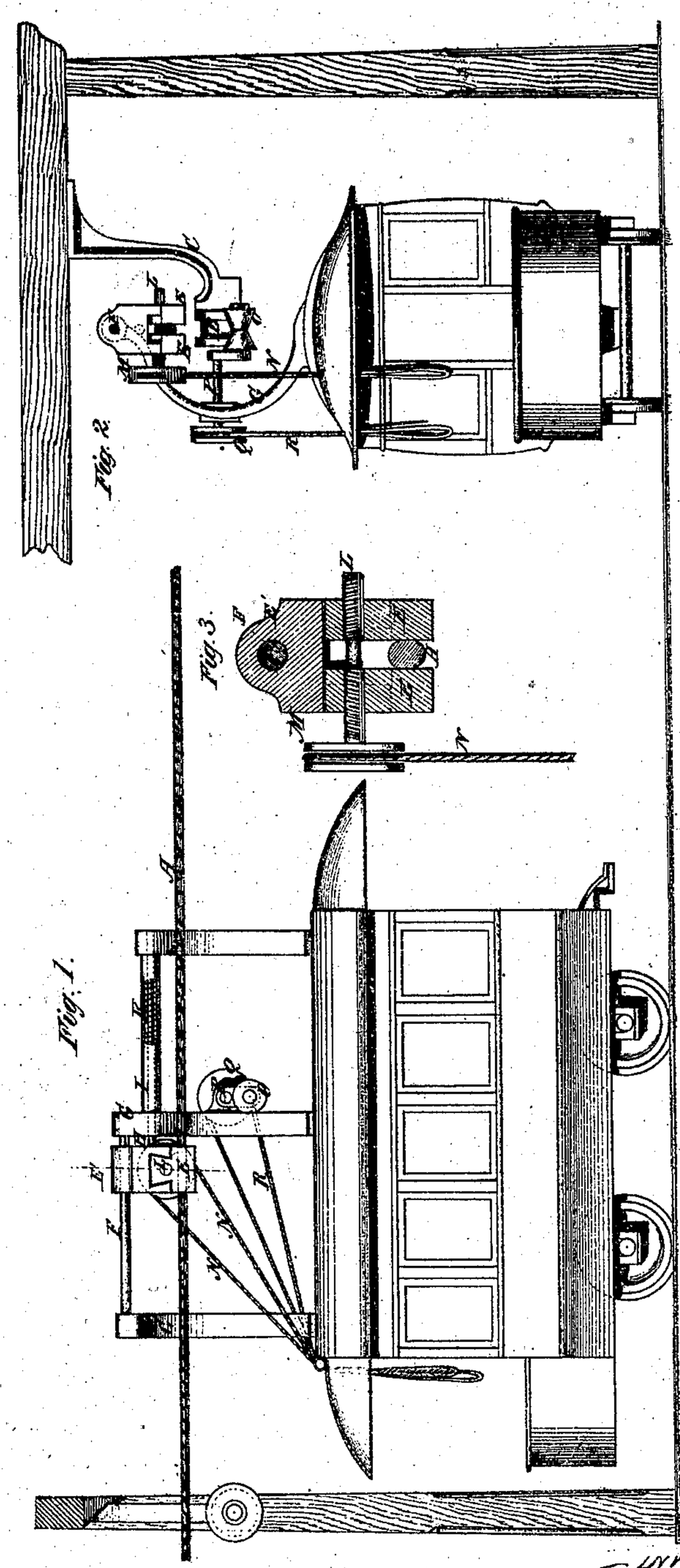
G. T. Beauregard,
Car Propeller.

No. 97,343. Patented Nov. 30, 1869.



WITNESSES.

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G. T. BEAUREGARD, OF NEW ORLEANS, LOUISIANA.

Letters Patent No. 97,343, *dated November* 30, 1869.

IMPROVEMENT IN MACHINERY FOR PROPELLING CARS.

