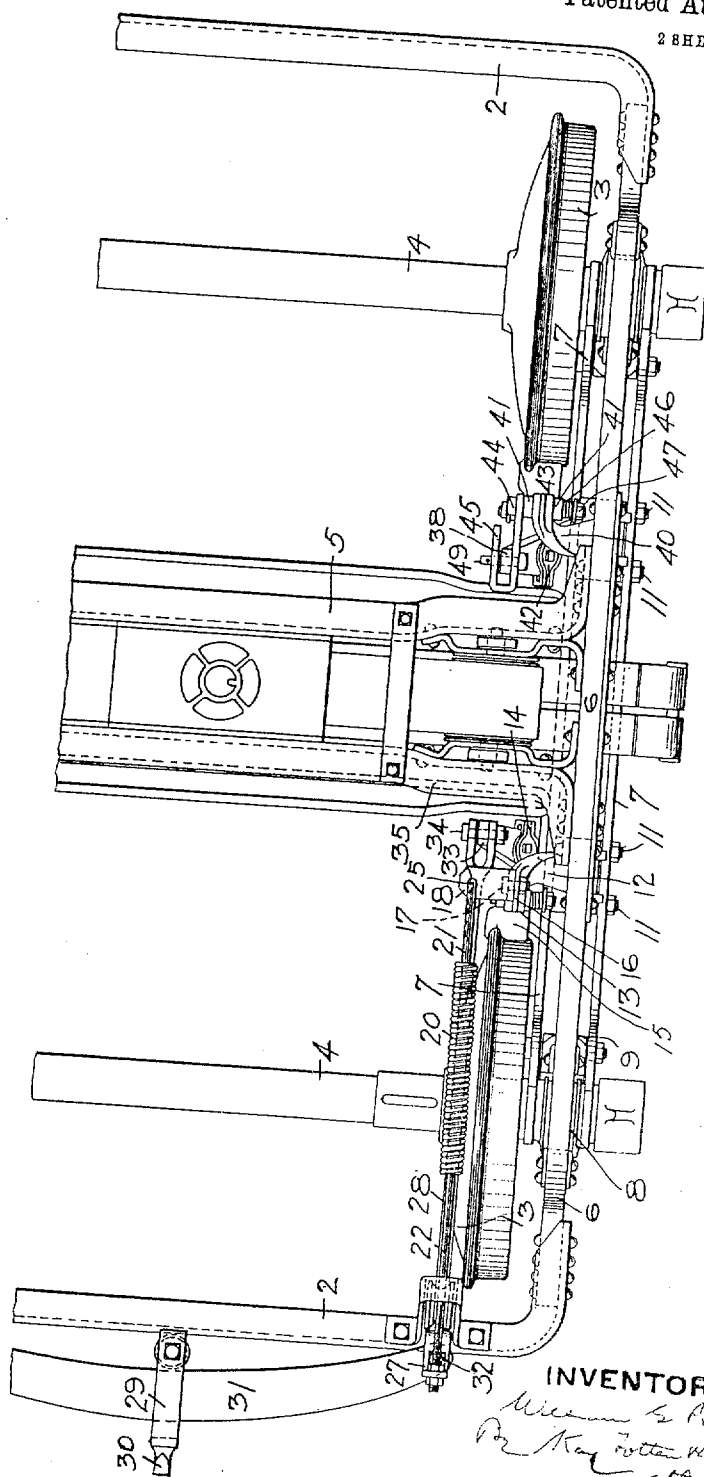


W. G. PRICE.
BRAKE RIGGING.
APPLICATION FILED NOV. 9, 1907.

Patented Aug. 16, 1910.
2 SHEETS—SHEET 1.

Fig. 1



WITNESSES.

J. R. Keller

Robert C. Jettam

INVENTOR.

William & Pric
Re Kay Fotten Winter
attorneys

Patented Aug. 16, 1910.

2 SHEETS—SHEET 2.

967,433.

