June 8, 1926.

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C. A. WETZELL

MECHANICAL TOY

Filed April 23, 1923

FIG. 1

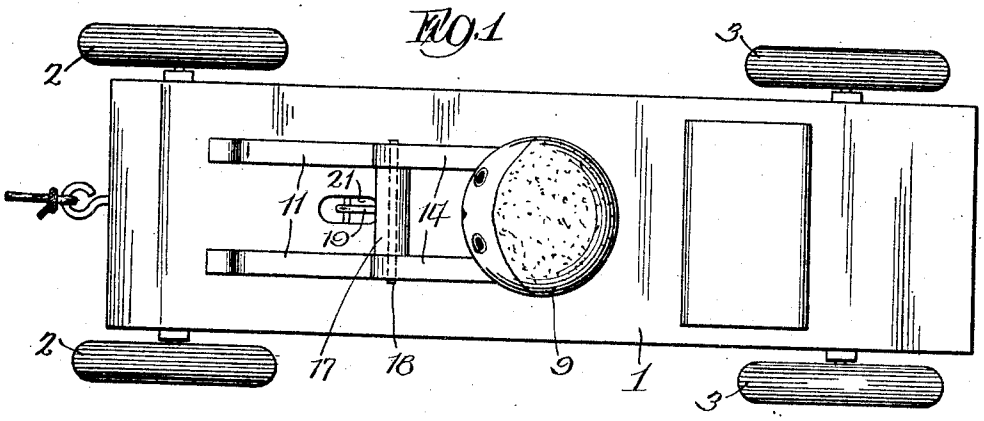


FIG. 2

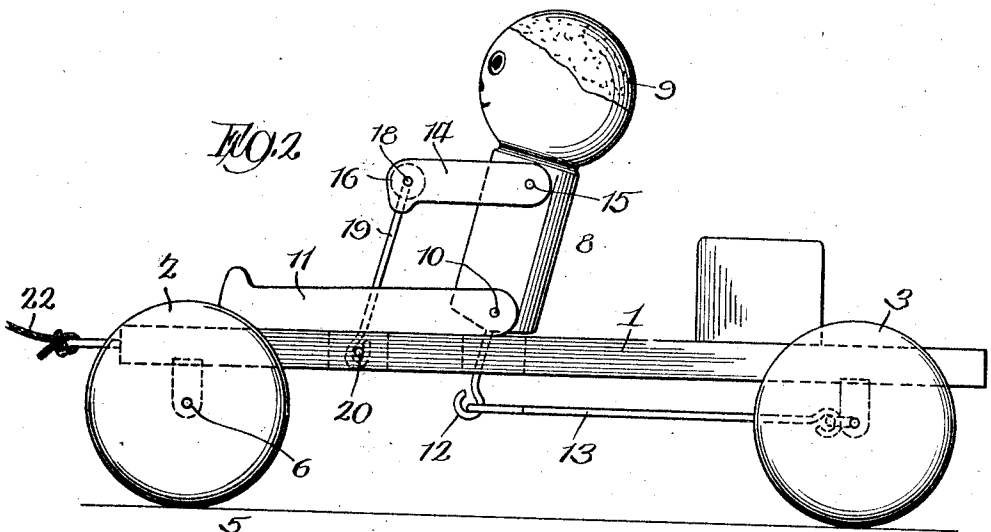
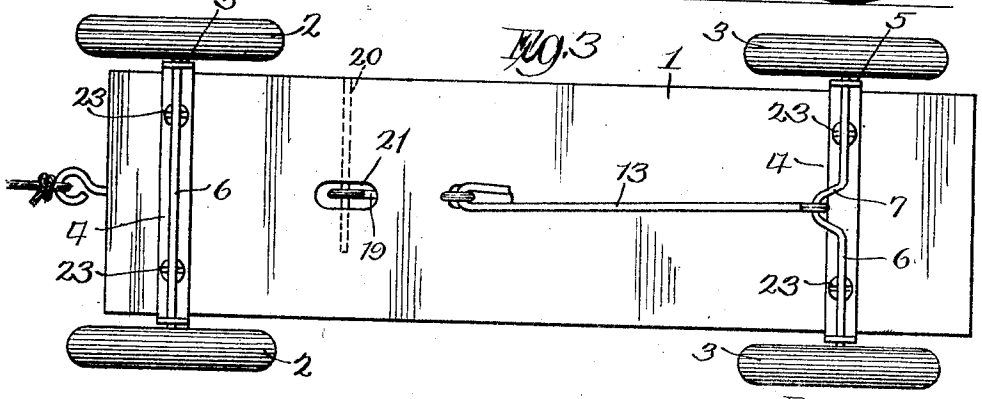


FIG. 3



Inventor

Clarence A. Wetzell

by Arthur H. Durand Atty.

