

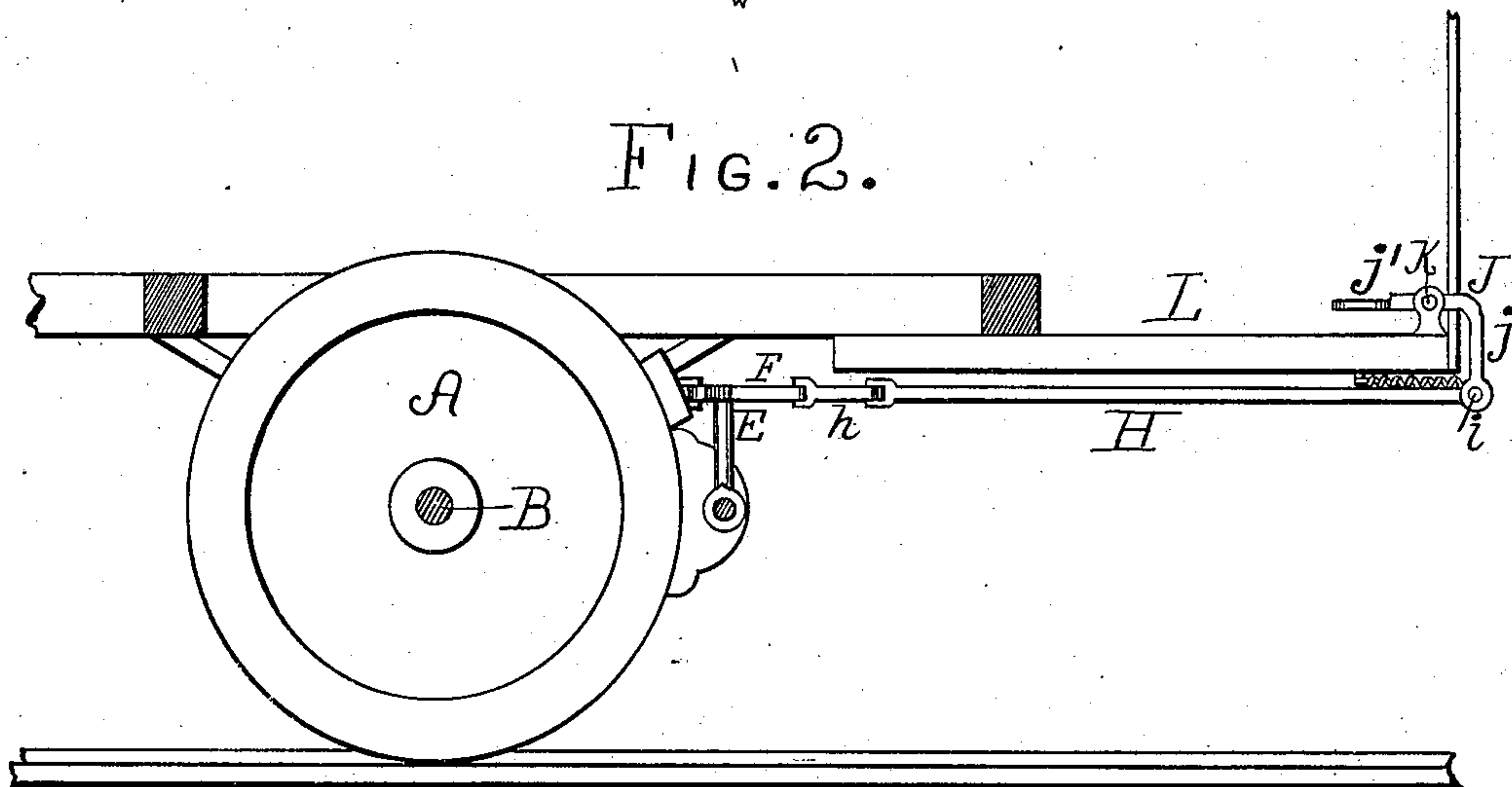
