P. KEFFER.

Car Brake.

No. 83,508. Patented Oct. 27, 1868.

Fig. 1.

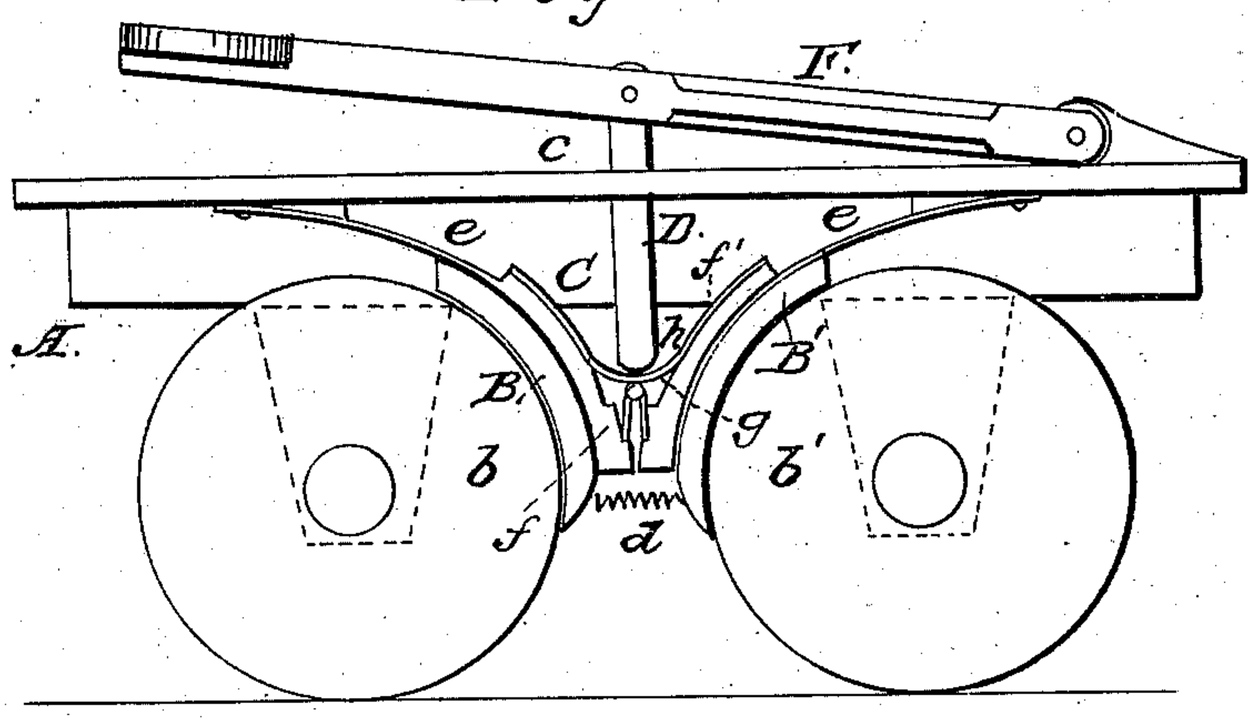
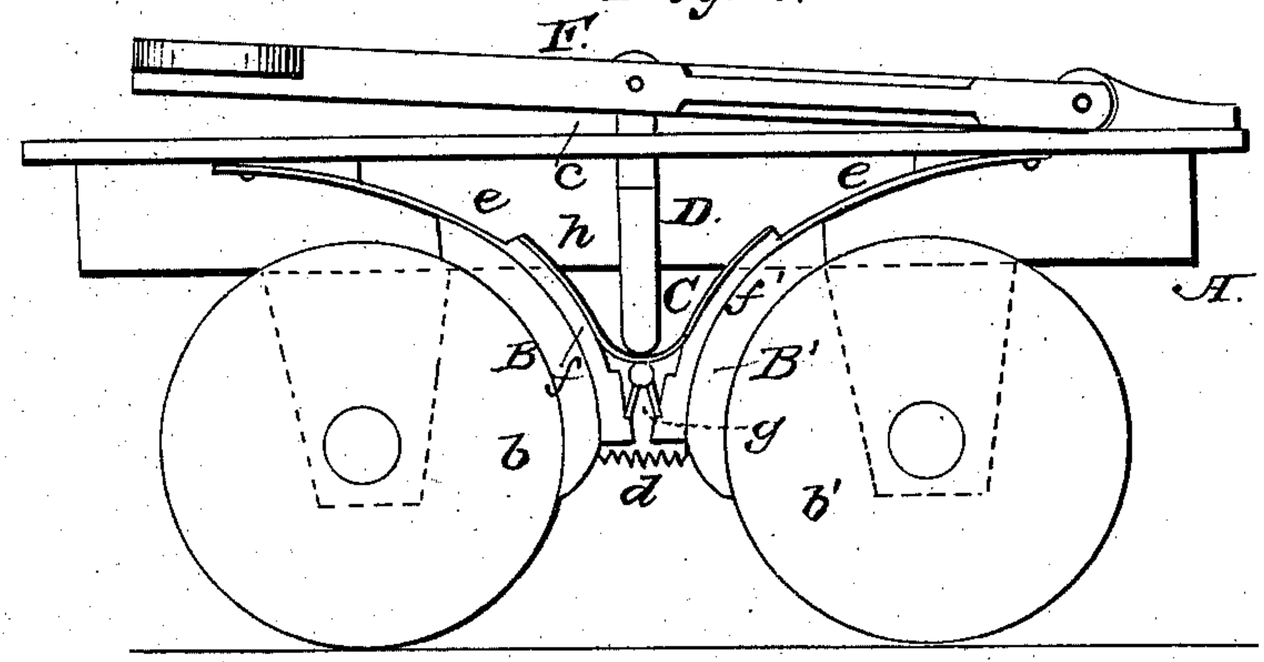


