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Christians

[11] **3,830,491**

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[54] **ROCKABLE CHAIR FOR AN AMUSEMENT TOY**

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[52] **U.S. Cl.** ..... **272/33 R,** 248/385, 272/1 C, 272/58, 272/85, 297/285

[51] **Int. Cl.** **A63g 1/20,** A63g 9/00

[58] **Field of Search** ..... 272/1 R, 1 C, 33 R, 33 A, 272/52, 57 R, 57 A, 58; 248/372, 385; 297/285

[56] **References Cited**

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[57] **ABSTRACT**

A legless chair includes a seat axially and swivelly mounted to the top of a support post which is securely attached to a supporting base. Strong spring connections between the seat and post maintain a normal level plane of the seat but permit rocking, wobbling or rotating motions actuated by the gyrations of the occupant. A pair of axle mounted wheels are secured to the chair and are in slight contact with the base such that upon rotational movement of the seat, the wheels will rotate about their own axles as well. Additionally, the seat is hingedly connected to the remainder of the chair so that it can be manually elevated to provide access to the spring connections for purposes of adjustment and maintenance. The chair is designed to have a plurality of varied respective bodies of selected configurations attachable thereto to simulate a variety of vehicles and objects for the creation of fun and enjoyment. This toy is usable either indoors or out of doors and the chair assembly may be separated from its supporting structure for use as a swing seat.

