(No Model.)

J. J. BUSENBENZ.

BRAKE FOR STORE SERVICE CARS.

No. 433,886. Patented Aug. 5, 1890.

Fig. 1.

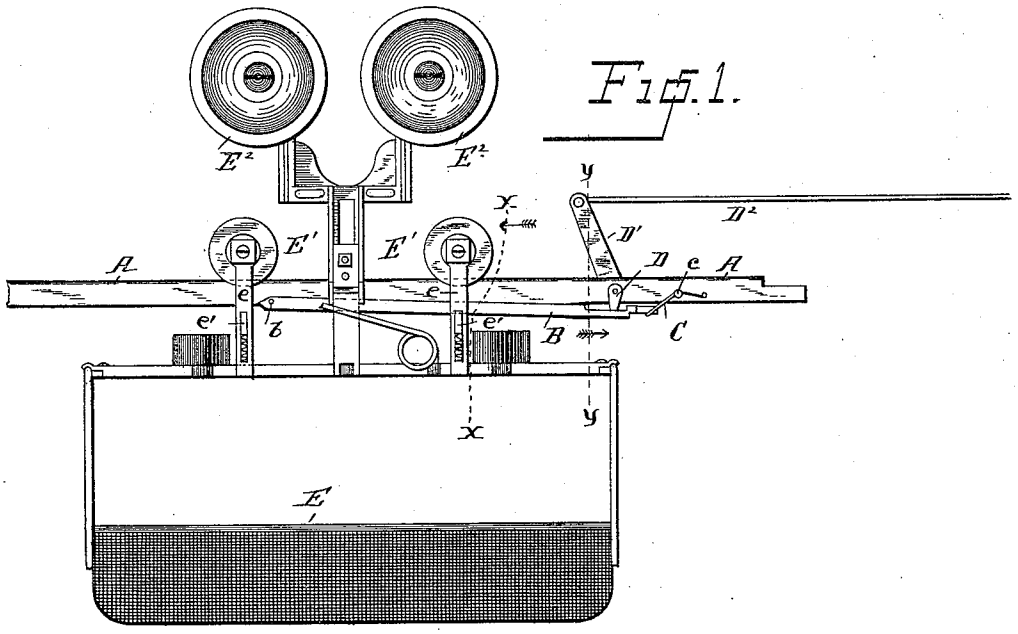


Fig. 2.

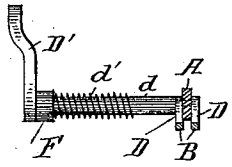


Fig. 3.

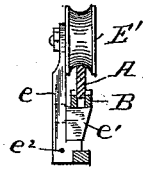
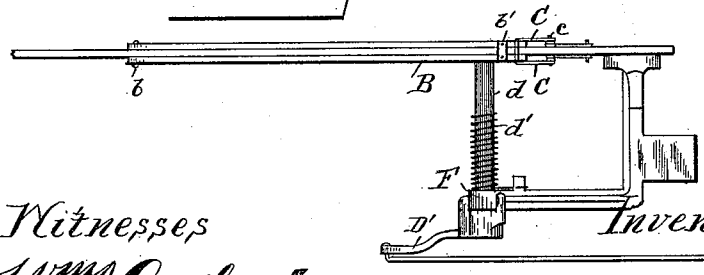


Fig. 4.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JACOB J. BUSENBENZ, OF GREENBUSH, ASSIGNOR TO THE UNITED STATES STORE SERVICE CO., OF ALBANY, NEW YORK.

BRAKE FOR STORE-SERVICE CARS.

SPECIFICATION forming part of Letters Patent No. 433,886, dated August 5, 1890.

Application filed July 7, 1887. Serial No. 243,654. (No model.)

To all whom it may concern:

Be it known that I, JACOB J. BUSENBENZ, a citizen of the United States, residing at Greenbush, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Brakes for Stopping Cars on Store-Service Railways; and I 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 means for stopping cars at their destination on store-service railways; and it consists in certain improvements in the construction of a brake for said purpose, as will be hereinafter fully set forth, and pointed out in the claims.

