(No Model.)

H. LOEFFLER.

EMERGENCY BRAKE FOR STREET CARS.

No. 606,065. Patented June 21, 1898.

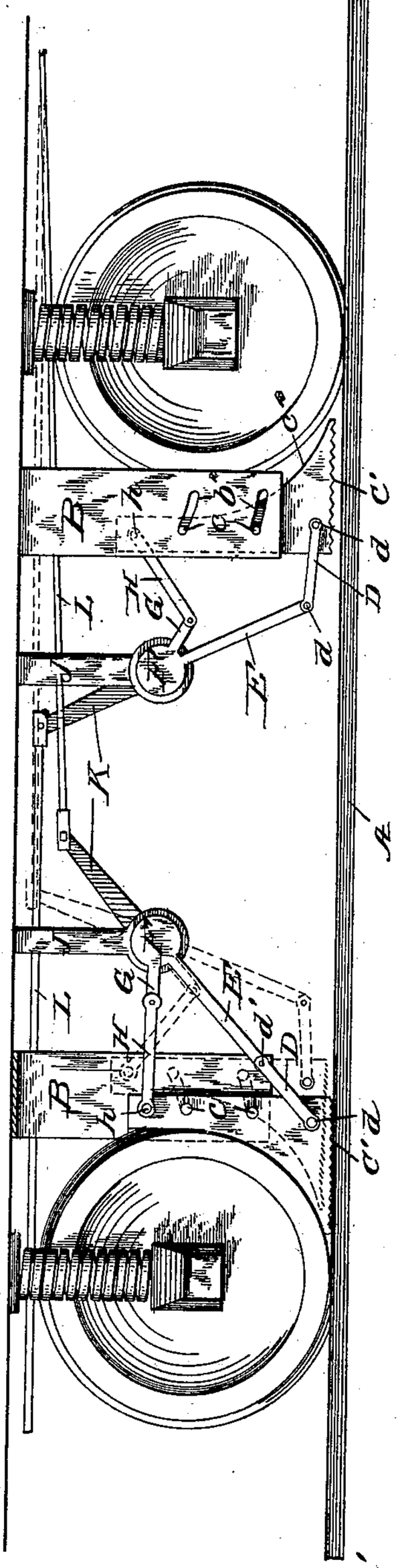

FIG. 1.

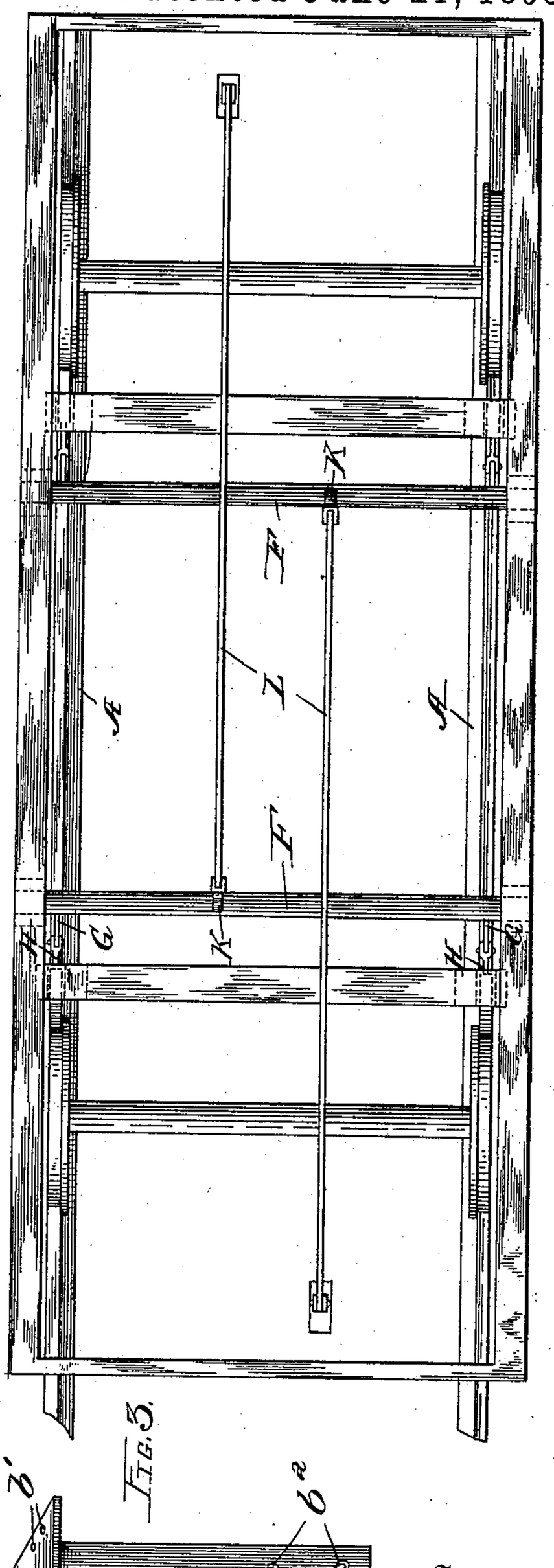

FIG. 2.

FIG. 3.

