Nov. 15, 1949 M. C. PACHECO 2,487,940

WHEELED TOY

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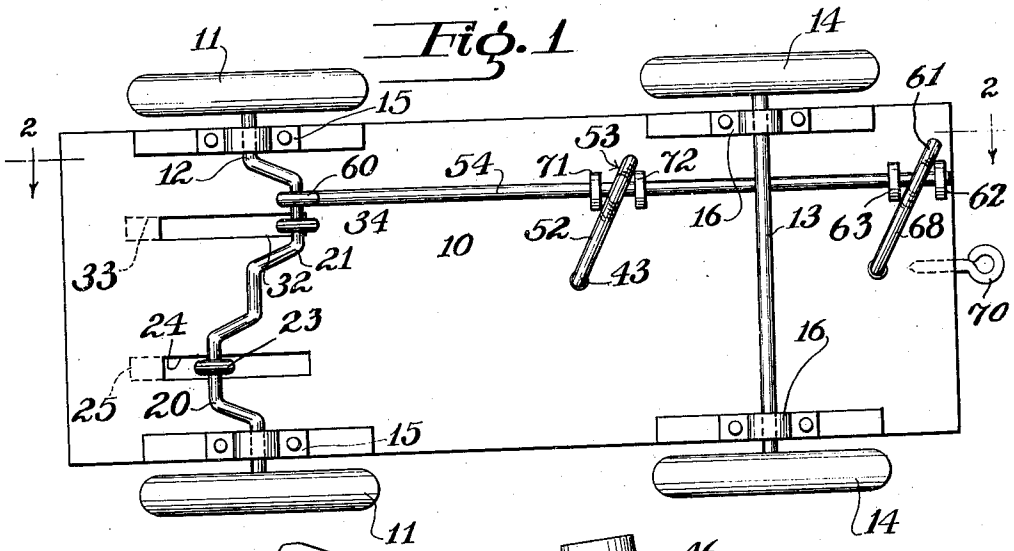
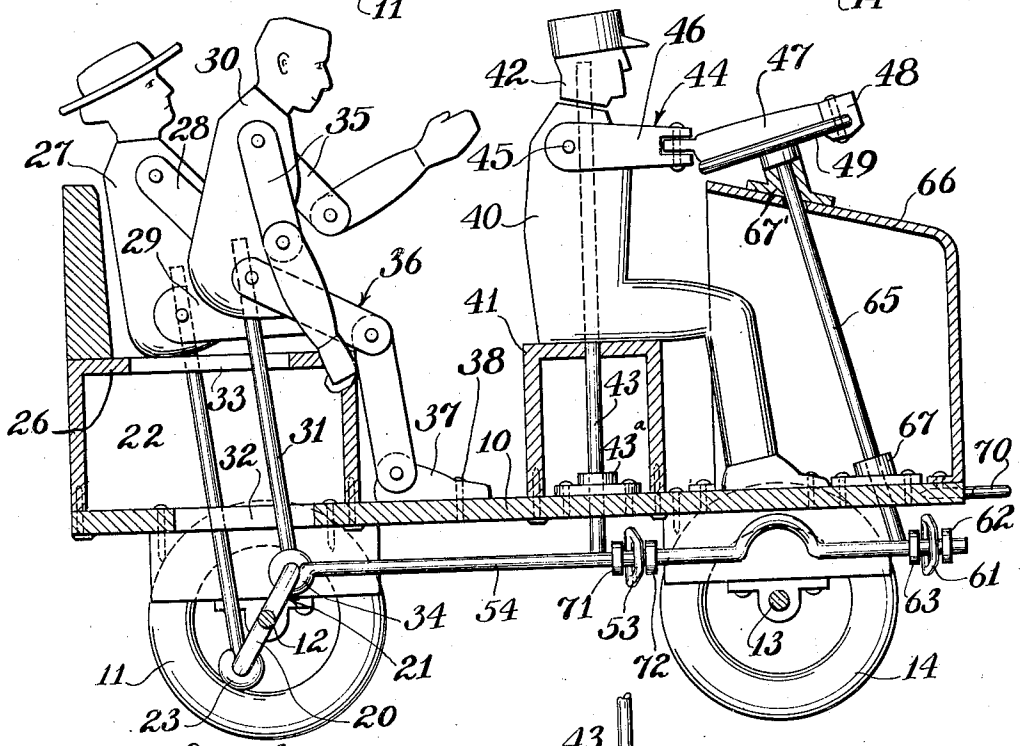
Fig. 1





