Jan. 2, 1968 N. L. PAVES 3,361,427

EXERCISE ROCKER

Filed Aug. 29, 1966

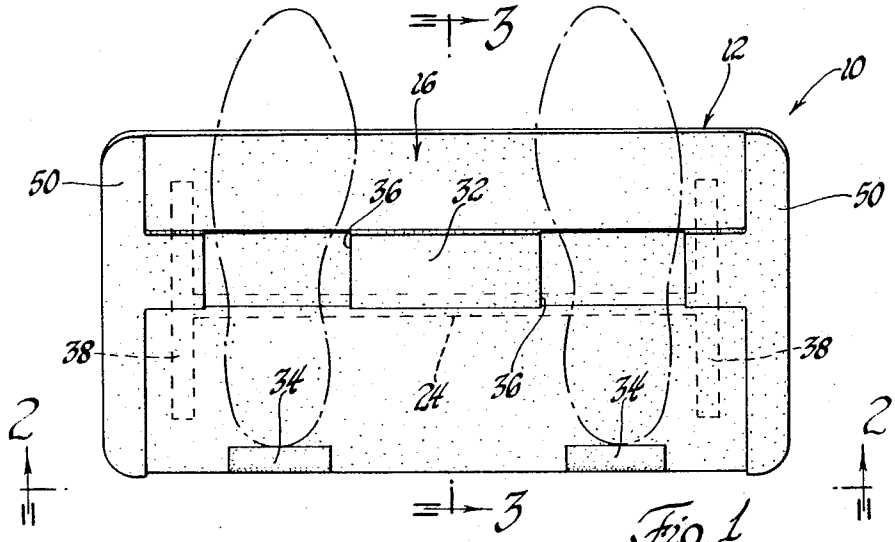


Fig. 1

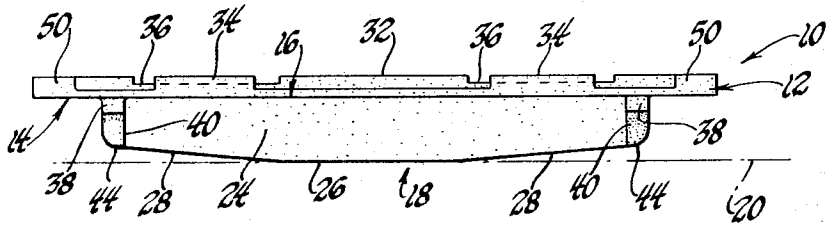


Fig. 2

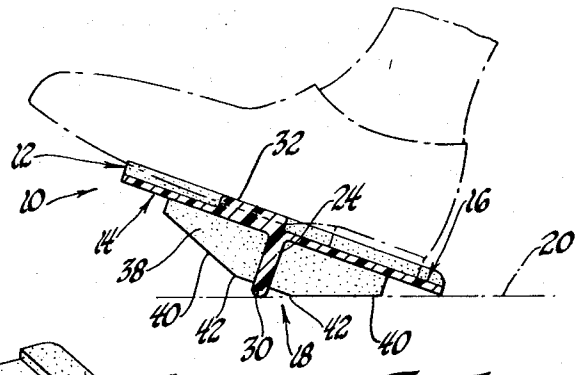


Fig. 3

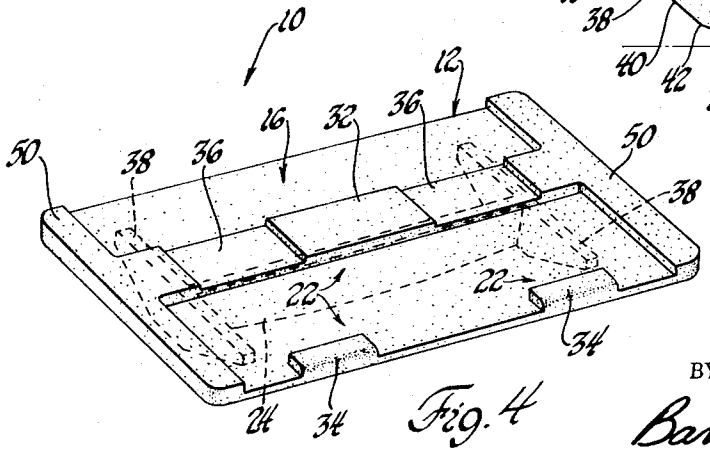


Fig. 4

INVENTOR.
Nathan L. Paves
BY
Barnard, McGlynn & Reising
ATTORNEYS

United States Patent Office 3,361,427
Patented Jan. 2, 1968

3,361,427

EXERCISE ROCKER

Nathan L. Paves, % Jewish Home for the Aged,
11501 Petosky, Detroit, Mich. 48204

Filed Aug. 29, 1966, Ser. No. 575,693
6 Claims. (Cl. 272—57)

ABSTRACT OF THE DISCLOSURE

The exercise rocker disclosed herein relates to a four-way rocker having a substantially planar member. On the bottom side of this member in the preferred embodiment is attached a rib. This rib has a substantially parallel central portion designed to permit smooth forward and rearward rocking movement. On each side of the central portion of the rib is a tapered rib portion, designed to permit smooth side to side rocking.