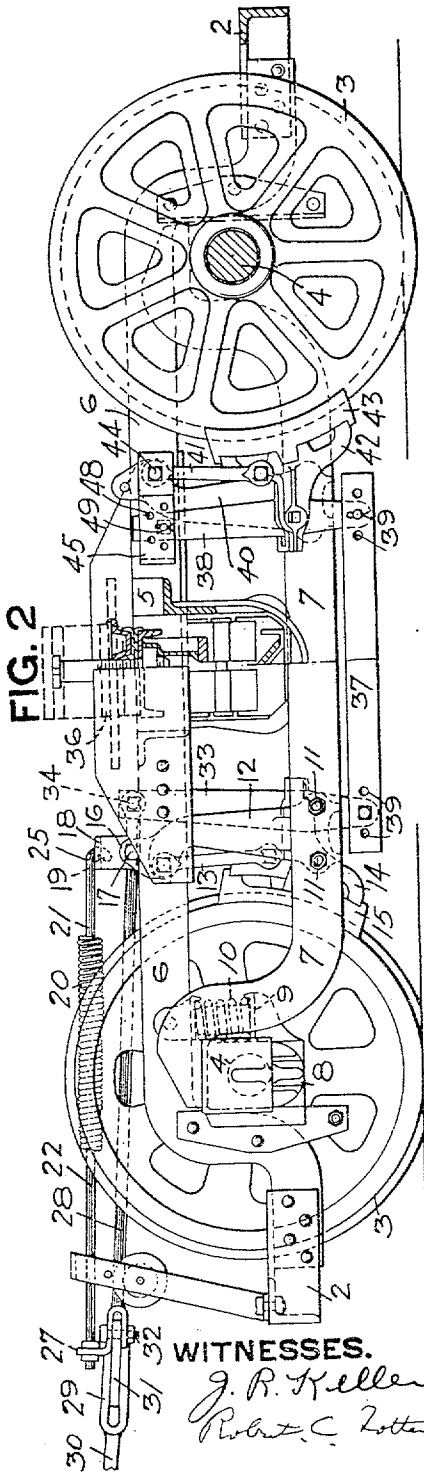


FIG. 4

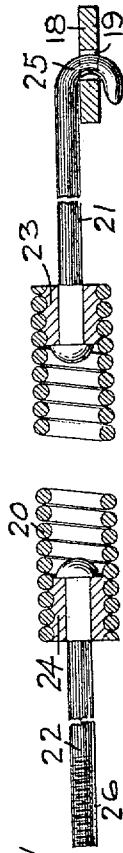


FIG. 3

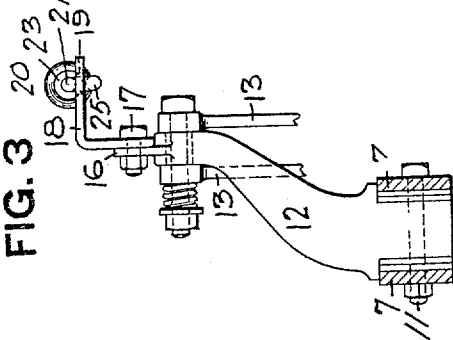
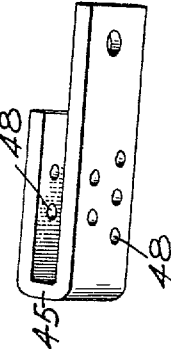


FIG. 5



WITNESSES.

J. R. Keller
Robert C. Zottner

INVENTOR.

William E. Price
By Kay Zottner & Winter
attorneys

UNITED STATES PATENT OFFICE.

WILLIAM G. PRICE, OF NEW CASTLE, PENNSYLVANIA.

BRAKE-RIGGING.

Specification of Letters Patent. Patented Aug. 16, 1910.

967,433.

Application filed November 9, 1907. Serial No. 401,496.

To all whom it may concern:

Be it known that I, WILLIAM G. PRICE, a resident of New Castle, in the county of Lawrence and State of Pennsylvania, have invented a new and useful Improvement in Brake-Rigging; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to brake-rigging.

10 The invention has reference in one particular to the manner of securing the release-spring in position so as to keep it out of the way of the swinging movement of the car-body which when the car was loaded was

15 liable heretofore to shear or break it off. A further object of my invention is to provide for the support of the dead-lever in such a manner that it will not be affected by the up and down movement of the truck-frame, thereby reducing the wear on the

20 parts and at the same time providing for the accurate adjustment of said lever so that the brake-shoes will be applied with full braking force.

25 In the accompanying drawing Figure 1 is a plan view of a truck with my improved brake mechanism applied thereto; Fig. 2 is a side view; and Figs. 3, 4 and 5 are details.

30 In the drawing the numeral 2 designates a suitable truck-frame supported on the wheels 3 mounted on the axles 4. The truck-frame is provided with a suitable bolster 5 connected to the side pieces 6 of the frame in any suitable manner. The equalizer-bars

35 7 are arranged in pairs at opposite sides of the truck and said equalizer-bars are supported by the journal boxes 8. The journal boxes 8 have the brackets 9 thereon to support the springs 10 upon which the truck

40 frame rests for support. Bolted at 11 to the equalizer-bars 7 are the brackets 12 and connected to the upper ends of said brackets are the hangers 13 which

45 carry the brake-heads 14 to which the brake-shoes 15 are secured. The lug 16 extends up from the bracket 12 and secured to said lug by the bolt 17 is the angle 18 having the opening 19 formed therein.

