

J. S. WATHEY.
BRAKE RIGGING.
APPLICATION FILED JUNE 3, 1911.

1,037,090.

Patented Aug. 27, 1912.

2 SHEETS—SHEET 1.

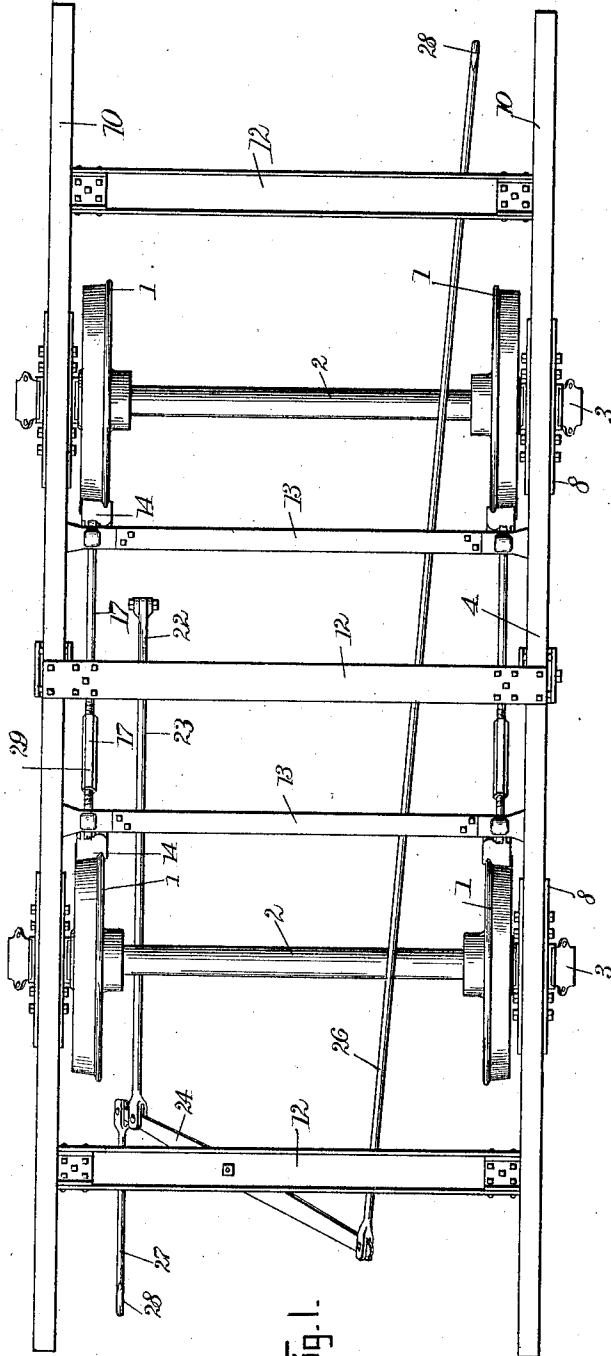


Fig. 1.

WITNESSES:

C. H. Reichenbach.
H. Whiting

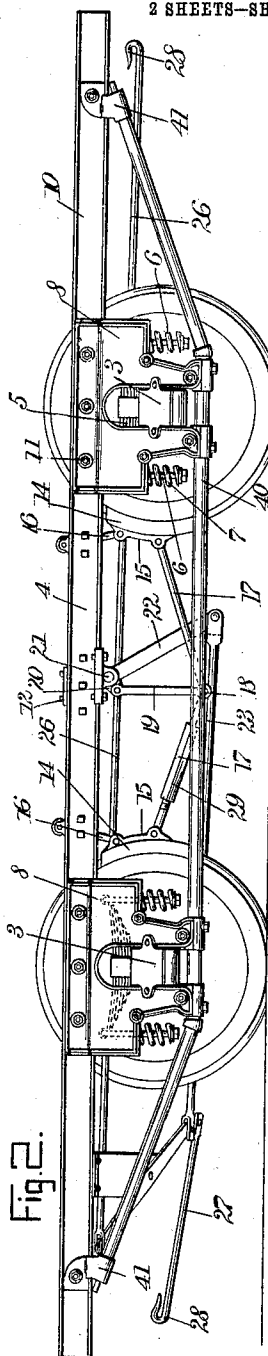


Fig. 2.

INVENTOR

Jesse Seymour Wathey

BY

Munn & Co.

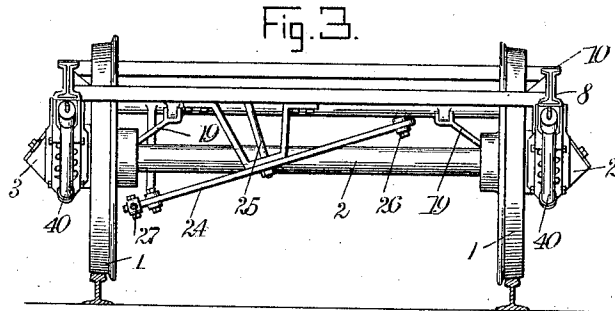
ATTORNEYS

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BY

M. M. Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

JESSE SEYMOUR WATHEY, OF BUTTE, MONTANA.

