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COORDINATION TRAINING DEVICE FOR SMALL CHILDREN

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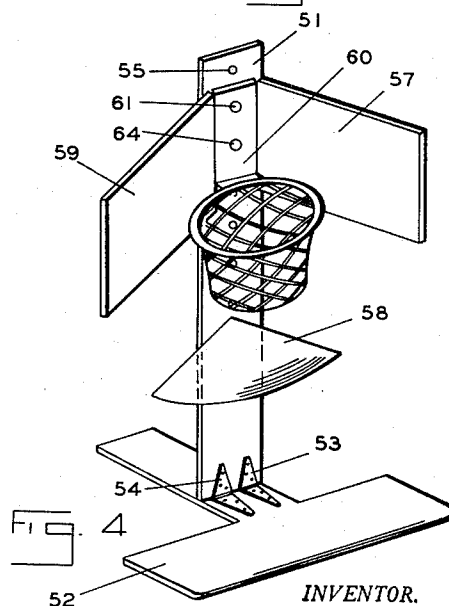
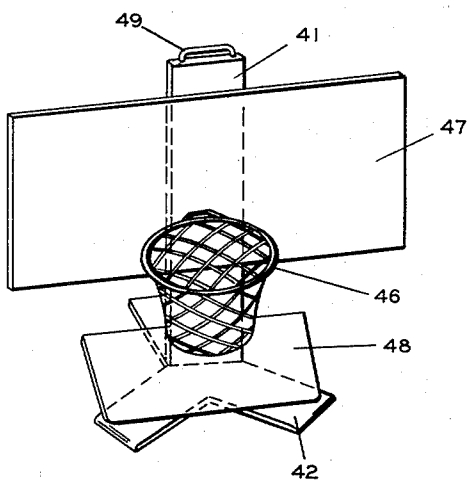
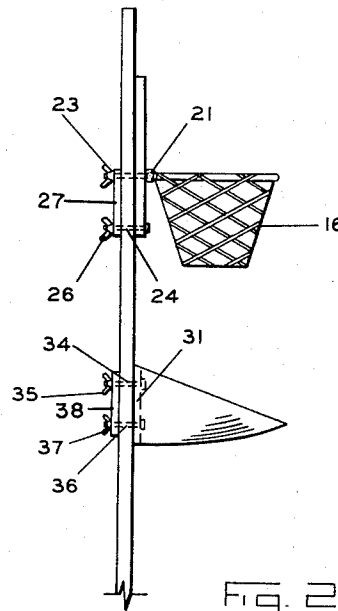
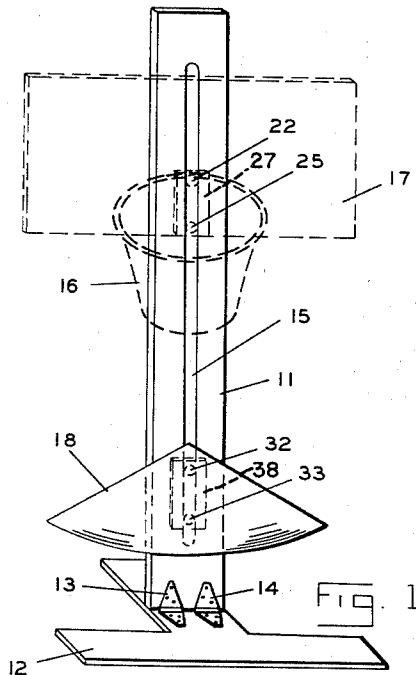


FIG. 3

FIG. 4

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COORDINATION TRAINING DEVICE FOR SMALL CHILDREN

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4 Claims. (Cl. 273—103)

The invention illustrated in the embodiments thereof shown and described in this application relates to amusement, educational, and exercise apparatus. The illustrations of several embodiments of my invention show several types of apparatus adapted particularly for use by a group of children. With the apparatus illustrated there is employed a ball such as a 7" rubber playground ball selected by the National Association of Childhood Education and a receiver such as a basket formed by a hoop and open bottomed tapered net. It is of course understood that the players shall throw the ball into the basket.

Provision is made in the preferred embodiment so that the height of the basket may be easily adjusted to the eye level of the children involved. It is to be especially pointed out at the outset that the types of apparatus disclosed are especially adapted for small children.