50 The release-spring 20 is connected at opposite ends to the bolts 21 and 22. Thimbles 23 with grooves 24 therein are secured within the ends of the spring 20, the spirals of said spring engaging said grooves. The bolt

55 21 has the hook portion 25 which is adapted to engage the opening 19 in the angle 18. The bolt 22 is threaded as at 26, and passes

through the lug 27 on the brake rod 28. The brake jaw 29 on the brake rod 30 is secured to the brake-equalizer 31, said brake-equalizer being secured to the brake-rod 28 by means of the bolt 32. The opposite end of the brake-rod 28 is connected to the upper end of the live-lever 33 by means of the bolt 34. The release-spring 20 acts normally to pull the brake-rod 28 and live-lever 33 in the direction of the truck-bolster so as to hold the brakes in their release position. Heretofore it has been customary to attach the release-springs to the truck-frame, as for instance to the transom 35. In this position, however, the release-spring with its point of attachment was in the path of the swinging movement of the side bearing plate 36, shown in dotted lines in Fig. 2, of the car-body and where the car was heavily loaded was liable to be sheared or broken off by the swinging movement of the car-body. By attaching the spring bolt 21 to the angle with the brake-hanger bracket the release-spring is entirely clear of the side bearing plate and is in no danger of being broken or injured thereby. The release-spring is carried at one end by the equalizer-bars and consequently at this end is entirely independent of the truck-frame.

85 The bottom brake-rod 37 is connected to the lower end of the live-lever 35 and at its opposite end to the lower end of the dead-lever 38. The rod 37 is provided with openings 39 to provide for the adjustability of said rod. The brackets 40 are secured to the equalizer-bars 7 and hangers 41 suspended from said brackets carry brake-heads 42 with the brake-shoes 43. The bolt 44 connects the hanger 41 to the bracket 40 and the same bolt secures in place the U-shaped link 45. A spring 46 surrounds the bolt 44 and is held in place by the nut 47. The U-shaped link 45 is provided with the openings 48 which are staggered to provide for the more accurate adjustment of the dead-lever 38. 100 The dead-lever 38 is pivoted to the link 45 by means of the pin 49. In this manner the dead-lever is held in position within the link 45 and as the dead-lever is carried by the equalizer-bars it partakes of no vertical movement when the truck is moving. Heretofore it has been customary to have the dead-lever bear against the transom of the truck-frame and as the truck-frame has vertical or oscillating movement when in motion there was almost a constant rubbing or saw-

110

ing action between the lever and truck-frame which caused very severe wear, especially as when the brake is applied the lever and transom were pressed together with great force, causing the rapid wearing away of the metal. By securing the dead-lever within the link 45 in the above manner I obviate all this wear and tear on the metal and at the same time provide for the accurate adjustment of the dead-lever.

By my construction the brake-rigging is entirely independent of the truck-frame and in this way the vibration caused by the brake-shoe pressing on the wheel is eliminated, which passes up with the truck-frame and thus to the car when the dead-lever is pressing hard against the transom.

What I claim is:

1. In brake-mechanism, the combination of a truck-frame, equalizer-bars, a release-spring connected at one end to the brake-rigging and at its opposite end supported by said equalizer-bars.

2. In brake-mechanism, the combination of a truck-frame, equalizer-bars, a release-spring connected at one end to the brake-rod and at its opposite end supported by said equalizer-bars.

3. In brake-mechanism, the combination of a truck-frame, equalizer-bars, a release-spring, connections between said release-spring and the brake-rigging, and connections between said release-spring and the equalizer-bars.

4. In brake-mechanism, the combination of a truck-frame, equalizer-bars, a release-spring, a bracket on said equalizer-bars, connections between said release-spring and said bracket and between said release-spring and the brake-rigging.

5. In brake-mechanism, the combination of a truck-frame, equalizer-bars, a bracket

on said equalizer-bars, an angle on said bracket having an opening therein, a release-spring, a bolt on said release spring having a hooked end engaging said opening, and connections between said release-spring and the brake-rigging.

6. In brake-mechanism, the combination of the truck-frame, equalizer-bars, and a dead-lever fulcrumed on the equalizer-bars.

7. In brake-mechanism, the combination of the truck-frame, equalizer-bars, a bracket on said equalizer-bar, and a dead-lever fulcrumed on said bracket.

8. In brake-mechanism, the combination of the truck-frame, equalizer-bars, a bracket on said equalizer-bars, a link on said bracket, a dead-lever in said link, and means for securing said lever to said link.

9. In brake-mechanism, the combination of the truck-frame, equalizer-bars, a bracket on said equalizer-bars, a U-shaped link on said bracket, a dead-lever in said link, and means for securing said lever therein.

10. In brake-mechanism, the combination of the truck-frame, equalizer-bars, a bracket on said equalizer-bars, a U-shaped link on said bracket having apertures therein, a dead-lever, and a pin passing through said lever and said openings.

11. In brake-mechanism, the combination of the truck-frame, equalizer-bars, a bracket on said equalizer-bars, a U-shaped link on said bracket having staggered apertures therein, a dead-lever, and a pin passing through said lever and said openings.

In testimony whereof, I the said WILLIAM G. PRICE have hereunto set my hand.

WILLIAM G. PRICE.

Witnesses:

ROBERT C. TOTTEN,
J. R. KELLER.