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UNITED STATES PATENT OFFICE.

CLARENCE A. WETZELL, OF STERLING, ILLINOIS.

MECHANICAL TOY.

Application filed April 23, 1923. Serial No. 633,916.

This invention relates to mechanical toys of the kind which are adapted to be propelled or moved along the floor to produce the desired mechanical effect.

Generally stated, the object of the invention is to provide a simple and comparatively inexpensive mechanical toy having a figure thereon which appears to be propelling the toy when it is drawn along the floor.

It is also an object to provide certain details and features of construction and combinations tending to increase the general efficiency and the desirability of a mechanical toy of this particular character.

To the foregoing and other useful ends the invention consists in matters hereinafter set forth and claimed and shown in the accompanying drawings in which—

Figure 1 is a plan of a mechanical toy embodying the principles of the invention.

Figure 2 is a side elevation of said toy.

Figure 3 is a bottom view of the toy shown in Figures 1 and 2.

As thus illustrated, the invention comprises a body 1 mounted on front and rear wheels 2 and 3, the body being provided with transverse metal bolsters 4 having down-turned end portions 5 which engage the rotary axles 6 to which said wheels are attached. It will be seen that the rear axle 6 has a crank 7 formed in the middle portion thereof. Near the front of the toy, on the flat body 1, there is mounted a figure comprising the cylindrical portion 8 provided with a round head 9, and the lower end portion of the body 8 of the figure being pivoted at 10 between and upon the rear end portions of the legs 11 which are fixed in outstretched position upon the top of the flat body 1 of the vehicle. The lower portion of the cylindrical body 8 is provided with a depending hook 12 to which is connected the pitman 13 that engages the crank 7 previously mentioned. The figure is provided with arms 14 which are pivoted thereon at 15 and which have between their outer ends or hands 16 a transverse spacer 17 which is pivoted thereon by a pin 18 extending from one hand to the other. A link 19 connects the spacer 17 with a pivotal point 20 in the slot 21 cut in the body 1, the pivot 20 being formed by any suitable means for this purpose.

Now the toy thus constructed has the appearance of being a vehicle which is propelled by the figure when the toy is drawn along the floor. The front end of the toy may have a string 22 attached thereto for this purpose. The crank 7 through the pitman 13 rocks the figure about its pivot 10, and when this is done the arms 14 have a swinging motion, with the result that the figure appears to be propelling the toy.

The construction is simple and comparatively inexpensive, and all the parts may be made inexpensively of wood, with the exception of the pivots and the axles and the pitman 13 and the link 19 and the hook 12, these parts being preferably made of wire. Also, the bolsters 4 are preferably made of metal strips and are secured in place by screws 23 inserted through the bolsters and into the flat board 1 which forms the chassis or body of the little toy vehicle.

When the toy is in use, the figure swings or rocks forward and backward, and the general effect is that of a boy riding an "Irish Mail" or some similar toy vehicle. The arms 14 are actuated by the body 8, and the link 19 is operated by said arms to simulate propelling means. Broadly, though, as stated, the invention contemplates a mechanical toy comprising a vehicle and a toy figure thereon which when the vehicle is drawn along the floor, appears to be operating the wheels, or at least one of them, to propel the vehicle in the desired manner.

The link 19, therefore, simulates a propelling device, and this propelling device is actuated by the arms 14, and the arms 14 are actuated by the body 8, and the body 8 is actuated by wheel power. In this way, therefore, the simulated propelling device 19 is simply connected between the arms 14 and the wheeled support 1, and is in no way directly connected with the wheels of the vehicle, and hence the simulated propelling device 19 is actuated by wheel power communicated thereto through the wheel actuated body 8 of the toy figure. The toy figure, therefore, really operates the simulated propelling device 19, but this is merely a dummy device, and this device neither propels the vehicle nor is it directly actuated by the wheels of the vehicle, but to the contrary this simulated propelling device 19 is actuated by the toy figure itself.

