(No Model.)

V. PARKS.

TWO WHEELED VEHICLE.

No. 455,764. Patented July 14, 1891.

Fig. 1.

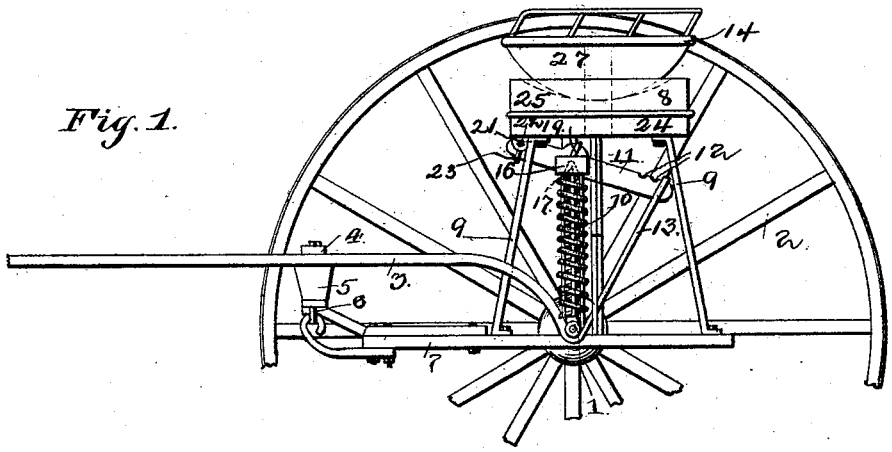


Fig. 2.

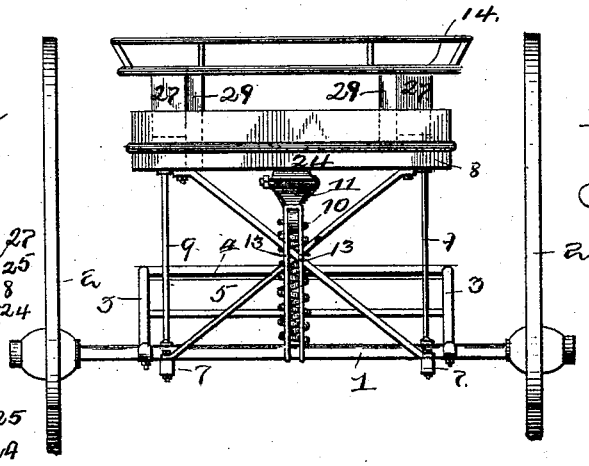


Fig. 4.

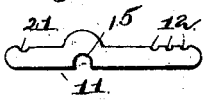


Fig. 5.

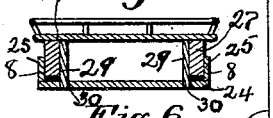


Fig. 6.

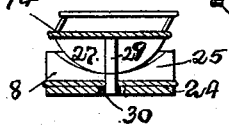


Fig. 3.

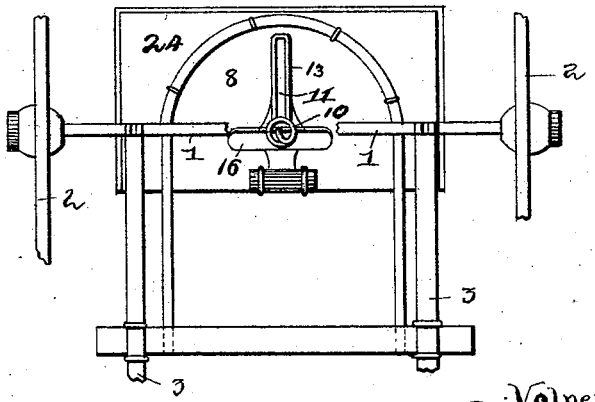
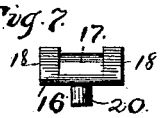


Fig. 7.



Witnesses

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Inventor

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By his Attorneys,

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UNITED STATES PATENT OFFICE.

VOLNEY PARKS, OF FORT WAYNE, INDIANA.

TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 455,764, dated July 14, 1891.

Application filed July 26, 1890. Serial No. 360,063. (No model.)

To all whom it may concern:

Be it known that I, VOLNEY PARKS, a citizen of the United States, residing at Fort Wayne, in the county of Allen and State of Indiana, have invented a new Two-Wheeled Vehicle, of which the following is a specification.

The invention relates to improvements in two-wheeled vehicles.

The object of the present invention is to simplify and improve the construction of road-carts and prevent the motion of the horse being communicated to the occupant and to enable the vehicle to pass over uneven surfaces without materially disturbing the seat.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a side elevation of a two-wheeled vehicle constructed in accordance with this invention. Fig. 2 is a rear elevation view. Fig. 3 is a reverse plan view of a modification, showing the invention applied to another form of road-cart. Figs. 4, 5, 6, and 7 are detail views.

