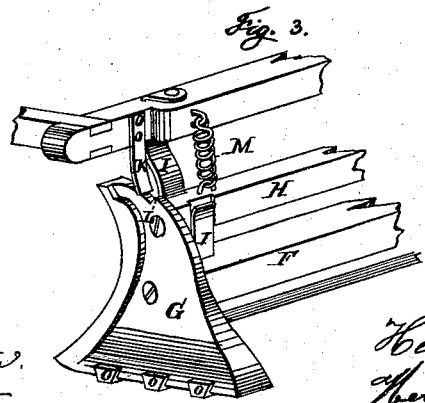
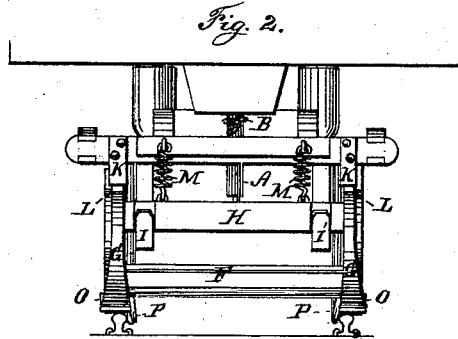
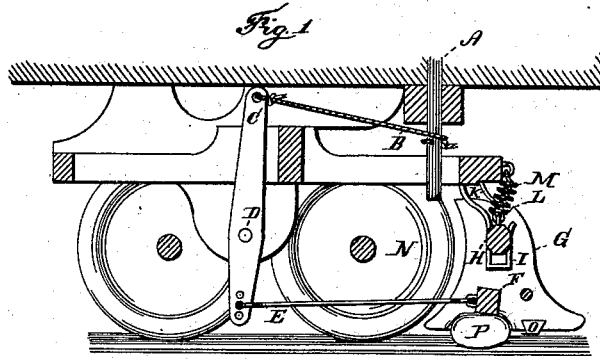


H. C. LAUBACH, H. BARGHAUSEN & H. T. RIES.
 CAR-BRAKE.

No. 187,718.

Patented Feb. 27, 1877.



WITNESSES:
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UNITED STATES PATENT OFFICE.

HENRY C. LAUBACH, HERMAN BARGHAUSEN, AND HENRY T. RIES, OF
WASHINGTON, D. C.

IMPROVEMENT IN CAR-BRAKES.

Specification forming part of Letters Patent No. 187,718, dated February 27, 1877; application filed
October 25, 1876.

To all whom it may concern:

Be it known that we, HENRY C. LAUBACH, HERMAN BARGHAUSEN, and HENRY T. RIES, of Washington, in the county of Washington, and District of Columbia, have invented certain new and useful Improvements in Car-Brakes; and we 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 nature of this invention consists in the construction and arrangement of the brake-shoes and their suspension to the framing of the truck by means of spiral and flat springs or loops in such a manner as to allow said shoes an adjustment within the loops or springs and to or from the wheels, as desired, through the medium of the crank rod, chain, and lever by which they are operated.

In the accompanying drawings, Figure 1 is a side sectional view, Fig. 2 is a front view, and Fig. 3 is a perspective view, of the same.

Similar letters indicate corresponding parts in the several figures.

A A is a crank-rod by means of which the brake is operated. Near one end of this rod is secured a rope or chain, B B. Said rope or chain is also fastened to one end of a lever, C, pivoted to the framing or truck by pivot D. The other end of lever C has holes therein to receive one end of an adjustable rod, E, said rod being connected at the other end and to the center of brake-bar F, by means of a staple in said bar. G G are brake-shoes, having their lower portion or points curved or rounded, and provided with rubber blocks or pieces o o o underneath the same. These blocks or pieces may be made of any other equivalent material. To the inner sides of said shoes are fastened plates P P, made so as to project below said shoes and along the sides of the rails. The advantage of these rubber blocks is, that they act in con-

junction with the brake-shoes, the two performing a double function, the blocks affording a resistance against the rails, and, at the same time, the shoes against the wheels, thus giving the train a more sudden stoppage, and in less time than it ordinarily takes. The brake-shoes, when in use, brake on the rails and wheels, and when not in use are raised and supported by means of the spiral springs.

H H is another brake-bar, to the ends of which, as well as F, are secured the shoes G G, and on the top and near the ends of said bar H H are fastened one at each end, by means of staples, two spiral springs, M M, their other other ends being connected with the framing or truck by similar means. I I are flat springs so curved as to form a loop or as near thereto as possible, to receive the bar H H, said bar having an adjustment therein. K K are stops which prevent the shoes from being raised higher than necessary, these stops being fastened to the framing or truck by any suitable means.

Operation: When it is necessary for the operator to adjust the shoes, all that is necessary to do is to turn the crank rod or lever. Said crank-rod having its connection with a rope or chain to an adjustable lever, and said lever being connected with the brake bar, the shoes are readily adjusted to any desired distance to or from the wheels.

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

The brake-shoes G G, in combination with the brake-bars F F H H, spiral springs M M, springs or guides I I, stops K K, connecting-rod E, rubber blocks o o o, side plates P P, adjustable lever C, chain B B, and crank rod or lever A A, substantially as shown and described.

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Witnesses:

WM. H. BATES,
S. M. POOL.