J. TURNER.

Railway Car-Trucks.

No. 158,760. Patented Jan. 12, 1875.

Fig. 1.

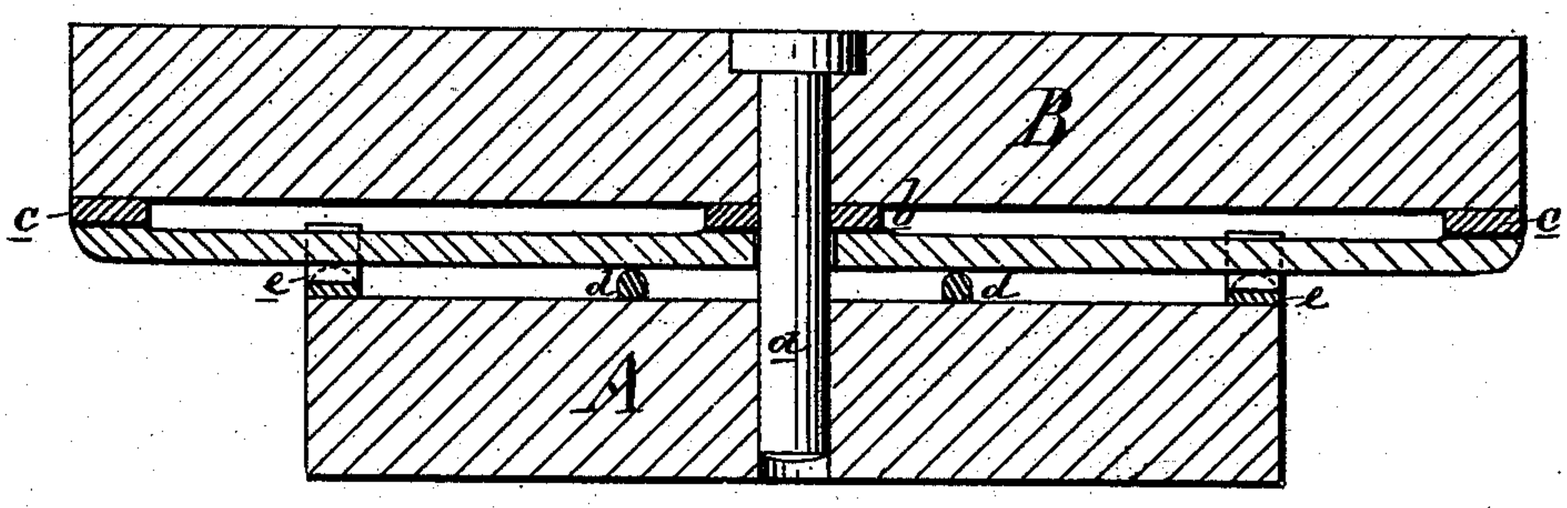


Fig. 2.

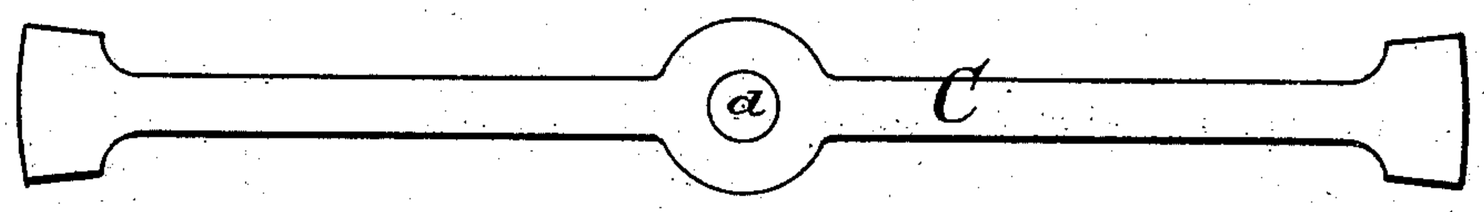
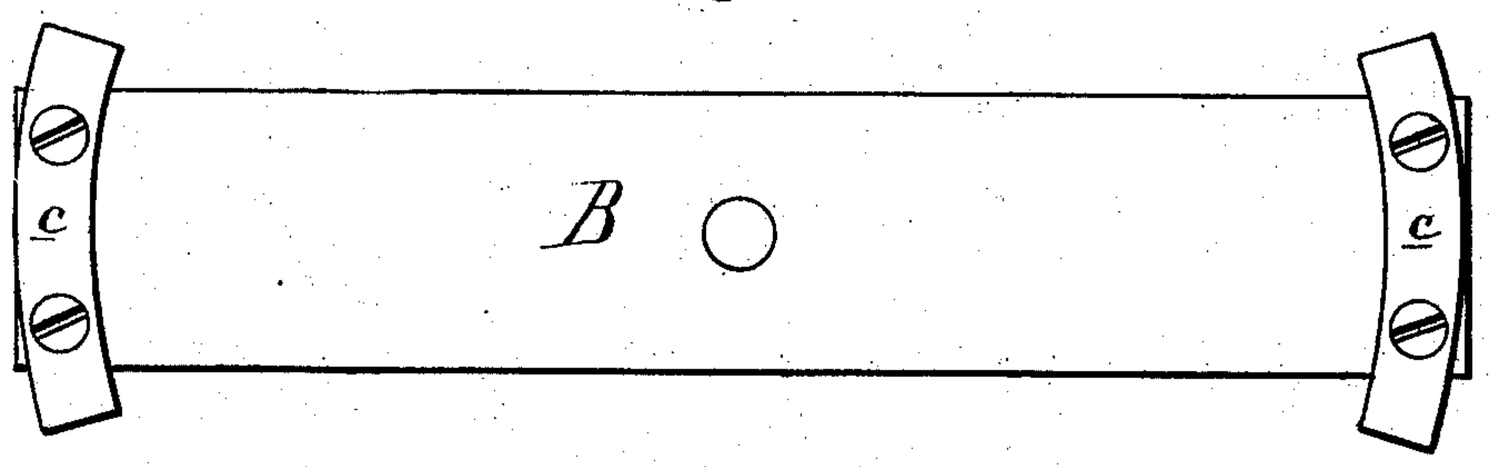


