March 28, 1933. K. KOSCHKA 1,903,116

AMUSEMENT DEVICE

Filed July 30, 1932 2 Sheets-Sheet 1

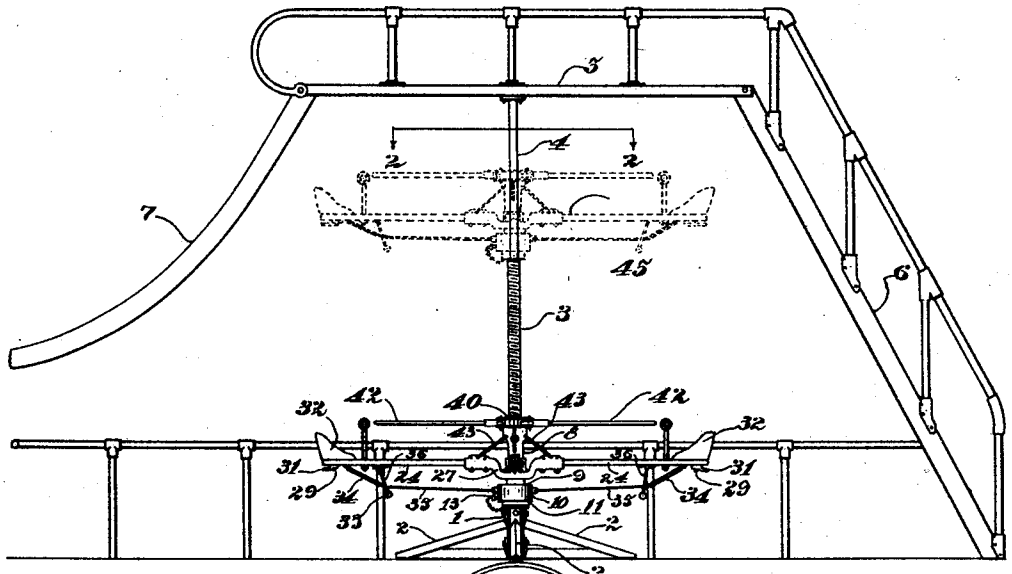


Fig. 1

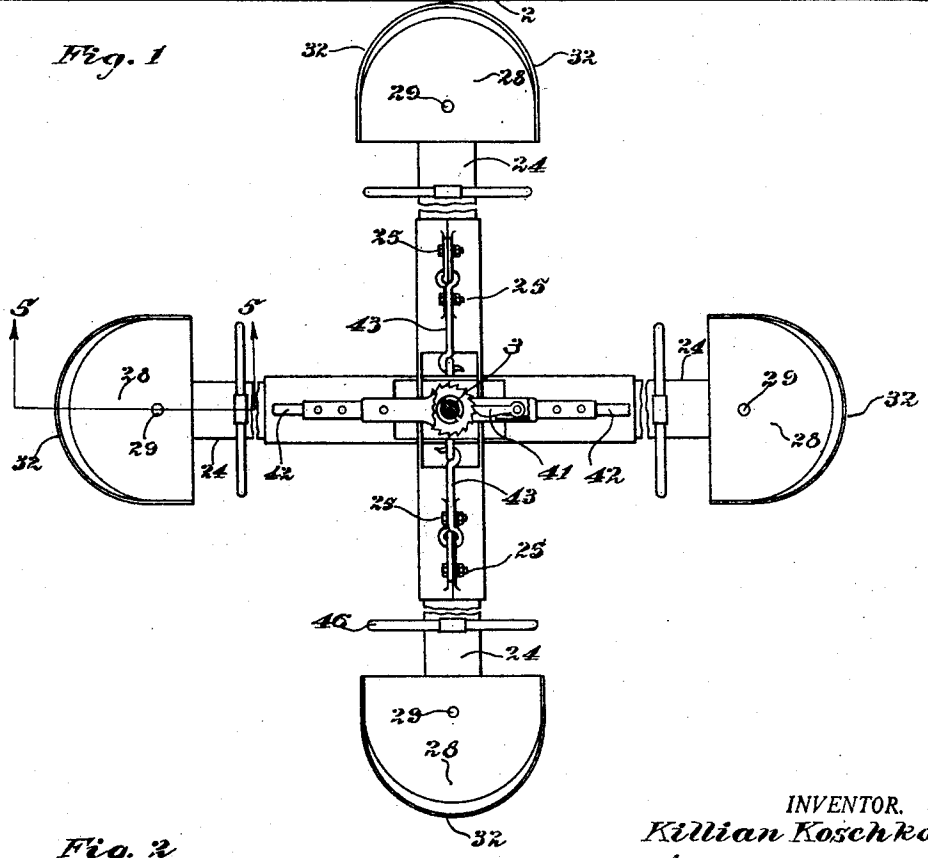


Fig. 2

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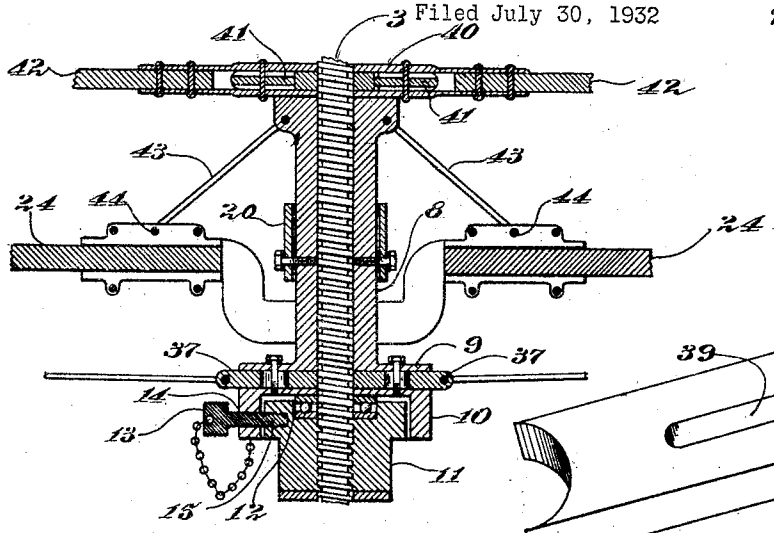


Fig. 3

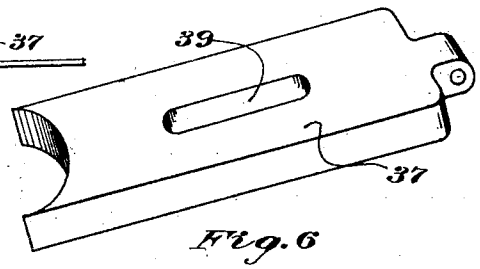