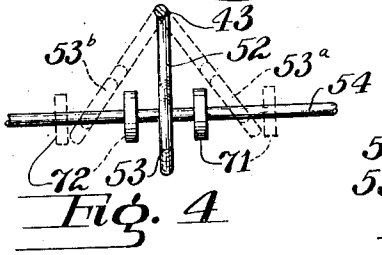


Fig. 4

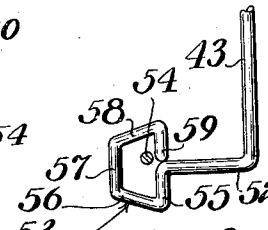


Fig. 3

Fig. 2

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WHEELED TOY

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1 Claim. (Cl. 46—107)

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This invention relates to toys. An object of the invention is the provision of a toy adapted to be drawn along a surface by manual propulsion, said toy including a carriage supported by wheels, a pair of which being secured to an axle having a crank thereon for reciprocating a rod longitudinally of said carriage supporting a figure on a seat, the figure having a head rockably mounted thereon and movable arms attached to a steering wheel, there being connections between the reciprocating rod and the head and steering wheel for causing rocking of the head and steering wheel when the toy is propelled.

A further object of the invention is the provision of a manually propelled toy having a crank embodied in an axle secured to a pair of supporting wheels, said crank actuating a reciprocating rod connected at one end to the crank, the other end of the rod being slidably mounted in an oscillating bearing carried at one end of a rockable arm rigid with a shaft to which is attached a wheel representing a steering device, a second shaft connected at one end to the head of a figure with a rockable arm connected to the other end of the second shaft and provided with an especially formed eye receiving an intermediate portion of the reciprocating rod so that as said rod is shifted back and forth, means on the rod at opposite sides of the eye will cause said arm to rock the head; likewise means on said rod at opposite sides of the oscillating bearing, causing rocking of the first-mentioned shaft and head when said rod is reciprocated.

The invention consists in the novel construction, arrangement and combinations of parts hereinafter more particularly described and claimed.

In the drawings:

Figure 1 is a bottom plan view of a toy constructed in accordance with my invention.

Figure 2 is a longitudinal vertical section taken along the line 2—2 of Figure 1.

Figure 3 is a fragmentary side view in elevation of an operating arm having an eye which receives a reciprocating rod, and

Figure 4 is a fragmentary plan view of the arm shown in Figure 3 in various positions.

Referring more particularly to the drawings, 10 designates a body portion which is supported by rear wheels 11 rigidly attached to an axle 12 and front wheels 14 secured to an axle 13. The axle 12 is mounted in a pair of bearings 15 while the axle 13 is carried by a pair of bearings 16. The pairs of bearings are secured to the under face of the body 10.

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Cranks 20 and 21 are incorporated in the axle 12. A link 22 has an eye 23 received by the crank 20 on the axle 12. The body has an opening 24 in line with an opening 25 in the top of a seat 26 secured to the body at the rear end thereof. The openings 24 and 25 receive the link 22 therethrough and function to guide the link in its vertical reciprocating movements.

A figure 27 is shown on the seat 26 but is adapted to be elevated by the link 22 and the crank 20. The figure 27 has an arm 28 and a leg 29 pivoted at each side of the figure and said arms and legs are adapted to swing loosely as the figure is raised and lowered.

A second figure 30 is secured to the upper end of a link 31 which moves through an opening 32 in the body 10 and an opening 33 in the top of the seat 26, the openings 32 and 33 guiding the reciprocating movements of the link. The lower end of the link has a bearing 34 receiving the crank 21 on the axle 12. Said figure has arms 35 and a leg 36 pivoted thereon so that the legs and arms will be moved as the figure is raised and lowered.

Each arm and each leg of both figures 27 and 30 are formed of two sections in order to simulate the arms and legs of a human being in motion. Feet 37 are pivoted to the lower ends of the legs and the feet are secured to the top of the body 10 of the toy, as shown at 38.

A figure 40 is mounted on a seat 41 secured to the top of the body 10. A head 42 at the upper end of a shaft 43 supported by a bearing 43—a is oscillatably mounted on the figure. An arm 44 pivoted at 45 at each side of the figure is formed of two sections 46 and 47 which have the inner ends thereof pivotally connected together. The outer end of each section has a hand portion 48 secured to a wheel 49. Feet 50 of the figure 40 are secured to the top of the body 10 in front of the seat 41.

