No. 843,834. PATENTED FEB. 12, 1907.

L. J. MARTINEAU.

HEADLIGHT OPERATING MECHANISM.

APPLICATION FILED NOV. 7, 1906.

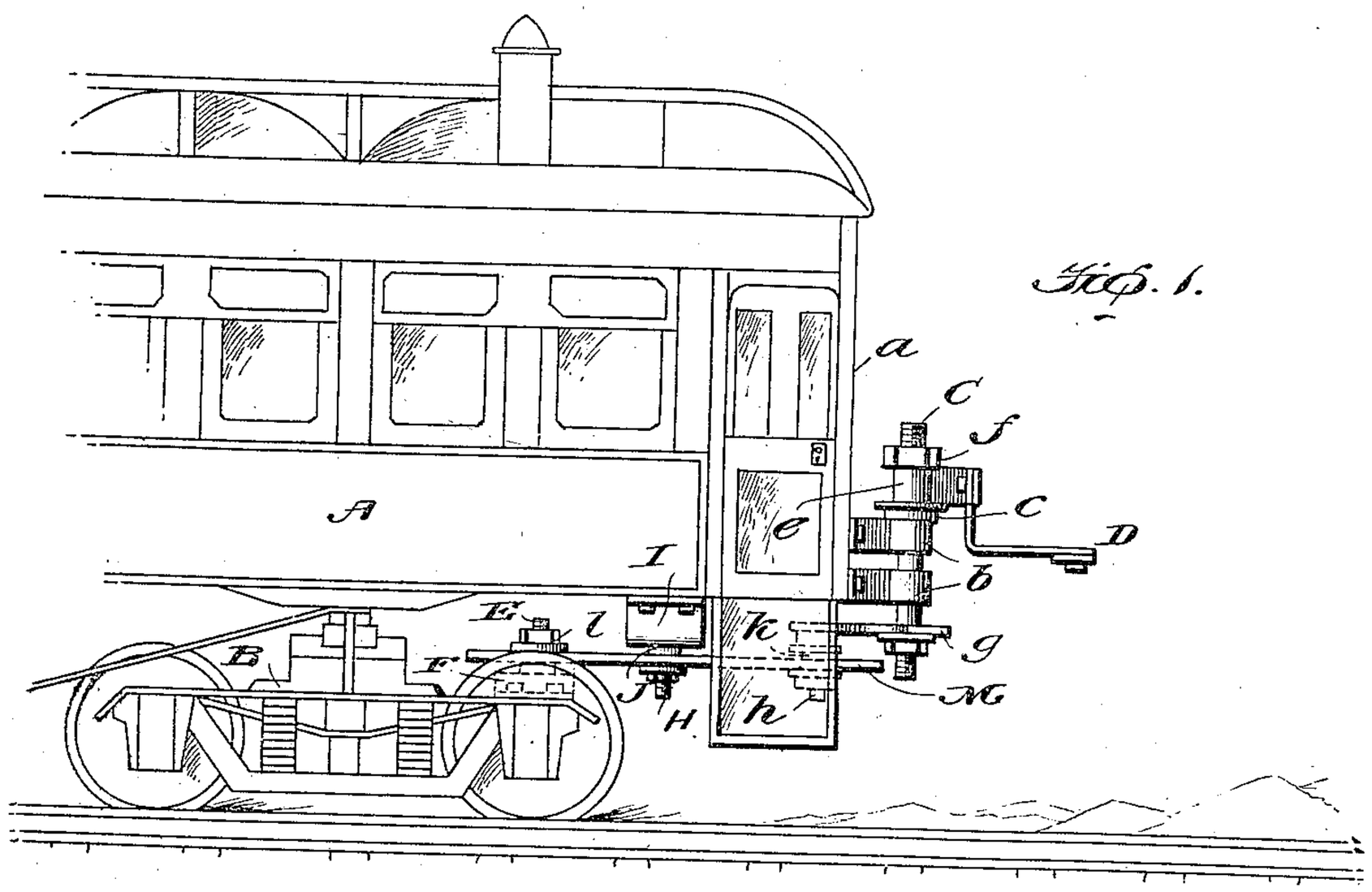

Fig. 1.

