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A. L. J. ZILERI ET AL

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STEERED TRUNDLE TOY

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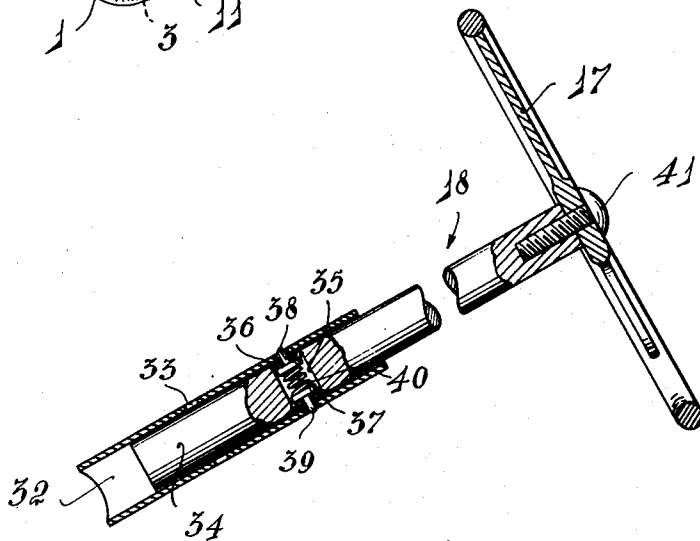
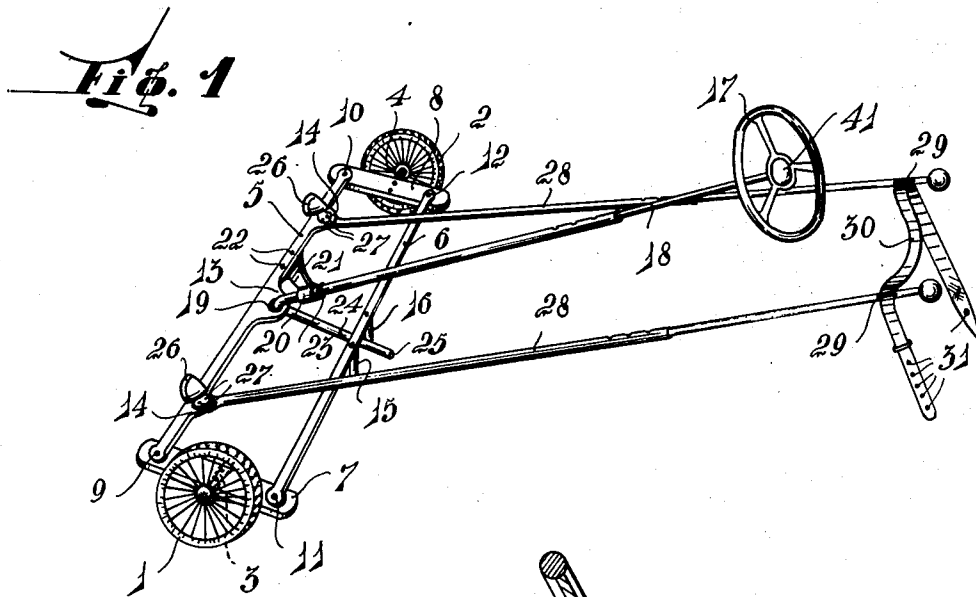


Fig. 2

INVENTORS :

ALBERT LEOPOLDO JULIO ZILERI
and MICHEL FREUDENSTEIN

BY : *Harnes Dickey Pierce.*
ATTORNEYS.

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STEERED TRUNDLE TOY

Alberto Leopoldo Julio Zileri and Michel
Freudenstein, Buenos Aires, Argentina

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3 Claims. (Cl. 46-220)

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This invention relates to a new toy and more particularly to a steered trundle toy in which the main features of a motor car are present in accordance with a child's interpretation.