My device is illustrated in the accompanying drawings, as follows:

Figure 1 is a side elevation view showing a section of a track A, the brake B, and a car E, stopped by said brake on said track. Fig. 2 is a transverse section taken on the line *y y* in Fig. 1. Fig. 3 is a like section taken on the line *x x* in same figure. Fig. 4 is a plan view from the under side of the track, the car not being shown.

The section of track here shown and marked A may be either the end of the main track at the central station of a store-service apparatus, or it may be the end of a switch-track at any of the way-stations of the apparatus. The object of the brake is to stop the car before it reaches the end of the track. Stopping the car by means of a buffer in such an apparatus is not desirable, as the car will rebound and may be derailed or its contents thrown from it or deranged. It is desirable that the car be stopped gradually, and to this end car-brakes have been provided which wedge between the wheels and parts of the frame-work of the car, and so stop the car gradually and hold it against rebound. It is to this class of brakes that my invention relates.

The construction of my device is as follows: The brake-bar B is formed of two bars—one on each side of the track A—which are joined by a cross-bar *b'*, and are pivoted to the track at *b*. The loose or swinging end of the brake-bar is supported by a spring C, which is in the form of a stirrup, its coils being wound upon a pin *c*, which extends through the track A. The action of this spring C, when free to act, will lift the brake-bar B up so that it will be parallel with the track; but the normal position of the brake-bar is at an angle to the track, so as to form a wedge to catch the car. This position is maintained by a cam D, which acts upon the bar B and holds it down against the action of the spring C. This cam D is on a shaft *d*, on which is a coiled spring *d'*, which holds the shaft so as to cause the cam to hold the bar B down against the action of the spring C. (See Fig. 2.) An arm D', with a cord D^2, when required, running to the attendant, enables the attendant to turn the cam up and allow the spring C to lift the bar B up parallel with the track. The shaft *d* is journaled at one end through an opening in the track-bar and at the other in a proper support F. The cam D is double, there being one on each side of the track A.

The car here shown is that used in the Blickensderfer system; but any other form of car may be used. E marks the car; E', the wheels on which the car runs when on the switch. *e* are the parts of the frame-work of the car which carry the wheels E'. *e'* are locking devices which project under the track to prevent the car from being derailed. These locks are pivoted at e^2. It is against these locks *e'* that the brake-bar acts; but it should be understood that if any other form of car is used there will be a part or projection under the track, either like the locks *e* or otherwise, against which the brake-bar can act.

As the car approaches the end of the track A the brake-bar B comes in contact with the top of the lock-piece *e'*, and the car is stopped by the wedging action.

When it is desired to release the car, so that it can move on off the end of the track and be received by the attendant, the cam D is moved, so as to allow the spring C to act, and it at once raises the brake-bar up parallel with the track, and thus the wedging action is destroyed and the car can move freely.

What I claim as new is—

1. In a brake for stopping cars on store-

service railways, the combination, with the track and the car on said track provided with a projection on its frame extending under said track, of the bifurcated bar B, pivoted to and embracing the lower side of said track, a spring-actuated cam D for holding said bar B at an angle to said track, and a lifting-spring C for holding said bar up parallel with the track when relieved from the action of said cam, substantially as set forth.

2. In a brake for stopping cars on store-service railways, the combination, with the track and the car on said track provided with a projection on its frame extending under said track, of the bifurcated bar B, pivoted to said track at *b* and extending along the under side thereof, the coiled-wire stirrup-spring C, attached to said track and acting to hold said bar B parallel with the said track, and the spring-actuated cam D, acting to hold said bar B at an angle to said track, substantially as set forth.

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

JACOB J. BUSENBENZ.

Witnesses:

JNO. K. HALLOCK,

WM. JOHNSON.