M. C. HINTON.

CAR BRAKE.

APPLICATION FILED NOV. 19, 1909.

952,990.

Patented Mar. 22, 1910.

2 SHEETS—SHEET 1.

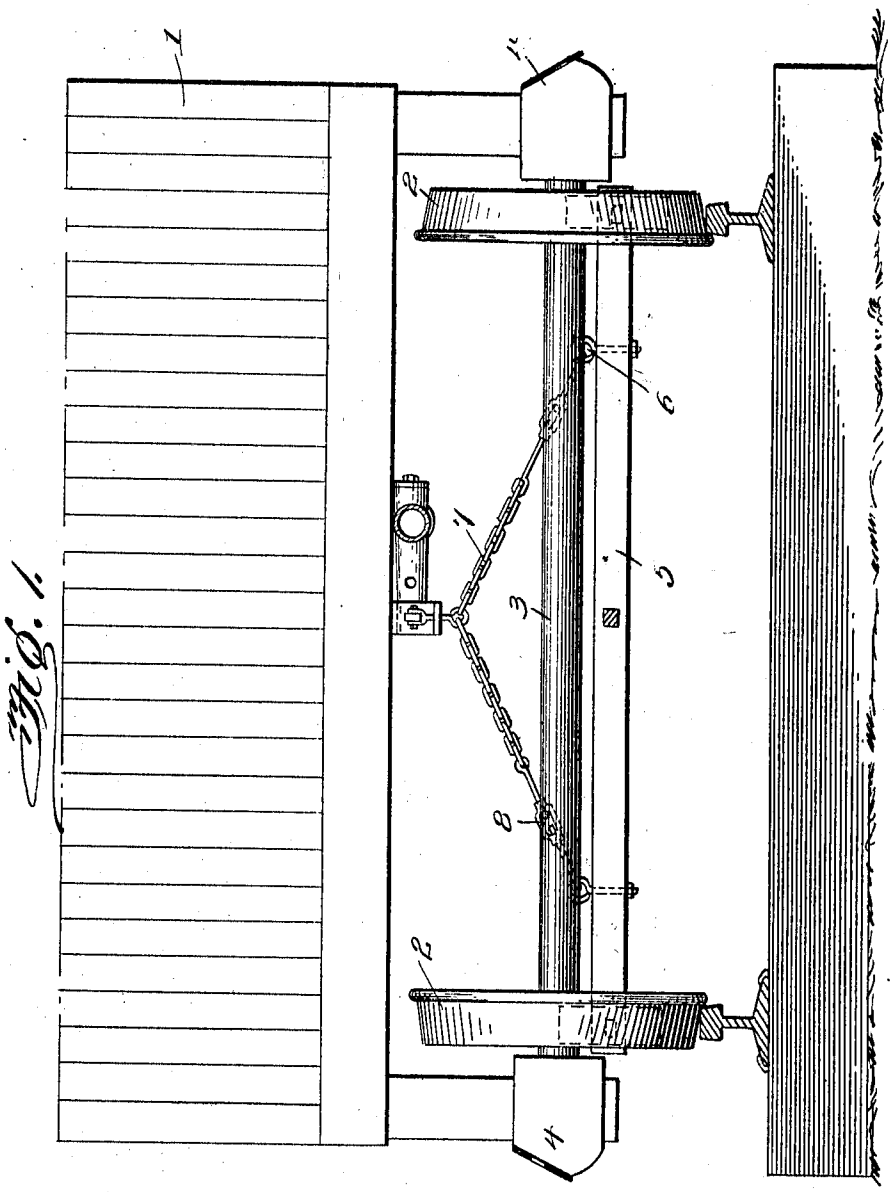

Fig. 1.

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2 SHEETS—SHEET 2.

Fig. 2.

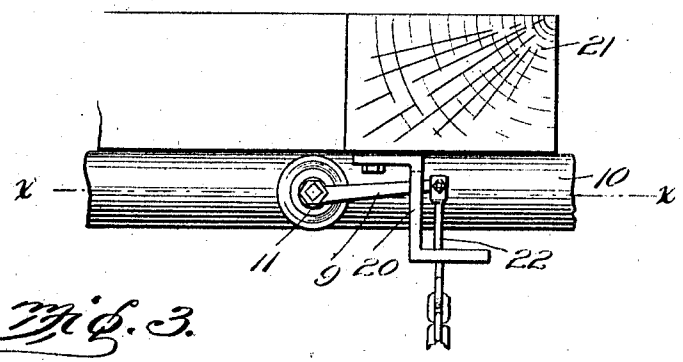


Fig. 3.

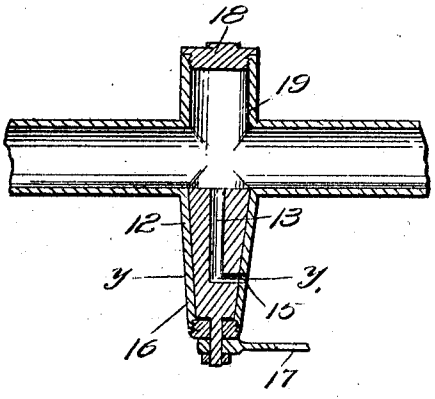


Fig. 4.

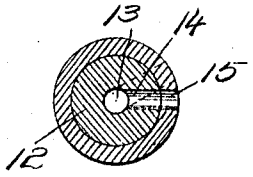
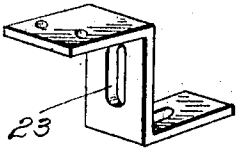


Fig. 5.