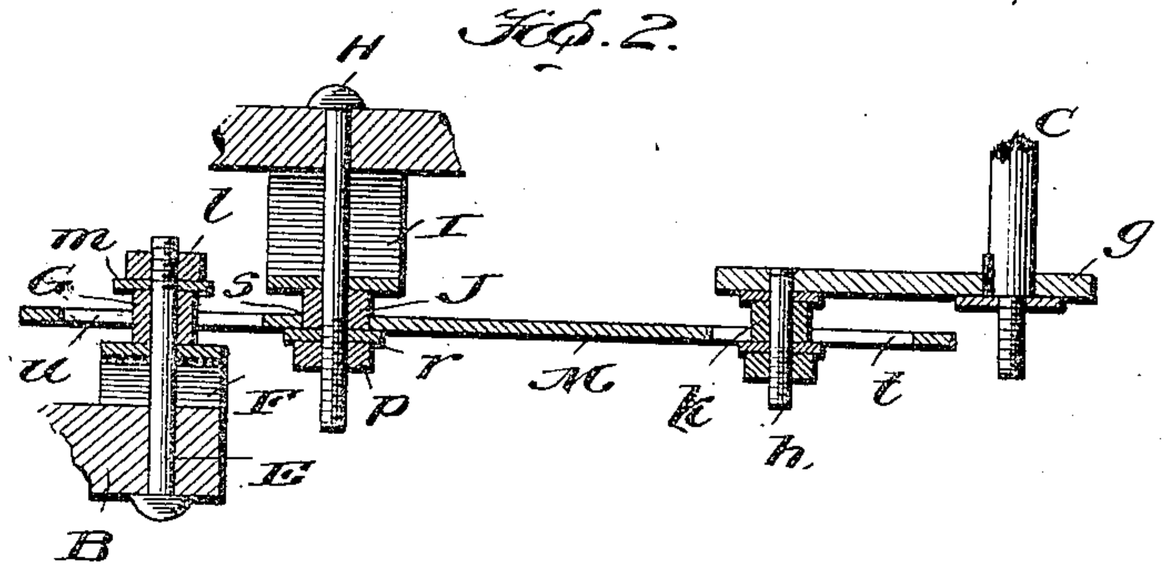

Fig. 2.

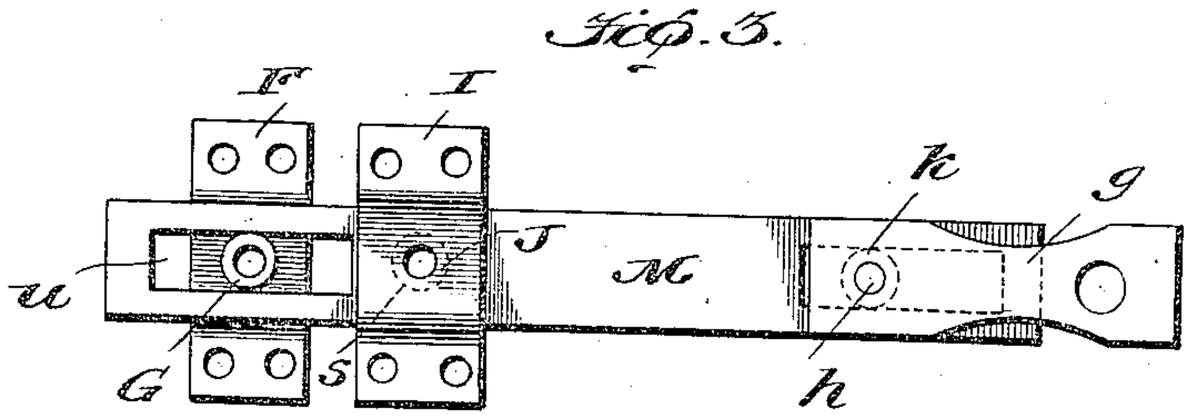

Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

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HEADLIGHT-OPERATING MECHANISM.

No. 843,834. Specification of Letters Patent. Patented Feb. 12, 1907.

Application filed November 7, 1906. Serial No. 342,344.

To all whom it may concern:

Be it known that I, LOUIS J. MARTINEAU, citizen of the United States, residing at Franklin, in the county of Norfolk and State of Massachusetts, have invented new and useful Improvements in Headlight-Operating Mechanism, of which the following is a specification.

My invention pertains to headlight-operating mechanism for cars, and it contemplates the provision of a simple and durable mechanism for turning a headlight synchronously with the swinging of the pivoted truck of a car, as when the car is turning a corner, so as to direct the beam of light from the headlight in the direction the car is to take subsequent to making the turn.