An arm 52 formed integrally with the lower end of the shaft 43 projects toward one side edge of the body 10. The free end of the arm has an eye 53 of particular formation as shown in Figure 3, which receives a reciprocating rod 54. The eye is formed by bending the end of the arm downwardly at 55, then upwardly at an angle as shown at 56, then vertically at 57 and inwardly at 58. The free end is then bent downwardly at 59 where it engages the arm 52.

The reciprocating rod 54 has a bearing 60 at the rear end thereof and said bearing is received by the crank 21. Said rod extends forwardly through the eye 53 and is supported at the for-

ward end by a rockable bearing 61 disposed between a pair of collars 62 and 63 fixed to the rod 54. The rear end of the rod moves through a circle with the crank 21 while the front end of said rod moves back and forth a distance equal to the diameter of the circular path of the rear end of the rod.

An inclined shaft 65 is mounted in a bearing 67' at the top of a hood 66 secured to the front of the body 10 and in a bearing 67 secured to the front end of said body. The shaft projects through and below said body and has a rock arm 68 integrally formed therewith and carrying the bearing 61 at its free end.

Means in the form of an eye 70 is screwed into the front end of said body. A cord is adapted to be attached to the eye 70 for manually propelling the toy along a surface for causing rotation of the front and rear wheels.

A pair of spaced collars 71 and 72 are secured to the rod 54 with one collar at each side of the eye 53. The collars are spaced a sufficient distance from each other to permit rocking and movement of said eye.

The operation of my device is as follows: When the toy is propelled, the figures 27 and 30 at the rear of the body are moved up and down by the cranks 20 and 21 and the respective links 22 and 31.

The rotation of the crank 21 causes reciprocation of the rod 54. As said rod is moved forwardly the collar 71 engages the eye 53 on the free end of the arm 52 to the forward position shown in Figure 1. When the rod is drawn rearwardly the collar 72 forces the eye 53 toward the rear. The movement of the eye is limited between the dotted line positions shown in Figure 4 and indicated by the numerals 53—*a* and 53—*b*.

The rocking of the arm 52 and the shaft 43 causes the head 42 on the figure 40 to move sideways. It will thus appear that the driver of the toy is looking constantly from one side to the other side of the toy. When the rod 54 is shifted back and forth the bearing 61 will be engaged alternately by the collars 62 and 63 for rocking the arm 68. Rocking of said arm causes the shaft to be rocked and likewise the wheel 49. Since the arms 44 are connected to said wheel, the arms of the figure 40 will move, giving the appearance of the wheel being operated by the driver or figure 40.

The rod 54 will not only be reciprocated but it will oscillate so that the rod will move up and down in the eye 53 and the length of the eye must be such as to accommodate the movement of said rod. The width of the eye must also be

such that said eye may be moved in an arc of a circle, the radius of which being the arm 52, so that the oscillating rod 54 will not interfere with the complete movement of said eye.

A combination of elements such as an oscillatable wheel 49 and the simultaneously rocking head 42 is effected through the medium of the single reciprocating and oscillating rod 54 to present the illusion of a driver watching the traffic and steering the vehicle.

I claim:

In a toy having a body and provided with a front axle having wheels thereon and a rear crank axle, traction wheels for driving said crank axle, said body having a seat, aligned openings formed in the seat and body, a vertically reciprocating rod extended through said openings, said rod having one end pivotally connected to the crank, a figure mounted upon the other end of the rod, a horizontally reciprocable rod having one end connected to the crank of the axle and extending forwardly therefrom and terminating beyond the front axle, an oscillating arm remote from the crank and provided with a bearing at the free end thereof for receiving and supporting the horizontal reciprocating rod, a collar secured to said last named rod at each side of the bearing, a shaft projecting upwardly from the arm and connected thereto, a figure on the shaft having a head mounted on the upper end of the shaft for oscillatable movements, a second shaft rising from the body and projecting therebelow and including an oscillatable arm, a bearing on the arm for receiving and supporting the horizontal reciprocating rod, a collar secured to said last named rod at each side of the bearing, said collars being positioned inwardly of the forward end of the rod, said second named shaft having a steering wheel secured to the upper end thereof, and said last named figure having hingedly connected arms secured to said steering wheel.

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