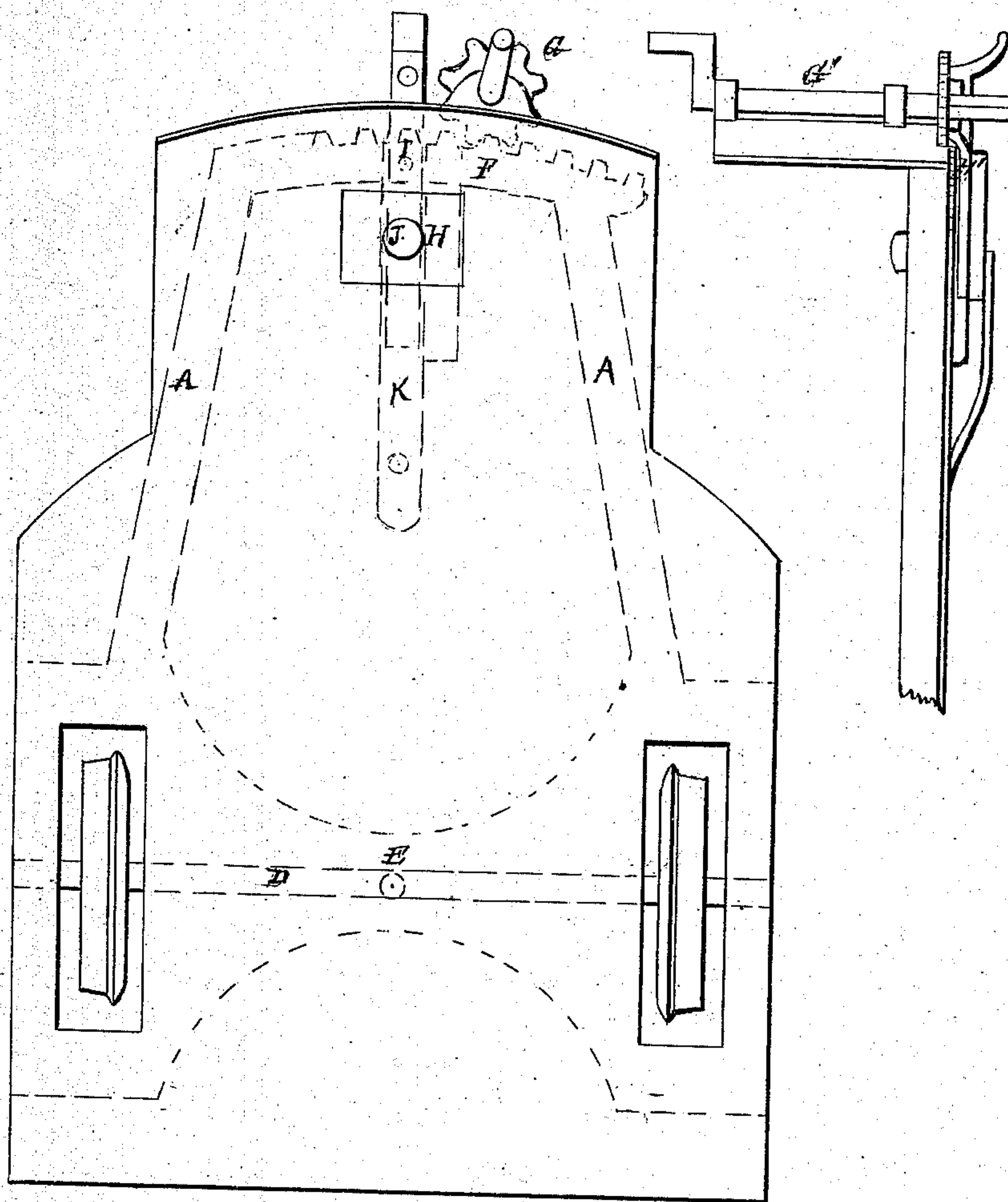


J. BERRY.
STREET CAR TRUCK.

No. 103,285.

