(No Model.)

P. H. CURTNER & C. C. GENUNG.

CAR BRAKE.

No. 318,419. Patented May 19, 1885.

Fig. 1.

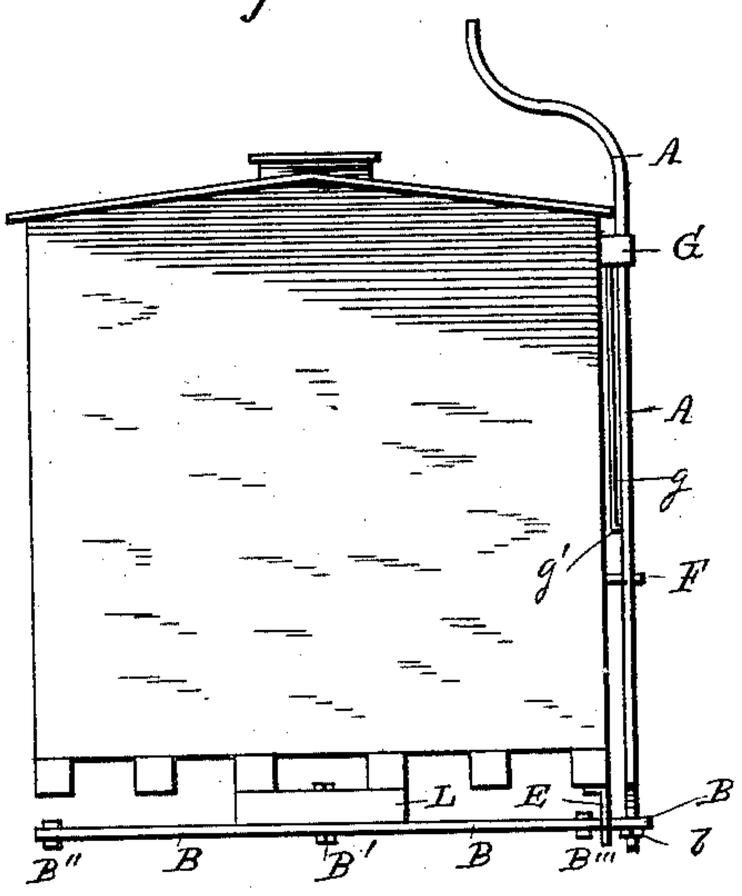


Fig. 2.

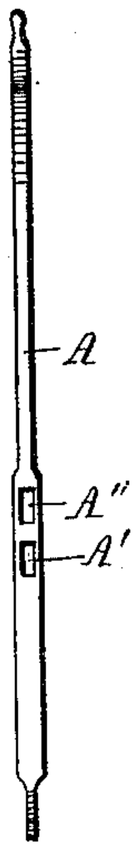


Fig. 3.

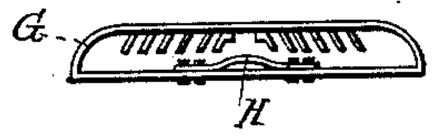


Fig. 4.

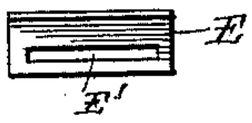


Fig. 6.

