

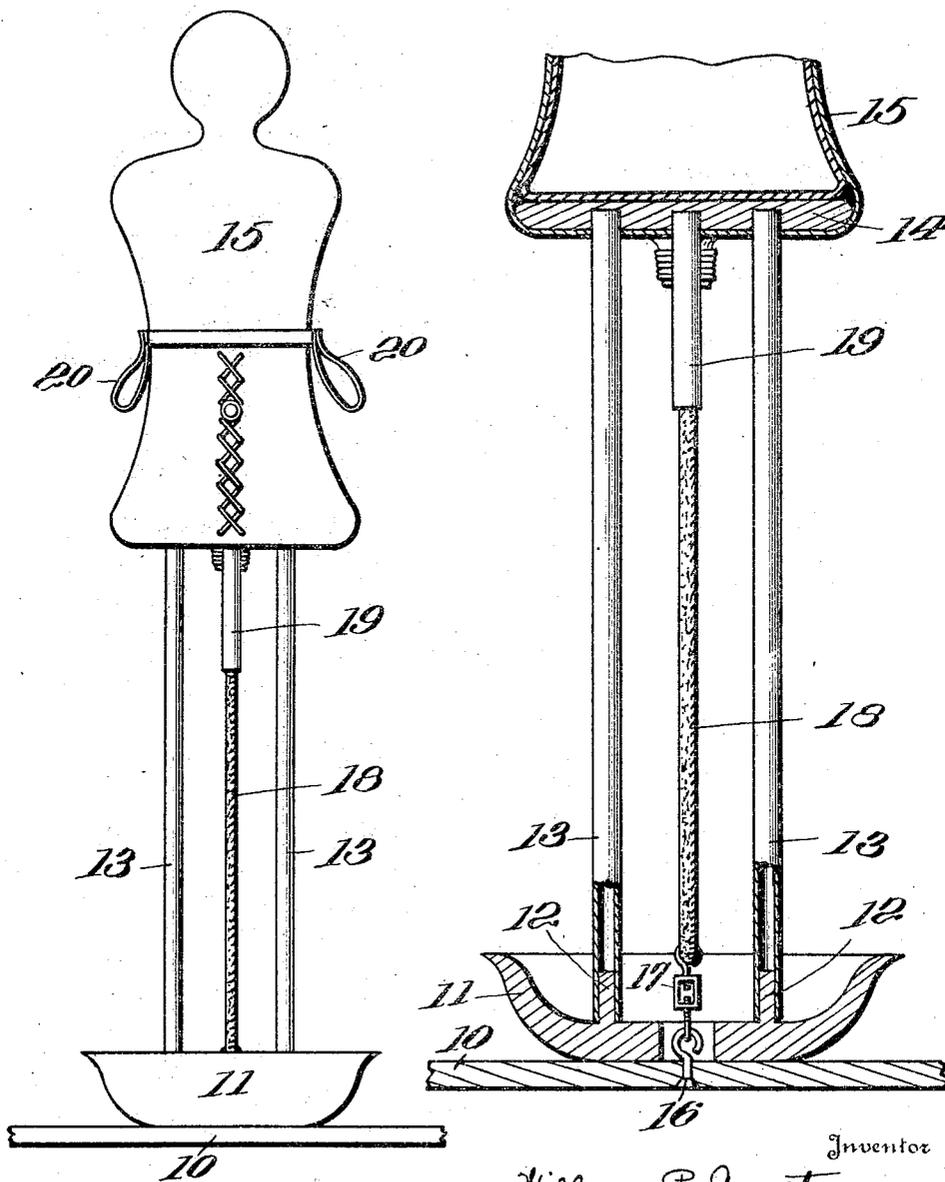
W. P. ARMSTRONG.
EXERCISING DEVICE.
APPLICATION FILED MAR. 5, 1918.

1,287,176.

Patented Dec. 10, 1918.
2 SHEETS—SHEET 1.

Fig. 1.

Fig. 2.