The invention will be fully understood from the following description and claim when the same are read in connection with the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of one end portion of a motor-car equipped with my novel mechanism. Fig. 2 is a detail longitudinal vertical section illustrating the connection intermediate the car-truck and the vertical shaft of the headlight-carrier comprised in my improvements. Fig. 3 is a view illustrating the said connection in plan and as removed from the car.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which—

A is the body of a motor-car, and B is a truck pivotally connected with the body in the ordinary well-known manner with a view of better adapting the car to pass around curves.

On the dash *a* of the body A are forwardly-extending bearings *b*, and in these bearings is journaled a vertical rock-shaft C, having at *c* a collar which bears on the upper bearing *b*, and in that way holds the shaft against downward movement. The said shaft C is equipped with a headlight-carrier D, which is preferably of angular form, as shown, and is provided on the rear side of its upright portion with a sleeve *e*, which is clamped between a nut *f* and the before-mentioned collar *c*, and in that way fixed on the shaft C so as to turn therewith. At a point adjacent to its lower end and in a plane below the under side of the car-body A the shaft C is provided with a crank-arm *g*, from the outer portion of which depends a bolt *h*, carrying an antifriction-roller *k*, Fig. 2, for a purpose presently set forth.

E is an upright bolt fixedly connected to and rising from the forward portion of the truck B.

F is a standard-brace fixed on the upper side of the truck and receiving the upper portion of the bolt E.

G is an antifriction-roller, which is loosely mounted on the bolt E and bears on the standard-brace F and is retained on the bolt through the medium of a nut *l* and a washer *m*.

H is a bolt fixed to and depending from the car-body A at a point in advance of the truck B. I is a depending brace fixed to the car-body A and receiving said bolt H.

J is an antifriction-roller held on the bolt H below the brace I, preferably through the medium of a nut *p* and a washer *r*, and M is a horizontally-swinging lever having an aperture *s*, receiving the antifriction-roller J, whereby the lever is fulcrumed on the bolt H. In its forward arm the said lever M is provided with a longitudinal slot *t*, which receives the antifriction-roller *k* on the crank-arm *g* of the shaft C, and in its rear arm the lever has a longitudinal slot *u*, in which is disposed the antifriction-roller G on the bolt E.

In virtue of the construction described in the foregoing it will be seen that incident to the turning of the truck B on its pivot, as when the car is passing around a curve, the lever M will be swung horizontally and its forward arm thrown in a direction opposite to that in which the truck turns. The crank-arm *g* of the upright shaft C will obviously be caused to move with the forward arm of the lever M, and this will result in the shaft C and the headlight-carrier D being turned in the same direction as the truck, so as to enable the beam of light from the headlight to indicate the direction the car is to take subsequent to passing around the curve. From this it follows that as the forward portion of the car takes a curve to pass from one street to a street disposed at a right angle thereto the beam of light from the headlight will be directed up the street into which the car is to pass, with the result that persons on said street will be warned of the approach of the car.

It will be gathered from the foregoing that my improved mechanism is advantageous because a single lever transmits motion from the truck to the vertical shaft on which the

headlight-carrier is mounted, and also because that in addition to being simple and inexpensive the mechanism as a whole is well adapted to withstand the rough usage to which car mechanism is ordinarily subjected.

I have shown but one end of a car equipped with my improvements; but it is obvious that in practice both ends of the car will be so equipped, this in order to secure the advantages of my invention irrespective of the direction in which the car is moving.

The construction herein shown and described constitutes the preferred embodiment of my invention; but I desire it understood that in practice various changes in the form, construction, and relative arrangement of parts may be made within the scope of the appended claim without involving departure from my invention.

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

The combination in a headlight-operating mechanism, of a car-body, a horizontally-swinging truck pivotally connected therewith and carrying a bolt on which is an antifriction-roller, a vertical rock-shaft journaled in a bearing on the body and equipped with a headlight-carrier, a crank-arm fixed on the lower portion of the rock-shaft and carrying a bolt on which is an antifriction-roller, and a horizontally-swinging lever fulcrumed on the car-body and having a longitudinal slot in its forward arm receiving the antifriction-roller on the bolt of the crank-arm and also having a longitudinal slot in its rear arm receiving the antifriction-roller of the bolt on the truck.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

LOUIS J. MARTINEAU.

Witnesses:
RENÉ C. BOULOGNE,
GEO. W. SPAULDING.