Feb. 20, 1940. F. J. MEILLEUR 2,190,795

MECHANICAL TOY

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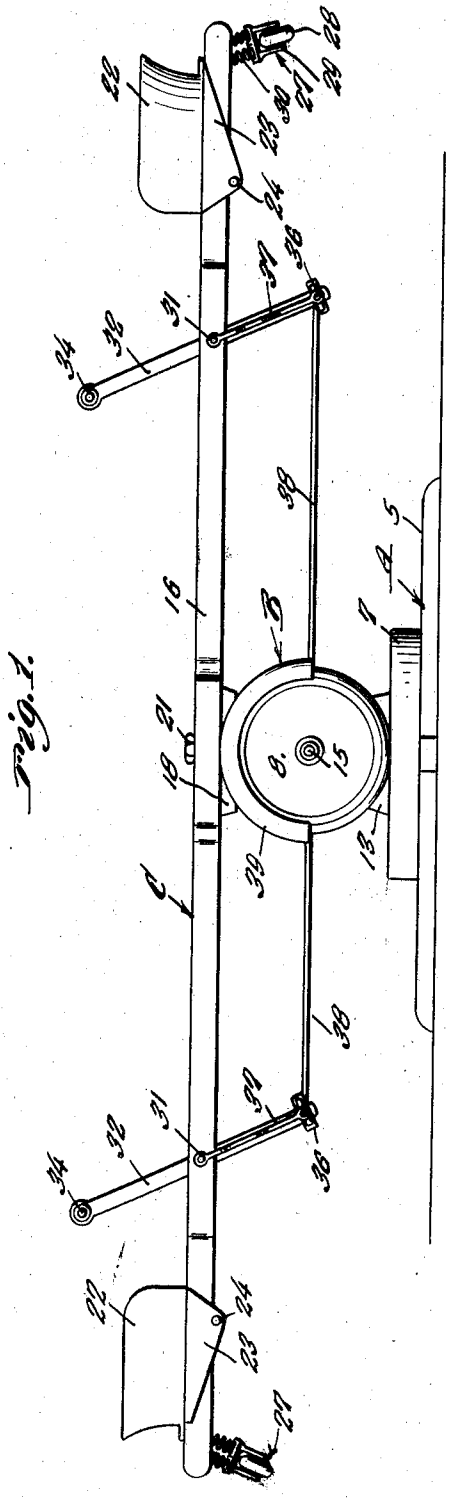

Fig. 1.

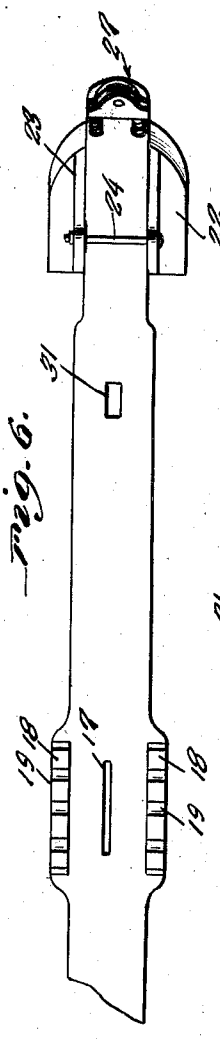

Fig. 2.

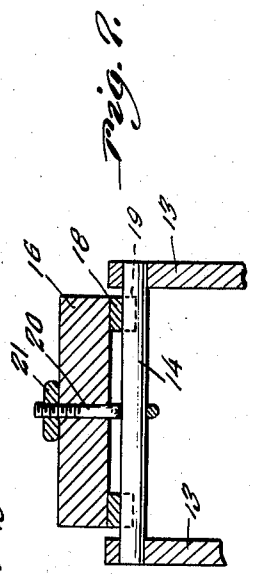

Fig. 3.

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Fig. 7.

