

W. B. BLADES.

Car Brake.

No. 79,805.

Patented July 14, 1868

Fig. 1.

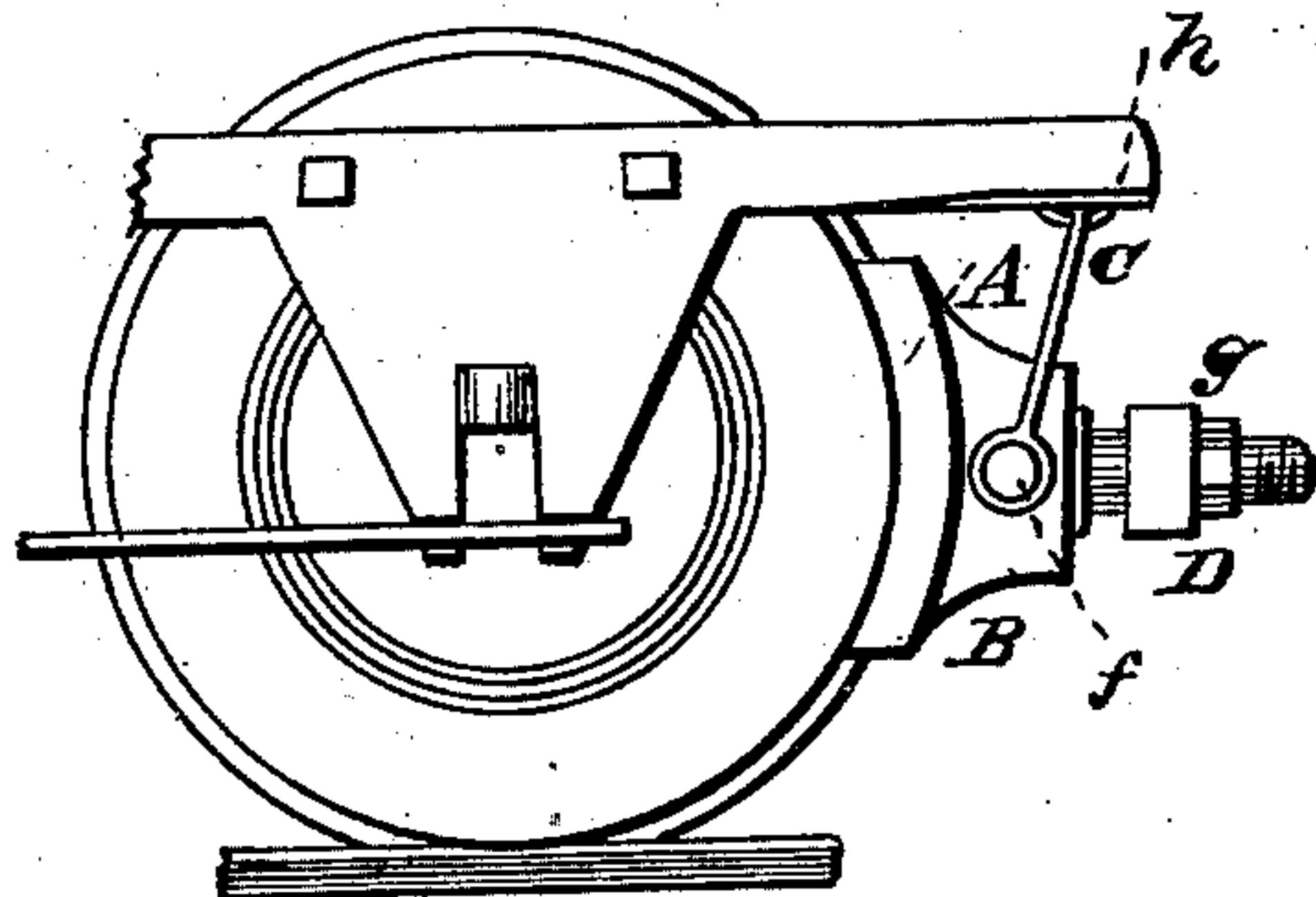


Fig. 2.