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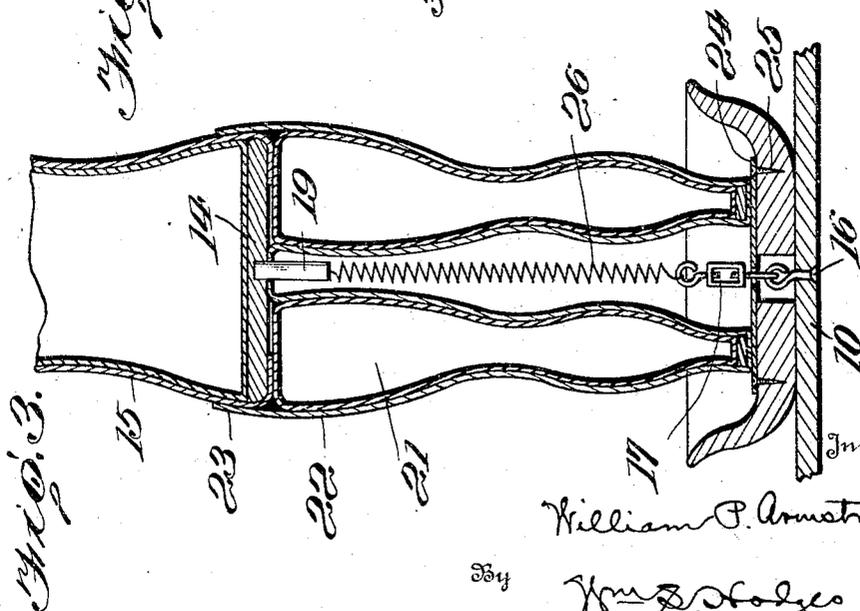
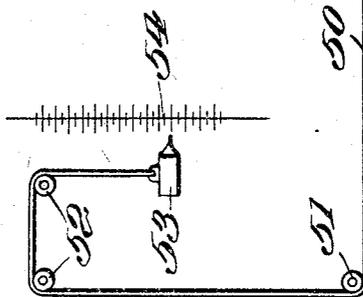
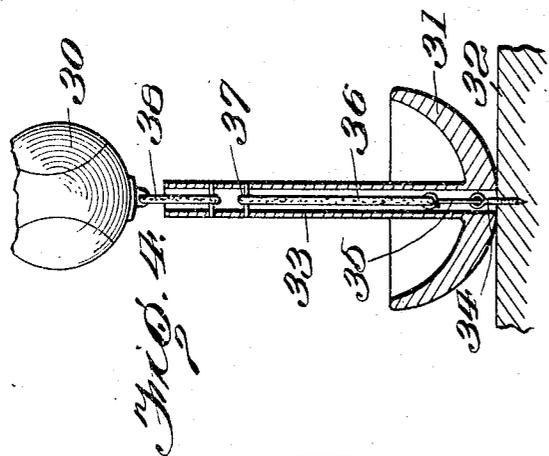
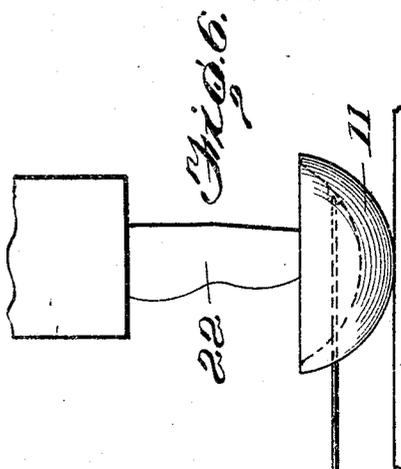
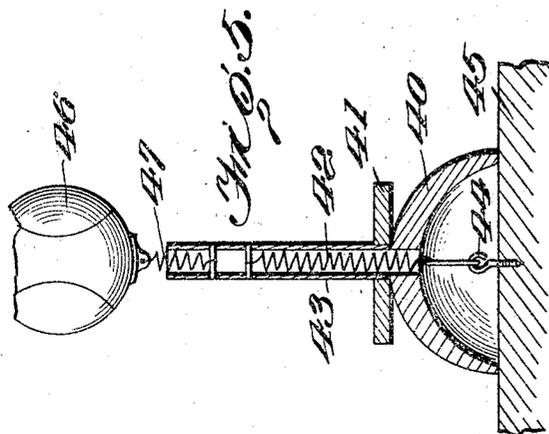
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UNITED STATES PATENT OFFICE.

WILLIAM P. ARMSTRONG, OF WASHINGTON, DISTRICT OF COLUMBIA.

EXERCISING DEVICE.

1,287,176.

Specification of Letters Patent. Patented Dec. 10, 1918.

Application filed March 5, 1918. Serial No. 220,559.

