

(No Model.)

C. W. HUNT.
CAR TRUCK.

No. 452,136.

Patented May 12, 1891.

Fig. 2

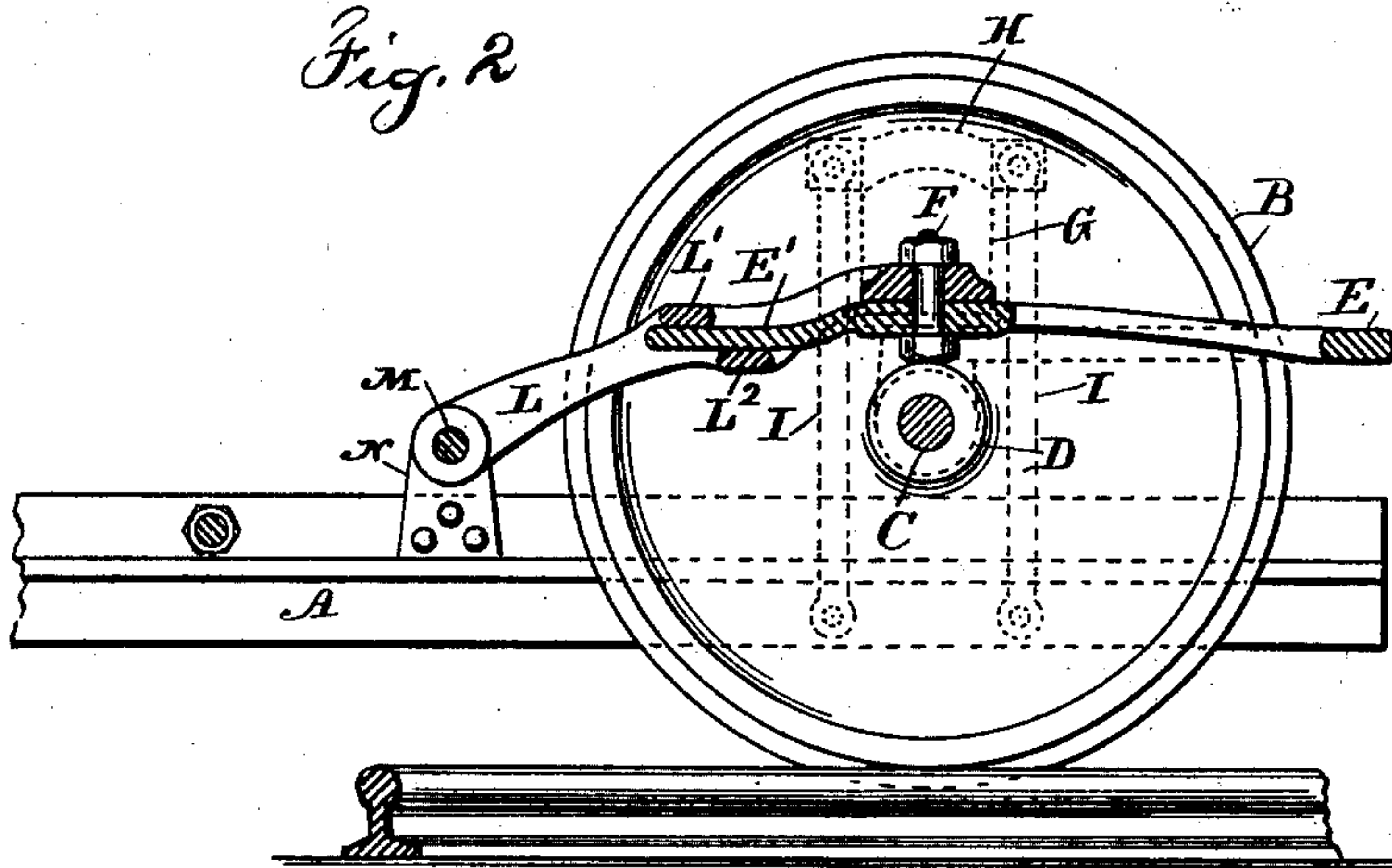


Fig. 3.

