

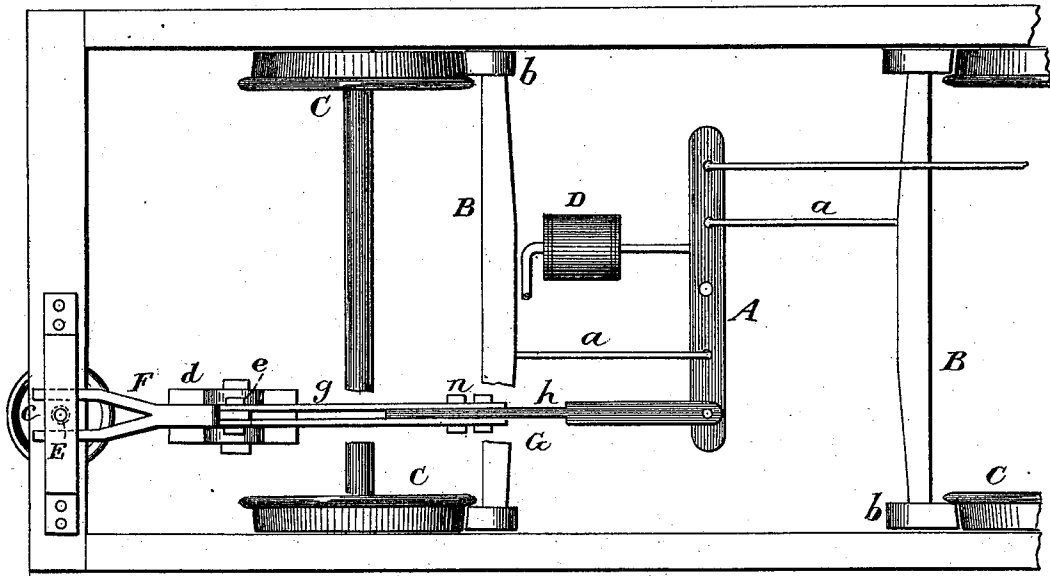
(No Model.)

R. A. ISENBERG & S. ALLOWAY.  
CAR BRAKE.

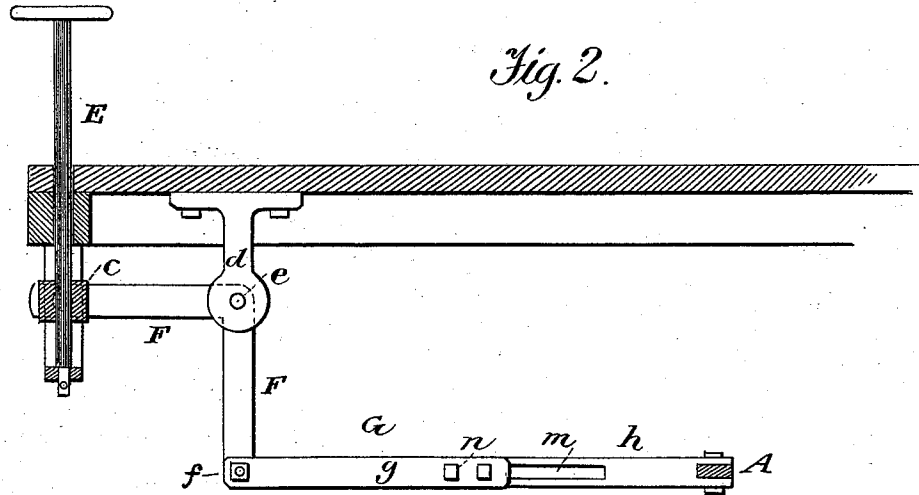
No. 418,723.

Patented Jan. 7, 1890.

*Fig. 1.*



*Fig. 2.*



WITNESSES:  
*A. Ruppert.*  
*G. B. Fowler.*

INVENTOR  
*R. A. Isenberg*  
BY *Samuel Alloway*  
*Per*  
*Thomas Simpson*  
ATTORNEY.

# UNITED STATES PATENT OFFICE.

ROLANDIS A. ISENBERG AND SAMUEL ALLOWAY, OF ALTOONA, PENNSYLVANIA.

## CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 418,723, dated January 7, 1890.

Application filed October 29, 1889. Serial No. 328,614. (No model.)

*To all whom it may concern:*

Be it known that we, ROLANDIS A. ISENBERG and SAMUEL ALLOWAY, citizens of the United States, residing at Altoona, in the county of Blair and State of Pennsylvania, have invented certain new and useful Improvements in Car-Brakes; and we 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.

This invention relates to car-brakes; and it consists in a certain improvement in the construction of the same, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is an inverted plan view of an air-brakes applied to the wheels of a car and provided with our improvement. Fig. 2 is a vertical section illustrating the connections of the brake-stem and connecting-rod.

A designates a central pivoted bar, which is connected by rods *a* extending in opposite directions, with the opposite brake-beams B, which are provided with shoes *b* in position to close against the car-wheels C.

D indicates a cylinder and piston, which are adapted to operate the brake by compressed air, the piston-rod being connected with the bar A in the ordinary manner.

E indicates a brake-stem, the lower end of which is threaded and extends through a nut *c*, which is journaled in the bifurcated end of an elbow F, which is pivoted at *e* to a supporting-bracket *d*. Each of the rods G which connects one end of the bar A with an elbow F is made in parts, which are so connected

that the rod is extensible at the joint, as shown in Fig. 2. A section *g* of said rod G is pivoted at *f* to the elbow F, the said section being open to receive the section *h*, which fits and has movement therein. The said section *h* is provided with a slot *m*, and may be secured to the section *g* by screws or bolts *n* passed through the slot, so that the section *h* is allowed a limited movement in section *g*, and when the brake is operated at one end of a car, the rod being drawn closes at the opposite end. With a solid draw-rod but one brake-shaft can be used. The chain, which is commonly wound on the brake-stem and often gets broken, thus endangering the life of the brakeman, is dispensed with, and less strength is required to operate the brake.

The improvement is shown as applied to a car which is also provided with an air-brake apparatus, and either construction may be used as occasion may require, the improvement being advantageous in any brake to be operated at either end of a car.

We claim—

The combination, with a brake-stem and a pivoted elbow constructed to be operated by said brake-stem, of a connecting-rod formed with section *g* and slotted section *h*, which are loosely connected, substantially as set forth and described.

In testimony whereof we have affixed our signatures in presence of two witnesses.

ROLANDIS A. ISENBERG.

SAML. ALLOWAY.

Witnesses:

WILLIS E. EBRIGHT,  
DANIEL W. FORD.