United States Patent

Burzenski

[15] **3,672,670**

[45] **June 27, 1972**

[54] WHEELED FOOT-EXERCISING DEVICE WITH HAND GRIPS

[72] Inventor: **Ralph A. Burzenski,** 5429 N. 25th St., Milwaukee, Wis. 53209

[22] Filed: **July 8, 1970**

[21] Appl. No.: **53,117**

[52] **U.S. Cl.** .....**272/79 R,** 272/DIG. 3, 272/83 R, 272/70.3, 280/11.2, 280/11.37 E, 272/79 R, 192/12 R

[51] **Int. Cl.**.....**A63b 23/04,** A63b 21/00

[58] **Field of Search** .....272/57 D, 57 R, 79 R, 58, 80, 272/70, 70.3, 83 R, 83 A, 82; 128/25 R, 25 B, 70; 280/11.19, 11.2, 11.11 R, 11.37 E

[56] **References Cited**

UNITED STATES PATENTS

2,772,881	12/1956	Fundom	272/5 TR X
327,374	9/1885	Zack et al	280/11.37 E
1,782,078	11/1930	Stiver	280/11.11 R
2,725,238	11/1955	Day	280/11.2
3,403,906	10/1968	Burzenski	272/57 R
2,720,396	10/1955	Pfaus	272/83 R
3,295,847	1/1967	Matt	272/83 R
3,421,760	1/1969	Freeman	272/83 R

FOREIGN PATENTS OR APPLICATIONS

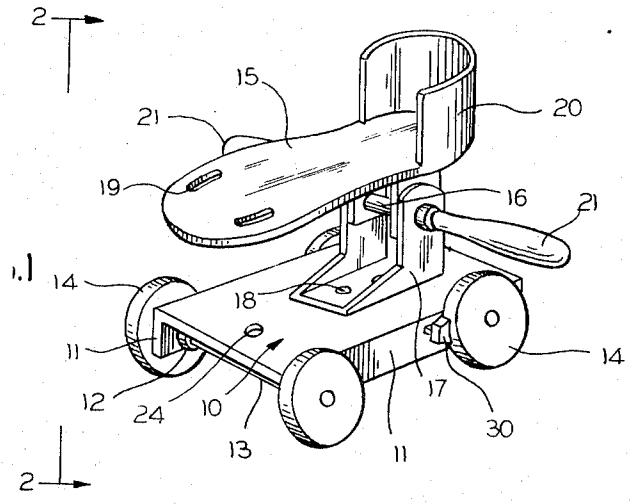
693,130	8/1930	France	272/70

Primary Examiner—Richard C. Pinkham
Assistant Examiner—William R. Browne
Attorney—Alter, Weiss and Whitesel

[57] **ABSTRACT**

A physical exercising device supported on wheels and having a pivoted upper platform for receiving the foot of a user. The upper platform is spring biased into a normal horizontal position. The exercising device has hand hold grips extending out from the side. These hand hold grips may be used by the exerciser in a push-pull manner on the floor so as to exercise his arms. The upper platform may have an extended lever to aid in manually pivoting the upper platform.

