

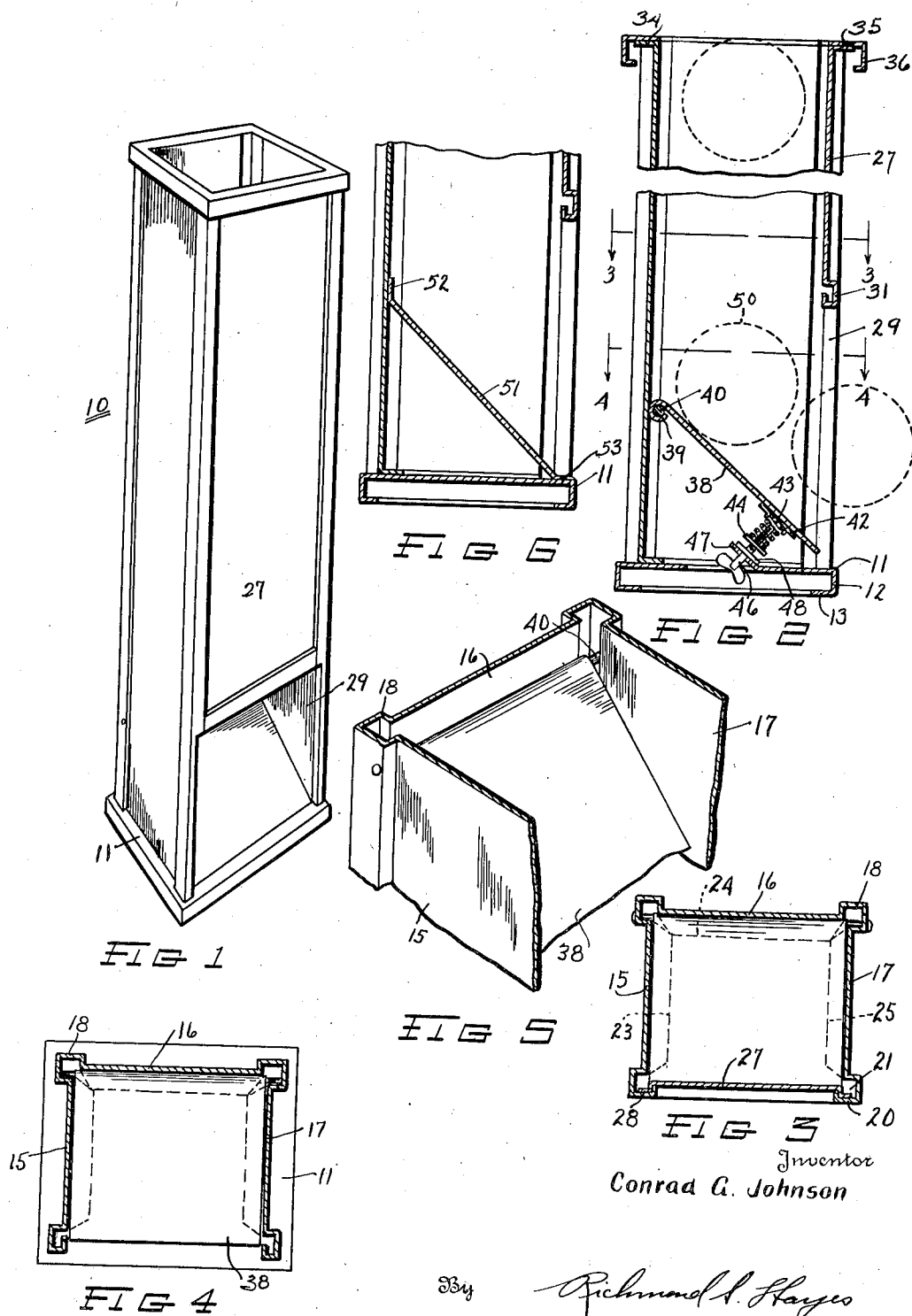
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EXERCISING DEVICE

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EXERCISING DEVICE

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4 Claims. (Cl. 272-57)

This invention relates to an exercising device and particularly to one of the cabinet type.

The preferred embodiment of the invention discloses a cabinet or chute like structure, generally rectangular in shape, having an open top. A further opening is provided above the base of the device and suitable deflecting means located within the device adjacent said opening. A ball or other object dropped into the open top falls longitudinally of the cabinet striking the deflecting means being thus rapidly propelled outwardly from the cabinet through the lower opening. The device is of such height as to require a person to stand upright in order to drop the ball into the top thereof. To catch the ball as it reaches the bottom of the device it is necessary for the person to bend quickly. The bending action may be from the waist or with a straight trunk and bending the knees. These bending exercises, being extremely beneficial and normally seldom resorted to, are pleasurably taken through the use of a device of this kind. The device may be further used as a game by considering the opening of the top thereof as a basket and a group of persons taking turns in tossing the ball into the device, thus adding accuracy of the eye to physical exercise. The device is so proportioned as to occupy little space and requires very little further space in which to operate it and is therefore readily adaptable for use in almost any size room.

Prior to this invention a few simple game-like or weight lifting devices of this general class have been developed but none of these is as simple in structure, easily manipulated or combines an exerciser with a game.

One of the objects of the invention lies in the provision of a simple, easily operated exercising device which, occupying little space, may be set up wherever it is desired.

Another object of the invention lies in the provision of an exercising device which, being in the form of a game, eliminates, to some extent at least, the drudgery of the usual setting up exercises.

A further object of the invention lies in the provision of a device of simple and rugged construction and which may be manufactured and sold for a very reasonable sum.

