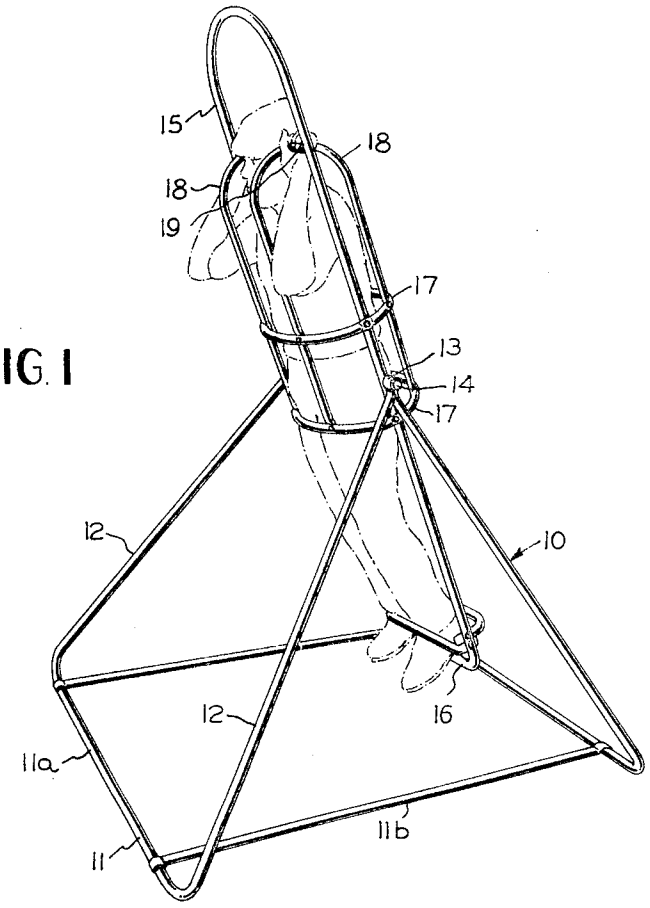
July 7, 1970 A. S. McQUEEN 3,519,268

OCCUPANT-ROTATED FRAME FOR RECREATION AND EXERCISE

Filed Nov. 20, 1968

FIG. 1



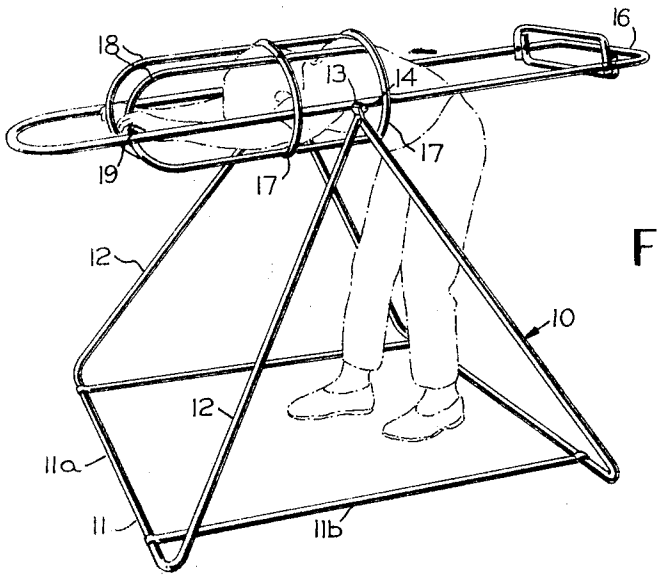


FIG. 2

INVENTOR

ALFRED S. McQUEEN

BY

Frederick, Ford & Tonack

ATTORNEY

United States Patent Office 3,519,268 Patented July 7, 1970

3,519,268

OCCUPANT-ROTATED FRAME FOR RECREATION AND EXERCISE

Alfred S. McQueen, 213 E. Unaka Ave., Johnson City, Tenn. 37601

Filed Nov. 20, 1968, Ser. No. 777,267
Int. Cl. A63g 1/12
U.S. Cl. 272—1 2 Claims

ABSTRACT OF THE DISCLOSURE

An exercising and recreational apparatus comprising a rotatable frame pivotably mounted on pivot means on a supporting frame. The rotatable frame has an elongated frame member in the shape of a closed elongated geometric figure, and an annular body supporting frame member attached thereto adjacent to the pivot means. A pair of inverted U-shaped frame members extend from the annular body supporting frame member toward the opposite end of the elongated frame member from a foot support member. The arrangement is such that a body-supporting frame work is formed by these parts. A hand grip member is connected between the elongated frame member and the closed end of each of the U-shaped frame members. This permits a person to stand in the framework and grasp the hand grip members and oscillate or rotate themselves around the pivot means.

The present invention relates to an exercise and recreational apparatus for a child which apparatus is maneuverable by the user so as to give the impression that the user is simulating orbital or space flight, or to encourage the user to imagine that he is training to be an astronaut.

It is well known that exercise and recreational apparatuses such as swings, see-saws, gliders and the like have always been popular with children. However, these devices all have the common characteristic that the body of the child is generally maintained more or less upright during the use thereof. It is also well known that children enjoy exercises in which the body is pivoted around a horizontal axis more or less parallel to the ground, such as spinning around the horizontal bar on a trapeze. Heretofore, single and easy to operate exercise and recreational devices which are particularly useful for performing such an exercise have not been readily available.

It is accordingly an object of the present invention to provide an exercising and recreational apparatus in which the body of the user is able to pivot about a horizontal axis parallel to the ground.

