

(Model.)

A. STENSTROM & A. NILSON.
Automatic Car Brake.

No. 238,178.

Patented Feb. 22, 1881.

Fig. 1

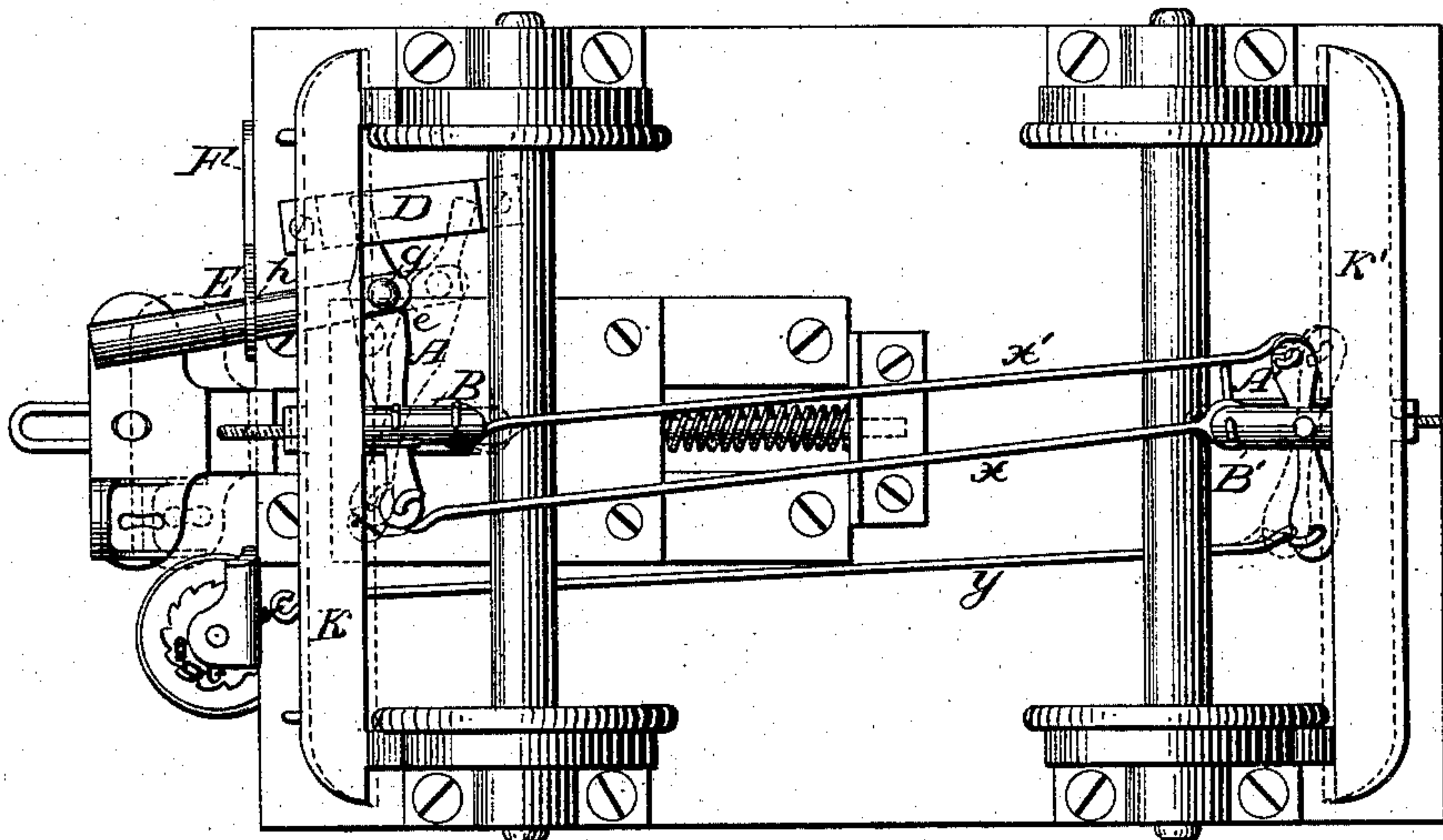
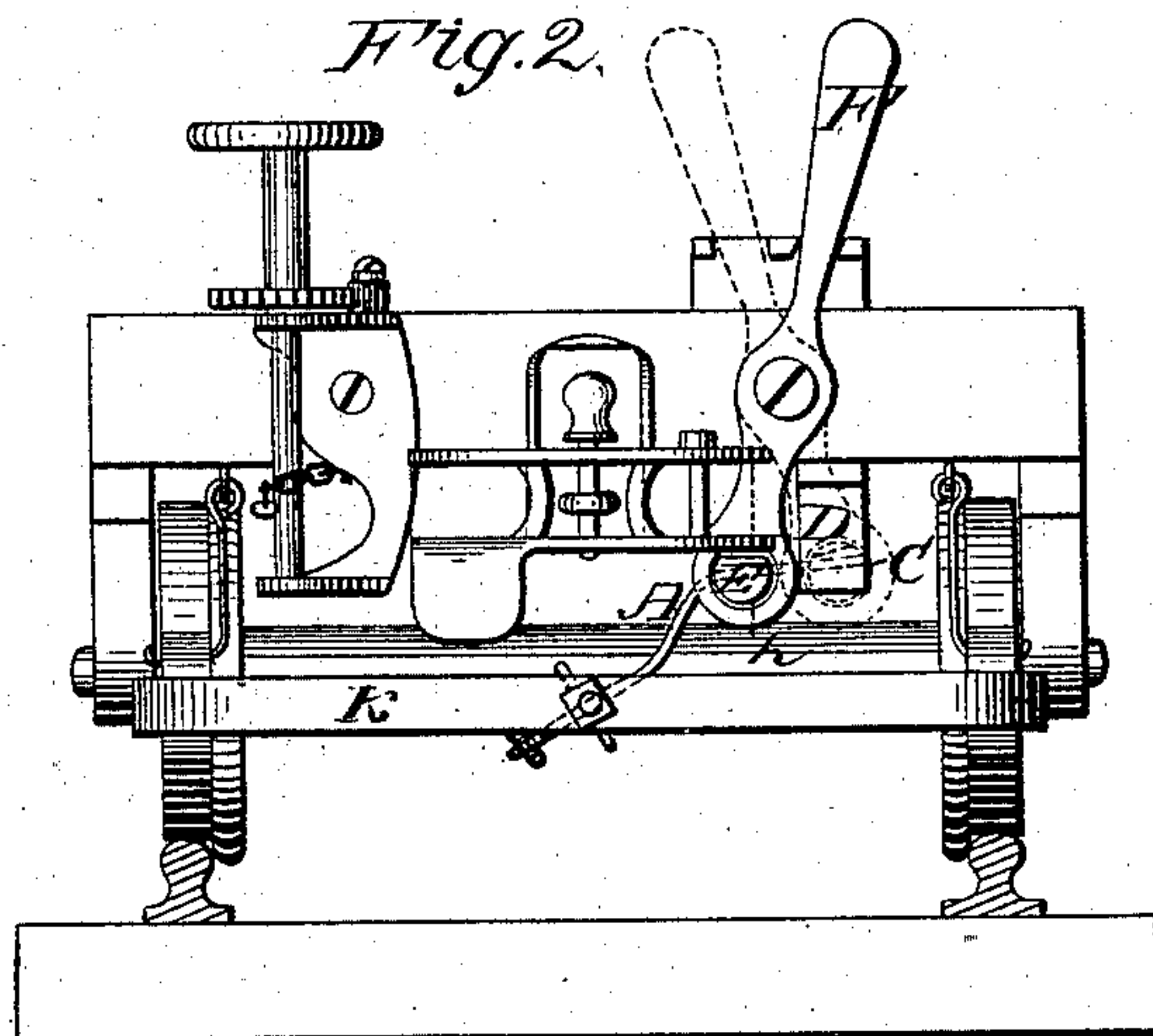