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UNITED STATES PATENT OFFICE.

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CAR-BRAKE.

952,990. Specification of Letters Patent. Patented Mar. 22, 1910.

Application filed November 19, 1909. Serial No. 528,929.

To all whom it may concern:

Be it known that I, MOORE C. HINTON, a citizen of the United States, residing at Hinton, in the county of Summers and State of West Virginia, have invented new and useful Improvements in Car-Brakes, of which the following is a specification.

My invention relates to certain new and useful improvements in car brakes and consists in the novel combination and arrangement of parts as will be hereinafter more particularly described and pointed out in the claims.

In the drawings: Figure 1 is a front elevation of my complete invention. Fig. 2 is a detail view showing the train pipe and valve connections forming a part thereof and secured to the usual frame of the car. Fig. 3 is a vertical longitudinal section taken through the train pipe and valve forming a part thereof and constructed according to my invention taken on the line *x*—*x* of Fig. 2. Fig. 4 is a transverse section taken on the line *y*—*y* of Fig. 3. Fig. 5 is a perspective view of the guide plate which I employ in connection with the draft timbers of the car and used in connection with a valve lever.

My invention has for its object to provide a very simple, practical and effective apparatus for automatically causing the brakes to be operated or set on a car or train, should the brake beam or other rigging forming a part of the same become displaced, inoperative or dropped to assume a dangerous position in respect to the wheels of the car or train.

The invention therefore consists of a chain or other yielding connection attached to the arch or brake beam, and in a movable and operative connection with the suitable valve located in the train pipe, whereby said valve is instantaneously operated by the accidental displacement of the brake beam or rigging forming a part of the latter, thereby preventing an escape of air in the train pipe and simultaneously setting the brakes on any particular car or the entire train to which my invention is applied.

Referring to the drawings, 1 represents an ordinary car having the usual wheels 2, shaft or axle 3 and boxes 4, all of which is of the ordinary construction.

The brake beam 5 is also of the usual construction and is suspended from the draft rigging of the car in the usual and well-known manner and is provided with the ordinary brake shoes.

Passing through the brake beam 5 and secured thereto in any suitable mechanical manner are eye-bolts 6 to which are secured the opposite free ends of the chain 7, the latter being adjustable along its length by turn-buckles 8, the uniting ends of said chain terminating at a common center and being attached to the free end of the lever 9, all of which will be hereinafter more fully described.

By referring particularly to Figs. 1 and 2 of the drawings, it will be seen that the train pipe 10 is of the usual construction and in carrying out my invention the same is provided along its length or below the body of the car with a tubular extension 11 within which is located a valve plug 12 having a longitudinal port 13 in communication with the train pipe and a horizontal port 14, the outer end of which is adapted to register with the opening 15 formed in the valve casing 16.

The valve plug 12 may be of any suitable design or construction and to the outer projecting end of which is secured a lever 17, to the free end of which is secured the opposite connecting ends of the chain 7 leading from the brake beam 5 of the brake rigging.

I do not limit myself to the precise construction of the valve herein shown and described, as the same may be modified in many respects without departing from the nature of my invention and referring particularly to Fig. 3 of the drawings it will be seen that I have employed a screw threaded cap 18 to close the upper projecting tubular extension 19 forming a part of said valve, the principal object, as before stated, being to cause an escape of air in the train pipe should there be any accidental displacement of the brake rigging and thereby automatically set the brakes on the car to which said brake is attached forming a part thereof, all along the entire train.

Referring particularly to Figs. 2 and 5 of the drawings it will be seen that I employ an angular guide plate 20, one arm of which is secured to the cross beam 21 of the car body and having its opposite projecting end slotted, through which the connecting link 22 is adapted to freely pass, the said angu-

lar bar also having a slot 23 for freely receiving the lever 9 when the latter is operated in its downward movement.

From the foregoing description it will be seen that when the brake beam 5 is in its normal or operative position in respect to the wheels of the car the valve will be in a closed position to prevent any escape of air from the train pipe, but should the said brake beam drop or become displaced from its normal or proper position, the said valve will be automatically operated causing the port in said valve to register or communicate with the opening 15 of the valve casing, thereby allowing an escape from the train pipe and causing the brake of the particular car or train to be automatically set, all of which is of the usual and well-known construction.

Having thus described the invention what is claimed as new is:

1. A car brake comprising a suitable valve in communication within the train pipe, and suitable means connected with said valve and with the brake beam of a car, as and for the purpose described.

2. A car brake comprising a suitable valve communicating with and forming a part of the train pipe, and suitable means attached to said valve and also to the brake beam of a car, whereby when said brake beam is accidentally displaced the said valve is automatically operated for permitting an escape of air from the train pipe, as and for the purpose described.

3. A car brake comprising a suitable valve having a longitudinal and transverse port formed therein and adapted to register with a suitable port formed in the casing thereof for the escape of air, a chain having its opposite end attached to the brake beam of a car and removably connected to a suitable lever forming a part of said valve for operating the latter, an angular plate one arm of which is secured to the car and having an opening for guiding the free end of the lever of the valve, said plate also having an opening formed in its outwardly projecting end through which the connecting ends of said chain are adapted to freely pass, as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

MOORE C. HINTON.

Witnesses:
E. O. PRINCE,
W. A. HARVEY.