United States Patent

[11] 3,604,722

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[45] Patented **Sept. 14, 1971**

[54] **WHEELED REVOLVABLE RIDER PLAY PLATFORM**
6 Claims,9 Drawing Figs.

[52] **U.S. Cl.** **280/87.01,** 272/1
[51] **Int. Cl.** **B62b 11/00**
[50] **Field of Search** ..... 280/87.01, 87.02, 87.03, 87.04, 87.04 A; 272/1 R, 39

[56] **References Cited**

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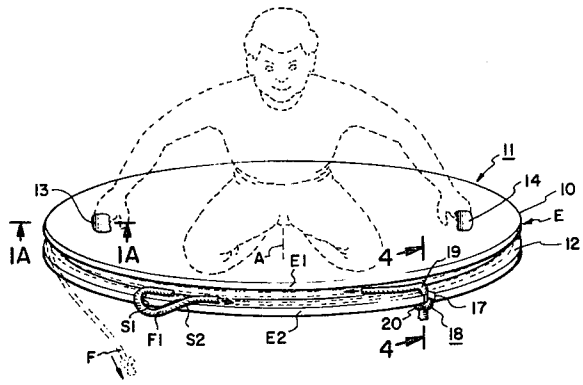
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Primary Examiner—Leo Friaglia
Attorney—M. Ralph Shaffer

ABSTRACT: The present invention comprises a toy device in which a platform is provided with manually gripping means and also with a peripheral edge groove accommodating rope or cable placement. In a preferred form, the invention includes edge slots or equivalent means by which the direction of winding of the rope or cable may be reversed, this at a point midway of the rope's length when inplaced. Rapid pulling of the rope will rapidly revolve a person sitting or kneeling on the platform and may offer both clockwise and counterclockwise rotations by a single rope pull. The device may also be used as a dolly, if desired.