To carry out the object of this invention, there is provided a supporting framework having a pivot means spaced above the ground, and a rotatable frame pivotally mounted on said pivot means, said rotatable frame having an elongated frame member in the shape of a closed elongated geometric figure, foot holding means at one end of said elongated frame member, at least one annular body supporting frame member attached to said elongated frame member adjacent said pivot means and extending in a plane transversely of the plane of the elongated frame member, a pair of inverted U-shaped frame members extending from said annular frame member toward the other end of said elongated frame member and having the free ends attached to said annular frame member and being generally in parallel spaced planes perpendicular to the plane of said elongated frame member, and handgrip members connected between the closed end of each U-shaped frame member and the adjacent portion of said elongated frame

member, the space between said U-shaped frame members being unobstructed.

With such an apparatus, the user can fit himself into the frame with his feet engaged in the foot holding means and with his hands gripping the handgrip members, and by appropriately manipulating his body, cause the frame to rotate around the axis of the pivot means.

The invention will now be explained in greater detail in connection with the accompanying drawings, in which:

FIG. 1 is a perspective view of the exercising and recreational apparatus according to the present invention, and showing the rotating frame thereof on a ground supported framework and in a substantially upright position;

FIG. 2 is a view similar to FIG. 1 showing the rotatable frame in a substantially horizontal position; and

Referring first to FIGS. 1 and 2, there is shown an embodiment of the apparatus according to the invention which is mounted on a ground supported framework **10** having a base generally indicated at **11**, and comprised of transverse base members **11***a* and longitudinal base members **11***b*. The ground supported framework has angularly upwardly extending members **12**, the members on opposite sides of the frame meeting at an apex which has thereon bearing means **13** for supporting a horizontally extending stub shaft **14**.

A rotatable frame is rotatably mounted on the supporting frame **10**, and is comprised of an elongated frame member **15** in the shape of a closed elongated geometric figure, here shown as an oval, and having foot holding means **16** at the foot end thereof. The stub shafts **14** extend laterally from about the middle of the elongated frame member **15**.

The rotatable frame further comprises at least one annular body supporting frame member **17**, although preferably a plurality of such frames **17** is provided. These framse are attached to the elongated frame member **15** adjacent the stud shafts **14** and extend in a plane transversely of the plane of the elongated frame member **15**. A pair of inverted U-shaped frame members **18** extend from the annular frame member **17** which is closest to the head end of the elongated frame member **15**. The free ends of the U-shaped frame members **18** are attached to the annular frame member or members **17**, and are generally in parallel spaced planes perpendicular to the plane of the elongated frame member **15**. Hand grip members **19** are connected between the closed end of each U-shaped frame member **18** and the adjacent portion of the elongated frame member **15**. The space between the U-shaped frame members **18** is unobstructed.

In use, the rotatable frame is first turned to the generally horizontal position, as shown in FIG. 2 and the user inserts his upper body portion and head through the annular body supporting frame members **17**, until his head is in the vicinity of the closed ends of the U-shaped frame members. At this point, it is a simple matter to grasp the hand grip members **19**, these being somewhere in the vicinity of the head or shoulders of the user. The rotatable frame is then turned to a generally upright position, and the user's feet are inserted into the foot holding means **16** at the foot end of the rotatable frame which is now at the lower end.

In this position, the rotatable frame is free to rotate about the stub shafts **14**, and the user, by properly manipulating the rotatable frame, can either cause the frame to rotate around the stub shafts **14** as an axis in complete rotations, or can simply oscillate the frame back and forth around the stub shafts as an axis.

Because oft he presence of the annular body supporting frame members, and the grip which the user's hands can easily maintain on the hand grip members and the grip which is provided by the foot holding means, the device

is perfectly safe, and the user will not fall out of it whether it is making complete rotations in which case the user will, from time to time, be upside down, or simply oscillating.

The rotatable frame need not be mounted on a framework which stands on the ground. It can for example be suspended by chains from the top beam of a swing frame. Alternatively, it could be suspended by rods rather than by chains. At the lower end of the chains, bearing means for holding the stub shafts **14** would be provided.

Further modifications can be made without departing from the scope of the invention. For example, the elongated frame member **15** can be modified so as to be adjustable in length between the stub shafts **14** and the foot holding means **16**. This will permit persons of varying height to use the apparatus. Additionally, the portion of the foot holding means upon which the feet rest can be flattened to permit greater comfort in use.

What is claimed is:

1. An exercising and recreational apparatus comprising a supporting framework having a pivot means spaced above the ground, and a rotatable frame pivotally mounted on said pivot means, said rotatable frame having an elongated frame member in the shape of a closed elongated geometric figure, foot holding means at one end of said elongated frame member, at least one annular body supporting frame member attached to said elongated frame member adjacent said pivot means and extending in a plane transversely of the plane of the elongated frame member, a pair of inverted U-shaped frame members extending from said annular frame member toward the other end of said elongated frame member and having the free ends attached to said annular frame member and being generally in parallel spaced planes perpendicular to the plane of said elongated frame member, and handgrip members connected between the closed end of each U-shaped frame member and the adjacent portion of said elongated frame member, the space between said U-shaped frame members being unobstructed.

2. An apparatus as claimed in claim **1** in which said supporting framework is a ground supported framework having upwardly extending members supporting said pivot means.

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RICHARD C. PINKHAM, Primary Examiner

R. W. DIAZ, Assistant Examiner

U.S. Cl. X.R.

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