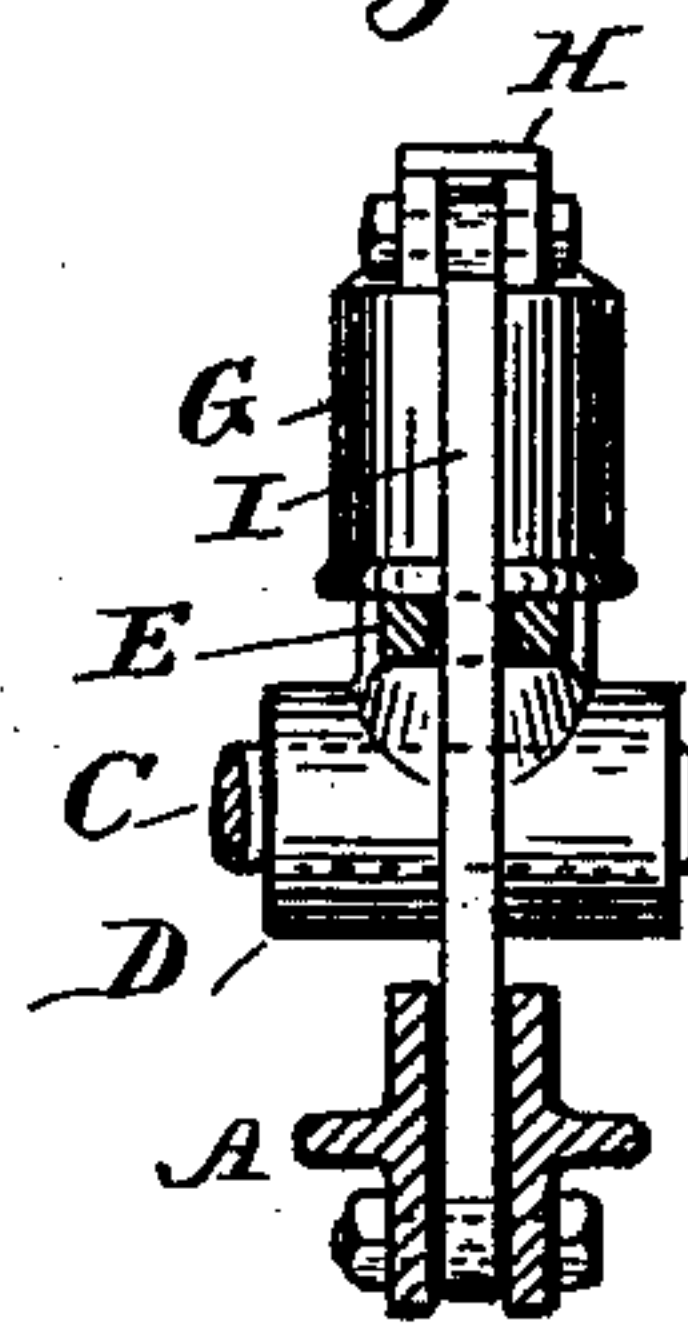