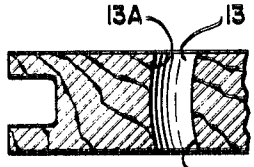


FIG. 1A

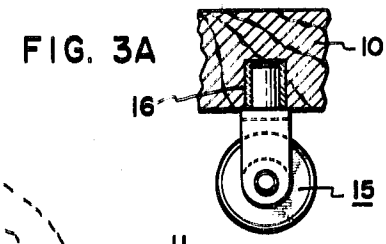


FIG. 3A

FIG. 1

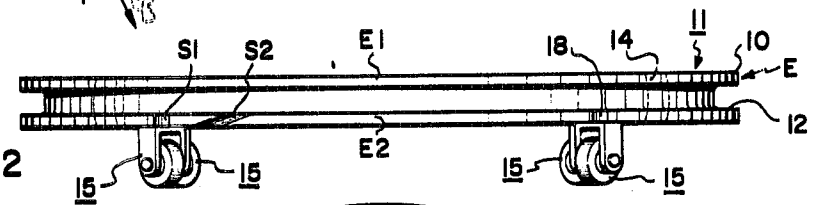


FIG. 2

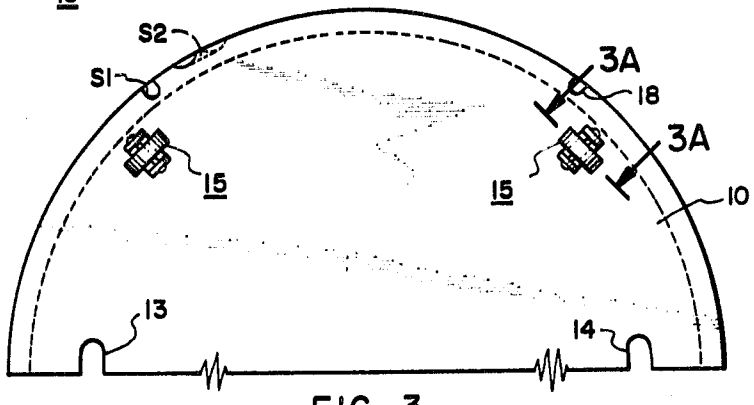


FIG. 3

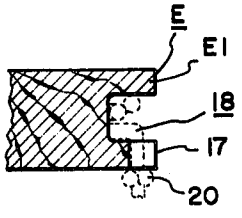


FIG. 4

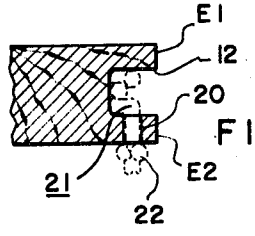


FIG. 4A

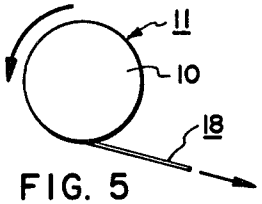


FIG. 5

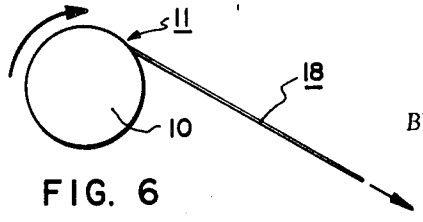


FIG. 6

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WHEELED REVOLVABLE RIDER PLAY PLATFORM

The present invention relates to dollies, revolvable platforms and the like and, more particularly, provides a play platform or utility dolly which is extremely simple, inexpensive to construct, and yet versatile in operation.

Those prior devices which have been called to the applicant's attention are believed to be deficient in one or more respects and also are highly expensive to manufacture. To improve over the prior art, the applicant has avoided the use of guard rails, framework and items of this nature, has provided manual gripping holes in the unit itself, and has included a novel torque producing means. In this regard, it is important to note that in the applicant's invention, a peripheral groove is necessitated and is provided in the peripheral edge of the device. The groove accommodates a flexible elongate member such as a rope or cable which is wrapped around the groove. When the rope is pulled, then the same rapidly unwinds from such peripheral groove of the platform of the device, thereby rapidly spinning or torquing the platform about its vertical central axis.

In a preferred form of the invention, the device includes auxiliary grooves or notches wherein the direction of rope placement is reversed midway at, or medially of the rope's length. In this way, the rope may be pulled so as to rotate the device in one direction and then, when the edge grooves are reached, to reverse revolvement of the device so it will revolve in reverse direction.

Accordingly, a principal object of the invention is to provide a new and improved revolvable platform device.

A further object is to provide a revolvable platform device which is extremely inexpensive to construct and yet versatile in operation.

An additional object is to provide a caster-supplied platform device which is rotatable about a vertical axis.

An additional object is to provide a platform device of the type described wherein a peripheral edge groove is supplied for revolving elongate flexible torquing member.

An additional object is to provide a platform device incorporating a peripheral edge groove, the same accommodating a torquing rope or cable which can revolve the device in either one or both directions upon a single pull.

The features of the present invention which are believed to be novel are set forth with particularity in the appended claims. The present invention, both as to its organization and manner of operation, together with further objects and advantages thereof, may best be understood by reference to the following description, taken in connection with the accompanying drawings in which:

FIG. 1 is a perspective view of a device incorporating the principles of the present invention.

FIG. 1A is an enlarged, fragmentary section taken along line 1A—1A in FIG. 1.

FIG. 2 is a front elevation of the device shown in FIG. 1.

FIG. 3 is a bottom plan showing a representative half of the invention.

FIG. 3A is an enlarged, fragmentary section taken along the line 3A—3A in FIG. 3.

FIGS. 4 and 4A are enlarged section details taken along the line 4—4 in FIG. 1, illustrating various embodiments.

FIGS. 5 and 6 are diagrammatic presentations illustrating revolvement displacement of the device in opposite directions, upon a single rope pull.

In FIG. 1, the platform 10 of device 11 is preferably circular in form and includes a peripheral groove 12 at edge E. Peripheral groove 12 is preferably formed as a V-groove or even a generally circularly concave groove. In any event, peripheral groove 12 should be such as to allow for easy, spinning removal of a rope or cable disposed therein as hereinafter explained. Of course, the groove can be simply of square or rectangular configuration as illustrated in FIG. 4A; however, the same preferably should not be undercut so as to interfere with automatic release of the rope or cable, hereinafter explained, once the same is being or has been pulled.

A pair of hand holes or apertures 13 and 14 are included, the general configuration of which is shown at 13 in FIG. 1A. Preferably, the sides 13A and 13B may be concave and convex configured, respectively, as illustrated, so as to provide for easy gripping of the device without necessitating hand gripping of the peripheral edge E of platform 10.

Platform 10 is provided with a plurality of caster assemblies 15 which are pivotable about respective vertical axes in the usual manner, and mounted in respective caster receiving apertures 16. Four such caster assemblies 15 will generally be supplied.

