

(No Model.)

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W. H. HUDSON.

CAR BELL.

No. 363,958.

Patented May 31, 1887.

Fig. 2

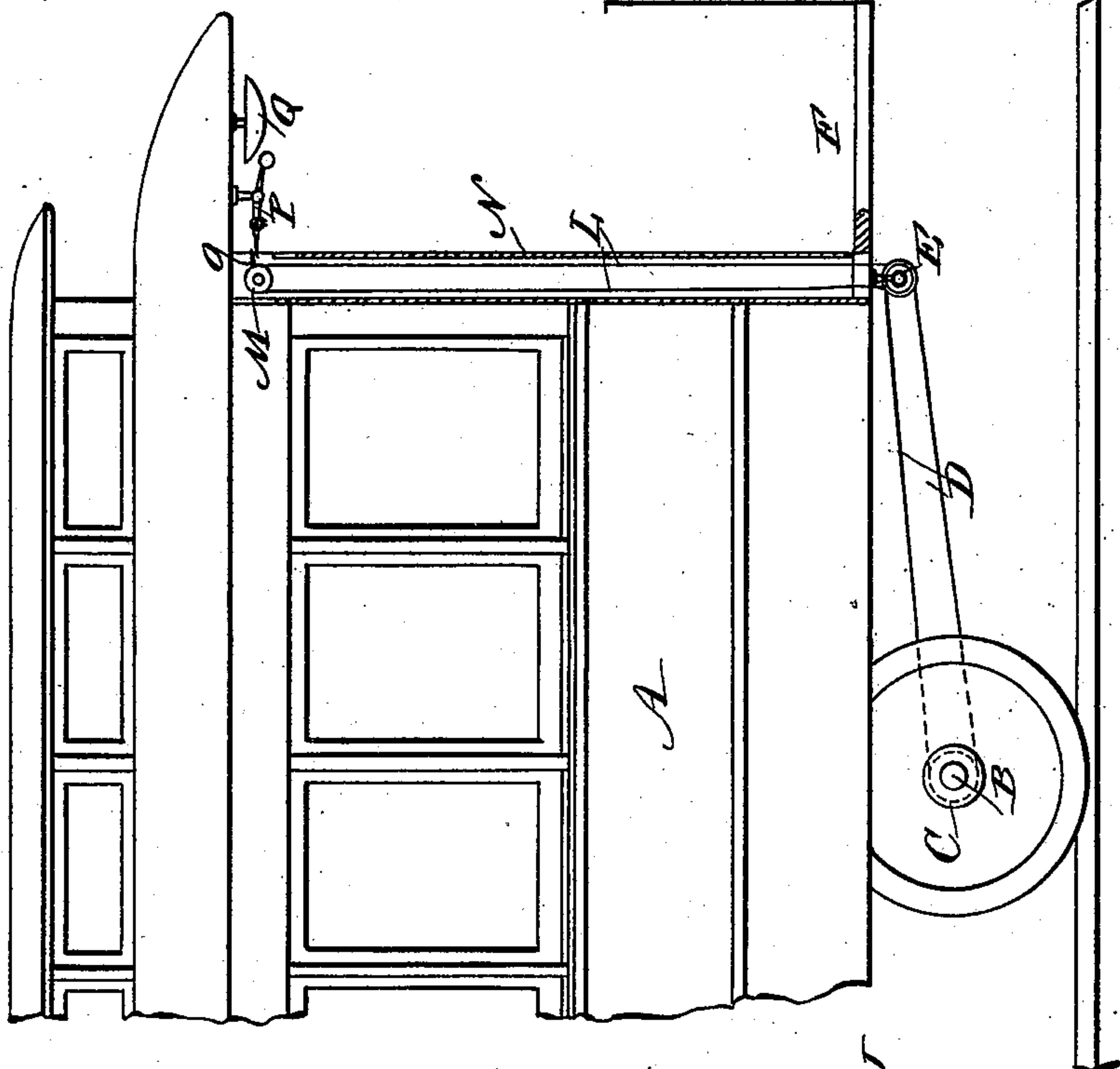
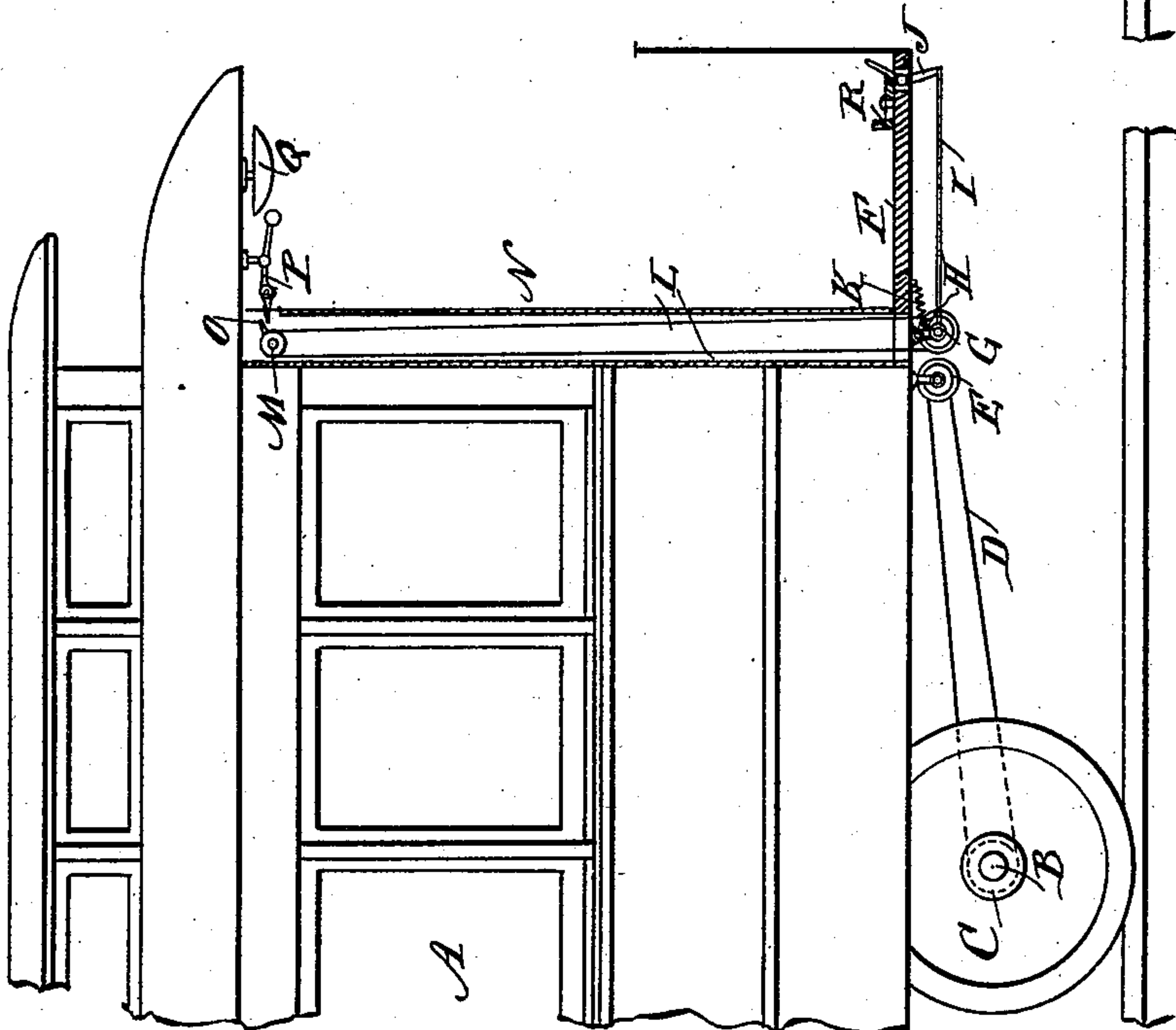