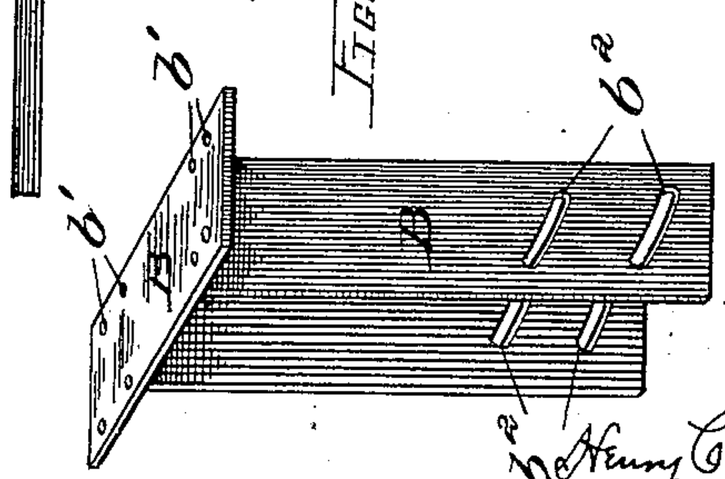

FIG. 4.

Witnesses
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UNITED STATES PATENT OFFICE.

HERMANN LOEFFLER, OF PITTSBURG, PENNSYLVANIA.

EMERGENCY-BRAKE FOR STREET-CARS.

SPECIFICATION forming part of Letters Patent No. 606,065, dated June 21, 1898.

Application filed September 8, 1897. Serial No. 650,916. (No model.)

To all whom it may concern:

Be it known that I, HERMANN LOEFFLER, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Emergency-Brakes for Street-Cars, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in car-brakes, and relates more particularly to that class known as "emergency-brakes."

The invention aims to construct a brake on the chock-block principle that will be quick-acting and reliable at all times; furthermore, one that may be easily controlled by the operator.

The invention has for its object to design a brake of the above-referred-to class that will be extremely simple in its construction, strong, durable, and comparatively inexpensive to manufacture.

The invention has for its further object to construct a series of levers whereby the brake-shoes may be readily applied to the periphery of the wheel and raised simultaneously, thereby effecting an almost instantaneous stop of the car in case of an emergency.

With the above and other objects in view the invention finally consists in the novel construction, combination, and arrangement of parts to be hereinafter more specifically described, and particularly pointed out in the claims.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like letters of reference indicate similar parts throughout the several views, in which—

Figure 1 is a side elevation of a car-truck equipped with my improved brake. Fig. 2 is a top plan view of the same. Fig. 3 is an enlarged detail view in perspective of the guides designed to carry the brake-shoes.

In the drawings, A indicates the car-track; B, the guides, connected at their upper ends by a cross-piece extending slightly beyond the guides and provided with apertures b' for the reception of bolts, (not shown in the drawings,) providing means whereby said guides are rigidly secured to the car-track and are provided near their lower end with inclined slots b^2 b^2. Said slots are arranged in their guides diametrically opposite each other and are adapted to receive pins c c of the brake-shoes C, having a lower underneath serrated face c'. The side of the brake-shoe adjacent to the wheel is of such contour as to conform with the latter, as indicated by reference-letter c^2, and is adapted to be applied to the periphery of the wheel.

At the lower extremity of the brake-shoe is pivotally secured at d a lever D, the other end of said lever being pivotally attached at d' to an arm E, said arm being rigidly secured to the rocker-shaft F, extending transversely across the car-truck underneath. To the end of said rocker-shaft F is also rigidly secured arm G, this latter arm being set at an angle of approximately forty-five degrees to the arm E, said arm G being pivotally connected at g to a lever H, the end of which is pivotally attached to the upper portion of the brake-shoe, as indicated by reference-letter h, the rocker-shaft F, carrying the levers E and G, being suitably supported by brackets J, rigidly secured to the frame of the car. An operating-lever K is securely attached to the rocker-shaft F. To the end of said lever is pivotally secured at C brake-rods L, which may be operated in any suitable manner, preferably by means of a chain and rod.

The operation of my improved brake will be readily apparent from the above description and reference to the drawings, as shown in Fig. 1 and indicated by dotted lines.

It will be noted that when the lever K is operated the brake-shoe will proceed downwardly against the track and simultaneously engaging the periphery of the wheel.

I call particular attention to the fact that various changes may be made in the details of construction and arrangement of parts without departing from the general spirit of my invention.

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

1. In a car-brake, the combination of the guides B, provided with the inclined slots b^2 b^2, a brake-shoe C, carrying pins c, c, adapted to operate in said slots b^2 b^2, levers D, H piv-

otally attached to said brake-shoe, and arms G, and E of the rocker-shaft F, connecting said levers D and H, an operating-lever K, connected to the brake-rods L, all parts being arranged operating substantially as shown and described.

2. In a car-brake, the combination of the guides B, a cross-piece *b*, extending slightly beyond the sides of said guides, the latter provided with inclined slots b^2 b^2 a brake-shoe C, carrying pins *c c* adapted to operate in the said slots b^2 b^2, the underneath face of said shoe being serrated, levers D and H pivotally secured to said brake-shoe, arms E and G set at an angle of approximately forty-five degrees to each other, and secured to the ends of the rocker-shaft, a lever K secured to said rocker-shaft, and a bracket J, substantially as described and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

HERMANN LOEFFLER.

Witnesses:
JOHN NOLAND,
THOS. M. BOYD, Jr.