W. G. JAHNKE.

CHILD'S AUTOMOBILE.

APPLICATION FILED OCT. 5, 1914.

1,146,880. Patented July 20, 1915.

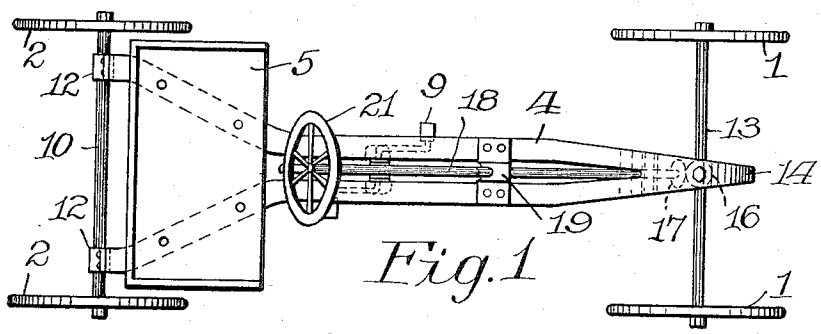


Fig. 1

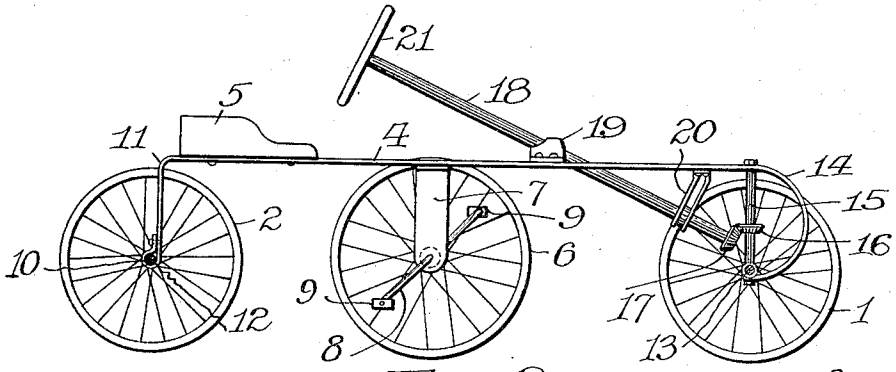


Fig. 2

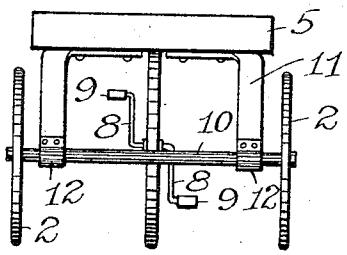


Fig. 3

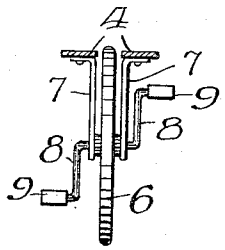


Fig. 5

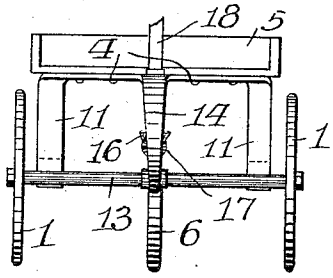


Fig. 4

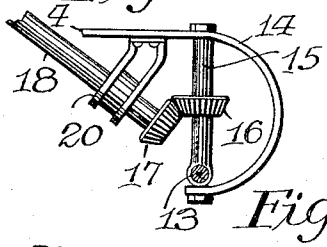


Fig. 6

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CHILD'S AUTOMOBILE.

1,146,880. Specification of Letters Patent. Patented July 20, 1915.

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To all whom it may concern:

Be it known that I, WILLIAM G. JAHNKE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Children's Automobiles, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

The subject matter of this invention is a toy automobile.

In the construction of apparatus of this type it is necessary to simplify the structure for the purpose of reducing the cost and of giving the child a mechanism which can be readily understood.

It is further desirable to dispense, as much as possible, with all gears and similar parts, in order that the child may not be injured in operating or playing with the device.