This invention relates to an exercise device and, more specifically, to an exercise rocker which an individual may place his feet upon and accomplish various exercise routines by moving the rocker in the prescribed manner.

As will become more clear hereinafter, the objects and features include the provision of an exercise rocker which may be utilized to exercise the legs and other body parts while standing, sitting or being bed ridden.

These and other objects and features of this invention may be attained in a preferred embodiment of the exercise rocker which includes a substantially planar member having oppositely facing bottom and top sides with a rib extending away from the bottom side and an arch support member disposed on the top side. The rib is configured so that an individual may place his feet upon the arch support and rock the exercise rocker in two different directions which are substantially transverse to one another. Such rocking movements may be accomplished by providing the rib with a central portion which is substantially parallel to the planar member and is arcuate for allowing rocking motion in a first direction. The rib is also provided with tapered portions extending from each end of the central portion toward the planar member so that the planar member may be rocked from one tapered portion, to the central portion, and to the other tapered portion and vice versa, thus accomplishing a rocking motion in the other direction. The novel exercise rocker may, for example, be used by placing the rocker in front of a chair enabling the seated operator to rock his body forward, backward, left and right, thus giving a workout to all the muscles in his body.

Other objects and attendant advantages of the present invention will be readily appreciated as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings wherein:

FIGURE 1 is a plan view of a preferred embodiment of the instant invention and showing an operator's feet in phantom;

FIGURE 2 is a view taken substantially along line 2—2 of FIGURE 1;

FIGURE 3 is a cross-sectional view taken substantially along line 3—3 of FIGURE 1; and

FIGURE 4 is a perspective view of the preferred embodiment illustrated in FIGURES 1 through 3.

Referring now to the drawings, wherein like numerals indicate like or corresponding parts throughout the several views, a preferred embodiment of the exercise rocker is generally shown at **10**. The exercise rocker **10** includes a planar member **12** having oppositely facing bottom and top sides which are indicated generally at **14** and **16** respectively. The exercise rocker **10** also includes a first

means, generally shown at **18**, which extends from the bottom side **14** for allowing rocking movement in first and second substantially transverse directions upon engagement thereof with a surface, such as that illustrated at **20** in FIGURES 2 and 3. The exercise rocker **10** also includes second means, generally shown at **22**, on the second side **16** for receiving and positioning an operator's feet, such as those illustrated in phantom in FIGURES 1 and 3.

The first means **18** includes a rib **24** which extends substantially perpendicularly from the bottom side **14**. The outward extremity of the rib **24** includes a central portion **26** which is substantially parallel to the bottom side **14**. The rib **24** also includes a tapered portion **28** extending toward the bottom side **14** from each end of the central portion **26**. The central portion **26** of the rib **24** is arcuate, as indicated at **30** in FIGURE 3, for allowing rocking movement thereabout in a first direction. The convex arcuate surface across the bottom edge of the central portion **26** of the rib **24** comprises a means for defining all rocking movement in the first direction. The rocking movement in the second direction may be accomplished by rocking the exercise rocker **10** from one tapered portion **28**, to the central portion **26**, and then to the other tapered portion **28**, and vice versa.

The second means **22** includes an arch support member **32** disposed on the top side **16**. The arch support member **32** is substantially parallel to the rib **24**. The second means **22** also includes the heel tabs **34**. The heel engaging tabs **34** are disposed in spaced relationship to the arch support member **32**. The arch support member **32** has a pair of spaced recesses **36** for receiving the arches of the operator's feet. Also disposed on the top surface **16** are the end plates **50**.

The exercise rocker **10** also includes the reinforcing ribs **38** which extend outwardly from the bottom side **14** at each end of the rib **24**. Each of the reinforcing ribs **38** is tapered at **40** from a point **42**, which is adjacent the rib **24**, toward the bottom side **14** to allow the rocking movement about the arcuate central portion **26** of the rib **24**. In addition, the outward extremities of the reinforcing ribs **38** are arcuate, as indicated at **44**, adjacent the ends of the tapered portions **28** of the rib **24**.