Fig. 1



WITNESSES:

*C. Novaux*  
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INVENTOR:

*W. H. Hudson*  
BY *Munn & Co.*  
ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

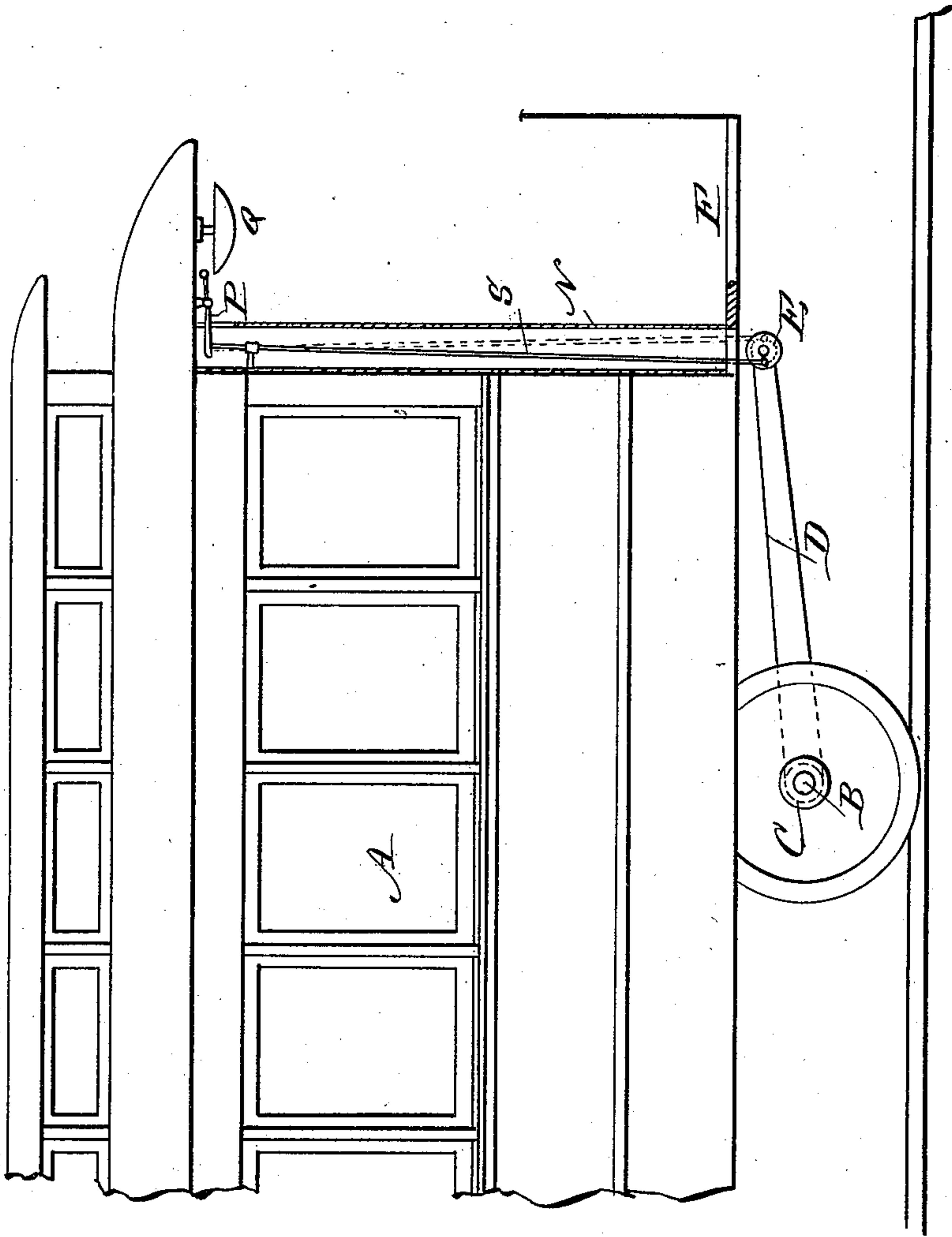
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*Fig. 3*



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# UNITED STATES PATENT OFFICE.

WILLIAM H. HUDSON, OF NEW YORK, N. Y., ASSIGNOR TO HUDSON & ZELTNER, OF SAME PLACE.

## CAR-BELL.

SPECIFICATION forming part of Letters Patent No. 363,958, dated May 31, 1887.

Application filed July 8, 1886. Serial No. 207,466. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. HUDSON, of the city, county, and State of New York, have invented a new and Improved Car-Bell, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved car-bell operated from the axle of the car when the latter is in motion.