Fig. 6

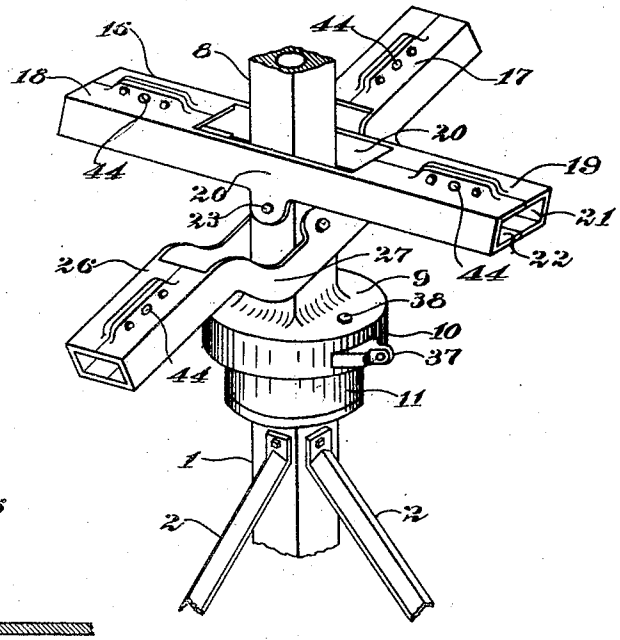


Fig. 4

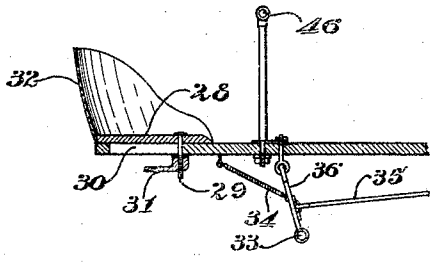


Fig. 5

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UNITED STATES PATENT OFFICE

KILLIAN KOSCHKA, OF ST. PAUL, MINNESOTA

AMUSEMENT DEVICE

Application filed July 30, 1932. Serial No. 626,765.