Referring to the accompanying drawings, 1 designates an axle, 2 supporting-wheels, and 3 shafts, having their rear ends coupled to the axle and provided a short distance from their rear ends and beneath the cross-bar 4 with a frame comprising a cross-bar 5 and blocks or hangers 6, depending from the lower faces of the shafts and secured to the cross-bar 5, and the said frame has connected to it the front ends of side bars 7, upon which is supported a seat-frame 8 by rods 9. Interposed between the seat-frame 8 and the axle 1 is a spiral spring 10, which has its lower end centrally clipped to the axle and has fulcrumed upon its upper end a lever 11, having its front end hinged to the front of the seat-frame and its rear end provided with a series of notches 12, arranged to be engaged by a loop or rod 13, having its lower end hinged to the axle and adapted to bring its upper end into engagement with the notches 12 to regulate the leverage and the tension of the spring and adjust the vehicle to the weight of the load, and it will readily be seen that by the arrangement of the spring and lever the weight of the seat 14 and the seat-frame 8 is supported by the spring, and by means of the lever the action of the spring upon the seat is greatly increased and is capable of regulation. The lever 11 is provided intermediate of its ends with a groove or notch 15, which bears upon a block or casting 16, provided with a curved ridge 17, and having lugs 18 arranged at the ends of the ridge to prevent sidewise movements of the lever, and the latter is secured to the block by a strap or tie-bar 19, and the said block has a depending cylindrical portion 20 arranged within the spring and secured to the same by a loop or tie-rod. The front end of the lever is provided with a curved notch 21, which engages a cross-bar 22, secured to the lower face of the seat-frame 8 and extending transversely along the front edge of the same, and the lever is secured to the cross-bar by a loop 23, and the said front end is partially hinged to the seat and is capable of sufficient movement on the cross-bar to permit the seat and seat-frame to readily act upon the spring. By this construction it will be seen that the vehicle is enabled to readily pass over rough roads and enter deep ruts and strike obstructions without disturbing the occupants, as the motion of the wheels will be readily taken up by the springs and will not be communicated to the seat and seat-frame. The seat-frame consists of a bottom board 24, parallel strips 25, extending longitudinally on the bottom board and provided in their upper faces with curved recesses extending throughout their lengths and forming concave upper faces to serve as bearings for rockers 27 of the seat 14, and side strips or guards 28 to prevent the rockers 27 of the seat 14 moving laterally from their bearing. The rockers 27 of the seat are segmental, and the curve of the concave upper faces of the strips is less than the curve of the rockers, and the latter have free and easy movement in their bearings, which construction prevents the motion of the horse being communicated to the occupant of the vehicle. The seat is prevented leaving its bearings by tongues 29, oppositely disposed on the inner faces of the segmental rockers and having their lower ends engaging mortises or recesses 30 in the bottom board of the seat-frame. The side bars 7 have secured to them the ends

of transversely-arranged slats which form the bottom for the vehicle, and the said side bars extend a sufficient distance beyond the axle to enable the rear rods 9 to support the back of the seat-frame and the latter to be centrally arranged over the axle, or approximately so.

In Fig. 4 is illustrated a modification of the invention, and a different construction of part is shown. The side bars are hinged at their front ends to the cross-bar of the shafts, and the rear ends of the side bars are secured to the lower face of the bottom board of the seat-frame. The spring is centrally secured to the axle, as above described, and the lever is fulcrumed on the spring and has its front end hinged to the seat-frame and its rear end connected with the axle by a loop or rod.

From the foregoing description and the accompanying drawings the construction, operation, and advantages of the invention will be readily understood.

What I claim is—

1. In a two-wheeled vehicle, the combination of the axle, the seat, the spring arranged between the seat and the axle, and the lever fulcrumed on the spring and having its front end hinged to and supporting the seat and the other end adjustably connected with the axle, substantially as described.

2. In a two-wheeled vehicle, the combination of the axle, the spiral spring secured thereto, the block having a convex face and provided with a stem arranged within the spring, the seat, the lever secured to the block and fulcrumed on the spring, having one end supporting the seat, and the rod connecting the other end of the lever with the axle, substantially as described.

3. In a two-wheeled vehicle, the combination of the axle, the seat, the spring secured to the axle and arranged beneath the seat, the lever fulcrumed on the spring and having its front end hinged to the seat and its rear end provided with a series of notches, and the rod 13, having one end secured to the axle and the other end arranged to engage the notches of the lever, substantially as described.

4. In a two-wheeled vehicle, the combination of the seat-frame, comprising the bottom board having the recesses 30, the parallel strips having their upper faces concave, the side pieces or guards 28, arranged upon the outer faces of the strips and extending above the same, and the seat provided with segmental rockers having tongues upon their inner opposed faces arranged to engage the recesses of the bottom board, substantially as described.

5. In a two-wheeled vehicle, the combination of the axle, the shafts coupled thereto, the side bars 7, arranged below the axle and having their front ends connected with the shaft, the seat-frame, the bars 9, arranged in front and rear of the axle and having their lower ends secured to the side bars and their upper ends secured to and supporting the seat-frame, the spring secured to the axle, and the lever fulcrumed on the spring and having one end supporting the seat-frame and the other end connected with the axle, substantially as described.

6. In a two-wheeled vehicle, the combination of the axle, the shafts coupled thereto, the frame depending from the shafts and comprising the cross-bar 5 and the hangers or blocks 6, the side bars 7, arranged beneath the axle and having their front ends connected to the frame, the seat-frame, the supporting-bars 9, arranged in front and rear of the axle and having their ends secured to the seat-frame and the side bars, the spring, and the lever fulcrumed on the spring having one end supporting the seat-frame and the other end connected with the axle, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

VOLNEY PARKS.

Witnesses:
WILMER LEONARD,
DIXON EDGERTON.