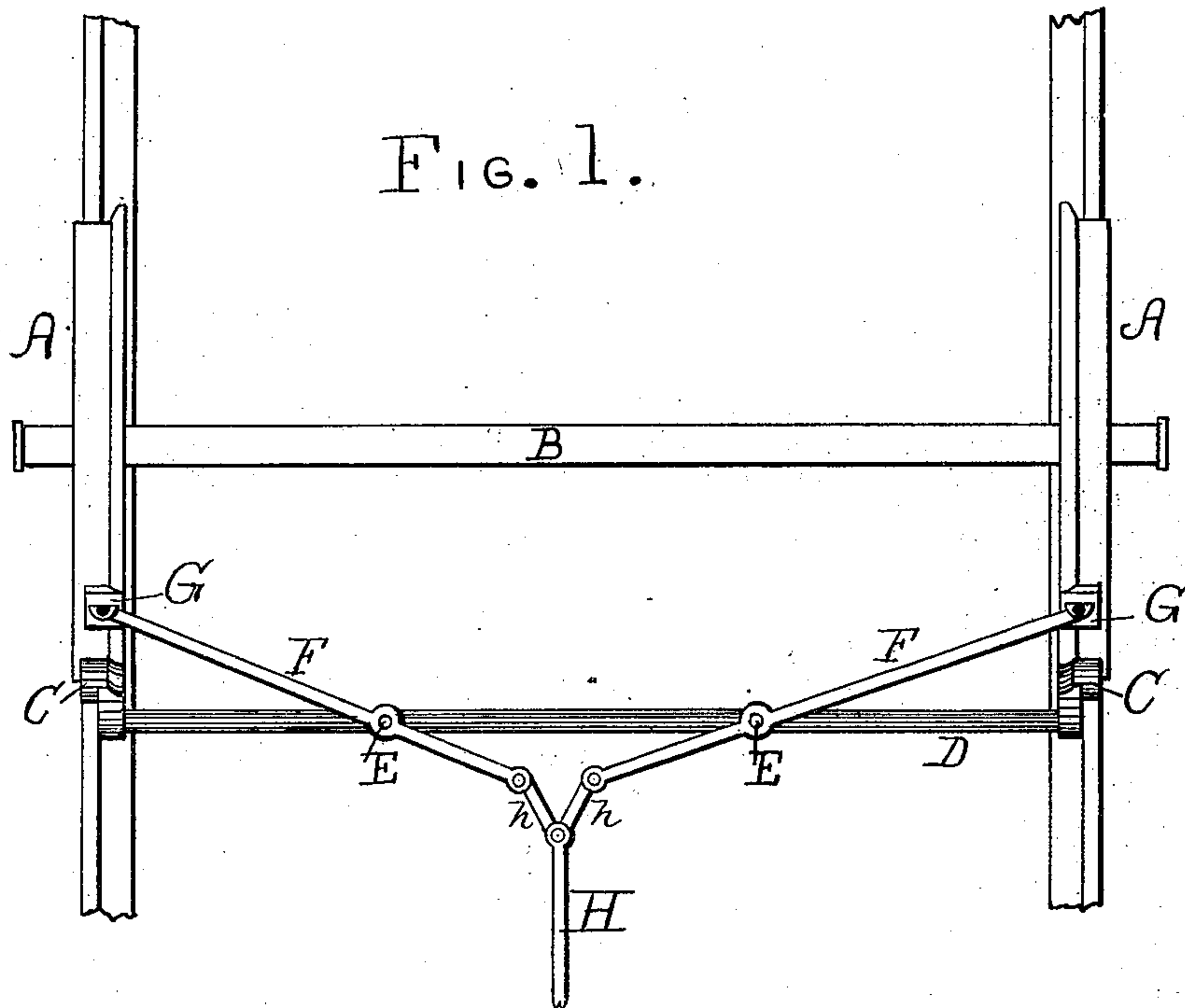
(No Model.)