The present invention relates to a playground toy, and more particularly to a toy adapted for use as a merry-go-round and teeter-totter, embodying new features of construction for the purpose of elevating and lowering the device at will.

Although possibly two of the oldest of amusement devices, the merry-go-round and teeter-totter are still the favorites of children.

An object of the present invention is to make an improved amusement device for children.

In order to attain this object, there is provided, in accordance with one feature of the invention, a merry-go-round having the seats thereof on opposite sides connected by a beam pivoted for vertical tilting movement to a rotatable central member. The rotatable central member is mounted to rotate in a horizontal plane about a vertical threaded post, and is provided with releasable means to threadedly engage said vertical threaded post to raise or lower said rotatable member and the parts carried thereby.

These and other features of the present invention will be more fully brought out in the following description and the accompanying drawings, wherein:

Figure 1 is a view in side elevation of a device embodying the present invention, the solid lines indicating the parts in a normal position, and the dotted lines indicating a rotatable member and associated parts in raised position, a portion of a slide, used as a support for a central post being broken away.

Figure 2 is an enlarged sectional view on the line 2—2 of Figure 1, portions of said supporting beams being broken away for the purpose of enlarging the scale of the drawing.

Figure 3 is a vertical sectional view through a rotatable central member and supported parts.

Figure 4 is a view in perspective of the parts shown in Figure 3, the upper end portion of the central member being broken away.

Figure 5 is a sectional view on the line 5—5 of Figure 2; and

Figure 6 is a view in perspective of a brake member.

Referring to the drawings in detail, a base member 1 is provided with bracing legs 2, a threaded member 3 being fixedly mounted in the upper end of the base member 1 to extend upwardly therefrom, and has an unthreaded member 4 extending upwardly from the upper end thereof. A walk 5 is secured to the upper end of this member 4 and steps 6 are connected to one end of this walk member, and a slide 7 is connected to the other end of the walk. There is, of course, nothing patentable in the walk member, stairs, and slide, per se., since these structures are well known to the art. However, it is desirable to use these members as a bracing structure for the central post 4 so that they may perform a dual function. If the threaded member 3 were extended to a lesser height than that shown in Figure 1, it would be unnecessary to use any brace members for the top of this central post, since the rigidity of the central post itself would then be sufficient to withstand the stresses of operation.

A rotatable central member 8 is provided with a smooth central opening, of a size to receive the central threaded member 3 and to rotate freely thereon. This member is provided with an outwardly extending flange 9 at the lower end thereof, with a depending skirt portion 10 formed integrally therewith, see Figure 3. This skirt overlies the upper end of an internally threaded member 11, which threadedly engages the center member 3 and a ball bearing 12, which is mounted between the freely rotatable central, member 8 and the threaded member 11.

A locking pin 13 is adapted to enter an opening 14 in the skirt 10 and an internally threaded opening 15, in the threaded member 11, the insertion of which causes the members 10 and 11 to rotate as a unit.

The rotatable central member is formed with a square central portion 8 and on this portion and disposed at an angle of ninety

degrees to each other are pivotally mounted a pair of tiltable members 16 and 17. These two tiltable members, while different from each other, are each formed of a pair of similar members.

The upper member 16 is formed of the two similar portions 18 and 19 having straight side portions 20 and channeled end portions 21 and 22. The straight side portions 20 are mounted one on each side of the member 8 and are each provided with a downwardly projecting portion with an opening therein to receive a pivot bolt 23. The channeled end portions when mounted as best shown in Figure 4, form sockets for the reception of teeter boards 24 which are clamped in position by drawing the members tightly together upon these boards by means of bolts 25.

The lower member 26 is essentially similar to the member 16 except that it has downwardly offset side portions 27 with upwardly projecting portions thereon to receive pivot bolts 25.

A seat 28 is mounted on the outer end of each of the boards 24 and is adjustably held in place by a bolt 29 which extends through a slot 30 and has threaded on the lower end thereof a locking handle 31. By screwing this locking handle up on the bolt the board 24 is gripped between the seat 28 and the locking handle 31 to hold the seat firmly in position. A back 32 of sheet metal is preferably provided around the rear of the seat to prevent a child from sliding off.

A foot brake lever 33 is pivotally mounted beneath the board 24 inwardly from the seat 28. A coil spring 34 normally holds the foot brake lever outwardly to an inoperative position.

