

No. 787,892.

PATENTED APR. 25, 1905.

L. S. CHADWICK.

BAND BRAKE.

APPLICATION FILED AUG. 4, 1903.

2 SHEETS—SHEET 1.

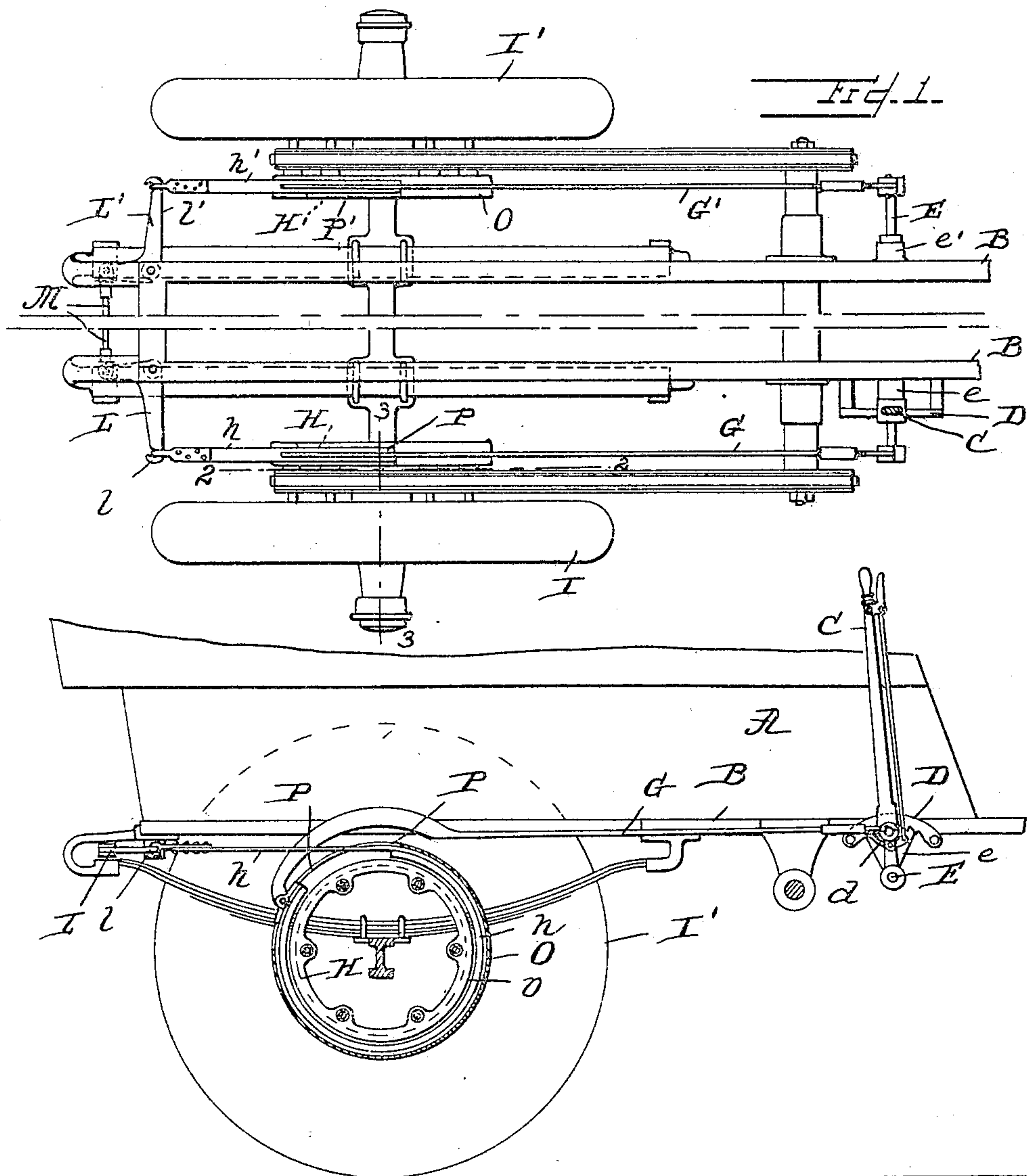


FIG. 2.