Other and further objects of the invention will be more fully understood from a consideration of the following specification which is taken in conjunction with the accompanying drawing and in which,

Figure 1 is a perspective view of an exercising device embodying one form of this invention;

Figure 2 is a vertical sectional view of the de-

vice showing one form of deflecting means for directing a ball or other object outwardly through an opening adjacent the base of the device;

Figure 3 shows details of construction of the cabinet or chute portion being taken substantially on the line 3-3 of Figure 2;

Figure 4 is a horizontal sectional view taken substantially on the line 4-4 of Figure 2;

Figure 5 is an enlarged fragmentary perspective view showing the adjustable deflecting means disclosed in Figure 2; and

Figure 6 is a fragmentary vertical sectional view of the cabinet with fixed deflecting means in place of the adjustable means shown in Figures 2 and 5.

Referring to the drawing, the invention, generally indicated by the reference numeral 10 is comprised of a base 11, having downwardly and inwardly directed sustaining flanges 12 and 13. Mounted on the base 11 is an element which includes walls 15, 16, and 17. The walls are connected by outwardly directed corner projections 18 which produce an exterior ornamentation as well as rigidifying the element. The free edges of walls 15 and 17 are terminated by flanged portions 20 which are shaped to provide inwardly opening recesses 21. The lower ends of the walls are formed with inwardly directed flanges 23, 24, and 25, indicated in dotted lines in Figure 3, which are welded or otherwise suitably joined to the base 11. A front wall 27 is formed with vertical flanges 28 which fit into the recesses 21 being secured to the flanges 20 of the side walls 15 and 17 in any suitable manner as by welding. The upper edge of the front wall 27 is flush with the upper edges of the walls 15, 16, and 17. The lower edge of the wall 27, however, is considerably shorter than the other walls of the structure and terminates in a return bent flange 31 which not only rigidifies this portion of the wall and adds to the external appearance of the device but, in conjunction with flanges 20 and base 11, defines an opening 29.

Each of the four walls of the device are terminated at their upper ends in outwardly directed flanges 34. A rectangular collar 35, having downwardly and inwardly directed flanges 36, is mounted on the flanges 34 to frame the top opening in the device, being secured to said flanges in any suitable manner as by welding.

Mounted within the device and adjacent the base thereof is a deflector plate 38. This plate is formed with a rolled upper edge 39 through which a pin 40 projects. The pin is supported in the flanged portions 18 and constitutes a hinge

for the plate 38. Attached to the under face of the plate is a bracket 42 which is recessed to receive one end of a compression spring 43. The other end of the spring 43 abuts and is secured to a collar 44 which is threadably mounted on a screw 46. A flange 47 struck up from the base 11 cooperates with a collar 48 fixed to the screw to control compression of the spring. Rotation of the screw in one direction advances the collar 44 along the threaded portion of the screw moving the spring 43 and deflector plate 38 upwardly. Rotation of the screw in the opposite direction draws the deflector plate downwardly. The upward and downward movement of the deflector plate 38 is through an arc about the pin 40. In the present showing (see Figure 2) plate 38 is at substantially a forty-five degree angle to the direction of travel of the ball 50, indicated by the dotted line. If the ball is of comparatively light resilient material it will be deflected outwardly and slightly upwardly from the device. In order that it may be deflected further upwardly or further downwardly, the adjusting means for the deflector plate 38 is provided. Furthermore, since it is contemplated to use a comparatively heavy ball similar to the so-called medicine ball, as well as a light weight resilient rubber ball, it is found desirable in order to compensate for the difference in weights of the two types of balls to provide an adjustable deflector plate having a certain amount of resiliency.

Since an adjustable deflector plate adds to the cost of manufacture of a device of this kind and is not in many instances either desirable or necessary, a fixed deflector plate is also shown taking the form of that disclosed in Figure 6 of the drawing. In this instance, a deflector plate 51, having an upper flange 52, is permanently joined to the rear wall 16 of the structure in any suitable manner as by welding. The lower and forward end of the plate is provided with a flange 53 which in turn is welded or otherwise suitably joined to the base 11.

The two modifications of a deflector plate shown and described as well as any other adaptations thereof and alternations in the general structure of the device are contemplated in so far as they lie within the spirit and scope of the invention as defined in the hereunto annexed claims.

Having thus set forth my invention what I

claim as new and for which I desire protection by Letters Patent is:—

1. A device for exercising comprising a four walled structure, a base supporting said structure, said structure being open at the top and provided with a similarly sized opening adjacent said base, adjustably pitched deflecting means adjacent said base and said opening, said means serving to direct a ball or other falling object outwardly through said opening, when said ball or object is inserted into said device from the top thereof.

2. A device for exercising comprising a base, an integral three wall element joined to and projecting upwardly from said base, a fourth wall joined to said element and forming therewith a rectangular hollow structure, said fourth wall terminating above said base to provide an opening, and deflecting means in said structure adjacent said base and said opening, said means being adjustable to vary the angular direction of a ball or other falling object outwardly through said opening, when said ball or object is inserted into said device from the top thereof.

3. A device for exercising comprising a base, a four walled structure joined to and projecting upwardly from said base, one of said walls being shorter than the others to provide an opening adjacent said base, deflecting means in said structure adjacent said base and said opening, said means serving to direct a ball or other falling object outwardly through said opening, when said ball or object is inserted into said device from the top thereof, and further means for adjusting the angle of said deflecting means whereby to alter the direction of travel of said ball as it leaves said device.

4. A device for exercising comprising a base, a four walled structure joined to and projecting upwardly from said base, the front wall of said structure having an opening adjacent said base, a deflector plate mounted in said structure adjacent said base and said opening, means pivotally supporting one end of said plate on said structure and further means for adjusting the other end of said plate whereby to alter the vertical direction of travel of a ball or other falling object, outwardly through said opening, when said ball or object is inserted into the top of said device.

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