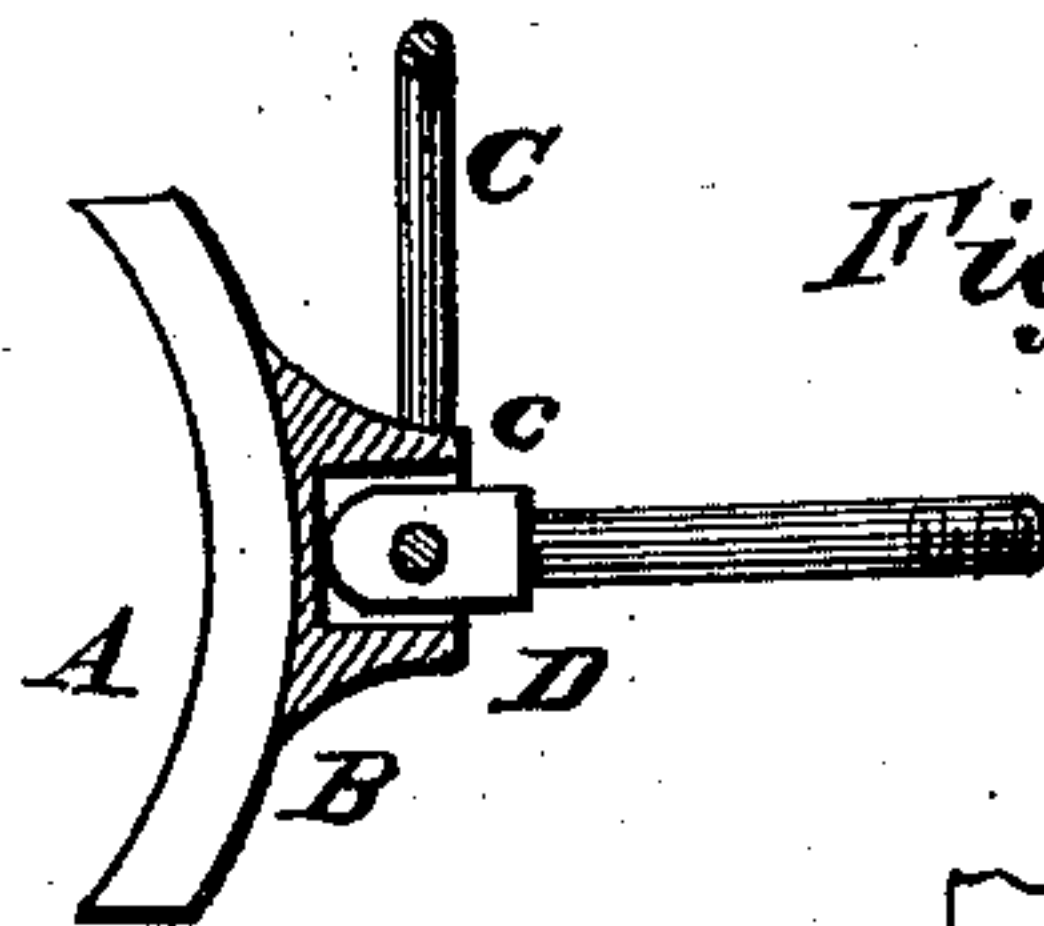
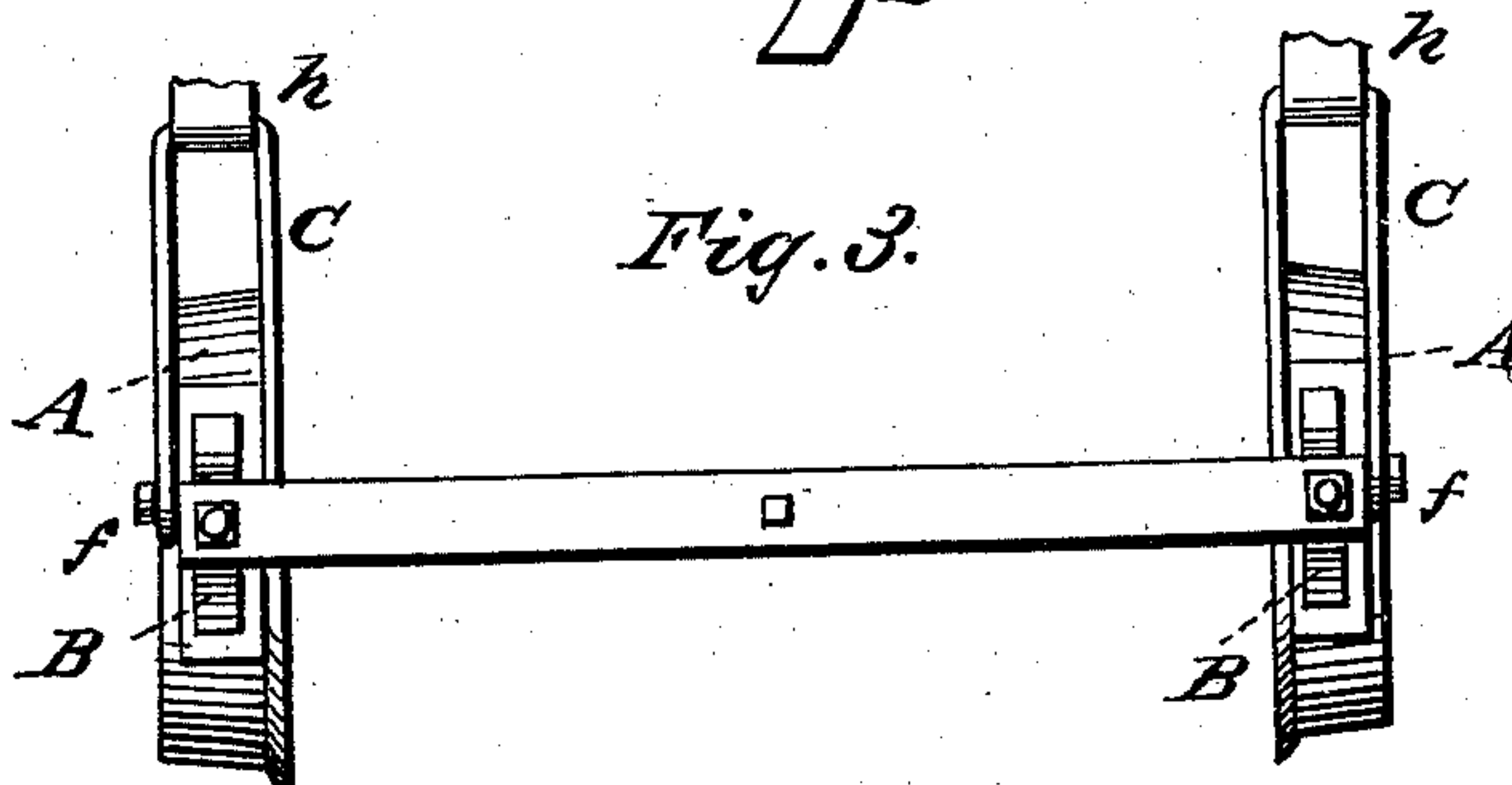


