Nov. 6, 1928. 1,690,590

W. D. MOLBY

INCLINED REVOLVING TEETER

Filed Aug. 8, 1924

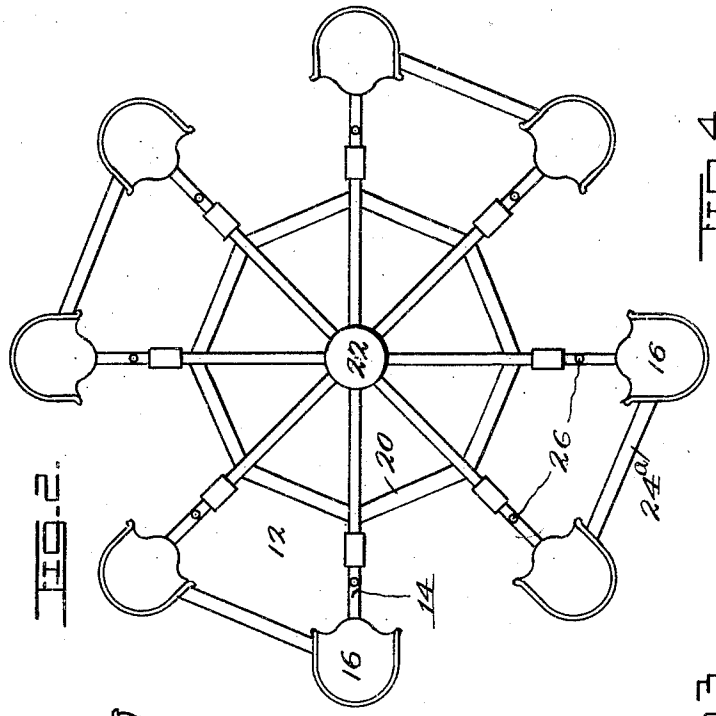


FIG. 2.

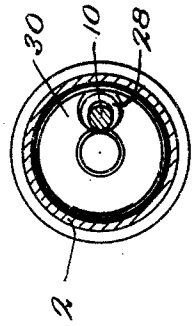


FIG. 4.

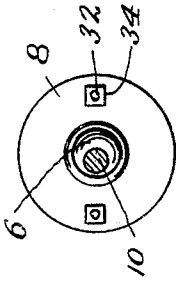


FIG. 3.

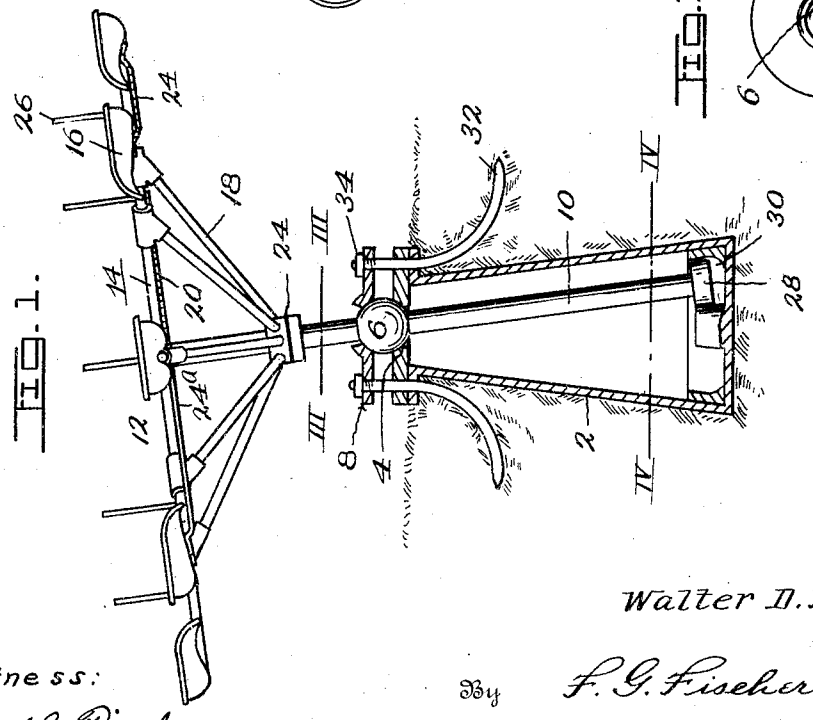


FIG. 1.

Witness:
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UNITED STATES PATENT OFFICE.

WALTER D. MOLBY, OF BALDWIN CITY, KANSAS.

INCLINED REVOLVING TEETER.

Application filed August 8, 1924. Serial No. 730,958½.

