

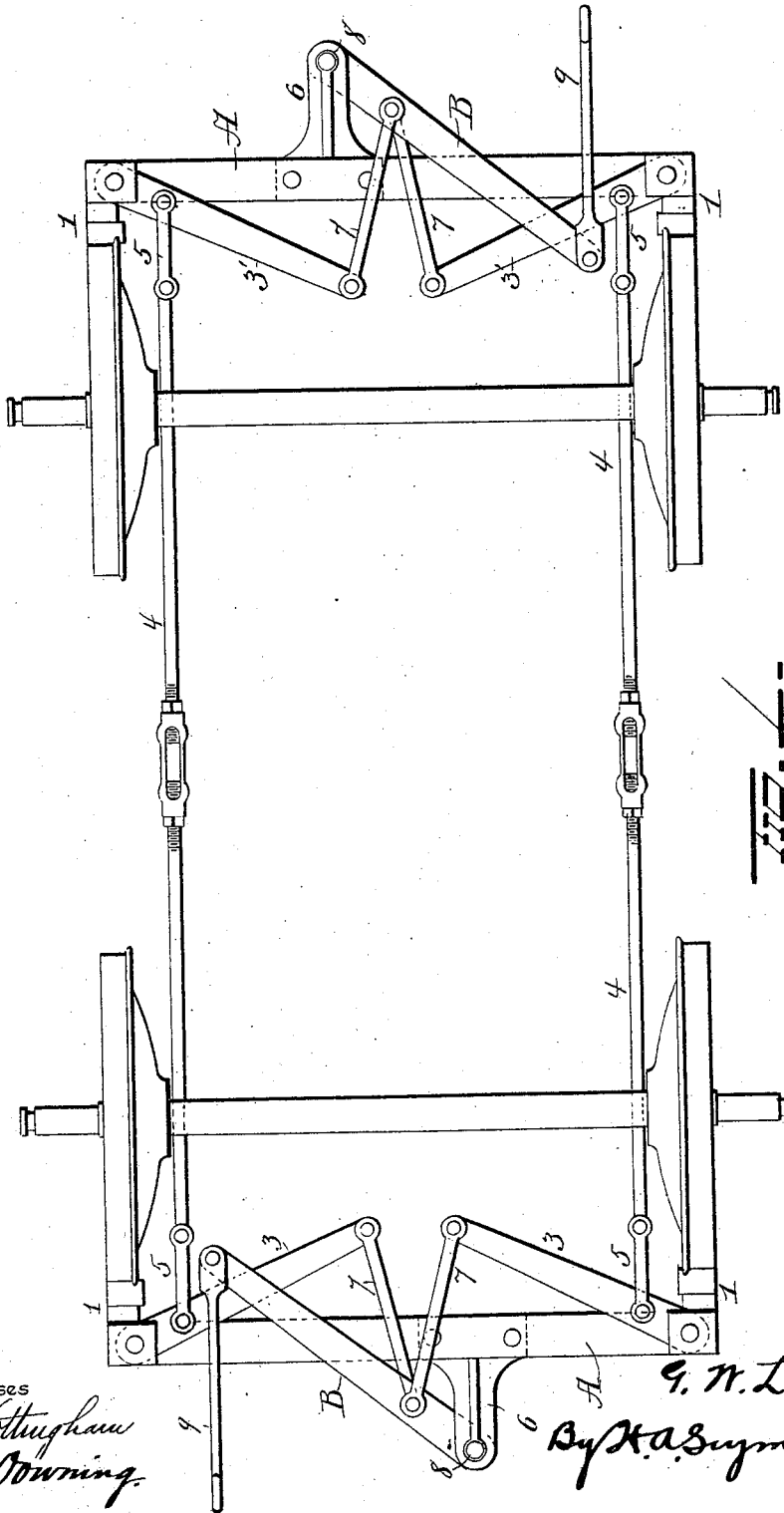
(No Model.)

2 Sheets—Sheet 1.

G. W. LACY.
CAR BRAKE.

No. 574,913.

Patented Jan. 12, 1897.



