J. J. SHAFNIT.

CAR-BRAKE OPERATING MECHANISM.

No. 184,179. Patented Nov. 7, 1876.

Fig. 2.

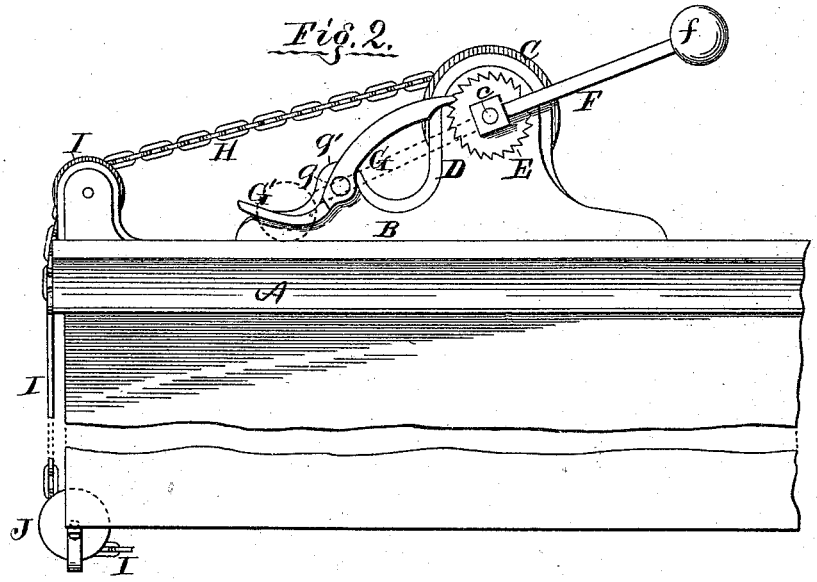
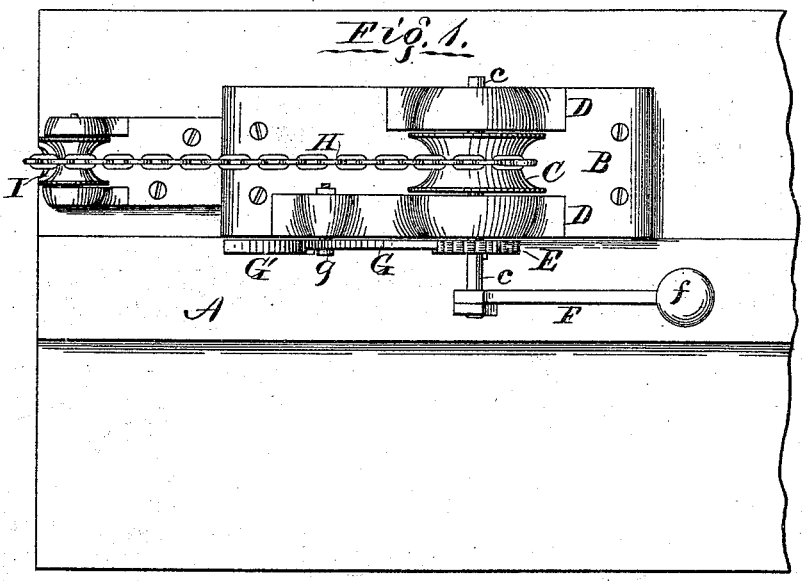


Fig. 1.



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UNITED STATES PATENT OFFICE.

JACOB J. SHAFNIT, OF MUSCATINE, IOWA.

IMPROVEMENT IN CAR-BRAKE-OPERATING MECHANISMS.

Specification forming part of Letters Patent No. **184,179**, dated November 7, 1876; application filed September 9, 1876.

To all whom it may concern:

Be it known that I, JACOB J. SHAFNIT, of Muscatine, in the county of Muscatine and State of Iowa, have invented certain new and useful Improvements in Car-Brake-Operating Mechanism; and I do hereby declare that the following is a full, clear, and exact description thereof, which 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 letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in car-brake-operating mechanism, and the invention consists in the use of a pulley, mounted on top of the car, and provided at one end with a ratchet-wheel and a retaining-pawl, and also with a weighted lever, and connected by a chain or cord with the ordinary brake-levers beneath the cars, so that it may be used to set and release the brakes, as hereinafter more fully described, and set forth in the claims.

In the accompanying drawings, Figure 1 is a top view of my invention, and a portion of a railway box-car; and Fig. 2 is a side elevation.

Referring to the parts by letters, A represents a portion of the top and one end of a box-car. B is a plate, which may be attached to the top of the car A, and carries the main working devices. C is a pulley-wheel, its shaft *c* mounted in suitable axial bearings in standards D, which spring from the plate B. E is a ratchet-wheel on the outer end of the shaft C; and F is a lever or handle attached at one end to the shaft *c*, and has a weight, *f*, on its other end. G is a pawl, engaging with the ratchet E, and pivoted at *g* to a standard, *g'*, projecting from the plate B. The lower end of the pawl G is extended to form a curved part, G', near the top of the car, and convenient for the foot of the operator. H is a chain or cord, attached at one end to the pulley C, and passes over a pulley, I, seated at the upper corner of the car, and another, J, seated at its lower corner, and thence to its attachment with the brake-lever, in the ordinary manner.

For applying the car-brakes, all that is necessary is to throw the lever F back to the position shown by full lines in the drawings, and allow the pawl G to engage with the ratchet E, and secure it in said position. For releasing the brakes the foot may be placed on the end G' of the pawl to disengage it from the ratchet, and then the lever F may be thrown forward to the position shown by dotted lines at Fig. 2, and thus slacken the chain H and allow the brakes to release in the common manner. The weight *f* will hold the lever F in the last-named position, and will aid in holding it in the first named, and thus relieve the pawl G of considerable strain.

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

1. The pulley-wheel C, ratchet E, weighted lever F, and pawl G, having treadle G', arranged to operate substantially as and for the purpose specified.

2. The combination of the pulley C, ratchet E, weighted lever F, and pawl G, with chain H, and pulleys I and J, substantially as and for the purposes specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JACOB J. SHAFNIT.

Witnesses:

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