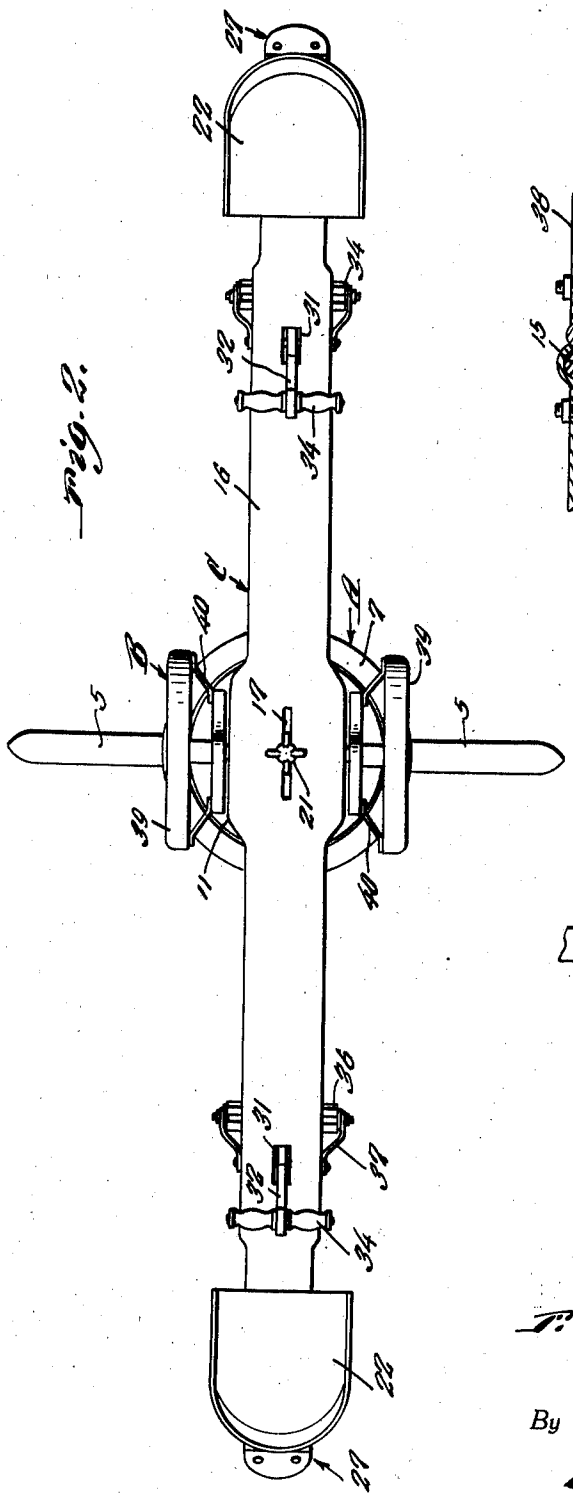


Fig. 9.

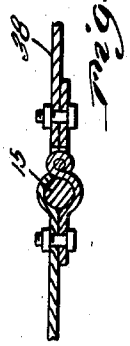


Fig. 10.

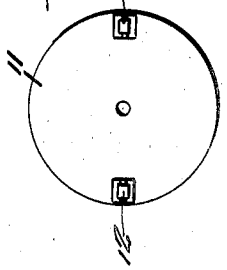
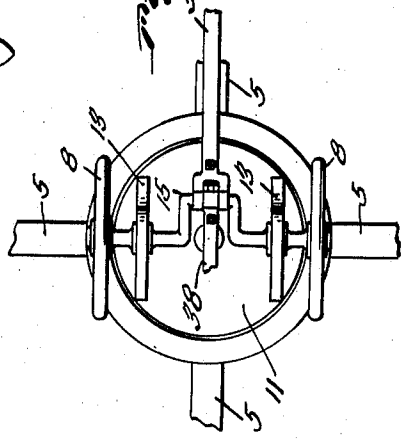


Fig. 8.



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MECHANICAL TOY

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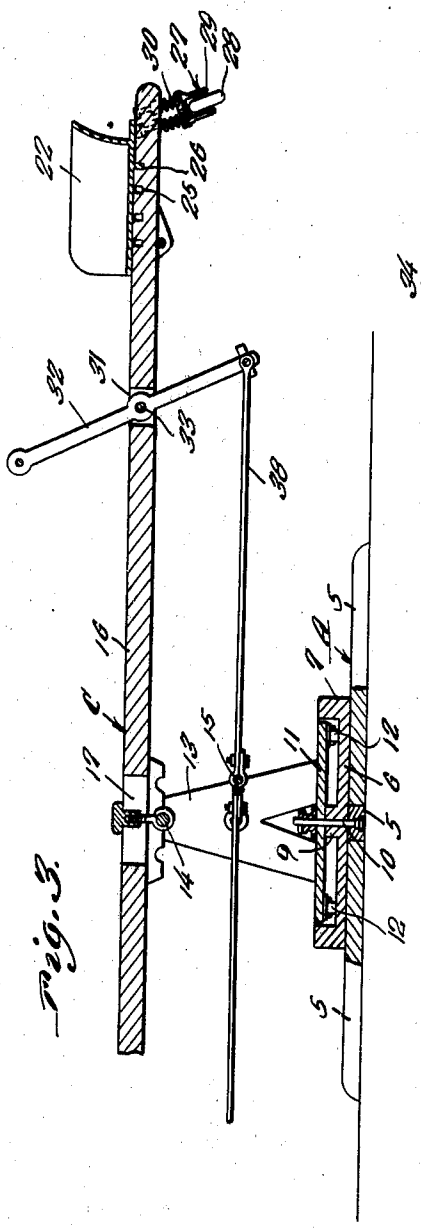

Fig. 5.

