J. J. ANTHONY.
Car-Brakes.

No. 196,320. Patented Oct. 23, 1877.

Fig: 1.

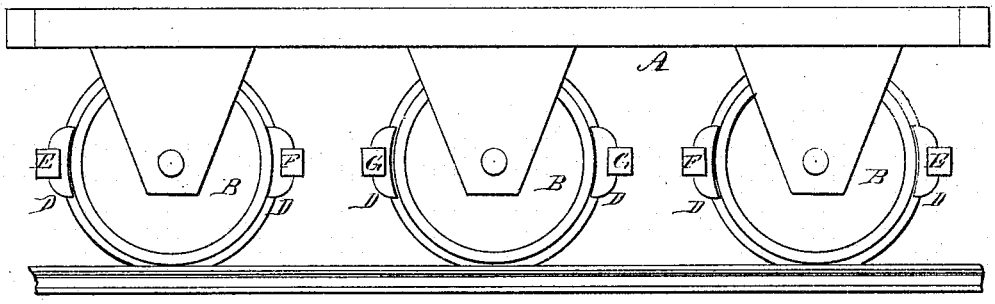


Fig: 2.

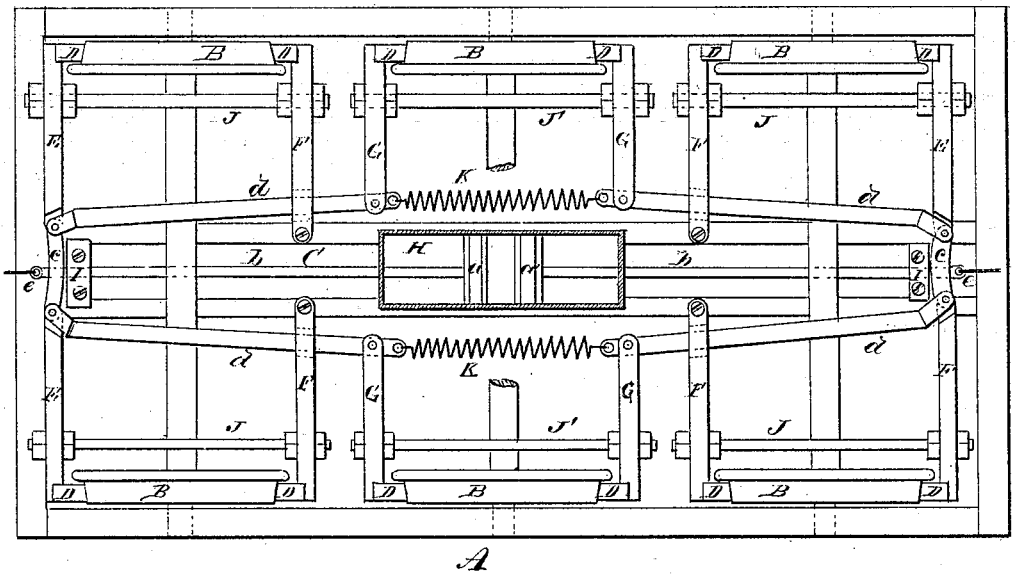
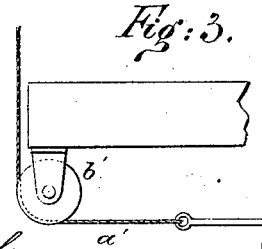


Fig: 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JACOB J. ANTHONY, OF SHARON SPRINGS, NEW YORK.

IMPROVEMENT IN CAR-BRAKES.

Specification forming part of Letters Patent No. **196,320**, dated October 23, 1877; application filed August 18, 1877.

To all whom it may concern:

Be it known that I, JACOB J. ANTHONY, of Sharon Springs, in the county of Schoharie and State of New York, have invented a new and Improved Car-Brake, of which the following is a specification:

Figure 1 is a side elevation of a truck having my improved brake attached. Fig. 2 is an inverted plan view, and Fig. 3 a detail view, of a portion of the apparatus.

Similar letters of reference indicate corresponding parts.

The invention will first be described in connection with the drawings, and then pointed out in the claim.

In the drawings, A is a truck, supported by six wheels, B, and provided with a center timber, C, for supporting the several parts of the brake. D D are brake-shoes attached to levers E F G, and suspended on opposite sides of the wheels. H is a cylinder attached to the timber C, and containing two pistons, *a a'*, each having a rod, *b*. These rods project from opposite ends of the cylinder through guides I, secured to the timber C, and are each provided with a head, *c*, which is jointed to the levers E, and also to the rods *d*, which extend toward the center of the track, and are jointed to the levers G.

The levers E are connected, by means of bolts J, with the levers F, the latter being pivoted to the timber C. The bolts J pass through these levers near their outer ends, and form a fulcrum for the levers E. The levers G are connected in a similar way by the bolts J. A spring, K, connects the inner ends of each pair of rods *d*, and retracts the levers after the brake has been applied. An eye, *e*, projects from each head, for receiving a chain, *a'*, by which the brake may be operated by hand, in the usual way, if required. This chain passes over a pulley, *b'*, placed under the car-platform, and is connected with an ordinary windlass for operating the brakes. By this means a brakeman can operate all of the brakes of a car from one end.

The cylinder H is preferably square; but it may be made round, if desired.

Steam, or water, or air, under pressure, is admitted to the cylinder, between the pistons *a a'*, and forces them apart. This results in moving the levers so that the brake-shoes are forced against the wheels with more or less pressure, as may be required.

The advantages claimed for this invention are that the brake-shoes are applied to all the wheels simultaneously and with an equal pressure on both sides of each wheel. It is also simple in construction and easily applied.

Having thus described my invention, I claim—

The rods *d*, connected by springs K, the levers G, connected by rods J', and the levers E F, connected by rods J, in combination with piston-rods having heads C, as and for the purpose specified.

JACOB J. ANTHONY.

Witnesses:

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