No. 820,453. PATENTED MAY 15, 1906.

J. D. WALSH.

PLEASURE CAR.

APPLICATION FILED OCT. 30, 1905

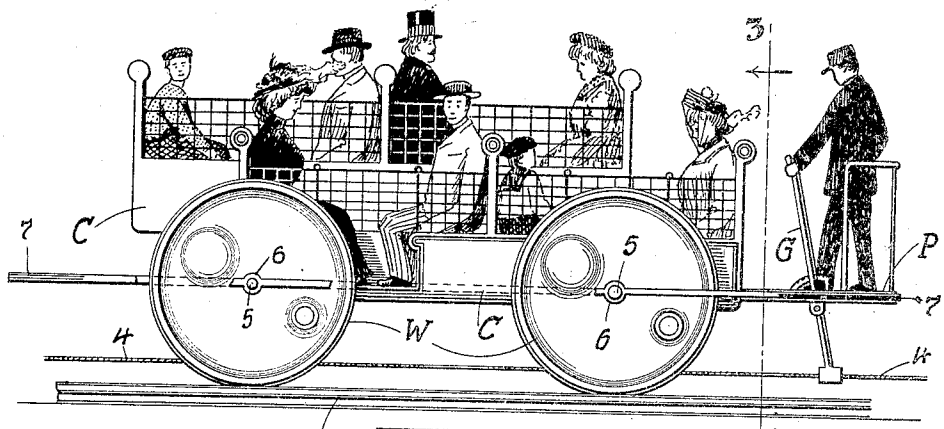

FIG. 1.

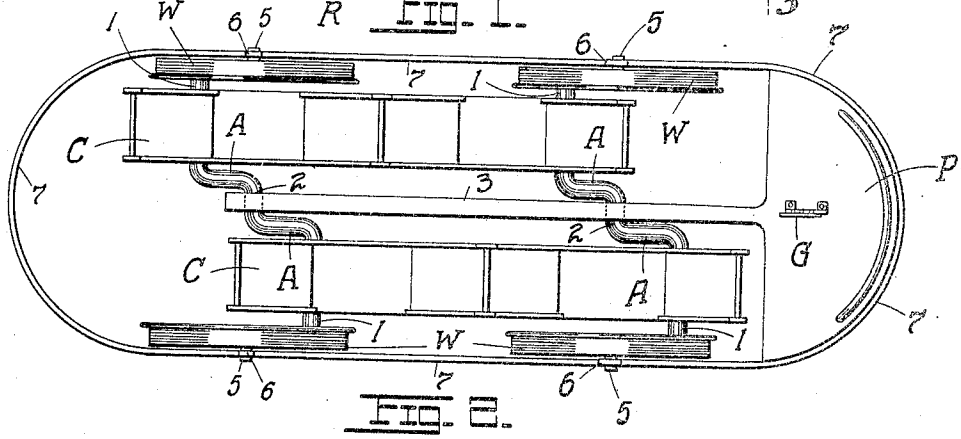

FIG. 2.

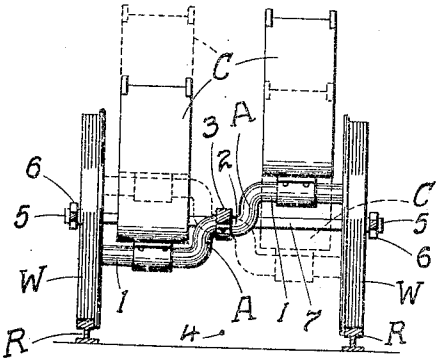

FIG. 3.

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PLEASURE-CAR.

No. 820,453. Specification of Letters Patent. Patented May 15, 1906.

Application filed October 30, 1905. Serial No. 285,062.

To all whom it may concern:

Be it known that I, JAMES D. WALSH, a subject of the King of Great Britain, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Pleasure-Cars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in pleasure-cars; and it consists in the novel construction and combination of parts more fully set forth in the specification and pointed out in the claims.

In the drawings, Figure 1 is a side elevation of the pleasure-car. Fig. 2 is a top plan thereof, and Fig. 3 is a vertical cross-section on line 3 3 of Fig. 1.

The present invention is a qualification of the construction of pleasure-car shown and described in United States Letters Patent No. 793,114, issued to me under date of June 27, 1905, and has for its objects to impart a novel and distinct movement to the car which will result in producing a correspondingly-exhilarating and novel sensation on the passengers occupying the same.

A further object is to produce an easily-running car and one whose travel is attended with a minimum amount of friction, all as will more fully appear from a detailed description of the invention, which is as follows:

Referring to the drawings, C C represent two cars of any approved design or pattern, the cars being disposed parallel to one another and jointly occupying the space between the planes of rotation of the opposite wheels W W of what may be considered the front and rear trucks. The wheels of each truck are connected by a compound crank-arm A A, the terminal crank-pins 1 1 of whose components extend horizontally in opposite directions and are coupled to the adjacent wheels on opposite sides of the centers of the respective wheels—that is to say, on opposite sides of their common axis of rotation. The center of rotation of the crank-arms corresponds to the axis of rotation of the wheels, the vertical members of the individual crank-arms being connected at such center by a cylindrical portion 2, which forms a bearing for the longitudinally-disposed central coupling-pole 3, connecting the front and rear trucks. The rear end of this coupling-pole is formed into or carries a platform P for the operator, who has control of the grip G, by which the cable 4 is seized or from which said cable is released, as occasion demands. The trucks run on suitable rails R, between which the cable 4 is centrally disposed.

The horizontal members 1 1, forming the crank-pins of the components of the respective compound crank-arms, are loosely coupled to the under sides of the juxtaposed cars C C, which they support, the crank-arms being initially so adjusted that the crank-pins of the components of the compound crank-arms of each truck are on opposite sides of the axes of rotation of the wheels of the respective trucks, so that when one pair of crank-pins are elevated or are above the plane of the axes of rotation of the wheels the other pair is below said axes. The result is that when one car occupies its highest position the other car is occupying its lowest position, Fig. 3, and as the wheels revolve the cars move up and down alternately, the nature of the motion for each car being on the order of the connecting-rod which couples two adjacent driving-wheels on a locomotive—that is to say, the movement is a longitudinal or horizontal reciprocating one, as well as vertically reciprocating, the cars always moving parallel to themselves for the longitudinal or horizontal movement. The wheels are provided with outwardly-projecting axial bosses or hubs 5, which are loosely embraced by the loops 6 of an oblong frame 7, coupled to the platform P. The frame and platform (and coupling-pole) are thus bound together, so as to result in a rigid construction, the frame at the same time resisting any tendency of the truck-wheels to spread. It is apparent, of course, that so far as the sensation produced by the movements of the cars is concerned the trucks need not necessarily have to run on rails, but may be suspended above ground so long as rotation is imparted to the wheels in any suitable mechanical manner.

Having described my invention, what I claim is—

1. In a pleasure-car having a front and a rear truck, wheels for said trucks, a compound crank-arm comprising two component crank-arms connecting the wheels of each truck, the crank-pins of said components being coupled to their respective wheels at points on opposite sides of their common axis of rotation, substantially as set forth.

2. In a pleasure-car, a truck having two wheels and a compound crank-arm between

them having the crank-pins of its component crank-arms coupled to the wheels on opposite sides of the common axis of rotation of the wheels, substantially as set forth.

3. In a pleasure-car, a front and rear truck, wheels for the trucks, a compound crank-arm comprising two component crank-arms connecting the wheels of each truck at points on opposite sides of their common axis of rotation, the crank-pins of the crank-arms on one side of the vehicle being coupled to the adjacent wheels above the plane of their axes of rotation, while the crank-pins on the opposite side are coupled to their wheels below said plane, and cars mounted on the crank-pins on opposite sides of the vehicle, whereby upon rotation of the truck-wheels the car on one side will be up while that on the opposite side is down, and vice versa, the parts operating substantially as and for the purpose set forth.

4. In a pleasure-car having a front and a rear truck, wheels for said trucks, a compound crank-arm comprising two component crank-arms connecting the wheels of each truck at points on opposite sides of their common axis of rotation, the points of connection of the crank-arms with the adjacent wheels of the respective trucks on one side of the car being on one side of the plane of the axes of rotation of the wheels of the trucks, while those on the other side are on the opposite side of said plane, cars mounted on the crank-pins of the arms at opposite ends of the respective trucks, cylindrical connections between the centers of rotation of the component members of the compound crank-arms, said centers being disposed on the axes of rotation of the truck-wheels, a coupling-pole connecting said cylindrical connections and a platform at one end of the pole, substantially as set forth.

5. In a pleasure-car having a front and rear truck, a coupling-pole connecting the trucks, and a frame connecting the coupling-pole with the wheels of the trucks, substantially as set forth.

6. In a truck for cars, a pair of wheels, and a compound crank-arm composed of two component arms extending in opposite directions and united at their common center of rotation, the ends of the component arms being coupled to the wheels of the truck at points eccentric to their axes of rotation, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES D. WALSH.

Witnesses:

EMIL STAREK,

MARY D. WHITCOMB.