Oct. 9, 1928. 1,686,890

R. W. WOOD

EXERCISER

Filed Feb. 11, 1926

FIG. 1

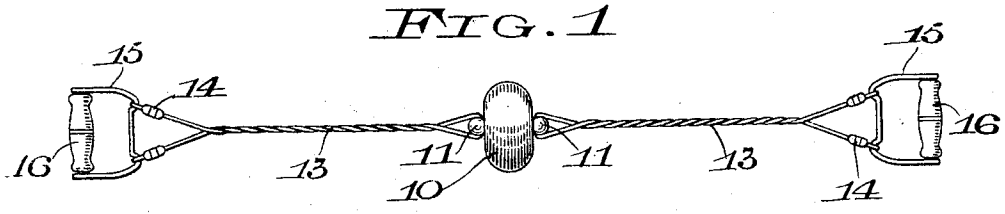


FIG. 2

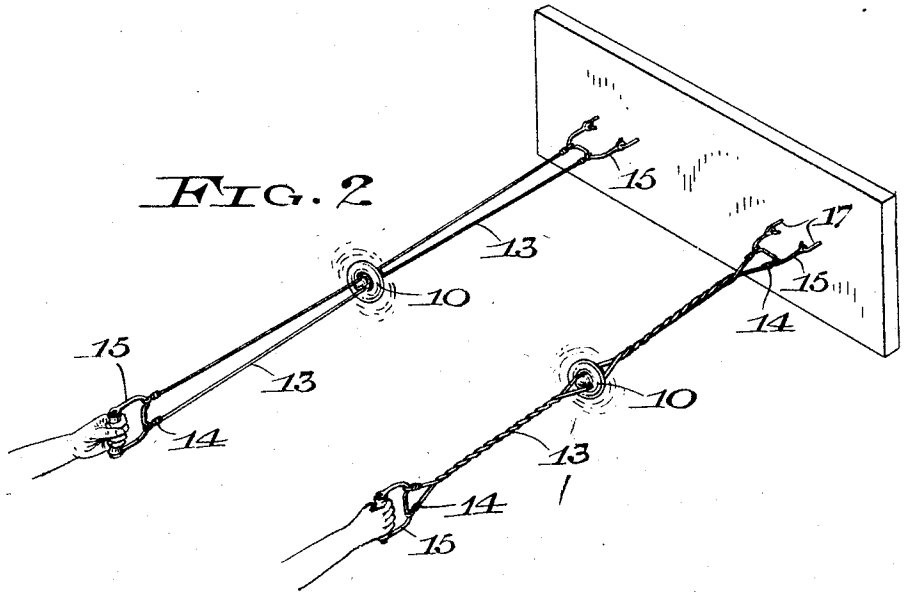
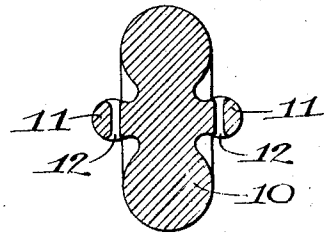


FIG. 3



WITNESSES

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UNITED STATES PATENT OFFICE.

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EXERCISER.

Application filed February 11, 1926. Serial No. 87,573.

This invention has for its object to provide apparatus for physical exercises constructed on the principle of the suspended top or what is known as the "button buzzer", wherein a weight mounted intermediately on a pair of spaced cords is caused to twist the cords by rotation in one direction and, in doing so, reduce their effective length and then, by a pull on the cords, is rotated in the opposite direction to acquire a momentum, causing the cords to be again twisted and effectively shortened with a consequent repetition of the operation any number of times.

By utilizing this principle in an exercising apparatus, the effect of pulley weights may be obtained accompanied by a torsional stress first in one direction and then in the other and, by reason of the spinning weights, affording interest in an otherwise uninteresting performance.

Another object of the invention is to provide an exerciser of this type of novel construction minimizing the wear on the cords and affording an easy grip for the hand convertible to a wall attachment.

With the above and other objects in view the invention consists in the exerciser as herein claimed and all equivalents.

Referring to the accompanying drawings, in which like characters of reference indicate the same parts in different views,

Fig. 1 is a view of an exerciser constructed in accordance with this invention;

Fig. 2 is a view of a pair of such exercisers attached to the wall, and

Fig. 3 is a sectional view of the weight or ball.

In these drawings, 10 indicates the ball or weight, which is preferably of hard wood or other suitable material and is shaped somewhat resembling a wheel with a heavy periphery reduced at the center, where projections or knobs 11 are formed on the opposite sides. Transverse openings 12 are formed through these knobs or projections, through which the cords 13 are passed, said openings being rounded to avoid wear on the cords. The ends of the cords 13 are preferably provided with swivel hooks or eyes 14 engaging spaced notches of hand grips 15. The hand grips may consist of a U-shaped wire member affording these notches for engagement with the ends of the cords and terminating in eyes in which the handle 16 is engaged so that when the exerciser is to be attached to the wall the wire member may be sprung off of the handle and engaged with suitable spaced hooks 17 on the wall or other stationary support.

In using a single exerciser both hand grips may be engaged in the hands and, after the ball has been turned to give an initial twist to the cords, by pulling the grips apart the ball is caused to rotate until the cords are untwisted, whereupon the pull on the grips is released permitting the momentum of the ball to rewind the cords and, in so doing, draw the grips closer together. The action is then repeated, the ball turning in the opposite direction, and the operation is continued at will, the hands being first moved apart under the yielding resistance of the unwinding cords and then being drawn together while offering a slight resistance thereto.

The connection of the cords with the ball by passing them through the rounded openings of the opposite knobs 11 is such as to avoid wear on the cords and their swivel connections permit them to turn while being twisted, thus prolonging their life.

By using two of the exercisers and attaching each to the wall or other stationary support, as shown, they may be operated independently to provide exercise similar to that afforded by pulleys and weights, but with this difference,—that the resistance to inward motion and the impelling force for outward motion is constantly varying. The resistance to the inward stroke tapers off as the ball acquires speed and the impelling force for the outward stroke tapers off as the cords are rewound. This affords a novel form of exercise and, as the attention is required to keep the balls properly suspended and in motion, it engages the interest of the user.

What I claim as new and desire to secure by Letters Patent is:

A physical exerciser comprising a ball having its greatest mass peripherally disposed and provided with knobs on its opposite sides, cords passing through openings in the knobs, swivel connections on the ends of the cords, and connecting members having spaced notches engaged by the swivel connections.

In testimony whereof, I affix my signature.

ROBERT WM. WOOD.