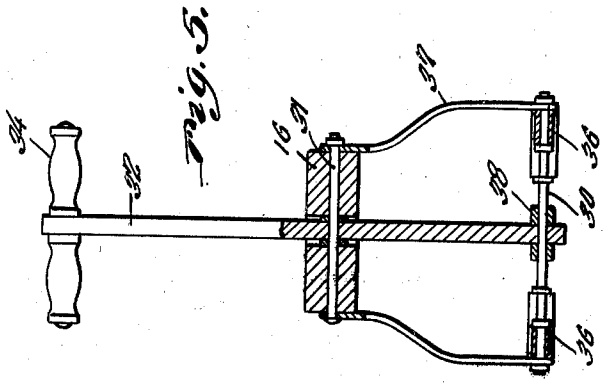

Fig. 6.

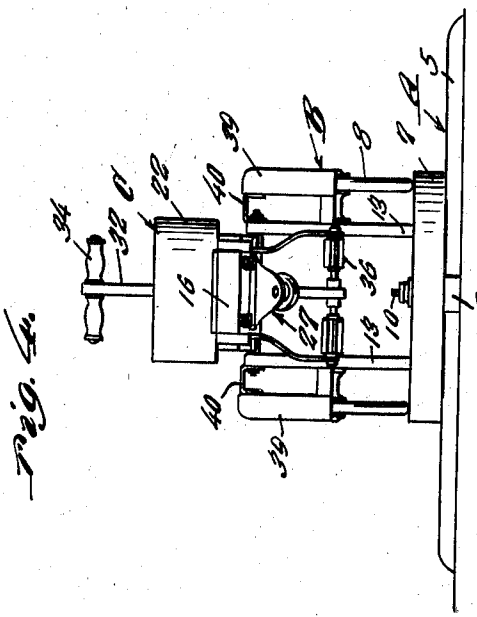

Fig. 7.

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Patented Feb. 20, 1940

2,190,795

UNITED STATES PATENT OFFICE

2,190,795

MECHANICAL TOY

Frank J. Meilleur, New Orleans, La.

Application August 4, 1939, Serial No. 288,442

3 Claims. (Cl. 272—30)

This invention relates to a mechanical toy, and has for the primary object the provision of a device of this character which is especially adapted to provide healthful exercise and afford a maximum amount of amusement for either children or adults and combines in one device a merry-go-round and a see-saw and may be easily operated by the riders as either a merry-go-round or a see-saw or with both motions at the same time and is simple in construction and durable and may be manufactured and sold at a low cost.

With these and other objects in view, the invention consists in certain novel features of construction, combination and arrangement of parts to be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawings, in which

Figure 1 is a side elevation illustrating a mechanical toy constructed in accordance with my invention.

Figure 2 is a top plan view illustrating the device.

Figure 3 is a fragmentary vertical sectional view showing the device.

Figure 4 is an end elevation illustrating the device.

Figure 5 is a transverse sectional view illustrating one of the combined handle bar and foot pedal.

Figure 6 is a fragmentary bottom plan view showing a portion of the rocker board and one of the seats adapted thereto.

Figure 7 is a fragmentary transverse sectional view illustrating the pivotal connection between the rocker board and its support for the mobile unit of the device.

Figure 8 is a fragmentary plan view showing a portion of the mobile unit with the rocker board removed.

Figure 9 is a fragmentary sectional view illustrating the means of joining the crank shaft of the device to connecting rods.

Figure 10 is a bottom plan view illustrating a turntable forming a part of the mobile unit.

Referring in detail to the drawings, it will be seen that the present invention includes a base A, a mobile unit B and a rocker assembly C.

The base A includes ground engaging members 5 arranged at right angles to each other and suitably joined together and on which is mounted a disc-like plate 6 having integral therewith an upstanding annular flange 7 forming a track for traction wheels 8 of the mobile unit B. The disc 6 is provided with a centrally arranged bearing 9 through which extends a king bolt 10 that also extends through the ground engaging members to act as a tie for the plate 6 to said members. The king pin 10 further extends through a turn-table 11 having equalizing rollers 12 that ride the plate 6 within the track 7. It is preferable that the rollers 12 be arranged at right angles to the traction wheels 8. The turn-table 11 includes vertically arranged spaced standards 13 connected at their upper ends by a pivot pin 14 and also have bearings for supporting a crank shaft 15, one end of which has one of the traction wheels secured thereto while the opposite end has the other traction wheel journaled thereon.

The rotation of the crank shaft will bring about rotation of the turn-table 11 due to the fact that one of the traction wheels is secured to the crank shaft and engages with the track 7.