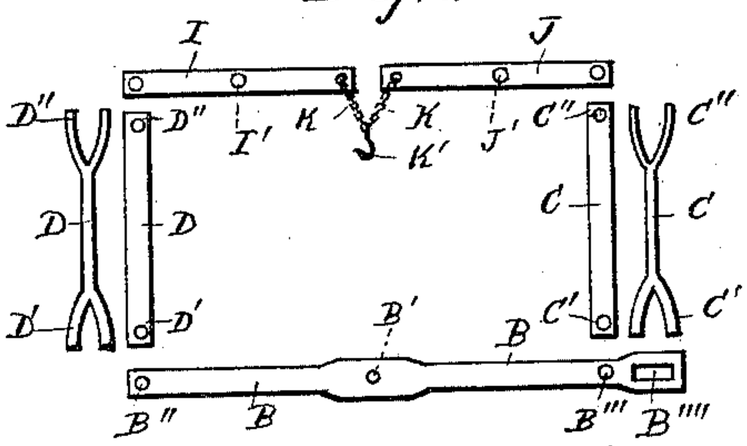


Fig 5

Fig 7

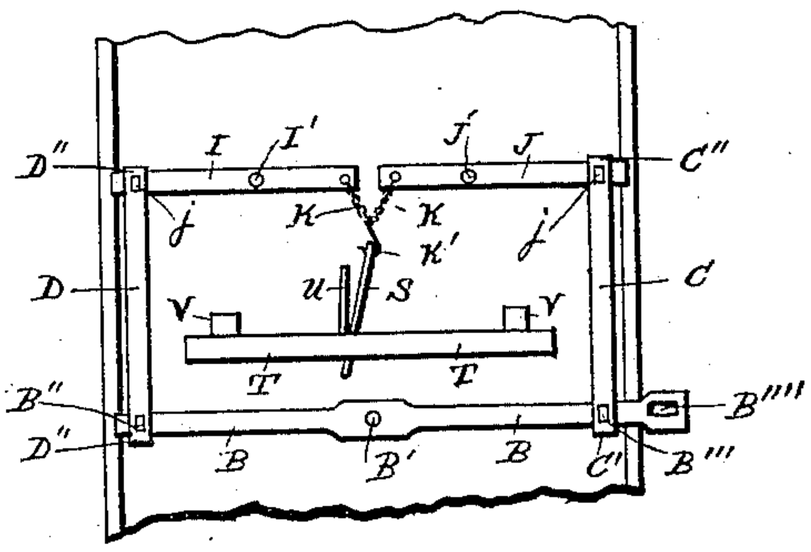
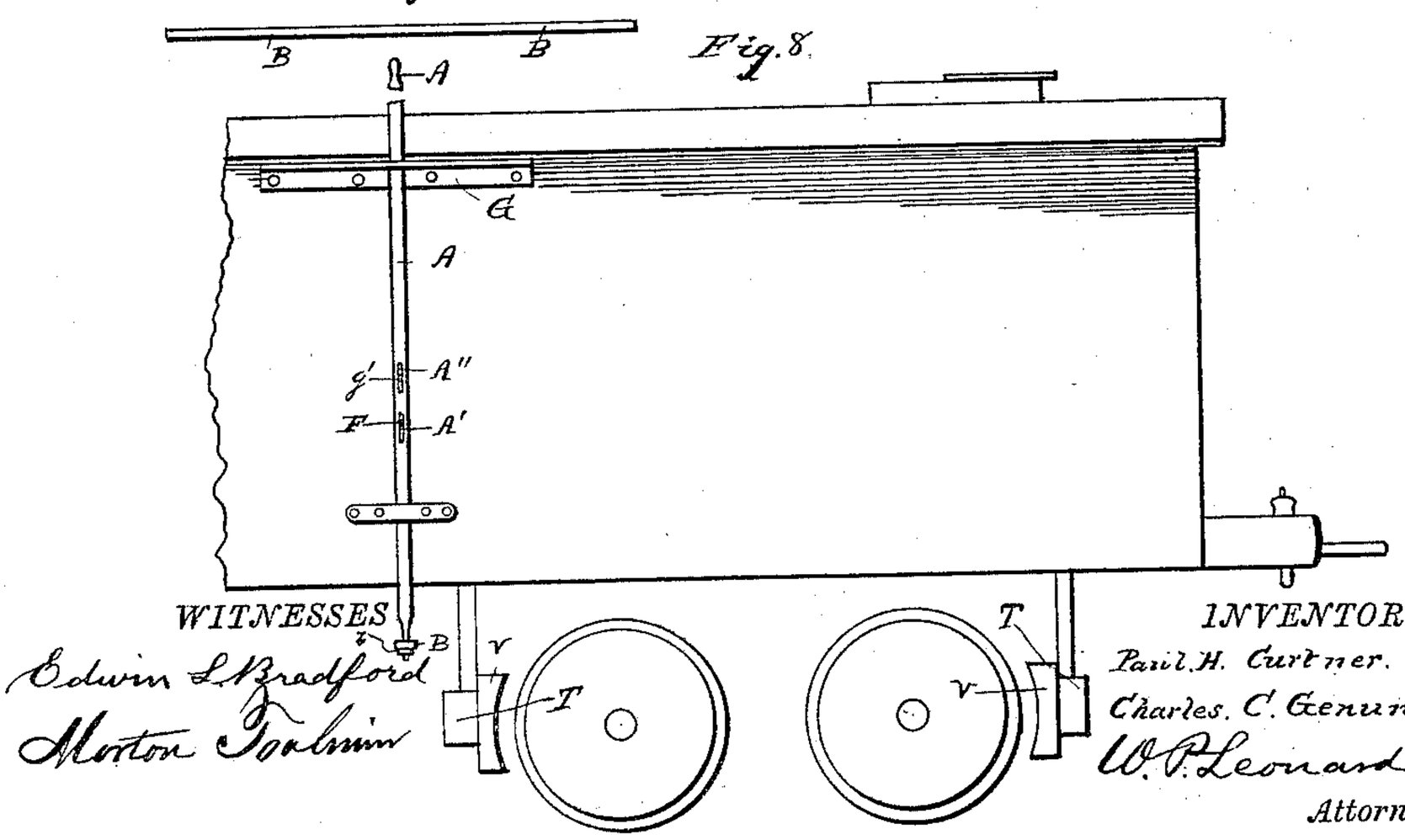


Fig. 8.