While the device bears some resemblance to some devices used for practice in shooting basket balls into basket-ball baskets, yet my device is different in that it is adapted especially for use in a small controlled area as in a classroom crowded with blocks, toys, etc., etc., without interfering or interference and especially adapted for acting upon a ball which has passed through the basket so as to deflect it from its normal vertical path and impart to it a trajectory which is radially disposed with respect to the device and which terminates within a predetermined restricted play area. The devices are especially adapted for cooperative play in the kindergartens of the public schools. They are designed for a basket toss game with unique features in that the basket is located at the child's eye level rather than at adult heights. The basket and back board are adjustable up and down for different age groups as for example for children of from kindergarten through the third grade. There is provided a unique ball deflector designed to return the ball to the area of play, which deflects the ball to the children at play within an arc so that as the ball may drop upon its return at one of several points the ball is delivered on a single bounce at random to different players arranged in an arc around the basket.

The purpose of the game is to develop coordination of eyes, nerve and muscle with resultant skill as a by-product, and at the same time to give the socializing benefit of cooperative play.

As suggested above the unique ball deflector is of special importance. The arrangement provided is not for a mere uncontrolled return, but is an adequate device for deflecting the path of a ball leaving the device into a horizontal trajectory which terminates within a predetermined playing area, thus enabling the small players to play in a designated area in a crowded classroom. It does not function merely as a return but functions to deliver the ball to small children on a slow bounce along a trajectory which terminates within a predetermined area.

It may be noted that the eccentric return is adjustable to follow the basket up and down according to the eye of the children and in order to deflect the ball as may seem desirable. One of the modifications is a smaller

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model for nursery schools with the basket close to the floor or at the eye level for the younger child and having a deflector suitable for imparting a low, relatively flat, trajectory to a ball, thus simplifying the use of the equipment for the simple use of the younger child.

One of the objects of my invention is to provide equipment suitable for the use of small children of varying age levels and size, as for example, from kindergarten through the third grade.

A further and most specific object of the invention is the provision of a basket equipment provided with means for adjusting the basket up and down depending on the age of the children and the size of the children using it, and also adjusting a ball deflector up and down to cause its position to correspond and be appropriate to the position of the basket.

A further unique object of the invention is to provide a ball deflector for imparting a horizontal trajectory to a ball and means for adjusting the position of the deflector so as to vary the pattern of the imparted trajectory to return the ball at a desired distance on a slow single bounce.

Further objects and features of the invention will be apparent from consideration of the accompanying drawings illustrating several embodiments of my invention.

In the drawings:

Fig. 1 is a view in perspective of a preferred embodiment of the invention consisting of a standard to which there is adjustably attached both a basket and a ball deflecting device, the view being taken substantially from directly in front of the device but at adult eye level;

Fig. 2 is a fragmentary view in side elevation of the apparatus shown in Fig. 1, the basket being in substantially the same position as shown in Fig. 1, but the ball deflecting device being adjusted upward slightly from the position shown in Fig. 1;

Fig. 3 is a view in perspective of a modification of the device shown in Fig. 1; and

Fig. 4 is a view in perspective of a second modification of the device shown in Fig. 1.

Referring now to the drawings, for detailed description of the embodiments illustrated, it is seen that I have shown in Fig. 1 an upright standard 11 having a T-shaped support 12 secured to the lower end of the standard 11 as by angle iron braces 13 and 14. The standard 11 is provided with a substantially vertical slot 15 extending from near its lower end to near its upper end. There are adjustably secured to the standard 11 a basket 16, a backboard 17 and a return device 18 in the manner now explained. Formed integrally with the basket 16 or secured thereto in any suitable manner is a bolt 21 which extends through a hole 22 formed in the backboard 17 and through the slot 15 of the standard 11. The bolt is secured in the desired position by a nut such as, for example, the wing-nut 23. Another bolt 24 extends through a hole 25 which is positioned vertically below the hole 22 in the backboard 17. The bolt 24 also extends through the slot 15 and is secured in position as by a wing-nut 26. A block 27 may be provided if desired between the standard 11 and the wing nuts 23 and 26.

The return 18 is formed in the shape of a portion of the surface of a cone, but is provided with a flat vertical flange 31 formed with holes 32 and 33. A bolt 34 provided with a wing-nut 35 extends through the hole 32 and through the slot 15 and a bolt 36 having a wing-nut 37 extends through the hole 33 and through the slot 15. The bolts 34 and 36 thus secure the return to the standard 11. A block 38 may be provided for obvious reason between the standard 11 and the wing nuts 35 and 37.