5 Claims, 7 Drawing Figures



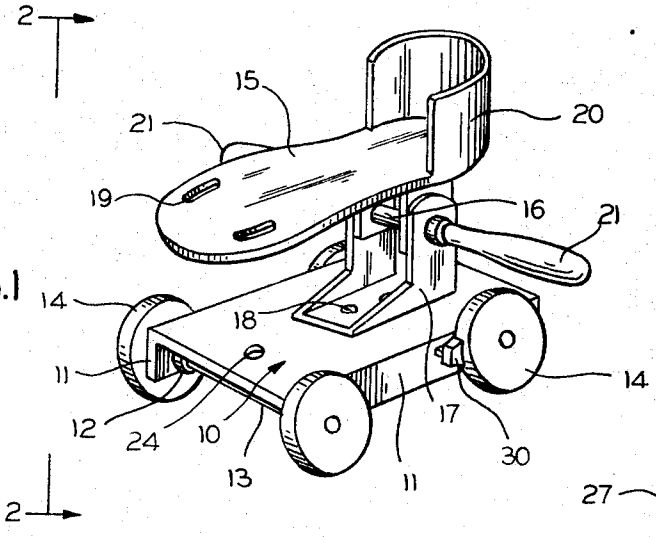


FIG.1

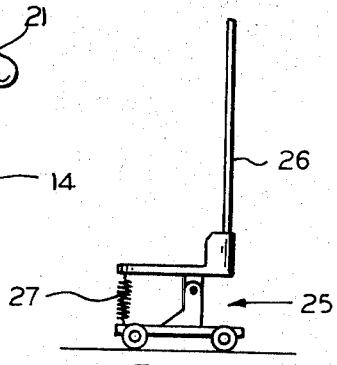


FIG.6

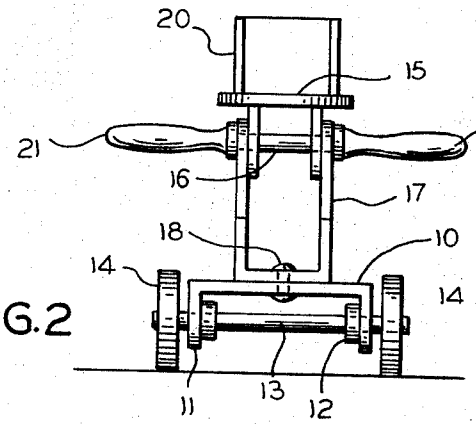


FIG.2

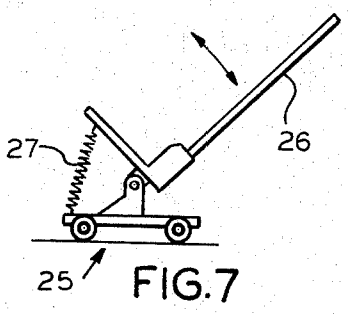


FIG.7

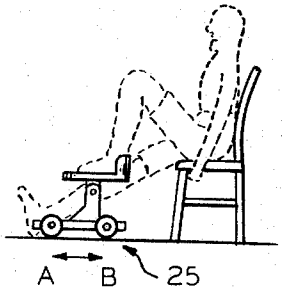


FIG.3

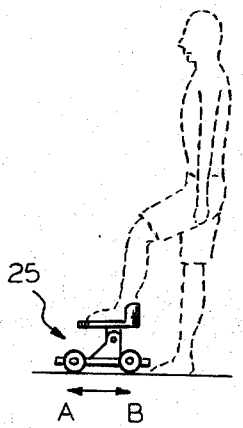


FIG.4

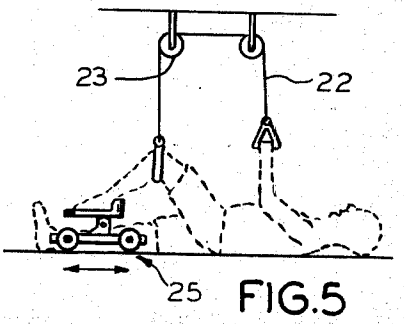


FIG.5

INVENTOR
RALPH A. BURZENSKI

BY
Alter, Weiss and Whitesel
ATTORNEYS

WHEELED FOOT-EXERCISING DEVICE WITH HAND GRIPS

My invention relates to physical exerciser devices and more particularly to exercising devices which are used by a human appendage, i.e. a foot, leg, arm, or hand.

Modern living places severe stresses upon the human structure since there is too little exercise and too much office work. As a result, there has been an upsurge of sales in devices for calisthenics exercising. Each device tends to exercise a different set of muscles. Thus, there is a need for devices which exercise muscles not heretofore reached by previously available calisthenics devices.

Accordingly, an object of this invention is to provide new and improved exercise devices. Here an object is to provide an exerciser especially—although not exclusively—adapted for use in a leg and foot shuffle type of exercise.

Another object is to provide a device which may be operated with ease and in a simple manner. Yet another object is to provide an exerciser which is not limited to exercising a specific part of the human body, but which permits use for a number of different calisthenics.

The device described, illustrated and claimed herein, is simple in construction, economical to manufacture, and is practical for many uses.

