

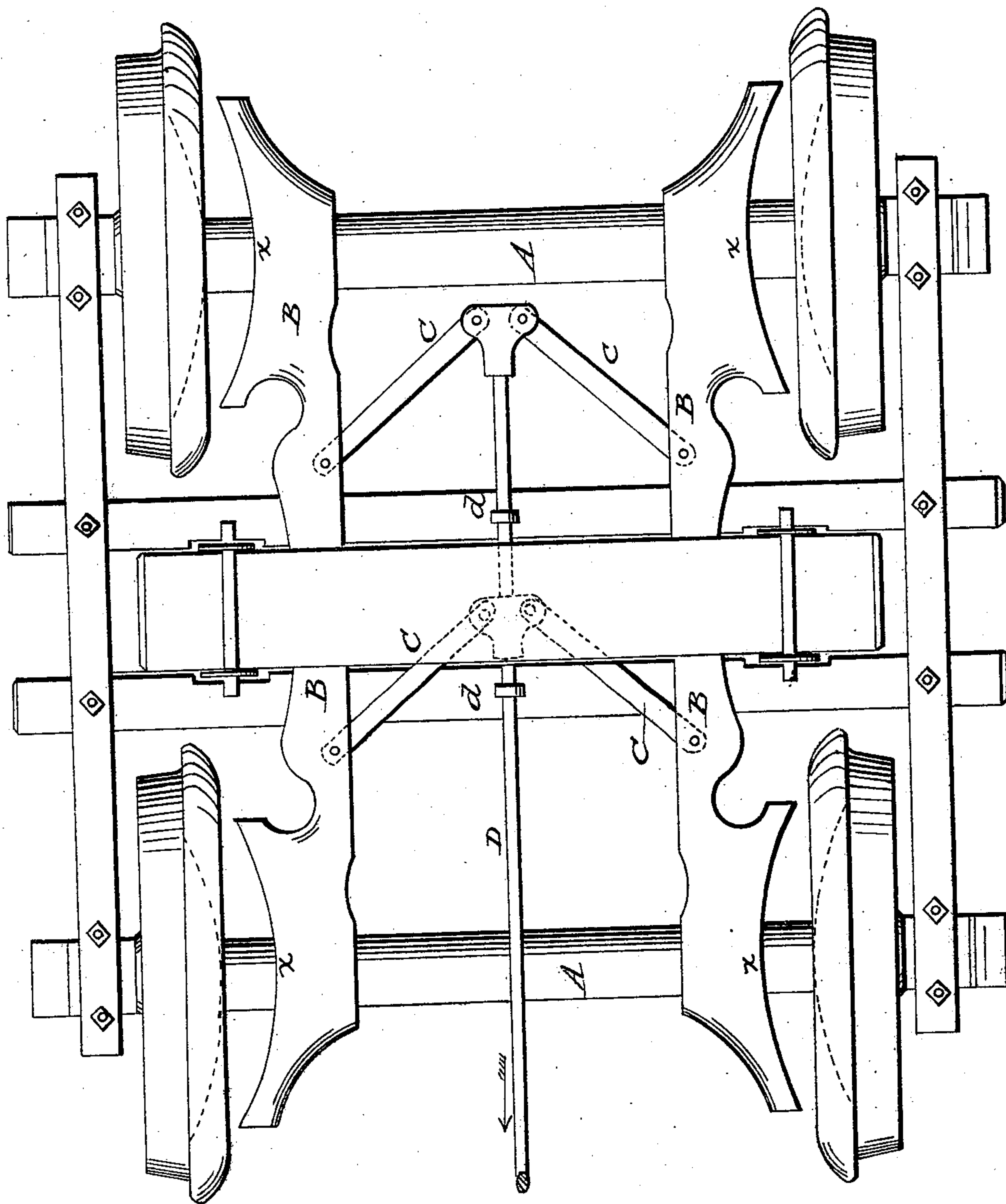
SCRIPTURE & DARRAGH.

