

John North Car Starter.

No. 121,540.

Fig. 1.

Patented Dec. 5, 1871.

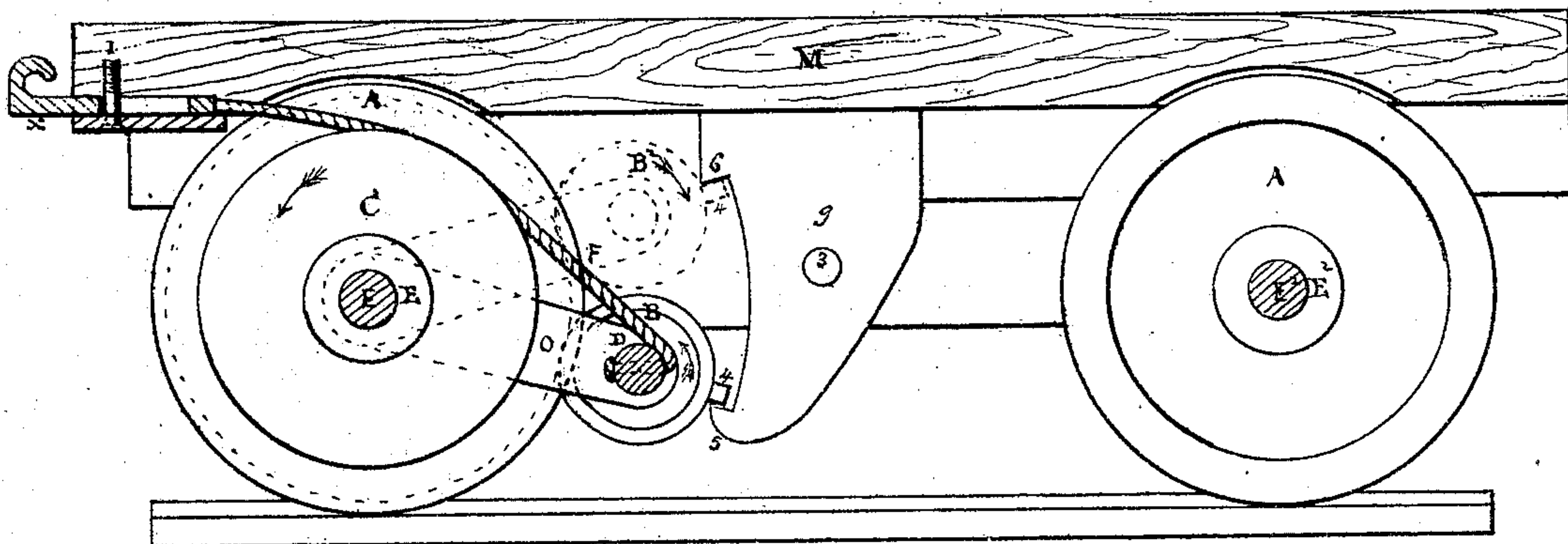
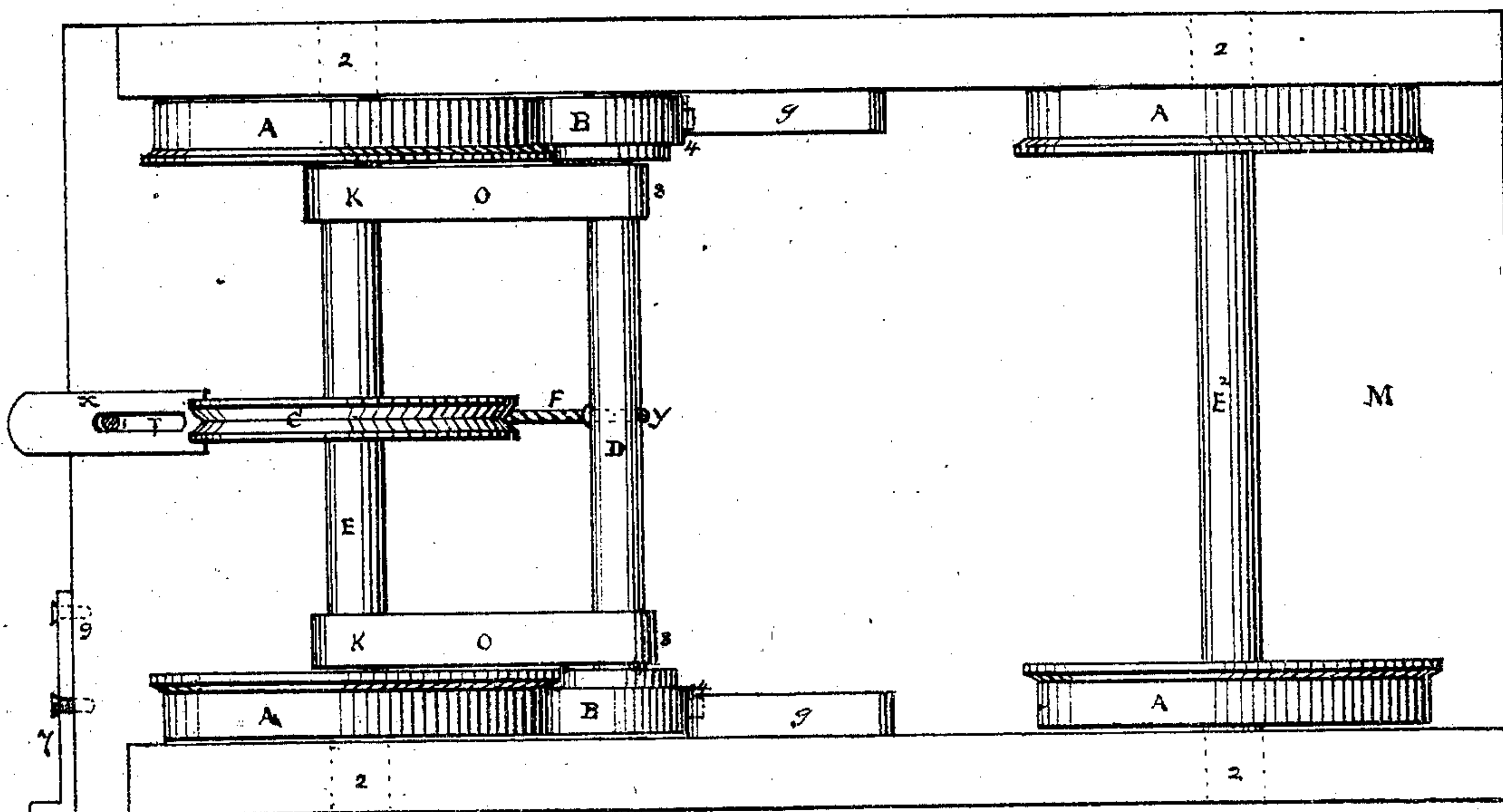


