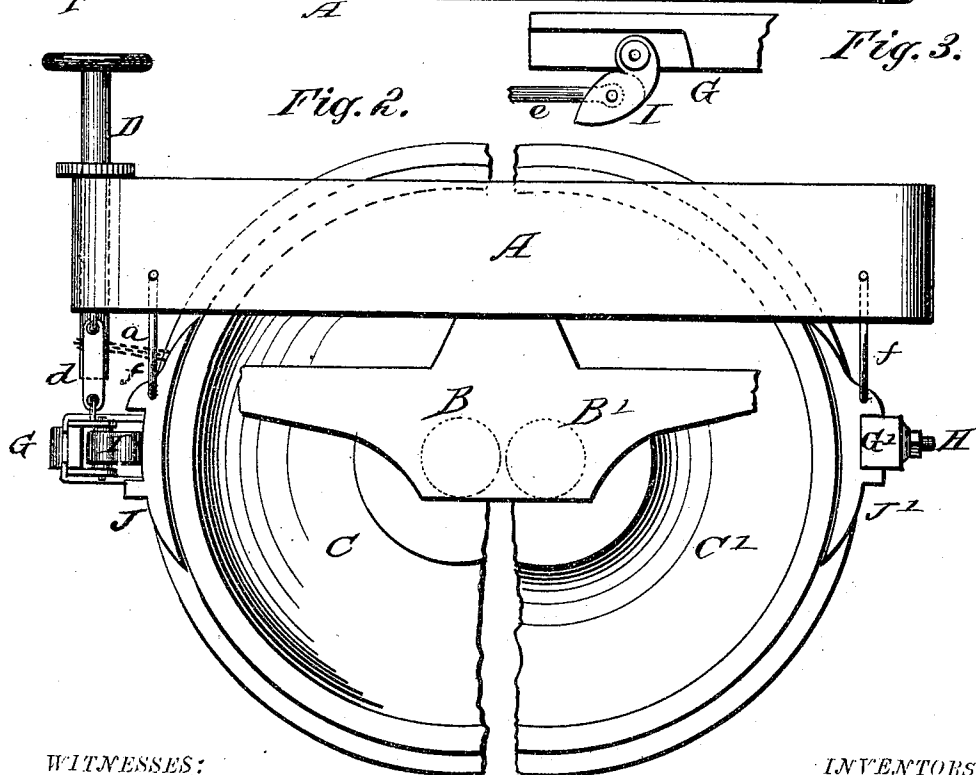
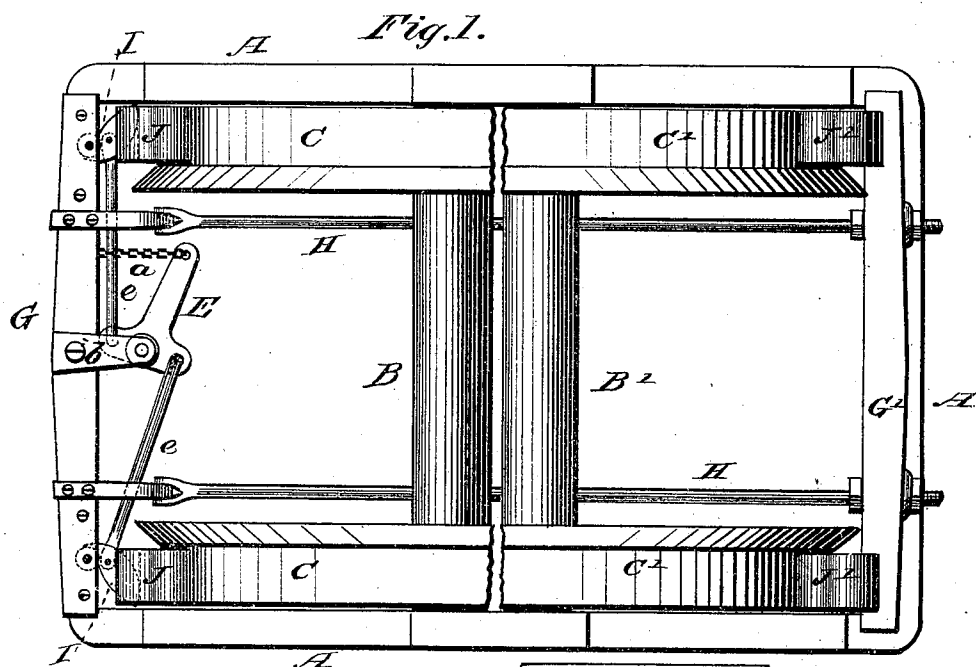


S. B. BENNETT & J. GANGWER, Jr.

CAR-BRAKE.

No. 175,410.

Patented March 28, 1876.



WITNESSES:

P. B. Dietrich
W. E. McArthur

By:

INVENTORS:

S. B. Bennett & Jesse Gangwer, Jr.
J. H. Alexander

Attorney.

UNITED STATES PATENT OFFICE

STEPHEN B. BENNETT AND JESSE GANGWER, JR., OF PITTSBURGH, PA.

IMPROVEMENT IN CAR-BRAKES.

Specification forming part of Letters Patent No. 175,410, dated March 28, 1876; application filed January 13, 1876.

To all whom it may concern:

Be it known that we, STEPHEN B. BENNETT and JESSE GANGWER, Jr., of Pittston, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Car-Brakes; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The nature of our invention consists in the construction and arrangement of a car-brake, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a bottom view, and Fig. 2 is a side elevation of our invention.

A represents a railroad-car-truck frame, with axles B B' and wheels C C and C' C'. a is the brake-chain, attached to an ordinary standard, D, with usual wheel on its top end, said standard being of any length desired, and provided with ratchet and dog in the usual manner. The other end of the chain a is attached to the center arm of a T-shaped lever, E, which is pivoted between suitable irons b b, projecting forward from the center of a brake-bar, G, which is suspended by links d d from the frame A. In each end of the brake-bar G is an iron box, within which is pivoted a cam, I, and the two cams are, by means of rods e e, connected with the side arms of the T-shaped lever E. The cams I bear against the backs of brake-shoes J, which are suspended from the frame A by hangers f, and

are to operate on the wheels C C. The brake-bar G is, by means of tension-rods H, connected with the brake-bar G', which has the brake-shoes J' attached to its ends, said shoes being suspended by similar hangers, and are to operate on the wheels C'. Upon winding up the chain a the T-lever E is drawn forward, drawing by its rods e e the cams I I inward, forcing back the brake bar or beam G. As the beam G moves backward, the beam G', by reason of being attached to the beam G by the tension-rods H, moves with it, bringing the shoes J' J' in contact with the tread of the wheels C' C'. As soon as this takes place, or instantaneously, the cams press the shoes J J upon the face of the wheels C C, and the amount of friction is limited only by the power exerted upon the standard-wheel.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination of the standard D, chain a, T-shaped lever E, beam G, rods e e, cams I I, and shoes J J, all substantially as and for the purposes herein set forth.

2. The combination, with the beam G, lever E, rods e e, cams I I, and shoes J J, of the tension-rods H H, beam G', and shoes J' J', all substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing as our own we affix our signatures in the presence of two witnesses.

S. B. BENNETT.
JESSE GANGWER, JR.

Witnesses:

ROBERT JAQUES,
CORAY PERRIN.