To all whom it may concern:

Be it known that I, WILLIAM P. ARMSTRONG, a citizen of the United States, residing at Washington, in the District of Columbia, have invented new and useful Improvements in Exercising Devices, of which the following is a specification.

This invention is a device for amusement and exercising purposes.

One of the objects of the invention is to provide a manikin or dummy figure so mounted that it may rock or swing in every direction under the impact of a blow imparted by a person standing contiguous thereto. A further object is to provide improved means to cause the figure to return or rebound quickly, whereby it will swing past its normal vertical position, requiring quick work on the part of the person using the same either to strike or to dodge, in order to avoid being struck by the figure, thereby developing quickness of the eyes and the hands, as well as agility in boxing. A further object is to provide an exercising device of the character mentioned in which the manikin or dummy is provided with an inflated body portion which may be readily detached from the rest of the structure and thrown overboard, under which conditions it will act as a life buoy capable of sustaining a number of men in the water.

The invention will be hereinafter fully set forth and particularly pointed out in the claims.

In the accompanying drawing:—

Figure 1 is a front elevation illustrating a manikin or dummy constructed in accordance with the invention. Fig. 2 is a longitudinal sectional view thereof. Fig. 3 is a sectional view illustrating a slight modification. Figs. 4 and 5 are detail sectional views illustrating the invention applied to the ordinary type of punching bag. Fig. 6 is a view illustrating means whereby the force of blow may be indicated.

Referring to Figs. 1 and 2 of the drawing, 10 designates a supporting base which may be the floor of a gymnasium, platform or other suitable place, or it may be a base-board of suitable dimensions to be placed upon a floor or platform. Resting upon said base is a weighted base 11, which is in the form of a circular saucer-like metal member having curved sides and a substantially flat bottom, the whole being shaped to have a rocking contact with said base. The in-

terior of the weighted base 11 is provided with two spaced apart lugs 12, over which are fitted the tubular legs 13 of the dummy, said legs being attached at their upper ends to a bottom board 14, to which is attached the inflatable portion 15, forming the upper part of the body. The portion 15 may be constructed in any suitable manner and of any desired material, but it is preferred to shape it so as to have a semblance to the human body, and to make it of an inflatable rubber bladder covered by a suitable fabric capable of protecting it from damage. Attached to the base board 10 by a suitable swiveling device, is an eye or ring 16, to which is connected a turn buckle 17, which in turn is connected to one end of an elastic band or reaction member 18, the other end of said band being attached to a lug or other device 19, depending from the bottom board 14.

In practice, the operator stands upon the base board 10, and strikes the inflated portion of the dummy body with his fists, or elbows or in any other manner which may be found desirable. When so struck the dummy will rock on its base 11, moving in a direction which will depend upon the direction of the blow which it receives, such movement being resisted by the weight of the base 11 and the tension of the elastic band 18. The tension of the band 18 is adjusted by means of the turn buckle 17 so that the movement imparted to the dummy by a blow is quickly counteracted, and the reaction of the elastic band is such as to quickly return the dummy after being moved under the impact of a blow, with sufficient momentum to carry it beyond the normal vertical position, and if the operator does not meet it with another blow, or in the absence of a blow if he fails to dodge quickly, the inflated portion of the dummy will strike him. By providing a circular base 11 and swiveling the ring 16 the dummy may be struck from any direction and will rotate and rock as though it were upon a universal joint. In this manner the operator must be constantly on the alert to avoid surprise, because the figure is very erratic in its return after being struck a blow, and as a consequence the operator soon develops quickness of eye and hand and an ability to shift his position quickly, all of which are important advantages in teaching the art of boxing.

The inflated body portion 15 is provided with a plurality of straps 20, to form hand holds to be grasped by persons when the figure is used as a life buoy. It will be readily understood that by disconnecting the elastic 18, the body may be detached from the base 11 by lifting it off of the lugs 12, whereupon the body may be thrown overboard as a life buoy.

In Fig. 3 the inflated body of the manikin or dummy is shown as supported upon inflated legs, each leg consisting of an inflatable rubber bladder 21 and a protecting cover 22, attached in suitable manner to the body 15, as indicated at 23. The lower ends of the legs are secured to an attaching plate 24, which is attached to the base 11 by any suitable means, such as screws 25. By inflating the bladders 21 the legs are given sufficient rigidity to sustain the body under all conditions encountered by the manikin while in use. In lieu of the elastic band 18 the reaction member consists of a helical spring 26 which is employed, connected to the base 10 and the bottom board 14 in the same manner as the band 18.

