(No Model.)

L. B. EGGLESTON & P. BRINKERHOFF.

CABLE RAILWAY.

No. 306,909. Patented Oct. 21, 1884.

Fig. 1.

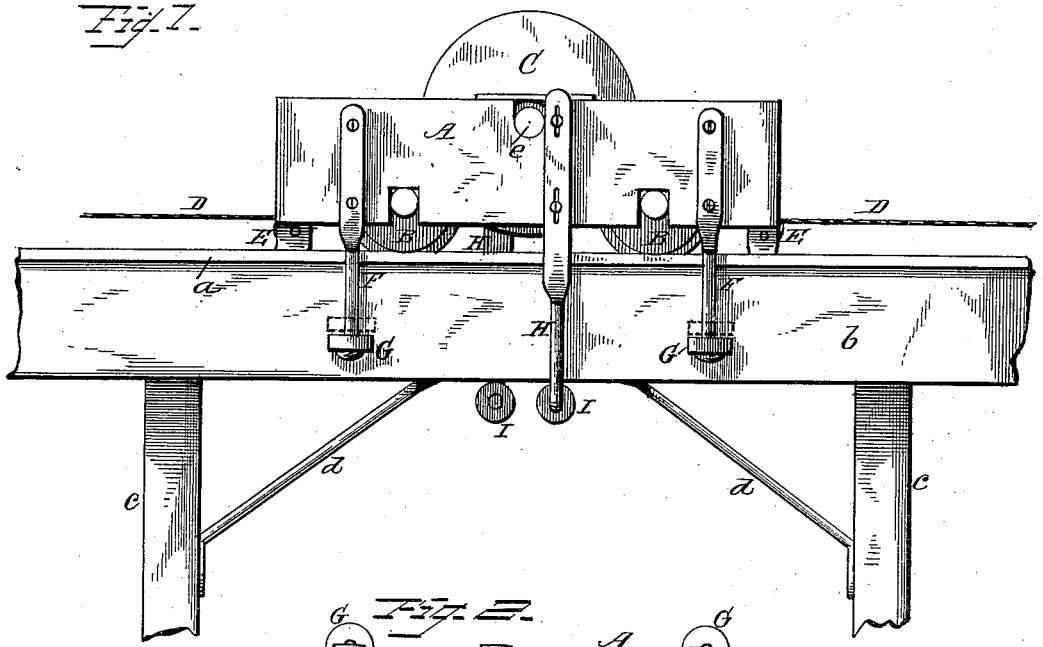


Fig. 2.

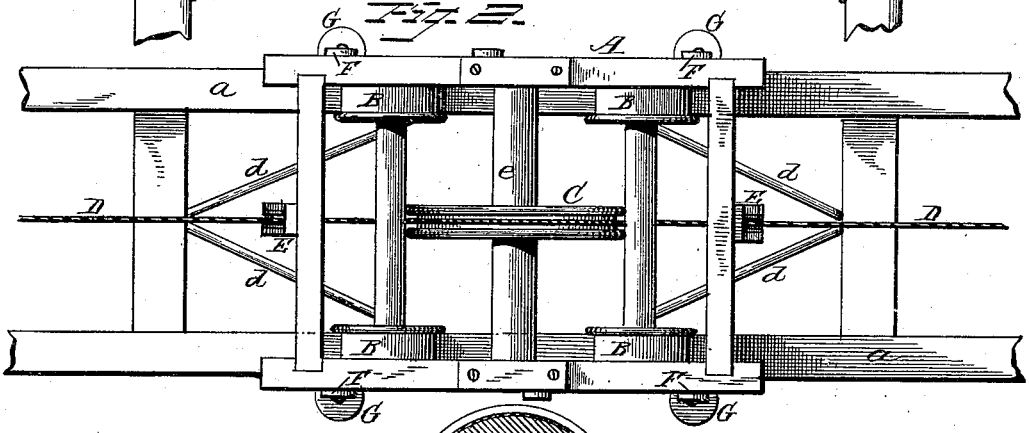
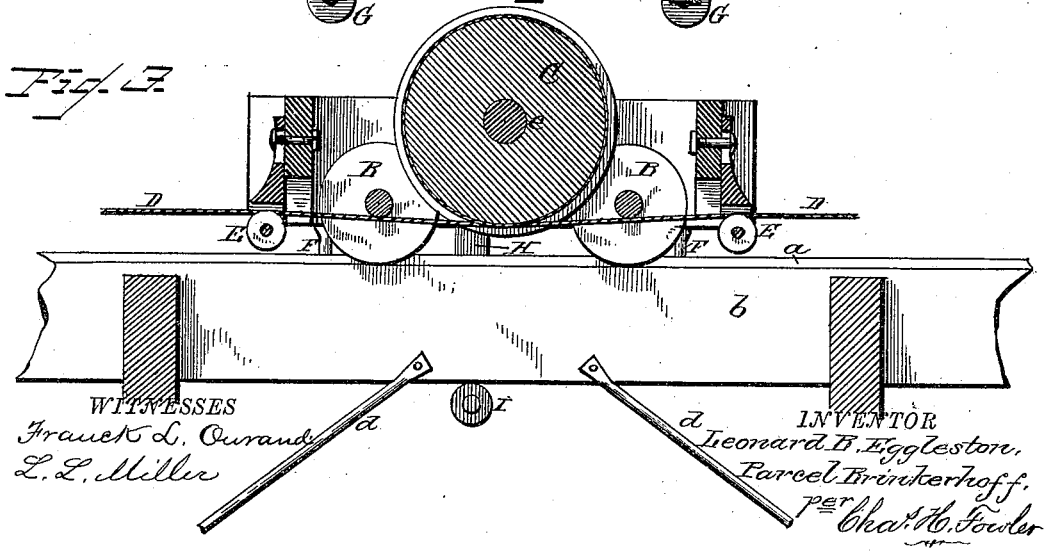