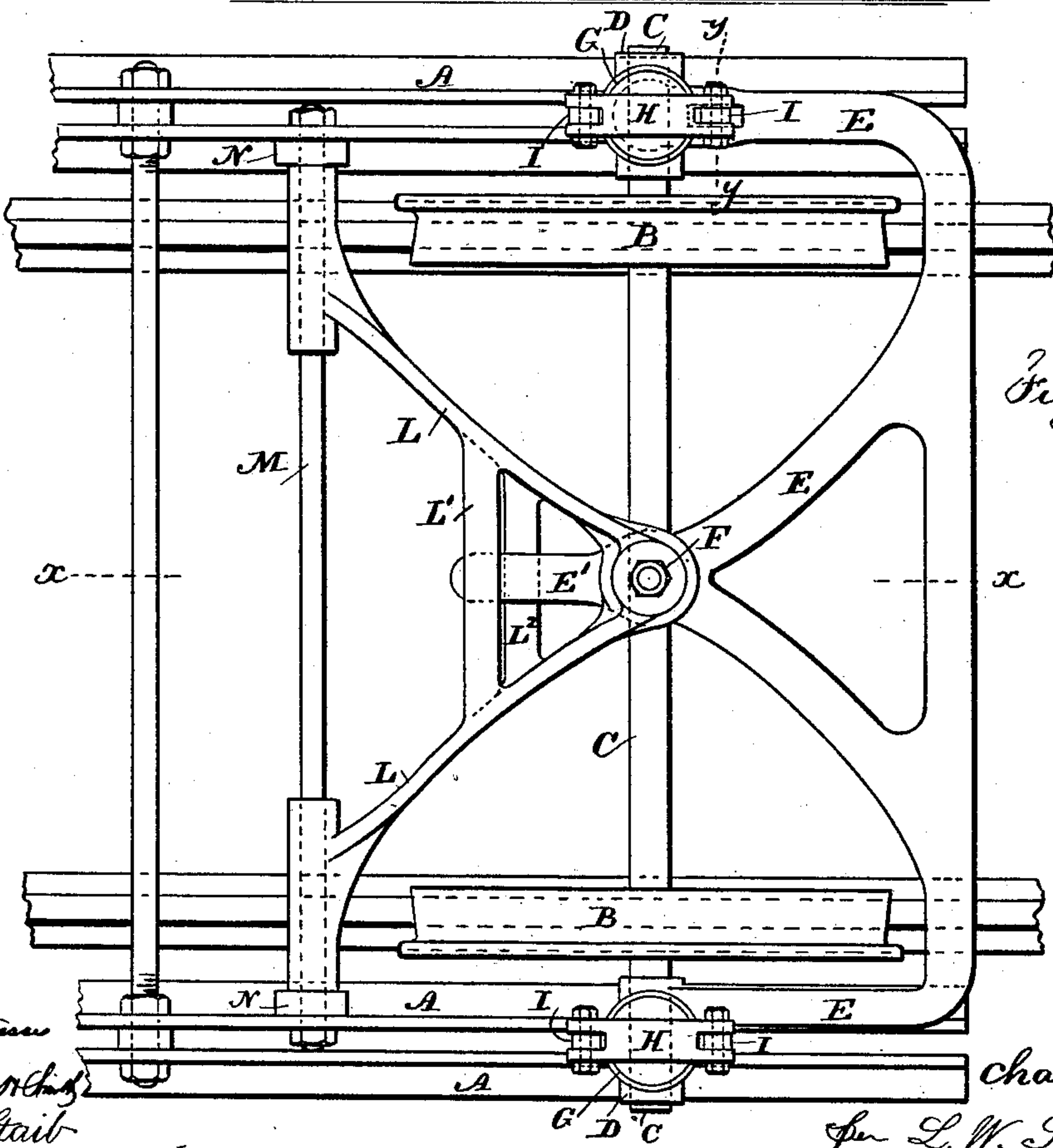