The rocker assembly C includes a rocker board 16 having a slot 17 intermediate its ends and secured to the rocker board upon its under face and at opposite sides of the slot 17 are bearing strips 18 having therein a series of notches or grooves 19. The notches or grooves 19 of one of the bearing strips 18 are arranged opposite or in alignment with the grooves or notches of the other bearing strip so that the notches of said bearing strips will be arranged in opposed pairs for the purpose of receiving therein the pivot pin 14. By having the pairs of notches or grooves will permit the rocker board 16 to be balanced on the rocker pin and to adapt its use for riders of different weights. An eye bolt 20 has the pin 14 extending therethrough and passes through the slot 17 and rocker board and receives thereon a nut 21.

The rocker board 16 is equipped with seats 22 which may be adjusted endwise of the rocker board and each includes cleats 23 which straddle the rocker board and are connected by a tie bolt 24 underlying the rocker board and which will prevent the front end of the seat from raising upwardly from the rocker board but still permit the seat to be slid endwise of the rocker board.

The rocker board has a series of sockets 25 overlaid by the seats and pins 26 are carried by the seats and may enter any of the sockets for adjustably connecting the seats on the rocker board and which will permit the seats to be easily adjusted endwise of the rocker board by disengaging the pins or projections from the sockets.

Roller type bumpers 27 are carried by the ends of the rocker bar to act as shock absorbers when the rocker bar is engaged with the ground or object and each includes a roller 28 carried by

frames 29 connected to the rocker board by a coil spring 30.

The rocker board adjacent the seats is provided with slots 31 through which extend operating levers 32. The operating levers are pivotally mounted, as shown at 33, and extend above and below the rocker board adjacent the seats. The upper ends of the levers 32 are provided with hand grips 34 and the lower ends are equipped with rods 35 on which are mounted foot pedals 26. The outer ends of the rods 35 are supported by braces 37 which are connected to the pivot pins of the operating levers and act as guards to prevent the operator's feet from slipping off of the pedals.

Connecting straps or links 38 are journaled on the rods 35 and also on the crank of the crank shaft. Thus it will be seen that the operators occupying the seats may operate the device by both the feet and hands. In operating the device the rocker board may be caused to rock on the pivot pin 14 to provide a see-saw motion and by rotating the crank shaft through the operation of the lever 32 the rocker board may be caused to move in a merry-go-round manner or if desired, either of the motions described may be brought about jointly or separately.

Guards 39 are provided for the traction wheels 8 and are supported by brackets 40 secured on the uprights 13.

A device of the character described and shown in the drawings is simple to operate and will provide a maximum amount of amusement and healthy exercise to the riders and may be readily assembled and disassembled when desired and may be manufactured at a low cost and constructed of any material suitable for the purpose.

It is believed that the foregoing description, when taken in connection with the drawings, will fully set forth the construction and advantages of this invention to those skilled in the art to which a device relates, so that further detailed description will not be required.

Having thus described my invention, what I claim is:

1. A mechanical toy comprising a base, a track on said base, a turn-table rotatably connected to the base and operating within the track, a traction device including wheels engaging the track and a crank shaft having one of the wheels secured thereto and the other wheel journaled thereon, supports on the turn-table and carrying the traction device, a rocker board pivotally and adjustably connected to the supports, seats adjustably connected to the rocker board, and manually operated levers pivotally mounted on the rocker board adjacent the seats and operatively connected to the crank shaft.

2. A mechanical toy comprising a base, an annular track on said base, a turn-table journaled on said base and operating within the track, supports on said turn-table, a rocker board pivotally and adjustably and detachably connected to said supports, a crank shaft journaled on said supports, traction wheels on said crank shaft and engaging the track and one of said wheels being secured to the crank shaft and the other wheel free of said crank shaft, guards for said wheels carried by the supports, seats adjustably connected to the rocker board, operating levers pivoted to the rocker board and extending above and below the latter, hand grips secured to the upper ends of the levers, foot pedals secured to the lower ends of the levers, and connecting straps joining the lower ends of the levers to the crank of the crank shaft.

3. A mechanical toy comprising a base, an annular track on said base, a turn-table journaled on said base, supports on said turn-table, a rocker board pivotally mounted on said supports, a crank shaft journaled on said supports, traction wheels on the crank shaft and engaging the track and one of said wheels being free of the crank shaft and the other wheel secured thereto, operating levers pivotally mounted on said rocker board, means for connecting said levers to the crank shaft, said rocker board having a series of sockets adjacent its ends, seats engaging the rocker board and adjustable endwise thereof, projections on said seats to engage in the sockets, cleats on the seats to straddle the rocker board, tie bolts underlying the rocker board and connecting the cleats.

FRANK J. MEILLEUR.