Thus it will be seen that the support 1 is simply a flat horizontal member, and that the legs 7 are straight and are stretched out straight ahead and are mounted flat-

wise on the top of said support. As the body 8 is round, and therefore of similar thickness, space is afforded between the arms 14 for the transverse bar 17, which latter simulates the upper cross-piece of an ordinary handle, so that the elements 17 and 19 simulate more effectively the ordinary propelling device of a vehicle. The invention contemplates, therefore, broadly, a simulated propelling device which is actually operated by the toy figure, and which is very obviously so operated, thereby to more nearly approximate the actual conditions of propulsion by the person sitting on a vehicle and actually driving the vehicle by means of a hand lever provided for that purpose.

As another advantage of the specific construction of the toy figure, as shown and described, it will be seen that the torso 8 is cylindrical, while the head 9 is spherical, whereby these parts can be very easily manufactured. Furthermore, the torso and the head have the same outline, when viewed horizontally from any direction, and hence it makes no difference which side faces forward—that is to say, it makes no difference which side of the head is made to represent the face of the figure. Consequently, it is optional which side of the torso and head is used for the front. Of course, after the arms and the legs are pivoted on the torso, the side of the torso and head facing forward becomes the front of the figure. But, very obviously, after the torso and head are made as shown, it is then immaterial which side is used for the front of the figure, and any side thereof, before the arms and legs are attached, may be painted or otherwise treated to represent the face of the figure. Thus the cylindrical torso and the spherical head are specifically of considerable value and advantage, as this formation not only gives the toy a unique appearance, but also simplifies the manufacture of toys of this kind. And, in addition, the cylindrical torso and the spherical head are not easily broken, if at all, and the toy will stand considerable rough usuage without being broken.

It is obvious, of course, that the elements 17 and 19 not only simulate a propelling device, but also simulate a specific kind of propelling device, namely one for communicating hand power to one or more of the wheels of the vehicle, as the latter is plainly of the kind which has driving wheel means for the propulsion thereof. Therefore, when the toy is moved forward along the floor, the toy figure has the appearance of manually communicating driving power to one or more of the wheels of the vehicle, and has the appearance of propelling the vehicle in this particular manner.

What I claim as my invention is—

1. In a toy having simulated driving wheel propelling means operated by a toy figure, a support provided with wheels to travel along the floor, a toy figure mounted in riding position on said support and having pivotally connected portions including a rocking body and pivoted arms actuated thereby, wheel operated means to cause motion of said pivotally connected portions of the figure by actuation of said body, and means to simulate a propelling device for operating one or more of said wheels, mounted on the wheeled support and connected to said arms, whereby said device is actuated by said arms, by motion communicated thereto from said body of the figure, so that the figure actually operates said simulated propelling device and thereby appears to be propelling the toy by hand power communicated to one or more of said wheels, when the toy is moved forward along the floor, said support being a flat member, said figure comprising legs fixed on said support, said body being pivoted on said legs, with said arms pivoted on said body, and said device comprising a link connecting said arms to said support, said wheel operated means comprising a crank shaft and a pitman connected to the lower end of said body, whereby the body is rocked on its pivot by the rotation of said crank shaft, thereby to cause said arms to vibrate said link to simulate propelling means.

2. In a toy having simulated driving wheel propelling means operated by a toy figure, a support provided with wheels to travel along the floor, a toy figure mounted in riding position on said support and having pivotally connected portions including a rocking body and pivoted arms actuated thereby, wheel operated means to cause motion of said pivotally connected portions of the figure by actuation of said body, and means to simulate a propelling device for operating one or more of said wheels, mounted on the wheeled support and connected to said arms, whereby said device is actuated by said arms, by motion communicated thereto from said body of the figure, so that the figure actually operates said simulated propelling device and thereby appears to be propelling the toy by hand power communicated to one or more of said wheels, when the toy is moved forward along the floor, comprising a transverse bar forming a spacer between the hands of said arms, so that the arms are in wide apart planes, legs in said planes, an upright member forming said device and extending downward from said spacer to said support, and a pivot for the lower end of said device, said bar and member forming said device.

CLARENCE A. WETZELL.