8 Claims, 5 Drawing Figures

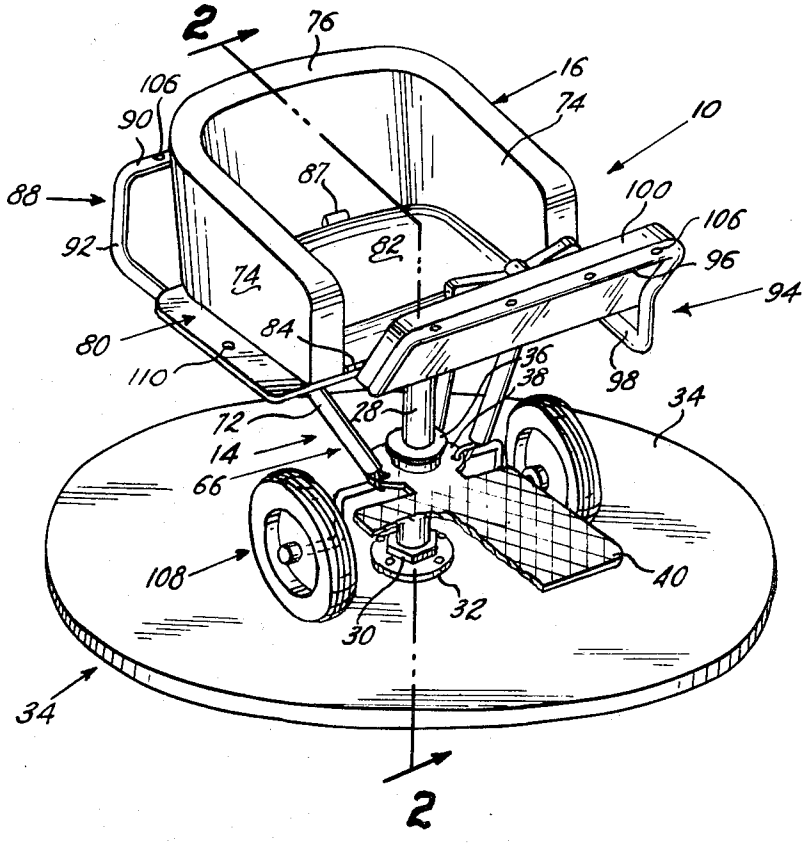


FIG. 1

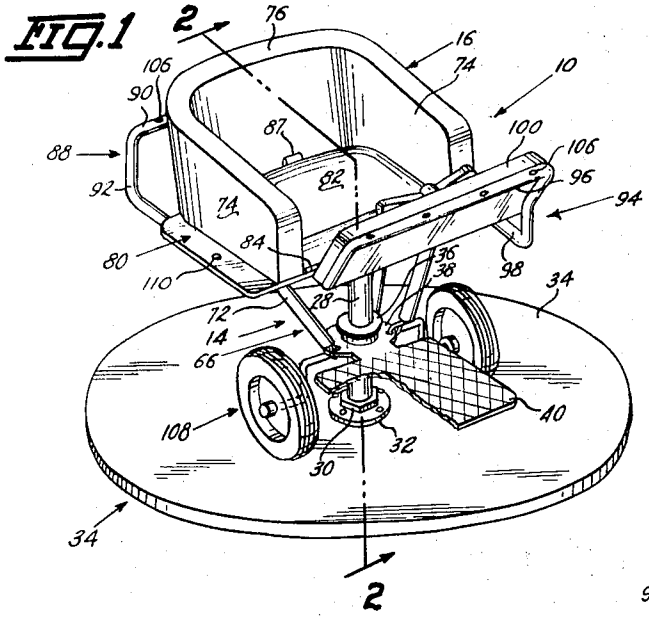


FIG. 3

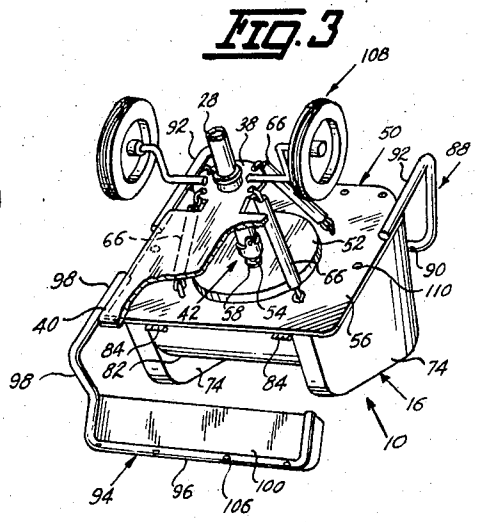