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WITNESSES:

Jesse B. Heller.

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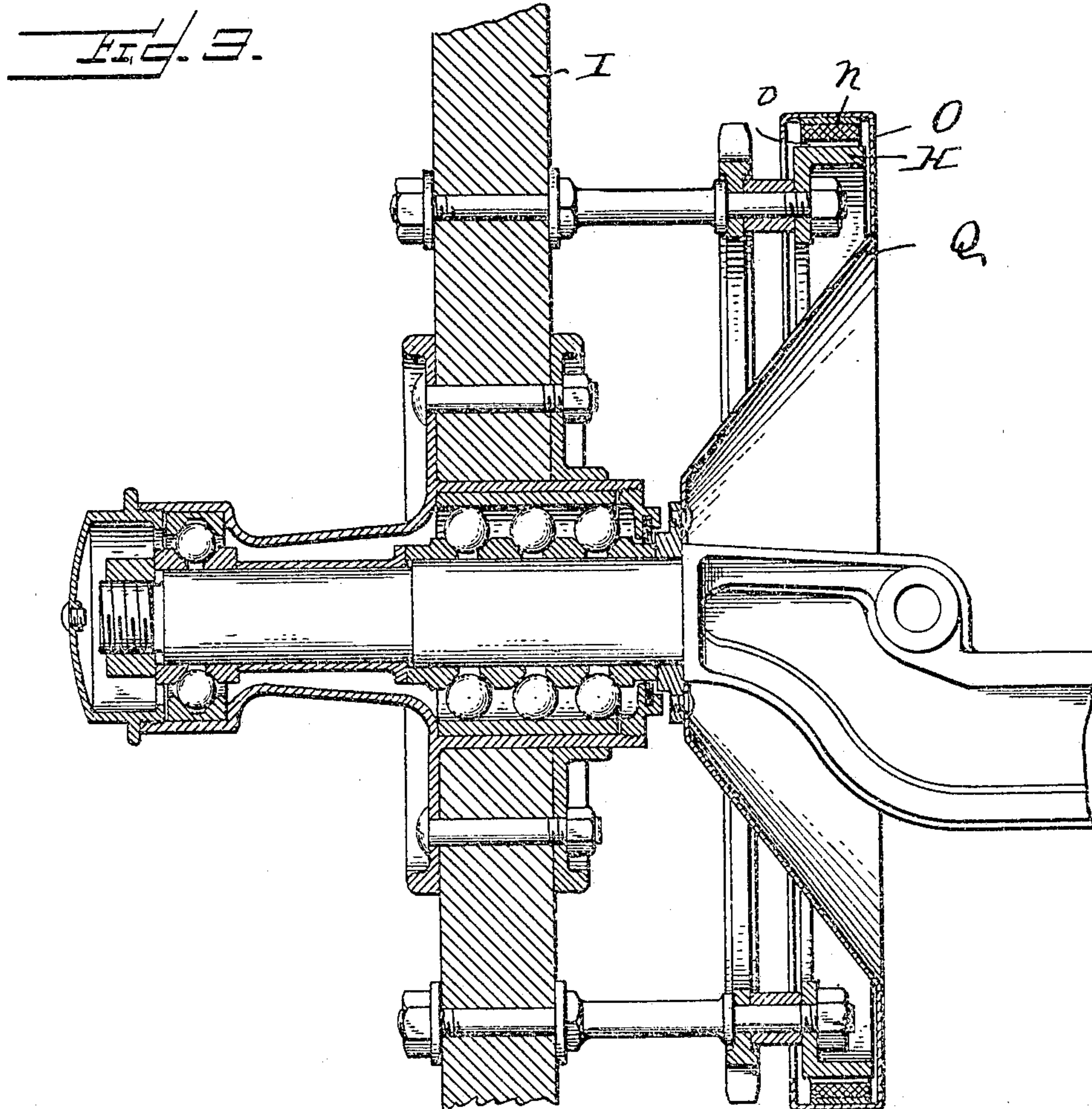
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WITNESSES:

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# UNITED STATES PATENT OFFICE.

LEE S. CHADWICK, OF RIDLEY PARK, PENNSYLVANIA.