One of children's preferred toys is a pedal-motor-car which however in view of its relatively high selling price is not accessible to a great sector of the population.

The present invention relates to a new toy which comprises a steering wheel which is for a child the most important part of a motor car. The steering wheel of the toy here to be described controls a pair of wheels mounted on a suitable frame which is fastened to the child so that the child may run with the toy and control the direction of the wheels by means of the steering wheel. It is obvious that the new toy cannot be compared with a pedal-motor-car but nevertheless it can be psychologically compared with a motor car, in accordance with a child's mind.

The new toy comprises a linked lever frame, a pair of wheels supporting said lever frame, a steering wheel coupled to said linked lever frame for position controlling said pair of wheels, and a support connected to said linked lever frame and having a free end provided with fastening means for fastening said toy to a human being.

From the foregoing it will be apparent that one of the objects of the present invention is to provide a new toy which psychologically substitutes the pedal-motor-car.

Another object is to provide a new toy the production price of which shall be considerably smaller than that of a pedal-motor-car.

A still further object is to provide a new toy easy to manufacture.

In order to facilitate the understanding of the present invention, the latter will now be described with regard to a specific embodiment by way of example, and in relationship with the accompanying drawings.

In the drawings:

Fig. 1 is a perspective view of the new toy, in accordance with the present invention.

Fig. 2 is a part sectional side view of a detail of the steering wheel arrangement.

As may be seen in Fig. 1, the new toy comprises a pair of wheels 1 and 2 rotatably mounted on stub shafts 3 and 4, respectively. A linked lever frame consisting of levers 5, 6, 7 and 8 forms an articulated parallelogram. In fact, lever 5 is articulated by means of pins 9 and 10 to levers 7 and 8, respectively, and lever 6 is articulated by means of pins 11 and 12 spaced away from pins 9 and 10, also to levers 7 and 8, respectively

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stub shafts 3 and 4 are supported by levers 7 and 8.

Lever 5 comprises a central projection 13 and two side projections 14 symmetrical with regard to the central projection 13.

A pair of pins 15 and 16 is supported by the middle portion of lever 6, said pair of pins 15 and 16 being spaced in parallel relationship and with their respective free ends directed downwardly.

A steering wheel 17 is fastened to one free end of a steering shaft 18 passing through a perforation 19 of the central projection 13, and also rotatably supported by a bearing or journal 20 having an arm 21 fastened to lever 5 by means of rivets 22. A collar 23 is fixed to steering shaft 18 adjacent to bearing 20 and between said bearing and said steering wheel 17, in order to avoid that steering shaft 18 be displaced downwardly. Said steering shaft 18 comprises a second portion 24 forming a crank, the free end 25 of which passes through the space defined by said pair of pins 15 and 16, so that upon actuating steering wheel 17, crank 24 will displace the pair of pins 15 and 16 with regard to the central projection 13 and thereby vary the angles of the linked lever frame and consequently the direction in which the wheels 1 and 2 tend to advance.

Side projections 14 are provided with suitable weights for example in the form of lamp shaped bodies 26 fixed to side projections 14 by means of screws 27 which also support one end of a respective bar 28, the other end of which is provided with a slot 29 through which a belt 30 passes provided with press buttons 31.

Bars 28 form a support which by means of belt 30 is secured to the waist of the user, who may run with the toy and control its direction by means of steering wheel 17. The weights 26 are added in order to help stabilize the toy while in motion. The fastening means of the belt 30 in the form of press buttons are highly advisable in order to ensure that, if the child falls, the belt immediately opens and the toy rolls away. If desired, the lamp shaped bodies 26 may be real lamps connected to a suitable dynamo arrangement as will be apparent to those skilled in the art.

In order to facilitate the packing question of the toy and at the same time to provide a toy which can be used for children of different ages, steering shaft 18 as well as bars 28 are of the telescopic type, as shown in Fig. 2, which telescopic arrangement will be described with regard to the steering shaft 18, but it is understood that a similar arrangement is used for bars 28.