Fig. 1.



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UNITED STATES PATENT OFFICE.

CHARLES W. HUNT, OF WEST NEW BRIGHTON, NEW YORK.

CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 452,136, dated May 12, 1891.

Application filed April 6, 1891. Serial No. 387,716. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. HUNT, of West New Brighton, in the county of Richmond and State of New York, have invented
5 an Improvement in Car-Trucks, of which the following is a specification.

This improvement relates to that class of car-trucks in which two wheels and an axle are pivotally connected to the frame or body
10 of the car in such a manner as to swing upon a king bolt or pin and assume the proper position in traveling upon either a curved or a straight track. In my patent, No. 347,936, the journal-boxes and frame are placed between
15 the wheels and the journal-boxes are connected by a sleeve surrounding the axle. Hence such boxes are kept in their proper relation one to the other and to the king bolt or pin. I find it advantageous to place the
20 frames outside of the wheels to support the car and its contents more firmly and steadily, and in so doing it has become difficult to connect the axle-boxes so that they will remain in the proper relative positions to each other
25 and to the king-bolt, and this difficulty I have overcome by the present improvement, which relates to a frame or yoke connected with the axle-boxes and extending around outside of the wheels and then inwardly to the king bolt
30 or pin, which is above the axle. Thereby the wheels, axle, and axle-boxes are free to swing or swivel upon the king-bolt; but such king-bolt maintains the proper relative position of the car body or frame to the truck, and the
35 yoke holds the journal-boxes at the proper distance from each other and in the same plane, so that the boxes cannot tip or become misplaced in relation to the axle or to the frame of the car.

40 In the drawings, Figure 1 is a plan view, and Fig. 2 is a section at the line $x x$, representing my improvements. Fig. 3 is a section at the line $y y$ of Fig. 1.

The truck is composed of the wheels B upon
45 the axle C, and the car-frame A or body of the car is outside of the wheels, and the axle-boxes D are of any desired character, and the yoke E is connected at its ends with the axle-boxes D, and it extends around the wheels B
50 and inwardly to the king bolt or pin F, which is centrally over the axle C, or nearly so.

In cases where there are not any springs

and the car-frame rests upon the axle-boxes D or upon rigid bearers, as in my patent No. 256,571, the king-bolt F can be connected di- 55 rectly to the car frame or body; but I have represented the improvement as made use of in connection with springs G of any suitable character between the upper surfaces of the journal-boxes D and the head-bars H, which 60 head-bars H suspend the frame A by the links I, and in this case the frame A and the car-body carried thereby can rise and fall upon the springs, and it is advantageous to make use of a swinging frame L, to which the king- 65 bolt F is connected, and this swinging frame L is connected with the frame A in any suitable manner—such, for instance, as by the cross-bolt M and lugs N. The central portion of the yoke E may come either above or below 70 the frame L, and the surfaces that are in contact may be of sufficient area to prevent the frame E tipping and for preserving such frame E in the same plane, or nearly so, as the frame L or there may be an extension or tongue E' 75 on the frame or yoke E, passing in between two parallel bars $L' L^2$ or bearing-surfaces upon the frame L, so that the yoke can turn or swivel upon the pin F as the axis of the truck-wheels assumes a more or less inclined 80 position to the center line of the car, and under all circumstances the wheels, axle, axle-boxes, and yoke swing as a whole upon the king-bolt F and are preserved in their proper relative positions by the yoke E. Where the head- 85 bar H and links I are made use of, it is preferable to mortise the yoke E for the passage of the links I, as shown at one side of said yoke in Fig. 1, such mortises being sufficiently large to allow for the swinging motion afore- 90 said; or the yoke E may pass between the lines I and the wheels B, as shown at the other side of said yoke in Fig. 1.

The boxes D and yoke E can be made of one casting, or they may be of separate parts 95 either set or bolted together, according to the peculiar construction of the axle-boxes and the other parts of the truck, and the king-bolt and the parts connected by it may be either above or below the axle. 100

I claim as my invention—

1. The combination, with the pair of wheels and the axle, of axle-boxes at the outer ends of the axle and a yoke extending around the

wheels and connecting the axle-boxes, and through which the king-bolt passes at or near the middle part of the axle, substantially as set forth.

5 2. The combination, with the car wheels and axle, of axle-boxes upon the outer ends of the axle, suspending-links, head-bars, and springs above the axle-boxes, and a yoke connected
• with the axle-boxes and extending around the
10 wheels and receiving the king-bolt at or near the middle of the axle, substantially as set forth.

3. The combination, with the car wheels and

axle, of axle-boxes upon the outer ends of the axle, a yoke extending around from one axle- 15 box to the other, a king-bolt at or near the middle of the axis and to which the yoke extends, and a swinging frame connected with the car body or frame and receiving the king-bolt, substantially as set forth. 20

Signed by me this 31st day of March, 1891.

CHAS. W. HUNT.

Witnesses:

GEO. T. PINCKNEY,

WILLIAM G. MOTT.