In FIG. 4 is illustrated one means of connection of a rope or cable with platform 10. Thus, the edge E may be provided with a slot 17 receiving the end 19 of cable or rope 18. Rope 18 is provided with knot 20 as seen in FIG. 4. Accordingly, the rope or cable may be wrapped around the device at peripheral groove 12 so as to accomplish a subsequent spinning of the same by the rope.

In the structure of FIG. 4, the rope is seen to be easily removed from the device as the same is pulled completely along its length to unwind relative to platform 10. As an optional embodiment, there may be provided a lip aperture 20 through which rope 21 is positioned and retained in place by knot 22. In such event, a spinning of the device by the rope will not effect a complete removal of the rope from the device. The configuration of FIG. 4A is preferred.

Referring again to FIG. 1, it is seen that the edge E includes outer edge margins E1 and E2, which are contiguous with peripheral groove 12. Through one of the margins, and preferably margin E2, there is provided a pair of additional slots S1 and S2. Slot S1 may be disposed vertically; however, slot S2 should be slanted or inclined in the direction shown.

In operation, the user takes a position upon platform 10 as indicated by the figure shown in the drawing of FIG. 1. The user will place his hands through the hand holes or apertures 13, 14, and hold on while another person attempts to spin the device about its own central vertical axis A. Rope 18 will be inplaced. Careful note is to be made of FIG. 1, wherein the knot of the rope is inplaced as shown, and the rope proceeds through hole 17 into peripheral groove 12, in a direction generally toward the left. The rope is thus wrapped in a clockwise direction about the platform 10, until, at an appropriate time, it is desired to reverse the direction of the rope. An this point, the rope is routed downwardly through groove S1 and then upwardly and to the right to groove S2. The rope is continued to be wrapped about the device, and this time in a counterclockwise direction, until the end F is positioned approximately as shown in FIG. 1.

The person then manipulating the device then pulls rapidly upon the rope at F so that the device spins rapidly in a counterclockwise direction. Then, when that area F1 of the rope is reached, the device will rapidly come to a stop and turn in a clockwise direction while the rope is continually being pulled, this until the rope either frees itself from the device, when the structure of FIG. 4 is used, or when the rope simply has reached its extremity in the case of FIG. 4A. In such event, the user disposed upon platform 10 will continue to revolve about axis A.

It is noted that if desired, the device may be revolved solely in one direction, with the slots S1 and S2 thus not being used. Greater excitement can be achieved, however, where the slots are used and a double-rotating movement effected; again, the single pulling of a single rope effects double revolvement.

Where the double-back rope configurement is employed, as in the case shown in FIG. 1, then FIG. 5 diagrammatically discloses the initial rotation of the device; subsequent pulling upon the rope effects a counterrotation as shown in FIG. 6.

The device of the invention can be used not only as a toy or a play device, but even as a dolly. The rope is useable to urge such dolly in any direction desired.

While the actuation means of the present invention has been referred to as rope or cable, it will be obvious that any type of flexible elongate means such as even a long flexible plastic tube may be utilized in practicing the invention. Hence, the term "flexible elongate means" herein shall refer to all types of such members that are constructed, by their flexible elongate nature, to revolve the dolly as above described.

While particular embodiments of the present invention have been shown and described, it will be obvious to those skilled in the art that changes and modifications may be made without departing from this invention in its broader aspects.

I claim:

1. A platform device including, in combination, a rigid platform, plural caster means pivotable about respective, individual vertical axes affixed to said platform for supporting the same, said platform being provided with a peripheral edge groove, and flexible elongate means disposed in said groove for spinning said platform.

2. The structure of claim 1 wherein said platform includes edge slots communicating with, and transversely disposed with respect to said edge groove, and constructed to receive said flexible elongate means in a doubled-back configuration.

3. The device of claim 1 wherein said platform is provided with a peripheral edge having upper and lower edge margins contiguous with said edge groove, the lowermost one of said edge margin being provided with plural slot means for receiving said flexible elongate means in doubled-back configuration.

4. The device of claim 3 wherein said lowermost edge margin is provided with a transverse aperture, said flexible elongate means passing through said aperture and including an enlargement retentively engaging said platform and said aperture.

5. The structure of claim 1 wherein said platform includes plural, handgripping apertures disposed on opposite sides thereof.

6. The structure of claim 1 wherein said platform includes means coacting with said flexible elongate means for enabling successive opposite revolvement of said platform upon the single pull of said flexible elongate means.