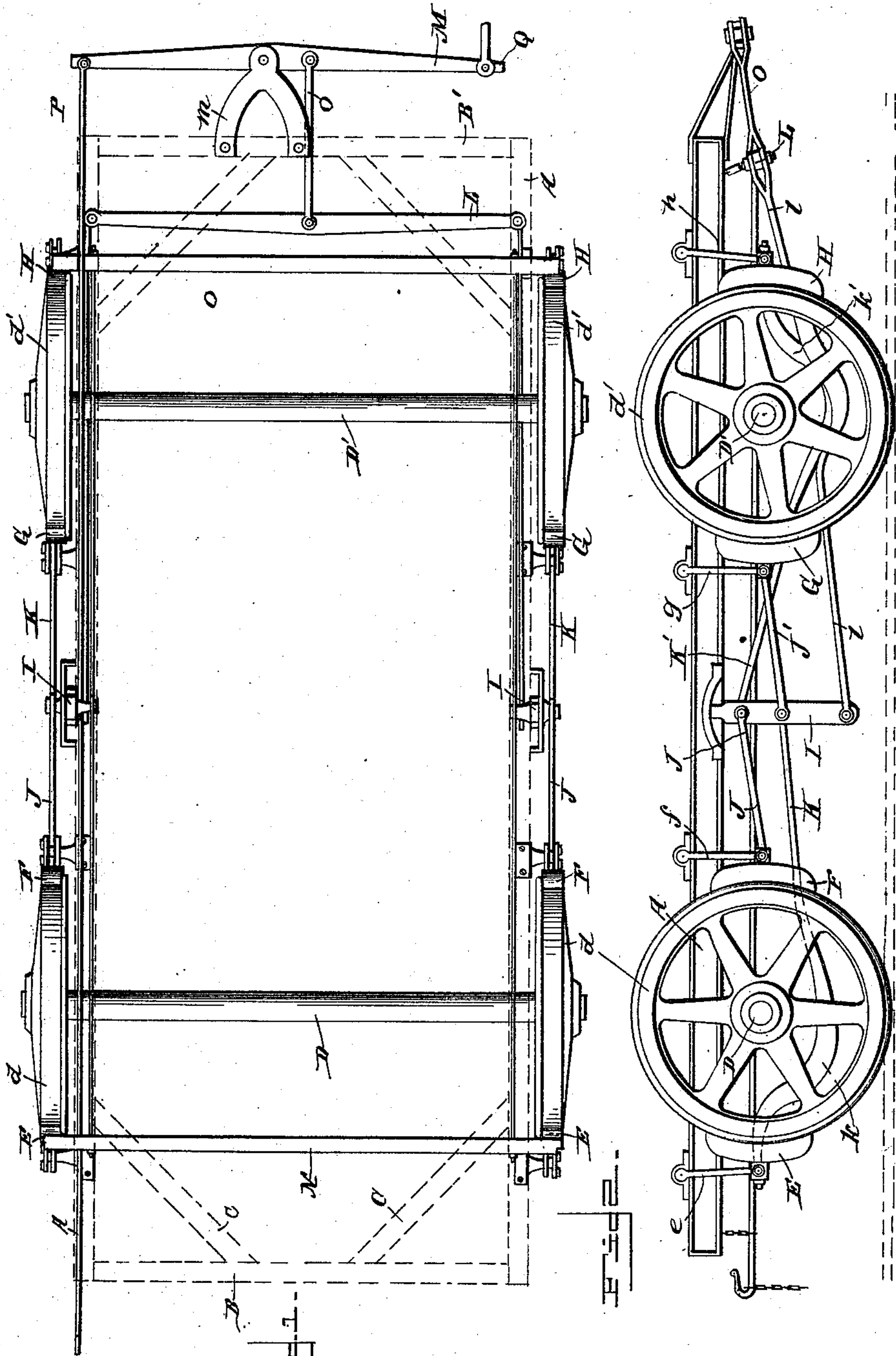


(No Model.)

W. JOSLIN.
CAR BRAKE.

No. 412,392.

Patented Oct. 8, 1889.



WITNESSES
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WILLIAM JOSLIN, OF CLEVELAND, OHIO.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 412,392, dated October 8, 1889.

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To all whom it may concern:

Be it known that I, WILLIAM JOSLIN, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Car-Brakes; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to car-brakes, and has for its object to devise a leverage system that will apply the brake-shoes on both sides of two wheels on the same side of the car at the same time, and which will be simple, compact, efficient, and readily accessible for repairing.

The improvement consists of the novel construction and the combination of the parts, which will be hereinafter more fully described and claimed, and which are shown in the annexed drawings, in which—

Figure 1 is a top plan view of a car-truck embodying my invention, the frame being shown by dotted lines. Fig. 2 is a side view of the truck.

The truck-frame is composed of the side beams A, end beams B B', and angle-braces C. The axles D and D' are provided at their ends with the wheels *d d* and *d' d'*, respectively. Each side of the car is similarly equipped; hence a detailed description of the system of levers on one side will suffice for both. The brake-shoes E, F, G, and H are suspended by the hangers *e, f, g,* and *h,* respectively. The shoes E and F are placed on diametrically-opposite sides of the wheel *d*, and the shoes G and H on diametrically-opposite sides of the wheel *d'*. The vertical equalizing-lever I is connected by the short rods J and J' with the shoes F and G, respectively, the rods being preferably on the outside of the said lever I. The shoes E and H are connected with the said lever I by the rods K and K', which are fastened to the lever I opposite the points of connection of the rods J and J' therewith. The rods K

and K' curve downward at *k* and *k'* to clear the axles D and D'.

The operation of the brake is as follows: By moving the lower end of lever I to the right the shoes F and G will be crowded against the inner edges of the wheels *d* and *d'*, and the shoes E and H will be drawn against the outer edges of the said wheels *d* and *d'*. The lever I, being free, will adapt itself to the strain of the levers, so that the brakes will be applied with equal pressure. In order that the brakes on both sides of the truck may be operated simultaneously, the levers I are connected by bars *ll* with the equalizing-lever L, and the end shoes E and H are connected by the shoe-beams M and N, respectively.

The lever M for transferring the power from either end of the car to lever L is supported between its ends by bracket *m*, and is connected by rod O with the said lever L. One end of lever M is connected by rod Q with the crank-bar on the front end of the car, and the other end of the lever is connected by rod P with the crank-bar on the other end of the car. The operation is manifest. If bar Q is drawn forward, the brakes are applied, and the same is true if rod F is drawn forward. Either operation causes lever M to turn in the same direction and pull lever L forward.

I claim—

1. The herein shown and described brake, composed of the suspended brake-shoes E F and G H, the shoes E F being disposed on opposite sides of the wheel *d* and the shoes G H on opposite sides of the wheel *d'*, the vertical lever I between the wheels *d d'*, the rods J and J' connecting lever I with the shoes F and G, and the rods K and K', connecting the shoes E and H with the said lever I in line with the points of connection of the rods J and J' with the said lever, substantially as and for the purpose described.

2. The hereinbefore-described system of brake-levers, composed of the corresponding pairs of suspended brake-shoes E F and G H on opposite sides of the car-truck, the vertical levers I, connected by rods J J' with the shoes F and G, and by rods K and K' with the shoes E and H, the brake-beams N and O,

connecting the shoes E and H on opposite sides of the truck, the lever L, connected with the levers I, and the lever M, pivoted between its ends and connected with the lever L, and adapted to have its ends connected with the crank-bars on the opposite sides of the car, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM JOSLIN.

Witnesses:

S. A. TERRY,
WILL MUIRHEAD.