My invention relates to amusement devices and my object is to provide a comparatively simple and inexpensive device of this character having a combined rotary and teeter action.

Another object is to provide an amusement device which may be operated by the movement of the bodies of the passengers, so that the cost of providing and maintaining a motor for that purpose may be avoided, thereby rendering the device especially suitable for use on public play grounds.

A further object is to provide a device of this character of substantial construction so that children playing thereon are not likely to become injured through breakage of any of the parts.

Other objects will hereinafter appear, and in order that the invention may be fully understood reference will now be had to the accompanying drawing, in which:

Fig. 1 is a side view of the device with the lower portion thereof in section.

Fig. 2 is a detail plan view of the upper portion of the device arranged in a horizontal plane.

Fig. 3 is a horizontal section on line III—III of Fig. 1.

Fig. 4 is a horizontal section on line IV—IV of Fig. 1.

In carrying out the invention, I employ a conical casing 2 provided at its upper end with a socket 4 to receive a ball 6, which is operably held in said socket by a cap 8.

10 designates an inclined shaft provided intermediate its ends with the ball 6, which is fixed to said shaft to support the same. The upper end of said shaft 10 is provided with a spider-like passenger carrying frame 12 consisting of radial members 14 provided at their outer ends with seats 16, braces 18, and struts 20. The inner or adjacent ends of the radial members 14 are united by a coupling 22 secured to the upper end of the shaft 10. The braces 18 are connected at their outer ends to the radial members 14 and at their inner ends to bearing 24 fixedly mounted upon the shaft 10. The struts 20 hold the radial members 14 in uniform spaced relation and are aided in this by connecting rods, tubes, or bars 24^a which unite the seats 16 in pairs as shown by Fig. 2.

Handles 26 are disposed in front of the seats 16 and fixed to the members 14, for the passengers to hold to.

The lower end of the shaft 10 is provided with an anti-friction roller 28 which travels in an annular guide 30 in the bottom of the casing 2, and thus maintains said shaft in an inclined position.

In practice the casing 2 is preferably sunk to the level of the ground as shown by Fig. 1, to prevent the device from upsetting and, also, to bring the seats 16 close to the ground so that they can be readily mounted by children without the aid of a platform. The casing 2 is aided in supporting the shaft 10 and the frame 12 by anchors 32, the lower portions of which are embeded in the ground while their upper portions extend through holes in the socket 4 and the cap 8 and are provided with nuts 34 for holding said cap 8 down upon the ball 6.

Passengers may start the shaft 10 and the passenger carrying frame 12 in motion by running beside the seats 16 for a short distance while pushing thereon before vaulting into said seats. After the passengers become seated the motion is continued by said passengers leaning inwardly toward the shaft 10 as the seats 16 move upwardly from their lowermost position, then leaning outwardly as said seats descend. During the course of the operation the shaft 10 not only revolves but its ends gyrate or describe orbits about an imaginary axis extending vertically through the center of the ball 6, the diameter of the orbital paths being restricted by the roller 28 and the guide 30. The shaft 10 and the frame 12 may also be caused to teeter by shifting the weight in such manner as to cause the higher seats to move downwardly and the lower seats upwardly.

From the foregoing description taken in connection with the drawings it will be apparent that the device not only revolves but also has a teetering action which adds to the amusement of the children or other passengers occupying the seats 16.

While I have shown and described the preferred embodiment of the invention, I reserve the right to make such changes in the construction, combination and arrangement of parts as properly fall within the spirit and scope of the invention as claimed.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:

1. An amusement device consisting of a casing adapted to be set into the ground and provided at its upper portion with a socket

and at its lower portion with an annular channel, an inclined shaft extending into said casing and said channel and having both ends free for describing orbits in either direction and also to rotate axially in either direction independently of any orbital movement, an antifriction roller mounted upon the lower end of said shaft and arranged to travel in the channel in the lower portion of the casing, a ball fixed to the shaft intermediate the ends of the latter and freely mounted in the socket in the upper portion of the casing, and passenger carrier means mounted upon the upper portion of the shaft.

2. An amusement device consisting of a ball and socket support, an inclined shaft fixed intermediate its ends to said ball and having both ends free for describing orbits in either direction, said shaft being also free to rotate axially independently of any orbital movement or vice versa, a spider fixed at its central portion to the upper portion of said shaft and including radially extending members, seats fixed to the outer portions of said members and through which the occupants of the seats can impart the above-mentioned movements to the shaft, and stationary circular means extending around the lower end of the shaft to limit the inclination of the latter.

In testimony whereof I affix my signature.

WALTER D. MOLBY.