

(No Model.)

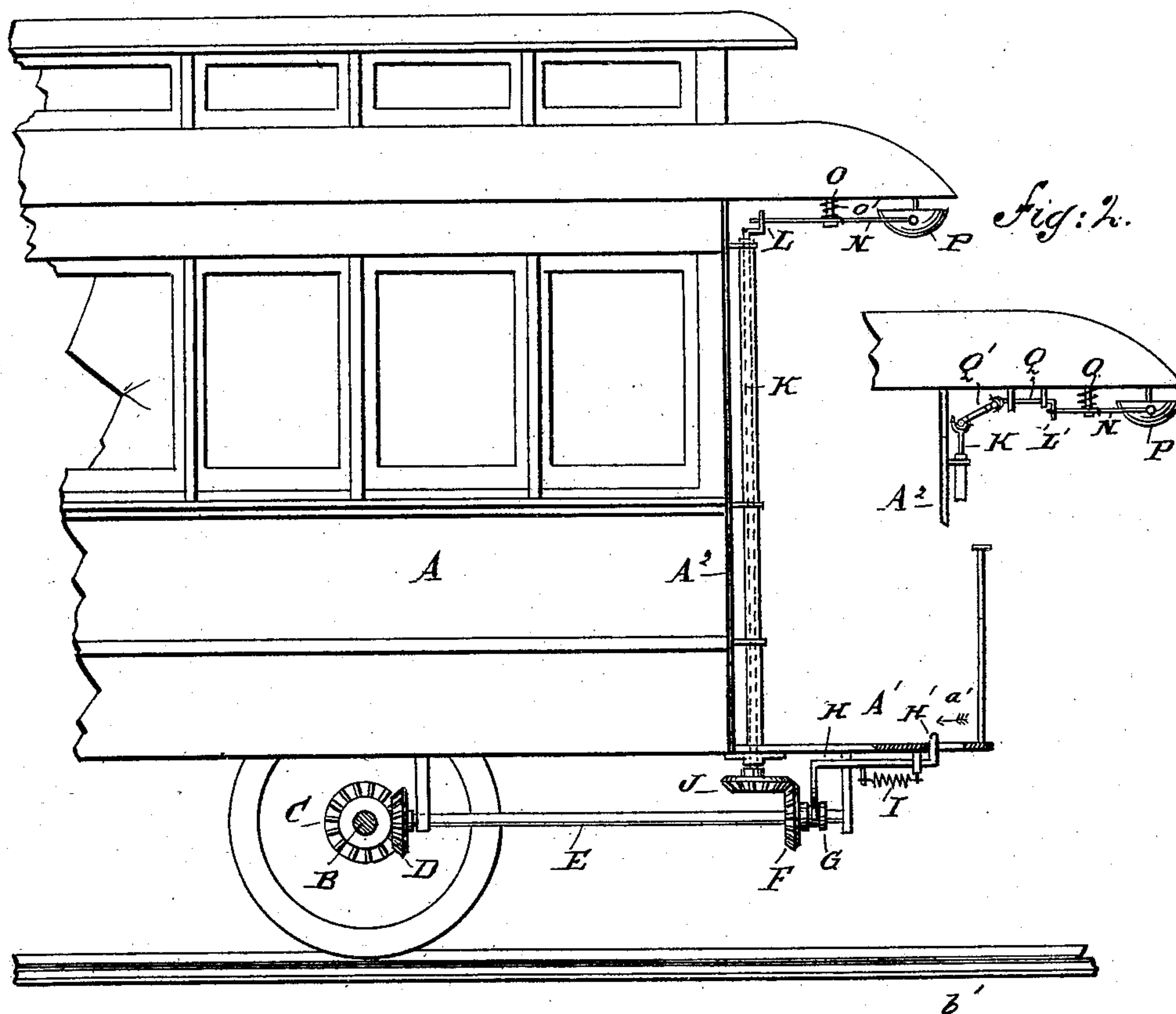
W. H. HUDSON.

CAR BELL.

No. 372,265.

Patented Oct. 25, 1887.

Fig: 1.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM H. HUDSON, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND
JOHN E. ZELTNER, OF SAME PLACE.