Witnesses
E. J. Nottingham
G. F. Downing

Inventor
G. W. Lacy
By H. A. Symonds
Attorney

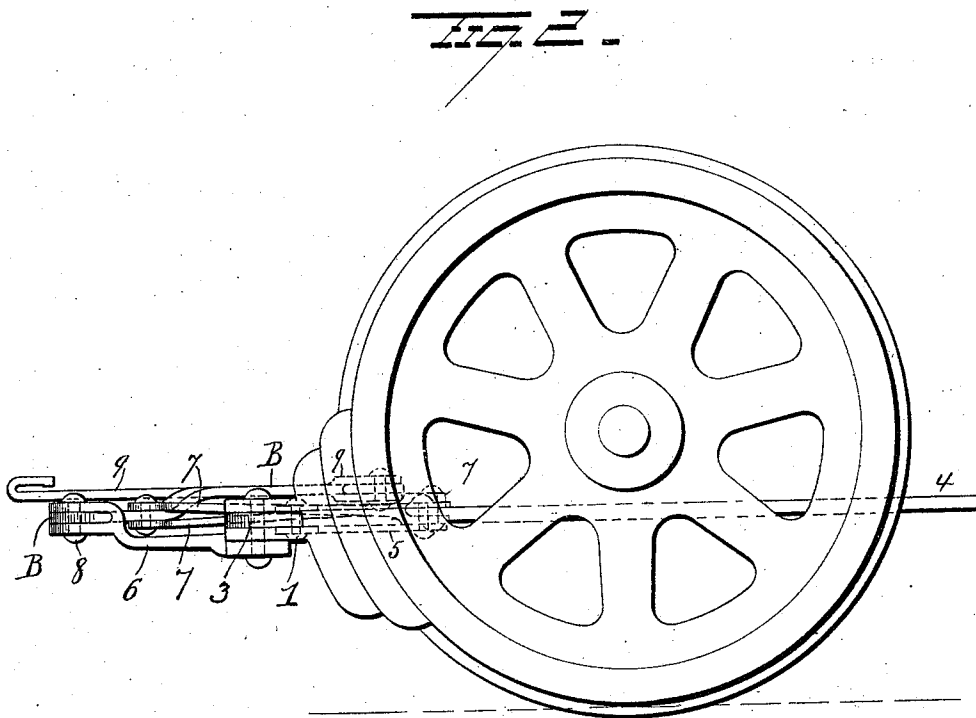
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UNITED STATES PATENT OFFICE.

GEORGE W. LACY, OF KINGSTON, NEW YORK.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 574,913, dated January 12, 1897.

Application filed February 21, 1896. Serial No. 580,234. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. LACY, a resident of Kingston, in the county of Ulster and State of New York, have invented certain new and useful Improvements in Car-Brakes; and I do hereby 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.

My invention relates to an improvement in car-brakes, the object being to provide a simple mechanism of great power which will respond quickly and accomplish its work effectually; and it consists in certain novel features of construction and combinations of parts, which will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of a truck, showing my improved brake applied. Fig. 2 is a side elevation.

As the mechanism is the same at both ends, it is only necessary to describe one set of mechanism.

A is a brake-beam extending across in the usual manner outside of the car-wheels. To the outer ends of this beam the brake-heads 1 1 are connected, and they are provided with shoes adapted to engage the car-wheels. A lever 3 is pivoted in each of these brake-heads, and rods 4 4 connect these levers near their pivotal point of connection with the brake-heads with corresponding levers 3' 3' at the opposite end of the car, the links 5 5 being provided at each end of the rod for connecting it with the levers, so as to give flexibility at this point.

B is the main operating-lever. This lever is pivoted to an arm 6, projecting outward from the brake-beam and located at one side of the center of the latter, and connecting-rods 7 7, pivotally connected with the free ends of levers 3 3, are pivotally connected with lever B near its fulcrum 8. A draft-rod 9 is pivotally connected to the free end of operating-lever B, and to it the power is applied for operating the brake mechanism.

It will be observed that very little strain comes on the center of the brake-beam, as heretofore, but the power is transferred to the levers 3 3.

It will also be seen that great power is de-

rived from the extensive leverage and that the action is quick and the parts are responsive. Draft being applied to the rod 9 by means of a brake-wheel, lever, or direct pull, the main operating-lever B is caused to swing. In so doing it pulls upon levers 3 3, and by virtue of their connection through rods 4 4 power is transferred to the brake-heads and they are thrust solidly against the car-wheels.

It is evident that slight changes might be made in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the exact construction herein set forth; but,

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a car-brake, the combination with brake-heads, 1, levers 3, 3' pivotally connected therewith, and rods connecting said levers, of lever B fulcrumed on a brake-beam, connections between the brake-head levers and lever B, and means for operating the same, substantially as described.

2. In a car-brake, the combination with a brake-beam, brake-heads, levers pivoted to the brake-heads, at a point directly behind the point where the power is to be applied and rods connected with these levers near their point of connection with the brake-heads, of a main operating-lever fulcrumed on the brake-beam and connecting-rods extending from the brake-head levers, to the main operating-levers, substantially as set forth.

3. In a car-brake, the combination with a brake-beam, brake-heads connected with the ends thereof, levers pivotally connected with said brake-heads at a point directly behind the point where the power is to be applied, links connected with these levers and rods extending from the links to the other end of the car, of a main operating-lever, fulcrumed on the brake-beam, and connecting-rods extending from the inner ends of the brake-head levers, to this operating-lever, substantially as set forth.

4. In a car-brake, the combination of a brake-beam, brake-heads, a compound lever system, comprising the levers 3, connections between said levers, and lever B, and means

for operating the same, substantially as described.

5 5. The combination with two brake-beams, levers 3, 3', fulcrumed at their extreme ends at or near the outer ends of the beams, and rods extending from the levers 3, 3, at one end to the levers 3', 3', at the opposite end, of main operating-levers fulcrumed at one end on the brake-beams, and links 7, 7, extending from the inner ends of levers 3, 3' to

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these main operating-levers and connected with the latter near their fulcrums, substantially as set forth.

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

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GEORGE W. LACY.

Witnesses:

JOHN G. VAN ETEN,
WILLIM E. DENDRY.