation; the form here shown being a simple arrangement for coal-cars in which the brakes are applied to one pair of wheels only.

I am aware that car-brakes have been used in which the suspended straps, carrying the brake-blocks, have been depressed by a lever operated by the hand or foot of the brakeman; but this arrangement has been found defective. The combination of the brake-strap with a screw, operated by a brake-wheel, is the new arrangement which makes this form of brake reliable.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of a metallic brake-strap, substantially such as described, with a screw-rod, operated by a wheel or handle, substantially as described, for the purpose of a car-brake, as described.

FRED. A. CANFIELD.

Witnesses:

T. B. BEECHER,
PHIL. R. FORREST.

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