

(No Model.)

J. J. KINZER, Jr.
BRAKE SHOE CONNECTION.

No. 546,701.

Patented Sept. 24, 1895.

FIG. 1.

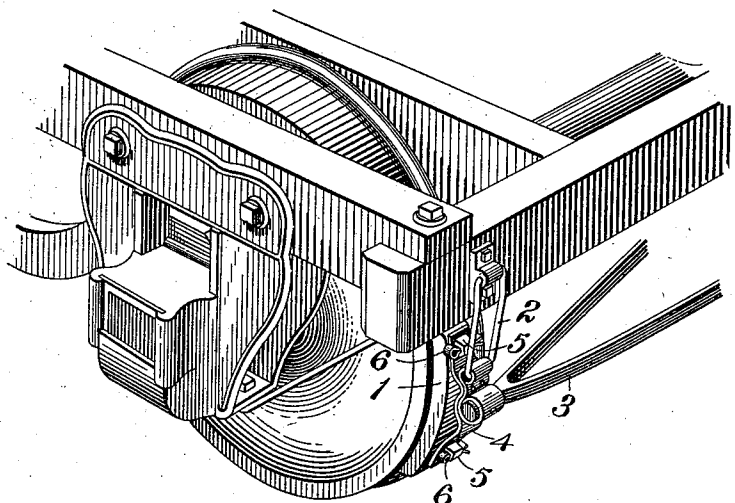
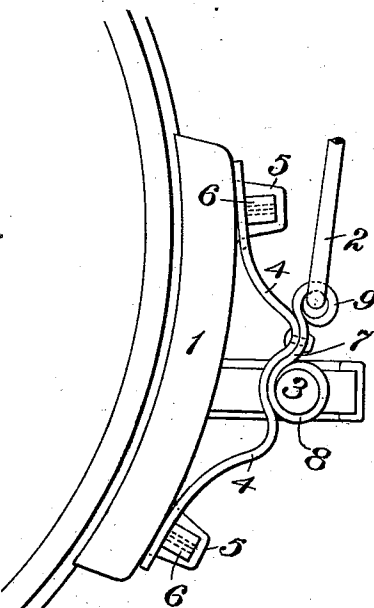


FIG. 2.



WITNESSES:

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INVENTOR,

John J. Kinzer Jr.
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Att'y.

UNITED STATES PATENT OFFICE.

JOHN J. KINZER, JR., OF PITTSBURG, PENNSYLVANIA.

BRAKE-SHOE CONNECTION.

SPECIFICATION forming part of Letters Patent No. 516,701, dated September 24, 1895.

Application filed May 28, 1895. Serial No. 550,963. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. KINZER, Jr., a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered certain new and useful Improvements in Brake-Shoe Connections, of which improvements the following is a specification.

The invention described herein relates to certain improvements in brakes for car-wheels, said improvements being more especially applicable to street-cars, where the repairs and renewals due to the flattening of wheels are sources of great expense. The flattening of the wheels is due to the locking of the same by the brakes, so that the wheels slide along the rails with the result of rapidly grinding portions of the periphery of the wheel.

The object of the present invention is to provide suitable means whereby full braking power may be obtained without liability of locking the wheels against rotation.

In general terms the invention consists in the construction and combination, substantially as hereinafter more fully described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of a portion of a car-truck having my improvement applied to the brake mechanism; and Fig. 2 is a side elevation, on an enlarged scale, showing the manner of applying my improvement to the brake mechanism.

In the practice of my invention the shoe or shoe-carrier 1, hanger 2, and brake-beam 3 are constructed and arranged in the usual or any suitable manner except that in lieu of attaching the beam directly to the shoe or shoe-carrier a spring 4 is interposed between said parts, thereby avoiding the possibility of obtaining a solid unyielding bearing of the shoe upon the wheel unless an excessively strong or rigid spring is employed.

In the construction shown the general shape of the spring 4 is semielliptic. The central portion is depressed or bent from its general shape to form a seat for the reception of the beam-gripping device, and the portions on each side of said seat are reversely curved to render the spring more elastic or yielding. As the shoe 1 is provided with lugs or ears 5 near its ends, elongated slots are formed near

the ends of the springs for the passage of the lugs or ears, and shoe and spring are held together by cotter-pins 6, passing through the lugs outside of the spring. The spring may be attached to the shoe or shoe-carrier in any suitable manner, dependent upon the construction of shoe or carrier.

On the back of the spring is fastened the clip 7, provided with eyes or sockets 8 and 9, formed by coiling the ends of the strip forming the clip, as shown in Fig. 2. The eye or socket 8 is made a little smaller than the end of the brake-beam, so that it will be opened when forced on the end of the beam, and will, therefore, being formed of resilient material, take a tight grip on the beam. While this construction forms a convenient means for attaching the spring to round-ended beams the form of socket may be varied to suit other shapes or constructions of beams.

The eye or socket 9 affords a means for connecting the spring to the hanger 2, which is also connected to the truck-frame in the usual or any suitable manner.

The interposition of a spring between the brake-shoe or carrier and the brake-beam insures a steady and uniform application of the shoe to the wheel regardless of the rapidity with which power may be applied to the brake-beam, and, further, the presence of the spring, unless it is made excessively strong or rigid, will prevent the shoe being freed with sufficient firmness against the wheel to lock it against rotation.

I claim herein as my invention—

1. The combination of a brake shoe or brake shoe carrier, a brake beam, a hanger, a spring connected to the shoe or carrier, and a clip provided with eyes for the reception of the hanger, and end of the brake beam, substantially as set forth.

2. The combination of a brake shoe or brake shoe carrier, a brake beam, a spring connected to the shoe or carrier and a clip attached to the spring, having a yielding eye for the reception of the end of the brake beam, substantially as set forth.

In testimony whereof I have hereunto set my hand.

JOHN J. KINZER, JR.

Witnesses:

DARWIN S. WOLCOTT,
F. E. GAITHER.