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TETHERED BASKETBALL PRACTICE DEVICE
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8 Claims. (Cl. 273—1.5)

This application is a continuation-in-part of my application Serial No. 286,243, entitled Basketball Practice Device, filed June 7, 1963, and now abandoned.

This invention relates to a new and improved device for sharpening one's skills in jumping, ball handling, shooting, tipping in, and the like; in particular, it concerns apparatus designed to be used primarily by basketball players to facilitate the development of their playing ability and to afford means for practicing various techniques without the necessity of chasing the ball or having it pass to them after each shot.

It is a general object of this invention to provide a new and improved basketball practice device. Other objects of the invention are: to provide improved basketball practice apparatus characterized by novel means for supporting and returning a basketball from an initial shooting position to a basket making position; to provide in apparatus of this type novel and improved means for supporting and returning the ball; and returning it to the player; to provide in apparatus of this type novel and improved means for keeping the ball under constant tension while it is being handled; to provide in apparatus of this type novel and improved means for absorbing the shock of the weight used to tension the basketball and return it to its original position; to provide in apparatus of this type novel structure adapted to restrict the movement of the ball cord through the vertically split hoop and net structure forming part of the invention; and in general to provide an improved basketball practice device which is highly versatile and dependable in use, simple and inexpensive to construct, and rugged and long wearing in service.

These and other objects and advantages of the invention will become apparent from a consideration of the following detailed description thereof taken in conjunction with the drawings wherein:

FIG. 1 is a perspective view of the invention;
FIG. 2 is a front elevation view of the invention;
FIG. 3 is a side view of the invention illustrating its use;
FIG. 4 is an enlarged fragmentary side view, with parts in section, of the structure shown in FIGS. 1—3;
FIG. 5 is a fragmentary view taken on the line—line 5—5 of FIG. 4;
FIG. 6 is a view taken on the line 6—6 of FIG. 4;
FIG. 7 is a top view of an alternate form of the invention;
FIG. 8 is an enlarged fragmentary view taken on the line 8—8 of FIG. 7;
FIG. 9 is a view taken on the line 9—9 of FIG. 8;
FIG. 10 is a view taken on the line 10—10 of FIG. 9;
FIG. 11 is a top view of a second alternate form of the invention;
FIG. 12 is an enlarged fragmentary view taken on the line 12—12 of FIG. 11;
FIG. 13 is a view taken on the line 13—13 of FIG. 12;
FIG. 14 is a view taken on the line 14—14 of FIG. 13; and
FIG. 15 is a view similar to FIG. 3 illustrating the function of the structure disclosed in FIGS. 7—14.

Briefly stated, my invention includes a supporting structure provided with a backboard upon which is mounted a forwardly split basketball hoop and net. The supporting structure is hollow and has an upper arm that overhangs the basketball hoop and net. Further provided is a conventional basketball which is tethered to a cord that extends within the supporting and is connected to a weight slidably positioned within the supporting structure for movements up and down. The weight travel and the length of the cord are adjustable.

Referring to FIGS. 1—6 of the drawing, my invention includes support structure 10 constructed of a hollow vertical arm 12 and an upper horizontal arm 14 which is also hollow and is connected to arm 12 to form therewith a continuous internal passageway 15. Arm 12 is braced to arm 12 by a gusset member 16. The outer end 17 of arm 14 is chambered, as at 19, to provide clearance for a pulley 18. Another pulley 20 is carried within arms 12, 14 at their juncture, as shown in FIG. 4. Slidably mounted within arm 12 is a weight member 24 that is urged by gravity against a stop pin 26. Spaced holes 28 in the lower end of arm 12 provide vertically adjustable mounting means for the stop pin 26, which is held in place by a circular band of spring material, indicated by the reference numeral 30, which surrounds arm 12 along part of its circumference, as shown in FIG. 6. A bumper 32 of suitable resilient material, such as rubber, is secured to the bottom of weight member 24.

Secured to the top of weight member 24 is an elongated flexible member or cord 34 which extends up and over pulleys 18, 20 to a depending position in front of arm 14. A basketball 36 is tethered to the free end of the cord 34.

A backboard 40 is secured to arm 12 by means of circular clamp members 42, 44, which are tightened against arm 12 to provide vertical adjustment of the mounting means for the backboard. A bracket 46 secured to the front of backboard 40 mounts hoop structure 50 beneath arm 14. Hoop structure 50 includes a generally circular rim 52 having a separation or opening 54 on its front surface. Net 56 having a vertical separation 58 is disposed along its front surface in register with the opening 54 of rim 52 is suspended from rim 52. As can be seen in FIGS. 1—4, arm 14 extends outwardly beyond hoop structure 50.

FIGS. 7—15 illustrate modified forms of the hoop structure 50 wherein a gate member is provided for restricting the passage of cord 34 through openings 54 and 58, that is to say, a spring biased member is provided which opens outwardly to prevent the cord 34 from passing from the outside into the hoop structure while permitting cord 34 to pass from inside hoop structure 50 to the outside. These modifications simplify use of the device in that the ball is normally maintained in an outwardly disposed position clear of hoop structure 50.

As shown in FIGS. 7—10, one form of such a gate may take the form of an elongated arm 60 equipped with spaced depending shoulders 62 at one end. Shoulders 62 overlie one end of rim 52 adjacent opening 54, as at 64, and are pivotally connected to rim 52 by a pin 66. The free end of arm 60 extends across opening 54 into abutting engagement with the other end of rim 52, as at 67. Spring member 69 normally biases arm 60 against rim 52 to close the opening 54. When the basketball 36 passes through hoop structure 50 cord 34 is permitted by arm 60 to leave the hoop but is prevented from re-entering it until another basket is made.

Another form of the gate described is shown in FIGS. 11—14. In this modification a hinged plate member 70 is provided having a stationary member 72, welded to rim 52 adjacent opening 54, and a gate member 74 hingedly attached to member 72. Gate member 74 extends across opening 54 into abutting engagement with the other end of rim 52, as at 76. A spring member 78 normally biases gate member 74 against rim 52 to close the opening 54, as described in connection with arm 60.
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In use, the basketball 36 is positioned by stop pin 26 so that it is suspended just above the head of the player. When ball 36 is pulled down, weight member 24 travels upwardly within passageway 15 of arm 12. Shooting the ball towards the hoop results in the return by gravity of weight member 24 to a lowered position set by the location of stop pin 26. When the ball 36 enters the hoop structure 30, cord 34 passes through openings 54, 58 thus returning the ball 36 to its original position. In FIG. 3, the cord 34 is shown as passing through openings 54, 58 from either direction, while in FIG. 15 it is illustrated as being allowed to pass therethrough only in one (outwardly) direction.

The use of weight member 24 for tensioning cord 34 and ball 36 permits one to hold the ball before shooting without resisting spring pressure or other means that may be employed to supply such tension. And when the ball 36 is released its return is accelerated by the force of gravity which acts upon the weight member 24. The use of weight member 24 also permits one to use a cord that is for all practical purposes weightless; reliance upon the weight of the cord for returning the ball is therefore avoided.

I intend that the patent shall cover, by summarization in the appended claims, all features of patentable novelty in the invention.

I claim:

1. In a basketball practice device, a support member, an arm extending outwardly from and outwardly from said support, a weight slidably mounted with respect to said support, a ball, a flexible means carried by the forward end of said arm and said support member connecting said ball and said weight, a backboard carried by said support member below said arm, and a split generally circular hoop mounted on said backboard, said split being disposed at the forward end of the hoop, the forward end of said arm extending outwardly of the forward portion of said hoