J. TARR.

CAR-BRAKE.

No. 192,719. Patented July 3, 1877.

Fig. 1.

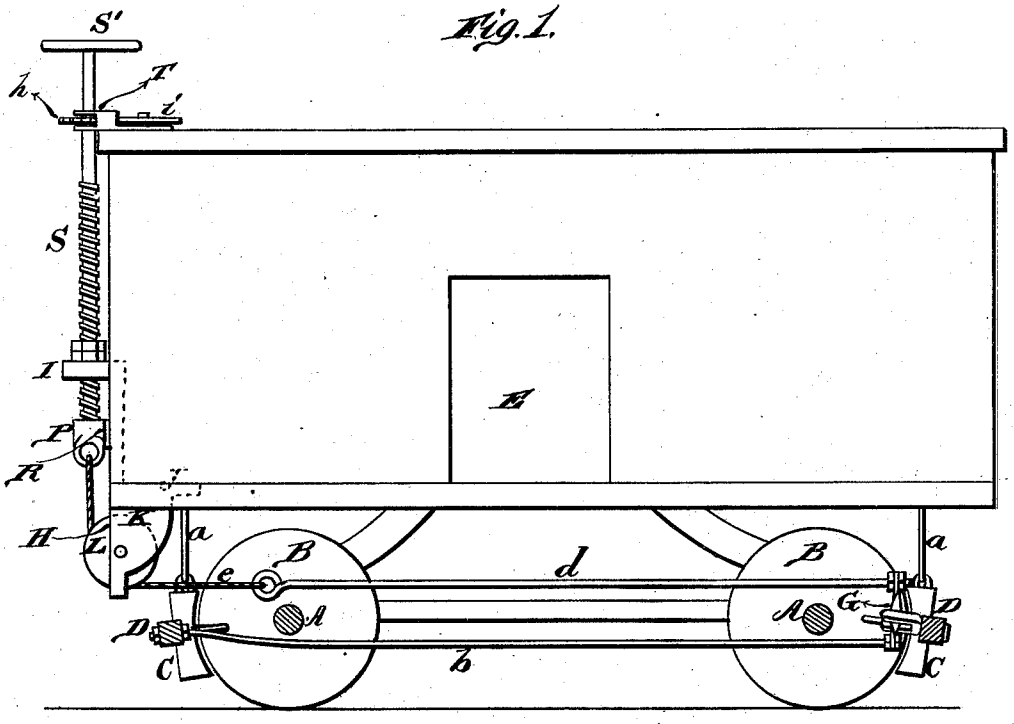


Fig. 2.

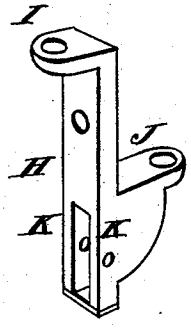


Fig. 3.



WITNESSES

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JOHN TARR, OF LEAVENWORTH, KANSAS.

IMPROVEMENT IN CAR-BRAKES.

Specification forming part of Letters Patent No. **192,719**, dated July 3, 1877; application filed May 5, 1877.

To all whom it may concern:

Be it known that I, JOHN TARR, of Leavenworth, in the county of Leavenworth and State of Kansas, have invented a new and valuable Improvement in Car-Brakes; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side view of my car-brake. Fig. 2 is a perspective detail, and Fig. 3 is a detail, of the same.

My invention relates to car-brakes; and it consists in the construction and arrangement of devices, as will be hereinafter more fully set forth, and pointed out by the claims.

The annexed drawing, to which reference is made, fully illustrates my invention.

A A represent the two axles of a car-truck, provided with the wheels B B, arranged under the car E in the usual manner.

On the outer faces of the wheels B B operate the brake-blocks C C, said blocks being attached to front and rear brake-bars D D, suspended from the bottom of the car by rods *a a*. The front brake-bar D is, by a rod, *b*, connected with the lower end of a lever, G, which is pivoted to the inner side of the rear brake-bar, while the upper end of said lever is, by a rod, *d*, connected with a chain, *e*, and this with the brake-operating mechanism at the front end of the car.

On the front end of the car E is secured a plate or casting, H, having at its upper end a forwardly-projecting lug, I, and near its lower end is a rearwardly-extending arm, J, fastened to the bottom of the car. This arm is, by side flanges K K, connected with the lower portion of the plate or casting H, forming a housing, in which is mounted a pulley, L, the said plate, with lug, arm, and side flanges, being all cast in one piece.

The chain *e* is passed around the pulley L, and attached to a lug, P, projecting from a plate, R; and this lug P is swiveled on the lower end of a screw-rod, S, which is passed through the lug I, above described, there being for that purpose a hole with female-screw threads made in said lug I.

The screw-rod S pasess through a guide, T, as shown, and has a hand-wheel, S′, secured on its upper end. By means of this hand-wheel the screw-rod S may be turned in either direction. When turning in one direction it draws up the lug P, which, by means of the chain *e*, applies the brakes, and when turning in the opposite direction the lug P descends, slackening the chain, and allowing the brakes to come loose.

It will be seen that the plate R, from which the lug P projects, rides on the plate or casting H, preventing wear to the wood-work; and it also prevents the lug P from turning by the operation of the screw-rod S.

In the guide T is placed a ratchet-wheel, *h*, which is so arranged, by means of a feather or otherwise, that it will turn with the screw-rod, but will allow said rod to move up and down through it at the same time. *i* is a clog or pawl, arranged to take into said ratchet-wheel for holding the brakes when applied.

What I claim as new, and desire to secure by Letters Patent, is—

1. The plate or casting H, provided with the lug I, having screw-threaded hole, and with the arm J and flanges K, forming a housing, substantially as and for the purpose set forth.

2. The combination, with the casting H, provided with lug I, said casting arranged as described, of the screw-rod S, passing through a threaded hole in said lug, the plate R, with lug P swiveled on the end of the screw, and the chain *e* connecting with the brake, substantially as and for the purpose described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN TARR.

Witnesses:
F. R. HUNT,
H. M. ALLEN.