It is an object of this invention to provide a toy automobile of an improved and simplified construction. The manner in which this is accomplished will be understood from the following specification taken in connection with the drawings, in which—

Figure 1 is a plan view of a toy automobile embodying my invention; Fig. 2 is a side elevation, partly in section; Fig. 3 is a rear view of the frame and wheels; Fig. 4 is a front view of the same; Fig. 5 is a cross-sectional view showing the suspension of the driving wheel; Fig. 6 is a fragmentary view of the steering mechanism.

The toy automobile shown in the above figures is a four-wheeled vehicle having front wheels 1 and rear wheels 2 connected by means of the three-point suspension frame 4. This frame, as may be seen in Fig. 2, is light and flexible in order that the same may bend under the weight of the child. A seat 5, which may be of any convenient size or material, is mounted on the rear part of the frame at a convenient distance from the driving wheel 6. The driving wheel 6 is suspended from the frame by means of the brackets 7 and is provided with a crank 8 and pedals 9, to be operated by the driver.

When the vehicle is unoccupied, the flexibility of the frame 4 causes the wheel 6 to be either out of contact with the ground or in contact to such a slight extent that said wheel would be incapable of tractive effort, due to the small amount of adhesion to the roadway which it would have if not weighted down in some manner. When the driver takes his place in the seat of the car the necessary weight is supplied, the frame is flexed, and the driving wheel brought into firm engagement with the road. The weight of the driver on the flexible frame causes the driving wheel to remain in constant contact with the ground and to conform to the irregularities thereof.

The rear wheels 2 are mounted on a rear axle 10 which is fastened to the depending legs 11 of the frame 4. The wheels may be secured to the shaft and the bearing arranged in the loop 12 of the frame, but preferably these wheels are free to rotate on the shaft in order to decrease the friction and to allow differential movement when the automobile is turning.

The front wheels 1 have bearings on the front axle 13 which is mounted in the frame 4 by means of a loop 14 forming an extension of the frame 4. A post 15 is attached to the axle 13 and forms part thereof. This post is mounted vertically in the loop 14, being secured thereto by suitable bolts, or the like, and carries a beveled gear 16 for engagement with a corresponding beveled gear 17 mounted on the steering column 18. The steering column has its bearings in a bracket 19 secured to the top of the frame 4 and a depending bracket 20 secured on the bottom of the frame 4, as shown more clearly in Figs. 2 and 6.

A suitable steering wheel 21 is secured to the steering column 18 in suitable proximity to the seat 5. In operation, the weight of the driver upon the seat 5 brings the traction wheel 6 into engagement with the road bed with sufficient pressure to allow of driving the toy in a manner similar to the velocipede. The steering wheel 21 affords a suitable hold and, at the same time, forms suitable means for guiding the device without taking the traction wheel 6 out of alinement with the seat 5, hence there is no danger of the traction wheel 6 rubbing against the clothes of the driver.

The wheel 6 is preferably of as large a diameter as can conveniently be secured, in order to increase the speed with which the machine may be driven, as well as to allow of a greater traction surface.

The wheels 1, 2 and 6 are preferably provided with rubber tires, but the same is not absolutely necessary. The flexibility of the

frame allows the wheels to be brought into alinement and to take up the inequalities of the road bed, but I have found that a much better tractive effort is secured by the use of a resilient tire on the traction wheel.

While I have illustrated one particular embodiment of my invention, it is to be understood that a number of modifications will at once become apparent to those skilled in the art, all of which I consider to come within the spirit and scope of my invention.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. In a vehicle of the class described, a plurality of load supporting wheels, a normally inoperative traction wheel and a flexible frame joining said wheels, said traction wheel being brought into operative engagement with the roadway by the weight of the occupant.

2. In a vehicle of the class described, a pair of rear wheels, a pair of front wheels, a frame joining said front and rear wheels, steering means for steering said front wheels, a normally inoperative traction wheel intermediate said front and said rear wheels, means to drive said traction wheel, said frame being flexed by the weight of the driver to bring said traction wheel into frictional engagement with the roadway.

3. In combination, a pair of front wheels, a pair of rear wheels, a frame joining said front and rear wheels, said frame having a flexible portion, a traction wheel secured to said frame intermediate said front and said rear wheels, a crank and pedals for driving said traction wheel, and a seat on said frame adjacent said flexible portion.

In witness whereof, I hereunto subscribe my name this 3rd day of October, A. D. 1914.

WILLIAM G. JAHNKE.

Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."