A link 35 connects the lever 36 to a brake shoe 37, which is slidably mounted in an opening in the lower portion of the central member 8 and is held in position therein by means of a bolt 38 riding in a slot 33 in the brake shoe.

A yoke 40 is mounted to ride on the upper end of the central member to be freely rotatable relatively thereto. A pawl 41 is mounted on the threaded post 3 to be freely slidable longitudinally thereof, a key, integral with the pawl 41 riding in a vertical keyway in the post 3 to prevent relative rotation of the pawl 41 and the post 3. Handles 42 are connected to the yoke 40 and extend outwardly a sufficient distance to permit children sitting in the seats to grasp them.

Hooks 43 are pivotally mounted on each of the members 16 and 26 on opposite sides of the central member 8 and engage openings 44 in the central member to lock the members 16 and 26 against tilting movement when so desired. Releasing the hooks from engagement with the central member 8 frees the members 16 and 26 for tilting movement.

Operation

First, assuming that it is desired to use the device as a teeter-totter, the hooks 43 are all released from engagement with the central member 8 and the pin 13 is unscrewed and removed so as to release the central member for free relative rotation with respect to the threaded member 11. This permits the two members 16 and 26, and their associated parts, to each be used as an individual teeter-totter.

By hooking the hooks 43 into the openings 44 in the central member 8, the members 16 and 26 are thereby held against tilting movement and the device can be used as a merry-go-round. When thus used, the handles 42 may be grasped by children sitting in opposite seats and by moving the handles back and forth may cause the central member 8 and associated parts to rotate about the post 3. When moving the handles 43 in one direction, the pawls 41 engage the teeth of the ratchet gear, while in moving the handle in the opposite direction the pawl releases the gear for relative rotative movement.

To elevate the device, the bolt 13 is inserted through the opening in the skirt and is screwed into the opening in the threaded member 11. When thus secured, rotation of the central member rotates the threaded member 11 and causes the threaded member to screw itself up the central post 3. The rotatable central member 8, being supported on the threaded member 11, is carried up with it to the ultimate dotted line position 45. The threaded portion of the center post 3 terminates short of the top of the center post so as to limit the upward movement of the mechanism within safe bounds.

In returning to normal from an elevated position gravity assists in rotating the device, and by increasing the pitch of the threads to a required extent, which can be readily determined by one familiar with the art, auto rotation by gravity may be had when returning from a raised to a lowered position.

The device is simple to make and operate, provides healthful outdoor exercise for children while playing on it, and is subject to a variety of uses, which prevents children from becoming tired of it.

I claim:

1. An amusement device of the character described, comprising a vertical threaded post, a rotatable threaded member having threaded engagement therewith, a seat supporting member rotatably mounted on said post to rest on said threaded member to be supported thereby and to normally be free for relative rotation with respect to said threaded member, lock means to secure said seat support member to said threaded member, a beam tiltably mounted on said seat support at approximately the center of said

beam, a seat mounted on each end of said beam, releasable means mounted to lock said beam against tilting with respect to said seat support member, and actuating means operatively engaging said post and positioned to extend adjacent said seats to permit rotation of said seats with respect to said post.

2. In an amusement device of the character described, a vertical threaded post, a threaded member mounted to threadedly engage said post, a seat support member mounted on said post to rotate freely with respect thereto and to said threaded member, releasable means adapted to rigidly connect said seat support to said threaded member, a pair of perpendicularly disposed beams tiltably mounted on said rotatable member, said beams having their axes of tilting support vertically offset from each other to prevent interference, releasable locking means to lock said beams against tilting movement, and hand actuated means mounted on said seat support member and operatively engaging said threaded post to rotate said seat support member and associated parts.

3. In an amusement device of the character described, comprising a vertical threaded post having a seat support mounted thereon for free rotation, a threaded member threadedly engaging said post and normally free for relative rotation with respect to said seat support, a pair of vertically offset beams tiltably mounted at right angles to each other on said seat support member, releasable locking means adapted to lock said beams against tilting, seats adjustably mounted on the outer ends of each of said beams, a ratchet carried by said seat support and having slidable keyed engagement with said post, a pawl adapted to engage said ratchet, and handle means connected to said pawl and extending outwardly adjacent said seats to permit manual rotation of said seats about said post.

In testimony whereof I affix my signature.

KILLIAN KOSCHKA.