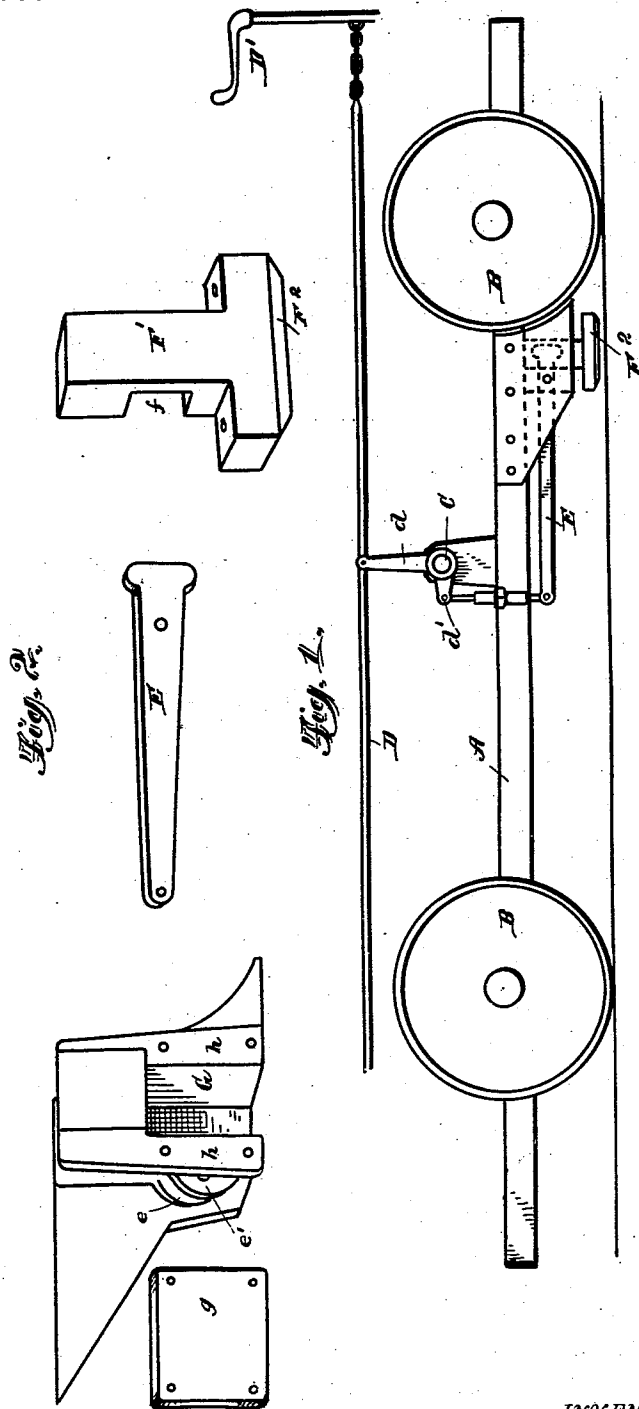


(No Model.)

E. VALLAT, Sr.
CAR BRAKE.

No. 563,103.

Patented June 30, 1896.



WITNESSES

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CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 563,103, dated June 30, 1896.

Application filed March 18, 1896. Serial No. 583,654. (No model.)

To all whom it may concern:

Be it known that I, EUGENE VALLAT, Sr., a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Car-Brakes; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to car-brakes, and has for its object an improved form of brake which is adapted to stop the car without acting upon the wheels, leaving the wheels free to roll so long as the car is in motion, and thus preventing the grinding or wearing off of the wheel at any part of its periphery and leaving it round and smooth so long as it is used.

To produce this result, I employ a shoe which is arranged to be pressed forcibly against the rail of the track.

In the drawings, Figure 1 indicates the brake applied to the truck of a car. Fig. 2 shows the details of the brake actuated by a lever of the first order.

A indicates the car-truck; B B, the car-wheels.

At any suitable place on the car-truck is a rock-shaft C. There are as many rock-shafts as it is intended to have pairs of brakes, and these pairs of brakes may be one, two, or four, or even more, to each car-truck.

In the drawings, Fig. 1, there is shown a single brake, indicating its position in front of the wheel, but it is readily seen that a pair of brakes might be placed in front or behind each pair of wheels by simply duplicating the mechanism shown and properly hanging the actuating-levers.

On the rock-shaft C is the rock-lever $d d'$, one end of which is connected with the rod D, and through the rod D to the brake-handle D'. The other end d' of the rock-lever is connected by a suitable adjusting device, similar in operation to a turnbuckle, to the end of the short brake-lever E. The brake-lever E is hung on a pin that passes through the lugs $e e'$, and the short end of the lever E engages in a slot f in a standard F' , to the lower end of which is bolted the brake-shoe F^2 . The standard F' lies in a retaining-box G, in which it is adapted to have a vertical movement be-

tween the vertical guides $h' h'$, but from which it cannot escape so long as the cover g is bolted to the box and the lever E is in place with the pin through the hole in it and in the lugs $e e'$. If, however, it is desired at any time to remove the standard F' for the purpose of renewing the brake-shoe F^2 or for any other purpose, the face-plate g is removed readily and the brake-head and brake-shoe can then be lifted out of the retaining-box and inspected, changed, or repaired.

Instead of the brake-head shown in Fig. 2, which has the slot f to receive the short end of the lever E, I sometimes cut through the brake-head a horizontal slot, and in the box place an eccentric h , which turns on the shaft H and turns in the slot f' in the brake-head. The lever E' is fulcrumed on the squared-off end of the shaft H. The result of the action of the lever E on the brake-head F of Fig. 2 is substantially the same as the result of the lever which actuates the brake-head K, the lever in the latter case being compounded of the part E' and the cam h , both of which turn on the shaft H as a fulcrum. In the second form the face-plate g' is bolted to the retaining-box G in precisely the same way as that before described.

The brake-shoe F^2 may be made of any suitable material, and may be renewed as often as it is necessary, as it is readily removed from the car, together with the brake-head to which it is attached, and can be removed from the brake-head and a new one substituted for it.

What I claim is—

In combination with a car-frame a hanger provided with vertical guides and a removable cover-plate g , over the recess between the guides, a brake-head provided with a stem which is adapted to reciprocate vertically in said recess, said stem being provided with a slot f , extending across and from the rear side into said stem, into which the end of the actuating-lever projects, a lever adapted to actuate said brake-head by engaging the upper and lower faces of the slot, but being otherwise disconnected from the brake-head or its stem, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

EUGENE VALLAT, SR.

Witnesses:

F. CLOUGH,
VIRGINIA M. CLOUGH.