The steering shaft 18 is formed of a tubular member 32 provided with a plurality of transverse perforations 33. A shaft 34 slidably and partially housed in said tubular member 32 is provided at its lower end portion with a transverse perforation 35. Said perforation 35 being partially closed at both ends by collar plates 36 and 37 screwed into said perforation 35. A pair of pin members 38 and 39 also housed in said perforation 35 extend through respective openings of collar plates 36 and 37, and are adapted to pass through perforation 33 of tubular member 32 in view of the pressure which spring 40 exerts on said pin members 38 and 39, respectively, so that upon coincidence of perforation 35 and transversal perforation 33, pin members 38 and 39 establish a linkage between tubular member 32 and shaft 34.

In view of the fact that tubular member 32 has a plurality of perforations 33 the length of steering shaft 18 may thereby be regulated. A similar regulation may be carried out with bars 23.

Steering wheel 17 is secured to steering shaft 18 by means of screw 41. Wheels 1 and 2 as well as steering wheels 17 are dismountable so that the toy may be kept in a relatively small box.

We claim:

1. A steered trundle toy comprising a pair of wheels, a linked lever frame in the form of an articulated parallelogram having a first pair of relatively long levers and a second pair of relatively short levers, a steering wheel, a steering shaft having a free end, said steering wheel being mounted on said free end of said steering shaft, a journal having two ends, for said steering shaft, said journal being supported by one of said levers of said first pair of relatively long levers and adjacent thereto, the axis of said journal forming an acute angle with the plane defined by said parallelogram, said steering shaft projecting out on one end of said journal and extending beyond the other lever of said pair of relatively long levers and having at the end thereof said steering wheel, the length of said projecting part of said steering shaft between said journal and said steering wheel being sufficient to provide the necessary distance between said parallelogram and said steering wheel to provide room for an operator of the toy, a portion of said steering shaft emerging out of the other end of said journal forming a crank substantially in a parallel plane with regard to the plane formed by said parallelogram, the axis of said crank forming with the axis of said steering shaft an acute angle substantially equal to the angle formed between said journal and said parallelogram plane, said crank being operatively connected with the other lever of said pair of relatively long levers, said levers of said second pair

of relatively short levers each supporting a stub shaft having a free end on which one wheel of said pair of wheels is rotatably mounted, a pair of bars connected to the lever supporting said journal said pair of bars being in spaced relationship with each other, one on each side of said steering shaft, said bars having slots, a belt passing through said slots, said belt having two free ends provided with separable pressure fastening means, said steering shaft and said bars being of the telescopic type.

2. A 2-wheeled steered trundle toy comprising in combination; a linked lever frame in the form of an articulated parallelogram having a first pair of relatively long levers and a second pair of relatively short levers, a stub axle mounted on each short lever substantially transversely thereto and intermediate the ends thereof, a pair of ground-engaging wheels rotatable on said axles, an elongated steering shaft, an elongated journal having a longitudinal axis mounted on one of said long levers with its axis at an acute angle to the plane defined by said parallelogram, the lower end of said steering shaft being carried in said journal, collar means adjacent said journal for preventing relative movement between said steering shaft and said journal along said longitudinal axis, a crank attached to the lower end of said steering shaft at an acute angle thereto and extending from adjacent said one of said long levers towards the other long lever, stop means on said other long lever, said crank means being operatively connected to said other long lever by said stop means, and a steering wheel mounted on a perpendicular to the upper end of said steering shaft.

3. A toy as set forth in claim 2 including means for pushing said parallelogram comprising a pair of substantially parallel bars having one pair of free ends and being connected at their other ends to said parallelogram, and a strap connected to the free ends of said bars adapted to attach said free ends to a child.

ALBERTO LEOPOLDO JULIO ZILERI.
MICHEL FREUDENSTEIN.

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