The invention consists of various parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a car, partly in section, and provided with my improvement; and Figs. 2 and 3 are similar views of modified forms.

The car A, of any approved construction, is provided with the usual axle, B, which rotates when the car is in motion. On the axle B is secured a pulley, C, over which passes an endless belt, D, which also passes over a pulley, E, having a concentric friction-roller mounted in suitable bearings secured to the under side of the bottom of the car at or near the rear of the platform F.

A pulley, G, having a concentric friction-roller, is mounted to rotate in an arm, H, pivoted to the under side of the bottom of the car in close proximity to the pulley E, so that the friction-roller of the pulley G can be thrown into contact with the friction-roller on the pulley E, which movement is accomplished by a link, I, connecting the pivoted arm H with the bell-crank lever J, pivoted to the platform F, and having its upper end projecting above the same. A spring, K, holds the pulley G and its connections in the former position, as shown in Fig. 1—that is, disconnected from the pulley E.

An endless belt, L, passes over the pulley G and also over the pulley M, mounted in suitable bearings, near the roof of the car A, in a box or casing, N, secured to the front wall of the car A. An arm, O, is attached to the front of the pulley M, and comes in contact at

every revolution of the pulley M, with the striker P, operating on the bell or gong Q, both being mounted on the front part of the roof of the car above the platform F.

The operation is as follows: It will be seen that when the car A is in motion the endless belt D will rotate the pulley E, and when the operator presses on the bell-crank lever J the friction-roller on the pulley G is thrown into contact with the friction-roller on the pulley E, which will cause the pulley G to rotate. This rotary motion of the pulley G is transmitted to the pulley M by means of the endless belt L, and the arm O then acts at every revolution of the pulley M on the striker P, which sounds the bell or gong Q. As soon as the operator releases the pressure on the crank-lever R the spring K forces the swinging arm H and its connections to assume their former position. The bell-crank lever J can be locked, when in a depressed position, by means of a lug, R, of any suitable construction, and placed on the upper side of the platform F, whereby the bell is continuously sounded as long as the car is in motion. The continuous sounding of the bell Q may also be accomplished as shown in Fig. 2, in which the endless belts D L pass over the pulley E, or as shown in Fig. 3, in which the pulley E is connected with the striker P directly by means of the pitman S, the lower end of which is pivoted to a crank-pin on the said pulley E, and the upper end is directly pivoted to the striker P. The striker can be disconnected from the arm O on the pulley M by providing the inner part of the striker P with a knee-joint, as shown in Figs. 1 and 2.

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

1. The combination of a car-bell and striker with a pulley having an arm operating on said striker, and an endless belt passing over the said pulley and operated from the axle of the car when the same is in motion, substantially as shown and described.

2. The combination of a bell and striker with a pulley having an arm, a pulley receiving a rotary motion from the axle of the car when the same is in motion, and an endless

belt passing over the said pulleys, substantially as shown and described.

3. In a car-bell, the pulley C on the axle B of the car, the pulley E, hung upon the under side of the car-bottom, and the endless belt D, passing over the pulleys C and E, in combination with the pulley G, hung at the rear end of the platform, the endless belt L, the pulley M, having the arm O, and the striker P, operating on the bell or gong Q, said belt L passing over the pulleys G M, substantially as shown and described.

4. In a car-bell, the pulley C on the axle B of the car, the pulley E, having a friction-roller and hung upon the under side of the car-bottom, and the endless belt D, encompassing the pulleys C E, in combination with the pulley G, having a friction-roller and operating the striker P by means of an endless belt, L, encompassing the said pulley G and a second

pulley, M, the swinging arm H, carrying the pulley G, the link I, the bell-crank lever J, and the spring K, said link I connecting the swinging pulley G and bell-crank lever J, and said spring K holding the frictional roller of pulley G normally out of contact with the frictional roller of the pulley E, substantially as shown and described.

5. In a car-bell, the pulleys G and E, arranged for coaction, the arm H, carrying the pulley G, the link I, and the bell-crank lever J, said link connecting said arm and bell-crank lever, in combination with the lug R, holding the bell-crank lever in a locked position, substantially as shown and described.

WILLIAM H. HUDSON.

Witnesses:

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