Car Brake.

No. 92,104.

Patented June 29, 1869.

Fig. 2.



Witnesses

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ELIPHALET S. SCRIPTURE, OF BROOKLYN, NEW YORK, AND JOHN
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Letters Patent No. 92,104, dated June 29, 1869.

IMPROVED RAILWAY-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 we, ELIPHALET S. SCRIPTURE, of Brooklyn, in the county of Kings, and in the State of New York, and JOHN H. DARRAGH, of Aurora, in the county of Kane, and in the State of Illinois, have invented certain new and useful Improvements in Apparatus for Breaking up the Speed of Railroad-Cars; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which is shown an enlarged plan view of the lower side of a truck with the brake applied.

Letters of like name and kind refer to like parts in each of the figures.

Our invention is an improvement in the means employed for braking railroad-cars; and

It consists in the application of the brakes to the inside of the wheels of a truck, and in the construction and arrangement of the devices by which said brakes are operated.

As ordinarily applied, the brakes being caused to press against the face or tread of the wheel, only a limited friction-surface can be obtained, rendering great pressure necessary upon said brakes, to enable them to accomplish the desired object, all of which is open to serious objections, as the excessive strain to which the different parts of the brakes are subjected, renders a large outlay continually necessary for repairs.

The application of the brakes upon one side only of each pair of wheels, is also open to objection, as the pressure of said brakes has a tendency to force each pair of wheels toward the centre of the truck, and cause a largely-increased amount of friction and wear upon the journals and boxes.

Another objection arises from the position of the brake-beams close to the track, as they are almost certain to be injured by running over cattle or other obstructions, ven though the car is not thrown from the track.

To remedy these objections is the design of our brake, which is fully illustrated by the drawing.

As seen in the drawing, the truck is of ordinary construction.

The brake-beams B B are suspended in a line with the track, instead of at a right angle thereto, as heretofore, and are provided with iron shoes at *x x*, which conform to the shape, and bear upon the inner surface of each wheel.

Pivoted at one end to each beam B, are two levers

O O, the opposite ends of which are pivoted to the brake-rod D, extending lengthwise beneath the car, so as to form two elbow or toggle-joints.

The rod D is provided with suitable guides, *d d*, which confine it to the centre, crosswise, while allowing it to move freely lengthwise of the truck.

The brake-beams are so suspended as to have only a transverse motion upon said truck.

From this description it will be readily seen that if the rod D be drawn forward in the direction indicated by the red arrow, the brake-beams will be forced outward, so as to bring the shoes against the wheels, and, by the friction between the surfaces of said shoes and wheels, retard or entirely check the motion of the latter.

The advantages possessed by this brake over any others in use, are—

First, a larger surface is exposed to the action of the shoes, and a greater amount of friction can be produced than when the shoes bear against the tread of the wheel.

Second, the pressure of the brake being in a line with the axle, and equally great upon either wheel, no strain is caused to the journals or boxes, nor to the truck, and their durability is thereby greatly increased.

Third, by the use of the toggle-jointed levers, a greater pressure can be caused upon the wheels, by the application of a given amount of power upon the brake-wheel, than by any other brake in use.

Fourth, the various parts of the brake being much higher above the track than those in common use, there is less liability to injury from cattle or other obstructions upon the track, and consequently less expense for repairs will be necessary.

Having thus fully set forth the nature and merits of our invention,

What we claim as new, is—

The within-described brake, consisting of the beams B B, levers O O, and rod D, when so constructed and arranged as that the friction-surfaces of or upon said beams, shall press directly against the inner faces of the truck-wheels, substantially as shown, and for the purpose set forth.

In testimony that we claim the foregoing, we have hereunto set our hands, this 2d day of January, 1869.

ELIPHALET S. SCRIPTURE.

JOHN H. DARRAGH.

Witnesses:

A. C. LITTLE,

A. G. McDOLL.