In Fig. 4 the invention is illustrated as applied to a punching bag 30 of ordinary type. In this form of the invention the rocking base 31 rests upon a supporting base 32, and is provided with a tubular stem 33. Secured to the base 32 is a screw eye or suitable device 34, which is connected by a cord 35, with one end of an elastic band 36, the other end of said band being connected to a cross pin 37 carried by the tubular stem 33. The punching bag 30 is attached to the stem 33 in any desired manner, such as by the elastic member 38.

Fig. 5 illustrates another modification of the punching bag type, in which a rigid base 40 is provided, having a substantially hemispherical upper surface upon which rests a rocker member 41 provided with a tubular stem 42. A helical spring 43 connects said stem 42 with a screw eye 44, or similar device engaging the supporting base 45. The punching bag 46 is shown as attached to the stem 44 by means of a helical spring 47.

In the modification illustrated in Fig. 6 a cord 50, is attached to the weighted base 11 in any desired manner, and passed around suitable guide pulleys 51 and 52 so as to suspend a weight 53 opposite a scale 54, the weight being provided with a suitable pointer or indicator cooperating with the scale. By this arrangement the operator is enabled to obtain some idea of the strength or power of the various blows imparted by him.

The advantages of the invention will be understood by those skilled in the art to which it appertains. It will be readily seen that far more perfect instructions in boxing is obtainable than is possible with the ordi-

nary punching bag; that by the use of the elastic band 18 or its equivalent the device is made to rebound very quickly, and by making the inflatable portion in a form capable of use as a life buoy, the device may be made to serve a double purpose on shipboard.

It is to be understood that the weighted base 11, may be made of any material possessing the required durability and weighted in any suitable manner. For instance the same may be constructed of metal, wood, papier mâché, or cement without departing from the spirit of the invention. While the reaction member has been shown and described as consisting of an elastic band or a spring, it will be understood that the invention is not limited in this particular, as said member may be made of any material possessing the necessary reacting qualities.

Having thus explained the nature of the invention and described an operative manner of constructing and using the same, although without attempting to set forth all of the forms in which it may be made, or all of the forms of its use, what is claimed is:—

1. An exercising device comprising a supporting base, a weighted base having a rocking contact with said supporting base, a dummy figure supported by said weighted base, and a resilient reaction member connecting said supporting base with said dummy figure at a point above the weighted base.

2. An exercising device comprising a supporting base, a weighted base having a rocking contact with said supporting base, a dummy figure supported by said weighted base, and a resilient reaction member having one end connected to said supporting base and its other end connected to said dummy at a point above said weighted base, one end of said reaction member being anchored by a swiveled connection.

3. An exercising device comprising a supporting base, a weighted base having a rocking contact with said supporting base, said weighted base having an opening therein, a dummy figure attached to said weighted base, and a resilient reaction member passed through the opening in said weighted base and having one end attached to the supporting base and the other end attached to the dummy at a point above the weighted base.

4. An exercising device comprising a supporting base, a movable base having a rocking contact with said supporting base, said movable base having an opening therein, a dummy attached to said movable base, a resilient reaction member passed through said opening and having one end attached to said supporting base and the other end attached to said dummy at a point above the

base, and means for controlling the tension of said reaction member.

5. An exercising device comprising a supporting base, a movable base having a rocking engagement with said supporting base, an inflated body connected to and supported by said movable base, and a reaction member anchored to said supporting base and connected to the inflatable body at a point above said movable base.

6. An exercising device comprising a supporting base, a movable base having a rocking engagement with said supporting base, an inflated body constructed to withstand blows imparted in boxing, and inflated legs supporting said body and attached to said movable base.

7. An exercising device comprising a supporting base, a movable base having a rocking engagement with said supporting base, an inflated body constructed to withstand

blows imparted in boxing, inflated legs supporting said body and attached to said movable base, and a reaction device connected with said body and cooperating with said movable base.

8. An exercising device comprising a rocking base, an inflatable dummy figure detachably connected to said base, and straps attached to the inflatable portion of said dummy figure.

9. An exercising device comprising a rocking base, a dummy figure supported by said base, a cord attached to said base, and means cooperating with said cord for indicating the extent of the rocking movements of said base.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILLIAM P. ARMSTRONG.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."