Patented May 24, 1870.



Witnesses.

David P. Smith
L. M. Smith

Inventor.

John Berry

United States Patent Office.

JOHN BERRY, OF SAN FRANCISCO, CALIFORNIA.

Letters Patent No. 103,285, dated May 24, 1870.

IMPROVEMENT IN STREET-CAR TRUCKS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN BERRY, of the city and county of San Francisco, State of California, have invented certain new and useful Improvements in "Street-railroad Cars;" and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and to the letters marked thereon.

My invention relates principally to improvements in the construction of the trucks of street-railway cars, whereby the well-known difficulties attendant upon turning curves is obviated, and consists in pivoting each truck independently to the bottom or platform of the car, so that the trucks can be moved laterally, and conform to the curvature of the road by simply operating the brake-spindle.

The truck-frames extend to the end of both platforms of the car, and are provided with a rack, the teeth of which are engaged by a pinion upon the brake-spindle, which is forced back against the platform by a spring when not in use, and admits of the brake-spindle being employed in the ordinary way again.

In the drawings—

Figure 1 represents a plan of my invention.

Figure 2, a side elevation.

Like letters refer to like parts.

To enable others skilled in the art or science to which it most nearly appertains to make and use my invention, I will proceed to fully describe its construction and operation.

A represents the truck-frame, in which the axle D has its bearings. The frame is pivoted to the bottom of the car by the pin E, and extends to the end of the platform, and is nearly flush with the said platform.

A curved rack, F, is provided for the end of the frame, the teeth of which are engaged by the pinion G on the brake-spindle G', which causes the truck-frame, and with it the wheels, to move right or left, as desired.

The end of the truck-frame rests on a block, H, which is provided with a forked arm, H', which guides the brake-spindle beneath the pinion. The pinion is loose on the spindle, and drops when the forked arm is pressed down, and is carried back again to its position when the pressure is removed from the arm.

The arm moves in the block on pins I I, by pressure of the foot upon a bolt, J, attached to the arm H', which passes up through the platform of the car, and a flat spring, K, holds the arm to its place against the lower face of the block.

In operating my device, sufficient play is given to

the pinion and brake-spindle to allow the pinion to fall by pressure upon the bolt, in order to engage in the teeth of the rack at the end of the truck frame, when, by turning the brake-spindle to the right or left, the frame is moved, and with it the wheels, at the desired angle, according to the direction of the curve of the track, and, when the pressure is removed from the bolt, the arm flies back to its position against the block, by means of the spring, and carries with it the pinion, when the brake-spindle may be employed as usual to stop the car, for it is not intended that the position of the pinion on the spindle shall interfere with its perfect working in the capacity of a brake-spindle.

If the block in which the end of the truck-frame moves and which supports it should not be found sufficient, slots may be made in the frame, and move on other supports or bolts, with heads, attached to the bottom of the car.

My improvement will also be found a great auxiliary in getting the car back upon the track after it has been thrown off.

I am aware that various attempts have been made to obviate the difficulties attendant upon turning curves with cars on street-railways by dividing the axles and the use of box-couplings, or by the employment of an independent wheel to overcome the sliding process or friction of the fixed wheels, and of other devices too numerous to mention in this connection; but none, I believe, have been found so efficient for the purpose as my own invention.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

1. The rack F at the end of the frame, and pinion G attached to the brake-spindle, so that, by operating the said brake-spindle, the position of the truck-frame and wheels can be changed from left to right or right to left, substantially as and for the purpose specified.

2. The forked arm H', which guides the lower end of the brake-spindle moving on the pins I I, in the block H, substantially as described.

4. The spring K, for holding the arm against the block H, and the foot-bolt J, passing out through the platform for pressing down the arm, substantially as described.

In testimony whereof I have hereunto set my hand and seal.

JOHN BERRY. [L. S.]

Witnesses:

C. W. M. SMITH,
H. S. TIBBEY.