F. S. CLARKSON.

MEANS FOR LUBRICATING FLANGES AND TREADS OF CAR WHEELS.

No. 332,994.

Patented Dec. 22, 1885.



Witnesses  
Geo. A. Pistel  
W. J. Brashears

F. S. Clarkson, Inventor  
Brashears & Williams  
Attorneys

# UNITED STATES PATENT OFFICE.

FRANK S. CLARKSON, OF BALTIMORE COUNTY, MARYLAND, ASSIGNOR OF  
ONE-HALF TO FRANK B. SLOAN, OF SAME PLACE.

MEANS FOR LUBRICATING FLANGES AND TREADS OF CAR-WHEELS.

SPECIFICATION forming part of Letters Patent No. 332,994, dated December 22, 1885.

Application filed June 21, 1883. Renewed June 29, 1885. Serial No. 170,133. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK S. CLARKSON, a resident of Baltimore county, Maryland, have invented certain new and useful Improvements  
5 in Means for Lubricating the Flanges and Treads of Car-Wheels, of which the following is a specification, reference being had to the accompanying drawings, forming part hereof, in which—

10 Figure 1 is a plan view of a portion of the running-gear of a car, the body being removed; and Fig. 2 is an elevation, partly in section, of the same parts, the front platform also being shown.

15 Like letters of reference mark the same parts in all the figures.

It is a well-known fact that railroad-cars, especially those of street or horse railroads, are hauled around curves with great difficulty,  
20 which is partially due to the fact that the outer wheels must slide as well as turn, and the further fact that the wheels are caused to move with their flanges in a groove while on the curve to prevent them from jumping the  
25 track. This latter objection has been the object of much effort in the way of overcoming it, and in the endeavor to remove this objection much ingenuity has been exercised.

It is a common practice to oil or otherwise  
30 lubricate the curves, especially the grooves in which the flanges of the wheels run. These efforts have been but partially successful, owing to many adverse circumstances. The oil or other lubricator placed upon the track is  
35 soon covered up by dirt or otherwise deprived of its properties as a lubricant, and a repetition of the operation becomes necessary. Much lubricating matter is thus expended and much labor and time wasted.

40 The object of my invention is to obviate these difficulties and provide means whereby a more easy passage around curves is secured; and in carrying out this object I have devised means, which will be hereinafter fully described, and  
45 afterward specifically pointed out in the claims, whereby the flanges and treads of the wheels may be lubricated on the approach of the car to a curve, thus securing an easy passage  
50 of lubricating material and with a saving of

all the extra labor employed to lubricate the track, the operation being performed by the driver of the car without in any manner interfering with his other duties.

Referring to the drawings by letter, A represents the wheels of a car rigidly mounted in the ordinary manner on an axle, B. C C are the ordinary brakes, connected, as usually, by a bar, D, extending across the car.

In the illustration I have given of one means 60 for accomplishing the object of my invention I have shown an upright, E, mounted upon this brake-bar, on each side of the center thereof, upon the upper end of each of which is pivoted a lever, F, each carrying at its end, im- 65 mediately over the brake-rubber, a box or other receptacle, G, for a lubricant of any desired kind. The inner ends of these bars approach very near to each other, and are connected to a bar, H, running longitudinally of 70 the car, by pivoted links *h*. This bar H extends to the front of the car, and is pivoted at *i* to the arm *j* of an elbow-lever, J, which is pivoted at K to the front platform, L, of the car, over which the other arm, *j'*, of the elbow- 75 lever projects in a horizontal direction, forming a treadle within easy reach of the foot of the driver. A spring, M, connects the arm *j* of the elbow-lever J with the under side of the platform L, and serves to retract the arm 8c when thrown forward.

The operation of this device is as follows, viz: When the car is approaching a curve, the driver presses down the arm *j'*, causing the elbow-lever to move on its pivot, and thus 85 move the arm *j* of said lever in a forward direction, carrying with it the bar H, links *h*, and the inner ends of the bars F, thus causing said bars F to vibrate on their pivots, throwing their outer ends, with their lubricant-re- 90 ceptacles, backward, causing the lubricant to be brought into contact with the periphery (both tread and flange) of the wheel, thoroughly lubricating it and causing it to pass easily around the curve. In order to lubri- 95 cate the other wheels, arms similar to the arms F are mounted in the same manner in front of them, which are connected by links similar to the links *h* to the bar H, extended to the rear for that purpose, and thus all the wheels of 100



the car are lubricated at one time by one motion and with the greatest ease.

The receptacle for the lubricant may be varied in construction—such, for instance, as to make it a receptacle for oil, which would be opened and shut by the action of the levers, to allow the oil to drop or flow on the wheels; or it may be made a box, in which a lubricant (solid) of any known style may be placed, and may be supplied with a spring to keep the lubricant always projecting, the projection being limited by any proper means. In fact, many ways may be devised for carrying out my invention without departing from the spirit thereof, and I do not, therefore, limit myself to the exact devices shown.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination, with the body, wheels and axles, brakes and brake-rods of a car, of lubricants carried on levers, as described, and means for bringing said lubricants into contact with the wheels, substantially as set forth.

2. The combination, substantially as described, of the wheels, the brake-bar, the up-

rights E, mounted thereon, the arms F, pivoted on said uprights and carrying lubricating material at their outer ends, the links h, bar H, elbow-lever L, and spring M, for the purpose set forth.

3. The combination, with the wheels of a railway-car and the body thereof, of means, substantially as described, whereby the flange or tread of said wheels may be lubricated by the driver, substantially as and for the purpose set forth.

4. The combination, with the wheels of a railroad-car, of a lubricant and means, substantially as described, extending to within easy reach of the driver or other person on the car, whereby the flange or tread of said wheels may be lubricated by the driver while seated or standing in his position on the platform, as set forth.

In testimony whereof I have signed this specification in the presence of two witnesses.

FRANK S. CLARKSON.

Witnesses:

S. BRASHEARS,  
GEO. H. PISTEL.