CAR-BELL.

SPECIFICATION forming part of Letters Patent No. 372,265, dated October 25, 1887.

Application filed December 14, 1886. Serial No. 221,525. (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 certain new and useful improvements in car-bells, for which an application filed July 8 was allowed November 9, 1886, under the serial number of 207,466.

The invention consists in the construction and arrangement 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 both the figures.

Figure 1 is a side elevation of a car, partly in section, provided with my improvement. Fig. 2 is a side elevation of part of the same, showing a modification.

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 bevel gear-wheel, C, meshing into a bevel gear-wheel, D, attached to the shaft E, having its bearings in suitable hangers secured to the bottom of the car A. On the shaft E is held the beveled gear-wheel F, adapted to turn with and slide on the said shaft E, by means of a key or other device.

The gear F is provided with a hub, G, having an annular recess in which operates a forked lever, H, provided with a foot-piece, H', projecting upward through a slot in the platform A' of the car A. A spring, I, operates on the said forked lever H and holds the latter in an outer position, so that the gear-wheel F is disengaged from the gear-wheel J, adapted to mesh into the said gear-wheel F, and secured to the vertical shaft or rod K, extending upward on the front wall, A², of the car A.

The upper end of the shaft K is formed into a crank-arm, L, operating on the striker N, pivoted on the stud O, secured to the roof of the car A, and adapted to sound the bell or

gong P. A spring, O', presses on the striker N and holds the same in its normal position.

Instead of using the crank-arm L, I may connect the upper end of the shaft K with the horizontal shaft Q by means of a link, Q', universally jointed to the said shafts K and Q, as shown in Fig. 2. The shaft Q is provided with a crank-arm, L', and operates on the striker N in the same manner as the crank-arm L shown in Fig. 1.

The operation is as follows: It will be seen that when the car A is in motion the gear-wheel C imparts a rotary motion to the gear-wheel D and its shaft E, whereby the gear-wheel F is also rotated. When the operator now desires to sound the bell, he presses the foot-piece H' inward in the direction of the arrow a', as shown in Fig. 1, so that the lever H throws the gear-wheel F in contact with the gear-wheel J, which is rotated, and imparts a similar motion to the shaft K, which, with the crank-arm L, operates the striker N and thereby sounds the bell P. As soon as the operator releases the foot-piece H', the spring I forces the lever H to its former position, and thus disengages the gear-wheel F from the gear-wheel J, so that the vertical shaft K ceases to rotate and the bell is prevented from ringing.

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

1. The combination, with a car-bell and striker, of a crank-arm operating directly on the said striker, a shaft carrying the said crank-arm, a beveled gear secured to the said shaft, a beveled gear-wheel adapted to mesh in the said beveled gear-wheel, a shaft carrying the said second beveled gear-wheel, means, as described, for operating the said shaft from the axle of the car, and means for throwing the said second bevel gear-wheel in or out of contact with the other beveled gear, as set forth.

2. In a car-bell, the bevel gear-wheel C, secured to the axle B of the car, the bevel gear-wheel D, meshing into the said bevel gear-wheel C, the shaft E, mounted in suitable bearings attached to the car and carrying the gear-wheel D, the gear-wheel F, turning with and

sliding on the said shaft E, and the lever H, for sliding the said bevel gear-wheel F, in combination with the bevel gear-wheel J, the shaft K, carrying the said bevel gear-wheel J, the crank-arm L, secured to the said shaft K, the 5 striker N, operated by the said crank-arm L, and the bell P, sounded by the said striker N, substantially as shown and described.

3. In a car-bell, the shaft E, rotated from 10 the axle of the car when the same is in motion, the bevel gear-wheel F, turning with and sliding on the said shaft E, the lever H, adapted

to move the said bevel gear-wheel F, and the spring I, operating on the said lever H, in combination with the bevel gear-wheel 15 J, the shaft K, carrying the said bevel gear-wheel J, and the crank-arm L on the said shaft K, and operating the striker N, sounding the bell, substantially as shown and described.

WILLIAM H. HUDSON.

Witnesses:

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