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

AUGUST STENSTROM AND AUGUST NILSON, OF BURLINGTON, IOWA.

AUTOMATIC CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 238,178, dated February 22, 1881.

Application filed December 23, 1880. (Model.)

To all whom it may concern:

Be it known that we, AUGUST STENSTROM and AUGUST NILSON, of Burlington, Iowa, have invented a new and useful Automatic Car-Brake, of which the following is a specification.

My invention relates to car-brakes in which, on a down-grade, the pressure of the cars against each other is utilized, in connection with a brake mechanism, to form an automatic brake, and this we accomplish by the devices and combinations of devices hereinafter set forth and described.

Similar letters of reference indicate similar parts.

In the drawings, Figure 1 is a bottom-plan view of a car or truck to which the present invention is applied. Fig. 2 is a front elevation of a car or truck having present invention.

In the drawings, A is a curved lever-arm pivoted in the bifurcated stud B, which is screwed centrally into the back part of an ordinary brake-bar, K. One end of the curved arm A is attached to the brake-rod x , while the longer end, bent upward and again outward, passes into the horizontal guide-slot C, in the stationary block D, which is screwed to the bottom of the car.

E is a push-bar, bifurcated at e , and fastened movably upon the curved arm A at g . Thence it passes forward through a perforation, h , in the lower end of the brake-operating lever F, which is pivoted to the car-front and serves to shift the push-bar.

The rod x is attached to the center of the brake-bar K' of the other pair of wheels in the same truck by a stud, B', similar in form to the stud B, through which passes the curved arm A', pivoted in its bifurcation. To the shorter end of the curved arm A' is attached the brake-

rod x' , whose opposite end is attached to the stud B. To the longer end of the curved arm A is fastened the rod y , which runs forward and is attached to the brake-chain of an ordinary brake.

The operation is as follows: By the hand-lever F the push-bar E is brought into position directly under the buffer of the car, whereupon, by the pressure of the cars against each other on a down grade, the longer end of the curved arm A is shoved backward in its slot C by the push-bar, thereby drawing forward the rod x , thus pressing the brake blocks and shoes upon both pairs of wheels.

The brakes may be loosened by simply turning the outward end of the push-bar from beneath the buffer.

For breaking other than on down grades the ordinary hand-wheel may be used.

It is evident that the device described can be attached to both ends of the car.

What we claim, and desire to secure, is—

1. The combination of the push-bar E, curved arm A, stud B, stationary block D, provided with slot C, hand-lever F, rod x , and the brake-beams of an ordinary car-truck, with the curved arm A', the stud B', the rod x' , substantially as and for the purpose described.

2. The combination of the bar E, arm A, stud B, block D, provided with slot C, lever F, rod x , curved arm A', stud B', and rod x' , with the rod y , the brake-beams of an ordinary truck, and the brake-chain of an ordinary brake, substantially as and for the purpose described.

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Witnesses:

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