The embodiment shown in Fig. 3 is for very young children only and is arranged so that neither the back-

board, basket, nor the deflector are adjustable. Furthermore, in this embodiment of my invention, the deflector is not conical but flat in order that the equipment may be simplified for the use of a younger child. Therein I have shown a standard 41, a backboard 47 secured thereto in any suitable manner, a basket 46 secured to the backboard 47 and also to the standard 41 in any suitable manner, and a flat deflector 48 which is positioned at an angle to the vertical and is secured to the forward prongs of the Y-shaped support 12 and to the standard 41. The flat deflector 48 is preferably so positioned that it represents an angle of 15° with the horizontal. This I have found to be the simplest angle for the deflecting of the ball directly to the younger child who should stand directly in front of said device. A handle 49 is provided so that the device is portable and may be moved from school room to school room.

The embodiment shown in Fig. 4 includes a standard 51 formed with a plurality of holes such as the holes 55, and supported by a T-shaped support 52. The standard 51 is secured to the support 52 by angle iron braces 53 and 54. The backboards 57 and 59 are secured to a block 60 which is secured by bolts 61 and 64 passing through a pair of the holes 55 formed in the upright 51. The conical eccentric deflector 58 may be secured to the standard 51 in a manner identical to that illustrated in the embodiments shown in Figs. 1 and 2. It may be secured in a manner similar to that in which the block 60 is secured.

In the operation of the equipment shown in Fig. 1 and Fig. 2 (a) the device is positioned preferably near one wall of a school room for small children; (b) basket with the backboard is adjusted upward or downward so that the top thereof is approximately at eye level of the children; (c) the deflecting device is adjusted upward or downward so that it will deflect the ball, imparting a trajectory to it which is radially disposed with respect to the device, and cause the ball to be directed on a single bounce to children arranged in a semicircle around the basket at the desired distance; and (d) the children are arranged in such semi-circle. It may be noted that the radius of the semi-circle varies depending on the heights of the basket and of the deflecting device and especially the height of the latter. Thus the deflecting device is adjusted to the exact height to direct the ball on a single controlled bounce to the exact radius of the semi-circle desired. A child tosses the ball in the basket and the ball is thereafter redirected by the device toward the children in the semi-circle at random.

It is to be understood that the above described embodiments of my invention are for the purpose of illustration only and various changes may be made therein without departing from the spirit and scope of the invention.

I claim:

1. An amusement apparatus for use by young children of varying ages comprising a vertically positioned standard having a vertically extending slot; a backboard formed with a plurality of vertically aligned holes and adjustably secured to said standard; a basket secured to said backboard; a bolt secured to said basket and extending through one of the holes in the backboard and through said slot in the standard; another bolt extending through another of the vertically aligned holes in the backboard and through said slot whereby said backboard and basket are secured adjustably to the standard; a deflecting device having a flat rear surface and a front surface formed in the

shape of a portion of a cone adjustably secured to said standard below said backboard and having said flat rear surface formed with vertically aligned holes; and bolts extending through a plurality of the holes in the deflecting device and through the slot in the standard for securing the deflecting device adjustably to the standard whereby the basket and backboard may be adjusted up and down to the eye level of children of varying heights and the deflecting device may be correspondingly adjusted up and down to a position beneath the basket.

2. An amusement apparatus for use by young children of varying ages comprising a vertically positioned standard having at least one opening therein; a backboard formed with a plurality of vertically aligned holes and adjustably secured to said standard; a basket secured to said backboard; a bolt secured to said basket and extending through one of the holes in the backboard and through an opening in the standard; another bolt extending through another of the vertically aligned holes in the backboard and through an opening in the standard whereby said backboard and basket are secured adjustably to the standard; a deflecting device adjustably secured to said standard below said backboard; and bolts for securing the deflecting device adjustably to the standard whereby the basket and backboard may be adjusted up and down to the eye level of the children of varying heights and the deflecting device may be correspondingly adjusted up and down to a position beneath the basket.

3. An amusement apparatus for use by young children of varying ages comprising a vertically positioned standard having a vertically extending slot; a backboard adjustably secured to said standard; a basket secured to said backboard; and a deflecting device having a flat rear surface and a front surface formed in the shape of a portion of a cone adjustably secured to said standard below said backboard whereby the basket and backboard may be adjusted up and down to the eye level of children of varying heights and the deflecting device may be correspondingly adjusted up and down to a position beneath the basket whereby a ball tossed through the basket is deflected along a trajectory extending radially from said standard and toward said children.

4. An amusement apparatus for use by young children of varying ages comprising a vertically positioned standard having at least one opening therein; a backboard adjustably secured to said standard; a basket secured to said backboard; and a deflecting device adjustably secured to said standard below said backboard whereby the basket and backboard may be adjusted up and down to the eye level of the children of varying heights and the deflecting device may be correspondingly adjusted up and down to a position beneath the basket whereby a ball tossed through the basket is deflected along a trajectory extending radially from said standard and toward said children.

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