Other and further objects of my invention will become more apparent as the description proceeds, when taken in conjunction with the drawings, in which:

FIG. **1** is a perspective view of the entire assembled device;

FIG. **2** is a front view of the assembled device taken along line **2**—**2** of FIG. **1**;

FIG. **3** is a schematic showing of the inventive device as used by a person in a sitting position.

FIG. **4** is a similar schematic showing with the user in a standing position;

FIG. **5** is still another schematic showing the operator in a reclined position, using his hands and arms, to raise and lower his knee;

FIG. **6** is a schematic side elevation view of a second embodiment equipped with a hand lever to enable the user to pivot the foot rest; and

FIG. **7** is a similar side elevation view with the foot rest in a pivoted position.

Similar reference characters indicate corresponding parts and features throughout the several views. In greater detail, the character **10** identifies the body of the inventive device which may be constructed of any rigid material, such as metal, plastic, wood, or the like. The principal parts of the exerciser are a platform **11**, wheels **14**, foot plate **15**, and hand holds **21**.

The platform **11** is shown here as being provided with downwardly extending longitudinal side members supporting conventional bearings **12**. Front and back axles **13** are supported in bearings **12**. Wheels **14** are of conventional design, and they are mounted on the ends of the axles **13**. Any suitable number of wheels and shafts or axles may be employed.

The foot plate or rest, generally shown at **15**, is pivotally mounted on a shaft **16** supported on the body plate **11** by means of a U-shaped channel bracket **17**. Bracket **17** is attached to the plate **11** by means of bolts or rivets, as shown at **18**. The foot plate or rest **15** may be provided with slots **19** to accommodate a toe strap (not shown). A heel plate or captive portion **20** supports the back of the users foot while he is using the device as a foot exerciser.

The shaft **16** which pivotally supports the foot rest **15**, extends outward from the sides of the channelled support bracket **17**. A pair of hand holds or grips **21** may be removably attached to the the ends of the shaft **16**. Thus, with the grips **21** in place, the device **10** may be used for exercising the arms of the user. When the grips **21** are removed, the device is used as a foot or leg exerciser.

FIGS. **3**, **4** and **5** schematically show sketches of the exerciser device being used as a foot exerciser, in a sitting position in FIG. **3**, in a standing position in FIG. **4**, and in a lying position FIG. **5**. In the first two of these positions, the exerciser is moved in the reciprocal directions of the arrows A and B. In FIG. **5**, the user is shown raising his knee by means of a cord **22**, engaging pulleys **23**, as he is using his arms to pull the cord **22**. As shown at **25**, in FIGS. **3** to **5** inclusive, the device may be moved by the operator in any direction and at any speed to perform a variety of functions. If desired, an adjustable friction brake or clutch **30** may be used to provide a variable resistance for the exerciser.

If desired, a removable hand lever **26**, (see FIGS. **6** and **7**), may be attached to the exercisor in any convenient manner. This lever enables the operator to pivot the foot rest **15** during the exercising. A spring **27** of any conventional design may be applied to bring the foot rest **15** back into its normal horizontal position when the handle **26** is released.

The device as illustrated, described, and claimed herein may be varied in numerous ways without effecting its performance. Therefore, I reserve the rights to make changes which I may deem necessary, or convenient. The appended claims are to be construed to cover all equivalents which do not depart from the spirit or scope of my invention.

I claim:

1. A leg and foot exerciser comprising a first platform supported by rollers, said first platform having a second platform positioned thereabove and constructed in the shape of the sole of a human foot, said second platform being pivotally mounted to said first platform, spring means interconnecting said first platform and said second platform for biasing said second platform against pivoting action of said second platform, said spring means brings the second platform back to a normal horizontal position.

2. The exerciser of claim **1** and a pair of hand holds or grips removably attached to said exerciser.

3. The exerciser of claim **2** wherein said hand holds are horizontally attached to the point of pivot between said foot rest and said platform.

4. The exerciser of claim **1** and an elongated handle for changing the angle of said foot rest with respect to said platform.

5. The exerciser of claim **1** and brake means for adjusting the resistance of said wheels to said reciprocal motion.

* * * * *