The rocker **10** may be utilized for various bodily exercises. For example, to exercise the legs, the exercise rocker is positioned on a surface **20**, such as a floor, with the long dimension or longitudinal axis (which is parallel to the rib **24** and the arch support **32**) being parallel to the front of the operator's body. The operator may then stand or sit in a chair and place his feet over the arch support **32**, as indicated in FIGURES 1 and 3. The operator then alternately presses down with his toes and back with the heels to rock about the arcuate surface **30** of the central portion **26** of the rib **24**.

In another exercise of the legs, the feet are positioned over the end plates **50** and alternately pressed down, i.e., first the left foot is pressed downward and then the right foot is pressed downward, to rock the exercise rocker **10** in a second direction which is transverse to the first-described rocking movement so that the exercise rocker contacts the floor successively through one tapered portion **28**, then through the central portion **26**, and then through the other tapered portion **28**, and vice versa. The rounded or arcuate portions **44** on the reinforcing ribs **28** will allow the degree of such rocking movement to be increased.

Another leg exercise which may be accomplished with this exercise rocker is a bicycling movement wherein the operator sits in a chair and places the exercise rocker **10** so that its longitudinal axis is perpendicular to the front of his body. The operator thereafter places his feet on the top surface **16** and alternately presses downward with his

feet to rock the exercise rocker **10** about the arcuate surface **30** of the rib **24**. In other words, the rocker is positioned so that the longitudinal axis is in the line of sight of the user whereby the exercise rocker can be pedaled as a bicycle.

As hereinbefore pointed out, these exercises and various other exercises may be accomplished while the operator is in the standing or sitting position. However, such exercises also may be accomplished by a bed ridden individual by placing the exercise rocker **10** in a vertical position against a suitable surface so that it may be manipulated by the feet while the individual is in the prone position in the bed. Such an exercise is suitable for patients who have been bed ridden for some time. The rocker is placed against the headboard of the bed. In order to avoid scratching the headboard, a bath towel should be placed over the headboard. In addition, a piece of plywood or a thick magazine should be placed under the lower edge of the rocker which stands in a vertical position having its top side facing the bed ridden patient and its bottom side facing the headboard. The patient then operates the rocker backward, forward, left and right.

The invention has been described in an illustrative manner and it is to be understood that the terminology which has been used is intended to be in the nature of words of description rather than of limitation.

Obviously, many modifications and variations of the present invention are possible in light of the above teachings. It is, therefore, to be understood that within the scope of the appended claims, the invention may be practiced otherwise than as specifically described.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. An exercise rocker for rocking movement in first and second mutually transverse directions and including; a planar member having oppositely facing bottom and top sides, a rib extending substantially perpendicularly from said bottom side, said rib having a bottom central portion which is substantially parallel to said bottom side and at least one straight tapered portion extending toward said bottom side from each end of said central portion, means defining all of said rocking movement in said first direction and including a convex arcuate surface across the bottom edge of said central portion, and second means on said top side for receiving and maintaining operator's feet in position.

2. An exercise rocker as set forth in claim **1** wherein said second means includes an arch support member.

3. An exercise rocker as set forth in claim **2** wherein said second means also includes heel tab means disposed in spaced relationship to said arch support member.

4. An exercise rocker as set forth in claim **3** wherein said arch support member has a pair of spaced recesses therein.

5. An exercise rocker as set forth in claim **4** including a reinforcing rib extending from said bottom side at each end of said first-mentioned rib, each of said reinforcing ribs being tapered from a point which is adjacent said first-mentioned rib toward said bottom side to allow rocking movement about said arcuate central portion of said first-mentioned rib.

6. An exercise rocker as set forth in claim **5** wherein the outward extremities of said reinforcing ribs are arcuate adjacent the ends of said tapered portions of said first-mentioned rib.

References Cited

UNITED STATES PATENTS

1,497,243	6/1924	Martin	272—57
1,509,793	9/1924	Thompson	272—57
2,658,753	11/1953	Dawson	272—1
2,803,461	8/1957	Coplin	272—57
2,930,613	3/1960	Katz	272—57
2,941,801	6/1960	Pedersen	272—57
3,108,802	10/1963	Sundquist	272—57
3,188,087	6/1965	Larson	272—1

FOREIGN PATENTS

620,896	5/1961	Canada.
966,810	6/1965	Great Britain.

ANTON O. OECHSLE, *Primary Examiner.*

RICHARD C. PINKHAM, *Examiner.*

A. W. KRAMER, *Assistant Examiner.*