## BAND-BRAKE.

SPECIFICATION forming part of Letters Patent No. 787,892, dated April 25, 1905.

Application filed August 4, 1903. Serial No. 168,137.

*To all whom it may concern:*

Be it known that I, LEE S. CHADWICK, a citizen of the United States, residing at Ridley Park, county of Delaware, and State of Pennsylvania, have invented a new and useful Improvement in Band-Brakes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object certain improvements in band-brakes, which will include compensating means, so that the band-brakes on two wheels at opposite sides of a vehicle will be set with like pressure.

My invention is particularly adapted for automobiles, where it is desirable that the band shall be applied with like pressure upon the brake-wheels at opposite ends of the axle and also to prevent the band-brake when loosened sagging upon the brake-wheel or rattling.

I will first describe an embodiment of my invention, illustrated in the accompanying drawings, and then point out the invention in the claims.

In the drawings, Figure 1 is a plan view of a portion of the running-gear. Fig. 2 is a sectional view on line 2 2 of Fig. 1. Fig. 3 is a sectional view on line 3 3 of Fig. 1.

A is the vehicle-body; B, the frame; C, the brake-lever.

D is a ratchet, and *L* is the brake-lever locking-pawl.

The brake-lever C is secured to the shaft E, which is held in supports *e e'* so as to rock. From one end of the rocking shaft E extends the connecting-rod G, connected to one end of the brake-band *h* upon the brake-wheel H on the wheel I. From the other end of the rock-shaft E extends the connecting-rod G', connected to one end of the brake-band *h'* upon the brake-wheel H' on the end of wheel I' opposite to that of brake-wheel H. The brake-band *h* surrounds the brake-wheel H. The end of the brake-band *h* opposite to that connected to rod G is connected to the hooked end *l* of the bell-crank L, the opposite end of the bell-crank L being connected to the rod

M, the bell-crank L being pivoted to the frame. The end of the brake-band *h'* opposite to that connected to rod G' is connected to the hooked end *l'* of the bell-crank L', pivoted to the frame. The other end of the bell-crank lever L' is connected to the rod M at the end opposite to that of its connection with lever L. By this construction if there is any tendency when the brake-lever C is applied for the band *h* to grip its brake-wheel more tightly than brake-band *h'* tends to grip its brake-wheel the connection of bell-cranks L L' and rod M will cause the pressure to be alike in both. Moreover, this result is arrived at with more certainty by placing this compensating mechanism in connection with the end of the brake-band opposite to the connection with the rock-shaft and brake-lever. The peripheries of the brake-wheels are also surrounded by a casing O, concentric with the rim or tire of the brake-wheel and separated therefrom by a space *o*, in which the brake-band is placed. There are also slots P P' in this casing for the passage of the brake-bands to connect with the rods G and G' and bell-cranks L L'. This casing O is held fixed by means of conical frame Q, secured to the axle. When the brake-band is loosened, it will lie in the space between the casing and periphery of the wheel against the casing, which will hold it from sagging upon the wheel or rattling or vibrating.

Having now fully described my invention, what I claim, and desire to protect by Letters Patent, is—

1. In combination, brake-wheels, a brake-band upon each wheel, a brake-lever and connection between said brake-lever and one end of each brake-band, bell-crank levers, one for each brake-band, the end of one brake-band opposite to that connected with the brake-lever being connected to one bell-crank and the end of the other brake-band opposite to that connected with the brake-lever being connected to the other bell-crank and a connecting-rod connecting said bell-cranks.

2. In combination, brake-wheels, a brake-band upon each wheel, a brake-lever, a rock-shaft operated by said lever, connections between said rock-shaft and one end of each of

said brake-bands, bell-crank levers, one brake-band at its end opposite to its connection with the rock-shaft being connected to one of said bell-crank levers, the other brake-band at its  
5 end opposite to the connection with the rock-shaft being connected to the other of said bell-crank levers and a connecting-rod connecting said bell-crank levers.

In testimony of which invention I have hereunto set my hand, at Trainer, Pennsylvania, on this 28th day of July, 1903.

LEE S. CHADWICK.

Witnesses:

N. B. RINGLY,  
GEO. B. HARVEY.