Fig. 2.



Witnesses { Wm. H. Steel. John Parker

Inventor.

Peter Keffer
by his Attorney
Henry Howson

United States Patent Office.

PETER KEFFER, OF READING, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND E. G. FISHBURN, OF SAME PLACE.

Letters Patent No. 83,508, *dated October* 27, 1868.

IMPROVED CAR-BRAKE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, PETER KEFFER, of Reading, Berks county, Pennsylvania, have invented an Improved Railroad-Car Brake; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists of a yielding wedge-shaped frame, in combination with brake-shoes, hung to the frame of a railroad-car or truck, all substantially as described hereafter, so as to form an efficient and readily-operated brake.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 is a side view of my improved brake, applied to a railroad-car, and

Figure 2, the same, with the parts in a different position.

A represents a portion of a railroad-car, *b b'* being the wheels, and *c* a part of the floor or platform. The brake-shoes, B B', are curved to conform to the shape of the wheels, and are connected together at their lower ends by a spring, *d*, which tends to draw them away from the wheels, and the said shoes are hung, independently of each other, to the floor, *c*, of the cars by flat metal strips, *e*.

The latter are sufficiently elastic, when pressure is applied, to allow the brake-shoes to be brought in contact with and accommodate themselves to the wheels, but possess sufficient rigidity, in the absence of such pressure, and in conjunction with the spring *d*, to maintain the said shoes free from contact with the wheels, as shown in fig. 1.

A wedge-shaped plate, C, consisting of two curved plates, *f* and *f'*, hinged together at *g*, and connected together at their upper ends by an elastic metal strip, *h*, is arranged to fit between the brake-shoes B and B', and is hung to a vertical rod, *d*, which may be operated, as hereafter described, by a lever, F, hung to the platform of the car.

Heretofore it has been customary, especially in the small cars which are used for transporting minerals, to use a wedge-shaped block, placed between the wheels of the car, and operated from above by a lever, or otherwise, so as to cause the required amount of friction upon the wheels. The simple block, however, is not sufficiently yielding, wears rapidly away, and is liable to bear against the wheels at times when no brake is required—objections which I overcome by my invention.

When the parts of the brake are in the position shown in fig. 1, the shoes B B', owing to the spring-strips *e e* and spring *d*, are free from contact with the wheels. On depressing the lever F, however, as shown in fig. 2, the frame *c* will be also depressed, and its blocks, *f f'*, pushed apart, so as to force the shoes B and B' against the wheels with a force commensurate with that exerted upon the lever F.

On releasing the latter, the spring *d* and elastic strips *e* and *h* will immediately cause the parts of the brake to resume their former position.

This braking-apparatus can be applied with advantage to trucks of ordinary cars, and the lever F may, if desired, be dispensed with, and other devices for operating the brake substituted, without departing from the main features of my invention.

I claim as my invention, and desire to secure by Letters Patent—

A railroad-car brake, consisting of a yielding wedge-shaped frame, C, constructed and operating substantially as herein described, in combination with brake-shoes B and B', hung to the car or truck, substantially as set forth.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

PETER KEFFER.

Witnesses:

F. R. SCHMUCKER,

GEO. D. STITZEL.