Fig. 3.



Witnesses
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United States Patent Office.

WILLIAM P. BLADES, OF BALTIMORE, MARYLAND.

Letters Patent No. 79,805, dated July 14, 1868.

IMPROVED CAR-BRAKE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM P. BLADES, of Baltimore city, in the State of Maryland, have invented a new and useful "Improvement in Car-Brakes;" and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

In the drawings, my invention is shown as follows, viz:

Figure I is a side view, showing it in contact with a car-wheel.

Figure II is a side sectional view.

Figure III is an end view, as applied to the wheels of a car.

This invention consists in suspending the brakes of a car in such a manner that when they are applied the whole breaking-surface of the shoe will press equally upon the wheel at the same time.

In construction I form my brake with the shoe A, brake-block B, suspension-link C and connecting-piece D.

In the centre of the brake-block is formed a slot, *e*, for the reception of the piece D, which connects the brake-block with the brake-bar. This slot is sufficiently larger than the end of the piece D to allow the latter to play freely vertically, but in no other way. This connecting-piece D has its ends rounded, and is held in the slot in the brake-block by the pin *f* running horizontally through them both. This pin *f* passes also through ends of the suspension-link C, thus making a common pivoted centre. The rounded end of the connecting-piece D comes in contact with the bottom of the slot *e* at all times, thus relieving the pin *f* of strain. The pin *f* is ordinarily a large bolt with broad head, and can be taken out to be replaced easily. The connecting-piece D is fastened rigidly to the brake-bar in any convenient manner, so as to be easily fastened or withdrawn.

The operation of this brake is as follows:

When the brakes are "put down," the brake-bar *g* moving toward the car-wheel, (if it does not bring all of the surface of the shoe in contact at first,) brings some portion of it either at the upper or lower end of the shoe, and the pressure of the brake-bar towards the wheel of the car still continuing, and the brake-block being hinged at the pin *f* and at *h*, the whole surface of the shoe is brought into contact with the wheel nearly instantaneously, and the greatest amount of friction is obtained with the least practical wear of the brake.

The advantages of this improvement in brakes are, first, that the shoe, from always pressing equally hard with all of its surface, wears uniformly, and not as the brake commonly in use, which is suspended at a point above the centre of the block, and which often becomes useless when not more than half of the friction-surface has been used.

It is also a much more efficient brake than that in general use, because there is friction over the whole surface of the brake invariably.

I do not confine myself to making the brake-block and shoe of one piece, as they may be made separately and then joined.

And now, having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The brake-block B, constructed with the slotted cavity, in combination with the supporting-bolt D, made with a neck or bolt to pass through brake-bar, and when pivoted to the block by the same link which supports the whole, substantially as described.

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