Fig. 2.



Witnesses.

W. H. Wiggins
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UNITED STATES PATENT OFFICE.

JOHN NORTH, OF NEW YORK, N. Y., ASSIGNOR OF ONE-FOURTH HIS RIGHT TO AMOS J. OSGOOD, OF CUMBERLAND, MAINE, AND OF ONE-FOURTH HIS RIGHT TO GEORGE S. PLYMPTON, OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN CAR-STARTERS.

Specification forming part of Letters Patent No. 121,450, dated December 5, 1871.

To all whom it may concern:

Be it known that I, JOHN NORTH, of New York, in the county and State of New York, have invented a new and Improved Device for Starting Railroad Cars, of which the following is a specification:

The nature of my invention relates to certain machinery applied to the running-gear of street railroad cars so as to overcome the dead weight and sudden strain in starting the cars, and it consists in devices hereinafter more specifically described and claimed.

In the accompanying drawing, Figure 1 is a longitudinal section of a car, showing my invention. Fig. 2 represents the same, bottom side up.

In constructing my device I attach loosely to the axle E, at K, two levers, O O, the opposite ends of which, at S, have a shaft, D, passing through them, and made fast to the ends of shaft D. I place the eccentric cams B B, having a pin, 4, fastened to them and resting on catch on hook 5 when in position to start the car. To the shaft D is a cord, F, or chain fastened at Y, which is carried over the pulley C hung to axle E, and made fast to the slotted hook. This hook is held in position by the screw or pin I. The hook X has a slot, T, to allow sufficient motion. A catch, 7, is hung at 9 by a screw, and may be thrown into slotted hook X when the cam B is required

to be held up. M M are the frame-work of the car, and g the catch-hook screwed to the side of the frame. On power being applied to the slotted-hook X the cam B wedges fast to the outer surface of the car-wheel A, and making a lever-power in starting the car of about three to one of the ordinary way of starting cars. The cam B, as hung to the levers O O, moves in the arc of the circle of wheel A, as shown in dotted lines B². When the pin 4 comes in contact with the hook b the cam B² is turned away from the wheel A, as shown by the arrow marked thereon, which relieves all friction from the running-gear of the car, as all the pull in drawing the car is against the pin I through the slotted hook X. When the car is stopped the levers O O and cam B will drop of their own weight, ready to start and hold the car from running back when stopped on an up-grade.

Having described my invention, I claim—

1. The levers O O, eccentrics B B, shaft D, connecting-rope on chain F, slotted hook X, in combination with the car-wheel A, for the purposes described.

2. The catch-hook g, in combination with eccentric B and pin 4, for the purposes described.

Witnesses:

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