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, G. T. BEAUREGARD, of New-Orleans, in the parish of Orleans, and State of Louisiana, have invented new and improved Machinery for Propelling Cars and Boats; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to new and useful improvements in machinery or apparatus for propelling cars and other vehicles on land, and boats on canals or rivers, by means of overhead wire or other rope, deriving motion from stationary engines or other power, at intervals along the route.

The invention comprises an arrangement of clamping-devices, for engaging and disengaging the rope, having a constant movement above roller or pulley-supports for it, suspended upon framing along the road, the clamp being connected to brackets, upon the top of the car, by a spring or yielding connection, to relieve the car or boat from injurious shocks at starting, and arranged to be operated by the conductor on the car, vehicle, or boat.

The invention also comprises an arrangement of means for raising the rope, when it is to be clamped for setting the car in motion, the pendent supports of which are necessarily lower than the clutch, to permit it to pass over them, also arranged for operation by it person standing on the car.

Figure 1 represents a side elevation of a car provided with my improvement, also showing the cord and a section of the suspending framing.

Figure 2 represents an end elevation of the same.

Figure 3 represents a sectional elevation of the clamp.

The cord A is made in long sections, and caused, by any suitable driving-mechanism, to run over pulleys or roller-guides B, suspended on brackets C, from any suitable framing, arranged along the route, at suitable intervals.

The said cord is kept in constant motion, and may be arranged to run up one track and down the other, when double tracks are used.

The cars D are provided with clamping-jaws E, suspended from a block, E′, on a rod, F, supported by curved brackets G, rising from the top of the car, above the rollers B, the suspending-brackets of which are also curved, the curvature being in the direction opposite to that of the brackets G, permitting the block and clamp to be carried above the said roller-supports of the cords, without any interference of either set of brackets.

The block G is capable of sliding on the rod F, and is provided with a piston-rod, H, working in a tube, supported between the central bracket G and another behind it.

This tube carries a spiral spring, K, wound upon the rod, and bearing against the piston at one end and the end of the tube at the other, and has a tendency to keep the block E′ drawn back against or near to the central bracket G.

The rear end of the tube is provided with an air-passage and valve, opening inward, to admit air behind the piston when forward, to prevent the too sudden return of the block when the cord is let go.

The clamp consists of a pair of movable jaws, E, capable of sliding to and from each other in the block E′, and a clamping-screw is provided with an operating-pulley, M, over which a cord or belt, N, works, the same being arranged for the attendant to operate, when standing on the platform of the car, or it may be at any other convenient place.

By turning this wheel M, the screw *d*, which is right and left-threaded will move the pins to and from each other, and clamp the cord or let it go.

O represents an elevating-roller, mounted on a wrist-pin of a crank-shaft, P, supported on the bracket just behind the clutch, and arranged to be turned by a cord, R, working over a pulley, Q.

The said cord is also arranged to be reached by the conductor, on the platform or other part of the car or boat.

This roller O may be kept in an elevated position, so that the attendant will only have to operate the clamp for stopping and starting the car.

When the clamps are screwed up against the cord, they will at first slip, and at the same time the spring will yield, and allow the clamp to move in advance of the car, sufficiently to set it in motion without undue shocks or jars.

Instead of placing the propelling-cord and clutching-devices above the car, they may be placed at the side.

I propose to make use of this apparatus for propelling boats on canals, and for other similar purposes.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

1. The combination, with a car or other vehicle, or a boat or other vessel, and a constantly-moving cord, A, suspended above or at the side of the car or vessel to be propelled, of the reciprocating block E′, clamping-jaws E, right and left-threaded screw-piston H, and spring K, substantially as specified.

2. The combination of the cord A and clamping-jaws of the elevating-roller, cranked shaft P, and operating-cord R, substantially as specified.

3. The combination, with the clamping-jaws E and operating-screw L, of the pulleys M and operating-cord, arranged substantially as specified.

4. The arrangements of the suspending-brackets C and the brackets G, for carrying the clutch above the cord, substantially as specified.

Witnesses: G. T. BEAUREGARD.

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