BRAKE-RIGGING.

1,037,090.

Specification of Letters Patent.

Patented Aug. 27, 1912.

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To all whom it may concern:

Be it known that I, JESSE SEYMOUR WATHEY, a citizen of the United States, and a resident of Butte, in the county of Silver Bow and State of Montana, have invented a new and Improved Brake-Rigging, of which the following is a full, clear, and exact description.

This invention relates particularly to brake rigging, and its object is to provide a car truck with a brake rigging, wherein the rods may pass above and below the motors, by virtue of a diagonally-disposed equalizing lever, to apply the brakes simultaneously to all of the wheels. These and further objects, together with the construction and combination of parts, will be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a top plan view; Fig. 2 is a side view in elevation; and Fig. 3 is an end view in elevation.

Referring generally to the drawings, 1 indicates a plurality of car wheels which are connected in the usual manner in pairs by axles 2. These axles are provided at their outer ends with the usual journal boxes 3, which are adapted to support a car truck frame 4.

For the purpose of carrying out the objects of the invention, there are provided brake shoes 14, which are of such structure that they engage both sides of the flanges of the wheels, so as to prevent them from moving transversely and thus eliminating loose rattling. These brake shoes are further provided with ribs 15 on their back sides, whereby the shoes are strengthened and reinforced, so that they can be worn down quite thin before being discarded, and further whereby suitable means for attaching the supporting and operating members for the shoes is afforded. Connected to these ribs, for the purpose of supporting the shoes, there are provided hangers 16, which are pivotally supported on the frame 4 in any suitable manner, but preferably so that when the braking force on the shoes is released, the shoes are automatically swung by gravity to a position out of contact with the wheels. Also connected to the

ribs 15 are toggle arms 17, which are also pivotally connected together at a point 18, at which point a link 19, is also pivotally secured at one end. The opposite end of the link 19 is pivotally connected to a short arm 20 on the brake shaft 21, which is rotatably supported on the frame 4 in any suitable manner. This brake shaft 21 is also provided with a long arm 22, whereby it may be operated. The opposite end of the long arm 22 is pivotally connected to a link 23, which in turn is pivotally connected at its opposite end to a transverse lever 24. It will be noted by reference to Figs. 2 and 3 that this transverse lever 24 is diagonally disposed and is pivoted on an inclined pivot 25 intermediate its ends, so that the link 23 may pass beneath the motor, and a link 26, connected to the opposite end of the lever, may pass above the motor.

The link 26 and a similar link 27 on the first end of the lever 24 are provided with hooks 28, whereby they may be attached to opposite ends of the car.

One or both of the toggle arms may be provided with a turn-buckle 29, whereby the wear in the shoes 14 may be taken up, to provide an accurate adjustment.

It will thus be seen that there is provided a new and improved braking mechanism of an efficient character and in which the links connected to the lever 24 may pass above and below the motor usually found in an intermediate position.

While I have shown one embodiment of my invention I do not wish to be limited to the specific details thereof, but desire to be protected in various changes, alterations and modifications which may come within the scope of the appended claims.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. The combination with a car truck having wheels to support the same, of brake shoes adapted to engage said wheels, hangers for supporting said brake shoes on said truck, toggle arms engaging said brake shoes and pivotally connected together, a brake shaft on said truck, a link connecting each pair of said toggle arms to said brake shaft, a lever arm for operating said brake shaft and secured thereto, a link connected to said lever arm, a diagonally-disposed lever having an inclined pivot connected to said last-mentioned link and adapted to operate

the same, and links connected to said lever at opposite sides of the pivot thereof and extending in opposite directions in vertically spaced relation.

- 5 2. The combination with a car truck having wheels to support the same, of brake shoes adapted to engage the wheels, hangers for supporting said brake shoes on said car, toggle arms engaging said brake shoes and
10 pivotally connected together, a brake shaft on said truck having a pair of short angular arms, a link connecting each of said short angular arms to a pair of said toggle arms, a lever arm carried by the brake shaft
15 and depending therefrom, a link pivotally

connected to the lower end of said lever arm, a diagonally disposed lever having an inclined pivot and having connection with said last-mentioned link at one side of its pivot, and links connected to said lever at opposite sides of the pivot thereof and extending in opposite directions in vertically spaced relation.

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

JESSE SEYMOUR WATHEY.

Witnesses:

RALPH L. WATHEY,
ALONZO B. MORRIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."