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UNITED STATES PATENT OFFICE.

PAUL H. CURTNER, OF HAZLETON, AND CHARLES C. GENUNG, OF EVANSVILLE, INDIANA.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 318,419, dated May 19, 1885.

Application filed April 7, 1885. (No model.)

To all whom it may concern:

Be it known that we, PAUL H. CURTNER and CHARLES C. GENUNG, citizens of the United States, residing, respectively, at Hazleton, Gibson county, and Evansville, in the county of Vanderburg, and State of Indiana, have invented certain new and useful Improvements in Car-Brakes, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to car-brakes, and is an improvement upon the car-brake for which Letters Patent No. 313,186 were granted us March 3, 1885, and has for its objects to equalize the leverage and more easily and readily apply power to the brakes by the means of additional levers and chains and their different connections, and to more certainly and securely keep the respective parts in place. These objects are attained by the mechanism illustrated in the drawings forming a part of this specification, in which—

Figure 1 is a sectional view. Fig. 2 is a view of brake-rod detached from the car. Fig. 3 is a detached view, taken from the top, of a clamp to be attached to one side of the car. Fig. 4 is a detached side view of a guide for one end of the bar B. Fig. 5 is a detached view of the bar B, and shows one edge thereof. Fig. 6 embraces detached views of the bar B, connecting-rods C D, pivoted bars I J, connecting-chain K, and hook K′. Fig. 7 is a view taken from the bottom of the car on the under side, and shows a part of the car and also the several parts illustrated in Fig. 6 connected with each other and in their relative positions. Fig. 8 is a side elevation of a part of a car.

The letter A indicates the brake-rod, the upper portion of which is curved over the top of the car, in order to be more easily grasped and operated by the brakeman. This rod passes through a clamp, G, secured to one side of the car, and provided with projecting teeth and a spring, H, by means of which the rod is held in the position where placed by the brakeman, and is also provided with slots A′ A″. The lower slot, A′, fits over the end of a stud or bolt, F, attached to the side of the car, and which forms the pivot or fulcrum upon which the rod A oscillates when operated by the brakeman. The elongated form of the slot A′ permits the rod A to slip up and down over the stud F.

A spring, *g*, is attached at its upper end to the side of the car, and extends in a downward direction until opposite the slot A″, which it enters by means of an elbow, *g′*. This serves the purpose to press against the rod A and maintain it in a vertical position when the brake is not in operation, and prevents the shoe from pressing against the car-wheel.

The lower end of the rod A is provided with a screw-thread, and passes through a slot, B″″, in the outer end of the bar B, to which it is secured by the nut *b*.

An angle-plate of metal, E, having a slot, E′, as shown in Fig. 4, is secured to one of the sills of the car. The slot therein, E′, is for the passage of the bar B, which it supports, and at the same time permits to slide freely back and forth in a horizontal direction when acted upon by the brake-rod A. The bar B is pivoted by a bolt, B′, to a cross-piece, L, secured to the bottom timbers of the car. This bar has openings B″ and B‴ near each end, which are intended for the passage of suitable bolts, by means of which two connecting-bars, C D, having bifurcated ends C′ D′, are secured thereto. The other ends of these bars (indicated by the letters C″ D″) are attached to the bars I J by bolts *j*, which pass through suitable openings therein for this purpose. The bars I J are secured to the bottom of the car by means of bolts I′ J′, which also serve the purpose of fulcrums or pivots, upon which these bars oscillate. The inner ends of the bars I J are connected to each other by a chain or chains, K, provided with a hook, K′, which engages with brake-beam rods S U, the other ends of which are secured to the brake-beams T, having shoes V, which may be of any of the ordinary forms in general use.

It will be observed that any movement of the brake-rod A in a backward or forward direction will be communicated to the bar B, thence through the connecting-bars C D to the bars I J, then by the chain K and hook K′ to the brake-beam rods S U, brake-beams T, and shoes V, and thus cause the shoes V to bear against the wheels of the car or to be withdrawn therefrom.

Having described our invention, what we

desire to secure by Letters Patent, and claim, is—

In a railroad-car brake, the combination of brake-rod A, curved over the roof of the car, having slots A′ A″, the clamp G, having spring H, and provided with teeth adapted to hold said rod A, the spring *g*, secured at its upper end to the side of the car, having an elbow, *g′*, and the stud F, with the bar B, having its outer end supported by slotted angle-plate F, the bolt B′, cross-piece L, connecting-rods C D, the bars I and J, having pivots I′ J′, and chains K, adapted to engage with brake-beam rods S U, whereby the brake-beams T and shoes V may be caused to bear against or be removed from the car-wheels, substantially as described, and for the purposes set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

PAUL H. CURTNER.
CHARLES C. GENUNG.

Witnesses:
RICHARD TAYLOR,
HENRY ROBB.