Fig. 3.



Witness:
Edward Barthel.
C. E. Burleigh

Inventor:
J. Turner
per atty
Thos. S. Sprague

UNITED STATES PATENT OFFICE.

JOHN TURNER, OF GROSSE ISLE, MICHIGAN.

IMPROVEMENT IN RAILWAY-CAR TRUCKS.

Specification forming part of Letters Patent No. **158,760**, dated January 12, 1875; application filed October 21, 1874.

To all whom it may concern:

Be it known that I, JOHN TURNER, of Grosse Isle, in the county of Wayne and State of Michigan, have invented an Improved Side and Center Bearing for Railway-Car Trucks, of which the following is a specification:

My invention consists in a lever or levers interposed between the under side of the center bearing of the car-transom, the said lever being extended to the extremities of the transom, and resting upon two fulcrums, one at each side of the king-bolt, as more fully hereinafter set forth.

Figure 1 is a longitudinal section of the car-transom and swing-beam of the truck. Fig. 2 is a plan of the lever. Fig. 3 is an inverted plan of the transom.

In the drawing, A represents the bolster or swing-beam of a truck, to the center of which the transom B of one end of the car is pivoted by the king-bolt *a*, which passes through a metallic disk, *b*, called the center bearing, which is interposed between the bolster and the transom. Under each end of the transom there is secured a segment-shaped metallic wear-plate, *c*. C is an iron lever of the same length as the transom, with a hole in the center, through which the king-bolt passes, it being interposed between the center bearing, *b*, and the bolster, which is provided with a fulcrum, *d*, at each side of its center, distant one foot from the king-bolt. The lever rests upon these fulcrums, and the bearing *b* and ends of the transom rest upon the center and ends of said lever. The usual length of the transom is ten feet, so that there is a leverage of four to one to throw the imposed weight upon the under side of the center bearing, *b*.

Taking an ordinary passenger-coach weighing fourteen tons, there would be a weight of fourteen thousand pounds imposed upon each truck, when each side bearing would carry one thousand four hundred pounds, and the center bearing eleven thousand two hundred pounds.

It is found in practice that the center bearing sinks, and the transom bows upward at the center, after a car has been run awhile, throwing all the weight upon the side bearings of the truck; and the natural tendency of the car to roll when in motion not only causes it to ride hard, but also causes the wheels to grind off their flanges, making them liable to ride upon a defective joint in the rails and jump the track, more particularly when the car has taken a set to one side by wearing down the side bearings of that side, or from the sinking of that side.

e e are keepers at each end of the bolster, embracing the lever, to keep it from moving with the transom.

If preferred, the lever may be divided into two parts at the eye for the king-bolt without departing from the spirit of my invention, making, in this case, two levers instead of one.

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

The combination of the lever C and fulcrums *d* with the bolster A and transom B of a railway-car, substantially as and for the purpose set forth.

JOHN TURNER.

Witnesses:

H. F. EBERTS,

H. S. SPRAGUE.