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

LEONARD B. EGGLESTON AND PARCEL BRINKERHOFF, OF BATTLE CREEK, MICHIGAN.

CABLE RAILWAY.

SPECIFICATION forming part of Letters Patent No. 306,909, dated October 21, 1884.

Application filed May 17, 1884. (No model.)

To all whom it may concern:

Be it known that we, LEONARD B. EGGLESTON and PARCEL BRINKERHOFF, citizens of the United States, residing at Battle Creek, in the county of Calhoun and State of Michigan, have invented certain new and useful Improvements in Cable Railways; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a side elevation of our invention; Fig. 2, a top plan view thereof, and Fig. 3 a longitudinal central section.

The present invention has relation to certain new and useful improvements in cable railways; and it consists in the details of construction, substantially as shown in the drawings, and hereinafter described and claimed.

In the accompanying drawings, A represents the truck of a car, provided with the usual flanged wheels, B, supported by the rails *a* of the track. The rails *a* are connected in any suitable manner to the side stringers, *b*, which are supported by suitable posts, *c*, connected by braces *d*. The truck A has a grooved drum, C, rigidly secured to a transverse revolving or rotary shaft, *e*, receiving its motion by steam or other power, as found most convenient. A cable, D, passes around the drum C in the groove, the cable being brought down under the drum, the ends crossing each other, extending in opposite directions to the ends of the road and suitably fastened thereto.

At the ends of the truck A are grooved pulleys E adjustably connected thereto, over which passes the cable D, the vertical adjustment of the pulleys tightening the cable when the pulleys are raised, this being of importance when the cable becomes too loose to properly act in connection with the drum.

To the sides of the truck A, near each end, are secured hangers F, to the lower ends of which are journaled horizontal friction-rollers G, to bear against the sides of the stringers *b* and keep the truck from jumping the track. It should be understood that the friction-rollers G have a vertical play or motion on the hangers F, to adapt them to any up-and-down motion of the truck or any irregularities in the surface of the stringers, and thus prevent the rollers from binding.

To the sides of the truck A are adjustably secured hangers H, of sufficient length to extend on a plane below that of the stringers *b*, the ends being bent at an angle inwardly under the stringers to form journals for friction-rollers I, which vertically revolve, their peripheries bearing against the under side of the stringers. These rollers keep the truck in position when it attempts to jump the track, and it should be understood that the peripheries of the rollers are only brought in contact with the stringers to revolve when the truck attempts to jump the track. The adjustment of the hangers is to adapt the rollers I to the varying widths of the stringers used.

Any suitable power may be used in imparting motion to the grooved drum, and the stringers may be supported by one or two posts at the ends, as found desirable, or any suitable frame-work may be substituted so long as the under side or edge of the stringers will be unobstructed to allow the rollers I to bear against it at any point along its length.

We are aware that it is not new to provide a car or car-truck with a revolving grooved drum and a rope or chain passing around the same, crossing at the under side thereof, and extending in opposite directions over guide-pulleys, so that as the drum revolves it will pull upon the rope or chain and form an immovable fulcrum to give motion to the truck.

We are further aware that car or car-trucks have been provided with guard-rollers to bear against the side and under edge of the stringers or tracks to prevent them from jumping or leaving the track. We therefore do not wish to be understood as claiming, broadly, the construction above referred to; but,

Having fully described our invention, what we do claim as new, and desire to secure by Letters Patent, is—

1. In a cable railway, a suitable car-truck having at its ends vertically-adjustable pulleys and a grooved drum secured to a rotary shaft, in combination with a suitable cable, the same passing over the drum, crossing at the bottom thereof, and extending over the

adjustable pulleys, substantially as and for the purpose set forth.

2. In a cable railway, the combination, with a suitable cable, of a car-truck provided with a rotary grooved drum, around which the cable passes, adjustable pulleys connected to the ends of the truck, friction-rollers bearing against the sides of the stringers supporting the rails, and having a vertical as well as a horizontal motion, and friction-rollers adapted to bear against the under side of the stringers, substantially as and for the purpose specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

LEONARD B. EGGLESTON.
PARCEL BRINKERHOFF.

Witnesses:
EDWARD FRENCH,
A. H. BRIGGS.