FIG. 2

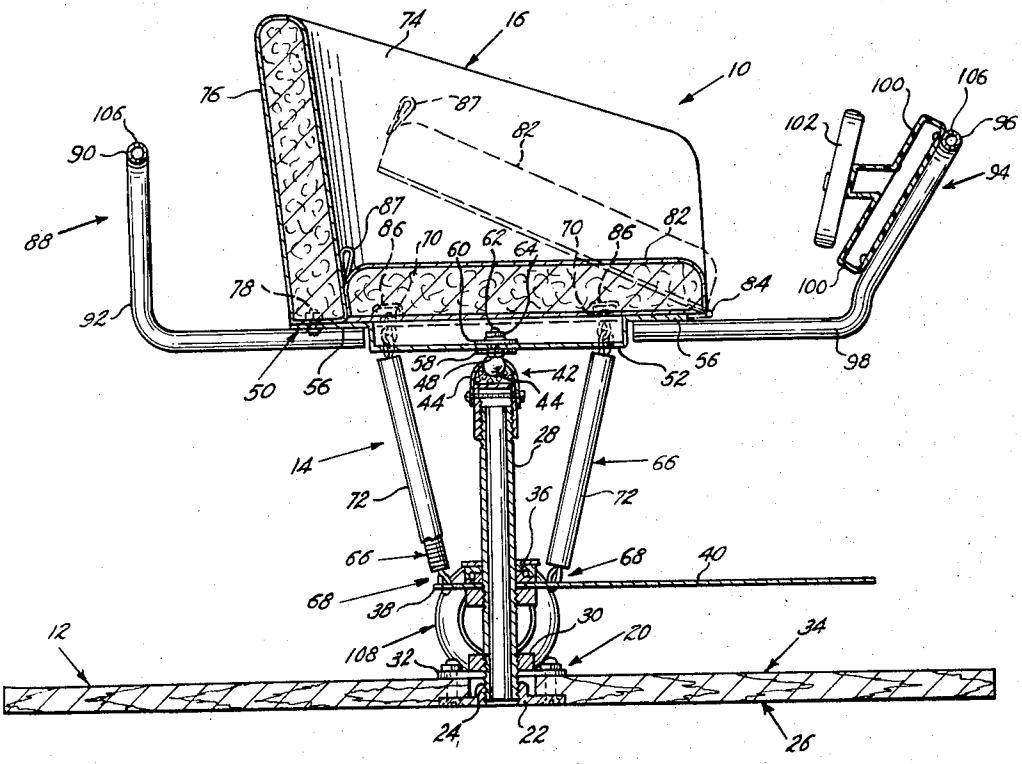


FIG. 4

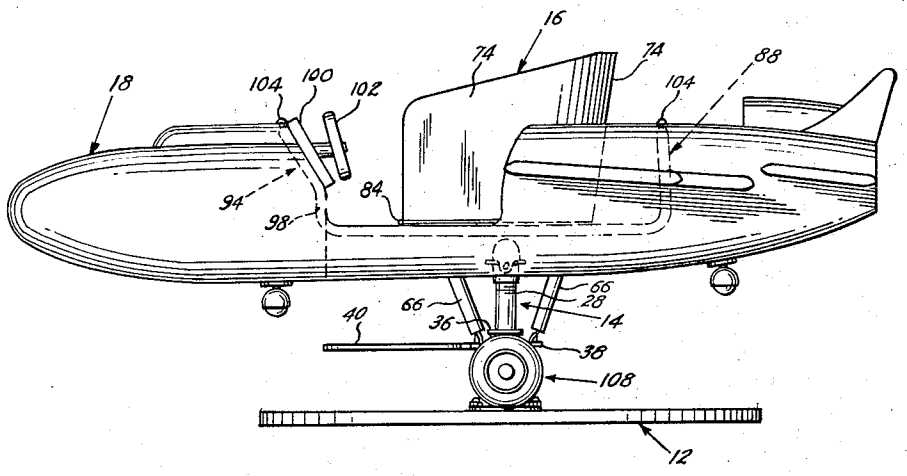
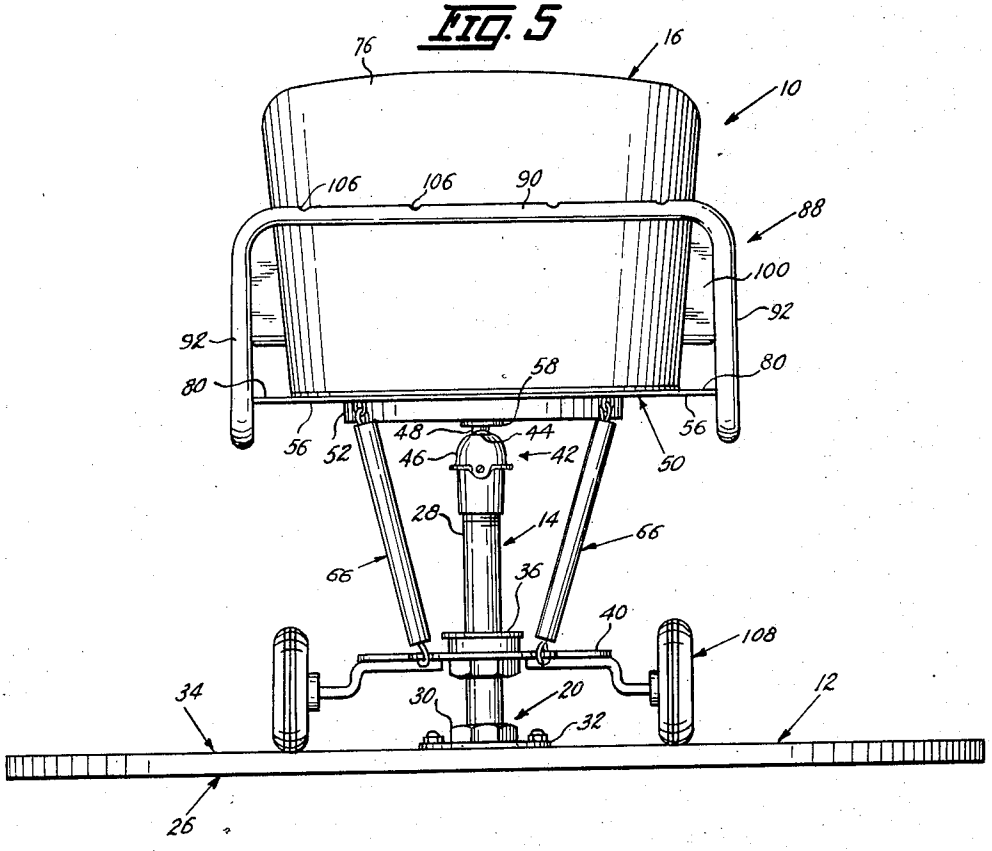

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FIG. 5


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ROCKABLE CHAIR FOR AN AMUSEMENT TOY

BACKGROUND OF THE INVENTION

This invention relates to an amusement toy that includes a seat susceptible of being rocked, wobbled or rotated by the gyrations of the occupant.

Occupant actuated rockable and rotatable toys of the type here involved have previously been provided in a variety of forms including those types designed to be moved about over a floor such as exemplified in U.S. Pat. No. 3,674,260 and those susceptible of various motions from a fixedly mounted base position as disclosed in U.S. Pat. No. 2,999,688. It is with this latter type that this invention is concerned and one of the important objects thereof is to provide an improved chair seat for an amusement toy fixedly positioned as to area but subject to a variety of rocking, bouncing and turning motions created by the body gyrations of the occupant.

Another object herein is to provide a toy of the above class which includes a legless chair suitably swivelly perched on a fixed standard and designed to have removably mounted thereto any one of a variety of accouterments which may be in any selected configuration to simulate a rocket ship, racing car, airplane and the like to add to the enjoyment and expand the imaginary uses which the occupant may wish to conjure up.

Still another object is to provide a toy as characterized which encourages healthful exercising and aids in teaching coordination and synchronization of movement while at the same time providing considerable fun, sport and enjoyment.

The foregoing objects and such further objects as may appear herein or be hereinafter pointed out, together with the advantages of this invention, will be more fully discussed and developed in the more detailed description of the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of this rockable amusement toy in its normal position,

FIG. 2 is a cross sectional view taken on the line 2—2 of FIG. 1,

FIG. 3 is a perspective bottom view for which this toy is shown in inverted position with portions cut away to more clearly illustrate the construction thereof,

FIG. 4 is a side elevational view showing this chair provided with a detachable accouterment here shown for purposes of illustration in the form of an airplane, and

FIG. 5 is a back view of this toy shown in FIG. 1.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to the drawings, this rockable chair for an amusement toy is designated generally by the numeral 10 and includes generally a ground or floor engaging base 12, a support assembly 14, a chair or seat assembly 16 and a selected attachment such as the airplane body 18 which shall all be referred to in more detail as this description proceeds.

Base 12 is preferably discoidal although this is not required and, as will appear, serves to support this toy so that it may be conveniently used in any suitable place either indoors or out of doors. A mounting assembly 20 is disposed axially of base 12 and includes the fitting 22 with a threaded well 24 that is flush with the bottom surface 26 (FIG. 2) and is designed to threadably receive the lower end of the upstanding standard 28. Assembly 20 also includes the lock nut 30 and plate 32 secured against the top side 34 of base 12.

Mounted to standard 28 above base 12 but below the longitudinal center of standard 28 is the bearing 36 that carries the concentric flange 38 capable of rotating about the longitudinal axis of standard 28 and integral with flange 38 is a horizontally projecting platform or foot rest 40 with the direction in which it projects being referred to as the front portion of toy 10. To the top or upstanding end of standard 28 there is removably secured a swivelable member 42 for which a variety of types are commercially available and for which I have preferably used a ball caster type as best seen in FIGS. 2 and 5 wherein a steel ball 44 projects partially from and is rotatable relative to a dome-like housing 46 secured to standard 28 in any suitable manner. For utilization of such ball caster for the present invention, I have secured a nut 48 to the projecting portion of ball 44 by welding for purposes to be later explained in more detail.

A rigid support plate 50 is preferably rectangular with its longest dimension disposed transversely of the front of the toy 10 and is provided centrally with a depression or well 52 (FIG. 2) in which there is the small axial opening 54 as best seen in FIG. 3. Thus formed, the top surface of plate 50 surrounding well 52 defines a shoulder or lip 56 and plate 50 is mounted to the support assembly 14 as follows.

Ball 44 is oriented relative to opening 54 in plate 50 on the underside thereof with a washer 58 placed over nut 48 below opening 54 and a second washer 60 is concentrically placed over opening 54 within well 52. A short bolt 62 carrying the lock nut 64 is threadably engaged with nut 48 through washers 60, 58 and opening 52 and lock nut 62 is tightened against washer 60 whereby plate 50 is in effect perched on the top of standard 28 and capable of turning, tilting and wobbling within the limits of movement of ball 44.

It is intended that plate 50 have a normal horizontal position and for this purpose I have provided a plurality of appropriate yielding members preferably in the form of springs 66 suitably secured at one end to spaced points on flange 38 such as at 68 and anchored at their other ends to the shoulder or lip portion 56 of plate 50 in any suitable manner such as by the eye and nut fasteners 70. As best seen in FIG. 3, springs 66 are secured to plate 50 at generally equally spaced points about the periphery of well 52 so as to generally provide equal yielding forces of restraint on plate 50 to continually urge it towards a normal level plane. Springs 66 may be encased in a suitable cover 72 of plastic or the like, if desired.

The chair assembly 16 includes the integral upstanding arms or sides 74 and back 76 which are mounted to the shoulder portion 56 of plate 50 by suitable fastening means 78 and the distance between sides 74 is such that shoulder 56 projects laterally from each side 74 as indicated at 80 (FIG. 1). The forward ends of chair sides 74 extend to the forward edge of plate 50 and a cushioned seat 82 designed to nest within the confines of sides 74 and back 76 is hingedly secured to the front edge of plate 50 as at 84 so that it can be raised from its normal position as seen in the broken

lines of FIG. 2. When lowered, seat 82 will rest on shoulder 56 and on its bottom side there is provided the recesses 86 for registration with the nuts 70 to assure a solid contact with shoulder 56. Since opening 54 in plate 50 is recessed, the fastening means described relative thereto will also be covered by seat 82. A finger loop 87 on seat 82 facilitates its elevation and the purpose of the hinged arrangement for such seat as described is to permit easy access to the several fastening means on plate 50 and in well 52 for springs 66 and mounting 42 for purposes of adjustment or maintenance.

A rear frame 88 (FIG. 5) includes the horizontal rod or bar 90 terminating at each end in the donwardly and forwardly extending L-shaped legs 92 which are suitably secured to the rear underside portion of plate 50 as best seen in FIG. 3 whereby frame 88 is supported in spaced relationship to the rear of the chair assembly 16. A front frame 94 also includes a horizontal rod or bar 96 with a depending L-shaped leg 98 only at one end secured to the front underside portion of plate 50 at one side thereof whereby rod 96 is disposed transversely of the front of chair assembly 16 to support such items as a simulated instrument panel 100, a steering wheel 102 and the like.

The airplane body 18 shown in FIG. 4 is removably mounted to frames 88 and 94 by any suitable fastening means 104 for which holes 106 are provided in frames 88 and 94 and such body 18 is intended to be only representative as it may be in any selected configuration to simulate such articles as a racing car, rocket ship or the like. Likewise, the simulated axle mounted landing wheels 108 are arranged on the support assembly 14 for adding to the enjoyment and imaginary exploits of the occupant and user of this toy.

With this toy 10 constructed and arranged as described, it can be used at any convenient place either indoors or out of doors. The chair assembly 16 will normally be on a level plane due to springs 66 and easy access to seat 82 is available between the front of the seat and that end of the front frame 94 opposite to leg 98 being the left end as viewed in FIG. 1. If desired, such access point may be provided with a suitable door means (not shown) but this is only a matter of choice. The foot rest 40 may also be used as a step for entering chair 16 if necessary. Once the occupant is seated chair 16 may be rocked tilted or wobbled by the gyrations of the body and may also be rotated about standard 28 because of bearing 36 to which springs 66 are attached. In this regard, the landing wheels 108 are suitably secured to flange 38 on bearing 36 and such wheels are in slight contact with base 12 so that if the occupant effects the rotation of chair 16, wheels 108 will move about standard 28 and also be rotated about their own axles. It will be understood that springs 66 are relatively sturdy so as not to permit displacement of chair 16 away from a level plane far enough to create any danger to the occupant of falling out.

As an added convenience, the projecting sides 80 of plate 50 are provided with holes 110 whereby, if desired, chair 16 can be removed from assembly 14 and used as a swing seat by suitable attachment of swing ropes or the like (not shown) through holes 110.

Accordingly, from all of the foregoing, it is thought a full understanding of the construction and operation of this invention will be had and the advantages thereof appreciated.

I claim:

1. A rockable legless chair for an amusement toy, comprising:

a ground or floor engaging base,

an upstanding standard fixedly secured to said base,

a chair defining a front and back side,

means swivelly mounting said chair to the upstanding end of said standard,

a bearing rotatably journalled on said standard for rotation about the longitudinal axis thereof,

yielding means operatively connecting said chair to said bearing to normally maintain said chair on a level plane but to permit of a rocking and wobbling motion thereof relative to said standard by the gyrations of a chair occupant and to permit said chair to be rotated about the longitudinal axis of said standard,

a pair of axle mounted wheels secured at diametrically opposite points to said bearing so that the periphery of said wheels are in slight contact with said base, and

with rotation of said wheels about the longitudinal axis of said standard with said chair, said wheels will also rotate about their own axles due to contact with said base.

2. A rockable chair as defined in claim 1 including said yielding means being a plurality of springs secured at one end at respective spaced points to said chair and secured at their other ends to respective spaced points concentrically about said bearing.

3. A rockable chair as defined in claim 1 wherein:

said chair includes integral closed sides and back portion and a separate seat portion,

a chair support plate,

means securing said chair sides and back portion to said support plate,

said means swivelly mounting said chair to said standard comprising a swivelable member mounted to the upstanding end of said standard and fastening means securing said support plate to said swivelable member, and

said yielding means being operably connected to said support plate and said standard.

4. A rockable chair as defined in claim 3 including:

said separate seat portion being normally disposed on said support plate within the confines of said sides and back portion so as to cover said fastening means and the points of attachment on said support plate of said yielding means, and

hinge means connecting said seat portion at the front of said chair to said support plate whereby said seat portion can be manually elevated to provide access to said fastening means and points of attachment for purposes of adjustment and maintenance.

5. A rockable chair as defined in claim 1 including:

first and second respective frame members carried by said chair so as to project from the respective front and back thereof,

a simulated toy instrument panel of any selected design mounted to said first frame member so as to extend transversely of the front of said chair in close spaced relationship thereto,

a simulated body member of any selected design detachably mounted to said frame members whereby

said chair is appropriately disposed for permitting the occupant to amuse himself by the pretended operation of the simulated device, and

a foot rest mounted on said standard in spaced relationship below the front of said chair.

6. A rockable chair as defined in claim **5** including:

said simulated body member being in the form of an airplane, and

said pair of axle mounted wheels forming a pair of simulated landing wheels carried by said standard.

7. A rockable legless chair for an amusement toy, comprising:

a ground or floor engaging base,

an upstanding standard fixedly secured to said base,

a chair defining a front, integral closed sides and back portion and a separate seat portion,

a chair support plate,

means securing said chair sides and back portion to said support plate,

means swivelly mounting said chair to said standard comprising a swivelable member mounted to the upstanding end of said standard and fastening means securing said support plate to said swivelable member,

yielding means operatively connecting said support plate to said standard to normally maintain said chair on a level plane but to permit of a rocking and wobbling motion thereof relative to said standard by the gyrations of a chair occupant,

said separate seat portion being normally disposed on said support plate within the confines of said sides and back portion so as to cover said fastening means and the points of attachment on said support plate of said yielding means, and

hinge means connecting said seat portion at the front of said chair to said support plate whereby said seat portion can be manually elevated to provide access to said fastening means and points of attachment for purposes of adjustment and maintenance.

8. A rockable chair as defined in claim **7** including:

a bearing rotatably journalled on said standard for rotation about the longitudinal axis thereof, and

means securing said yielding means to said bearing whereby said chair can be rotated about the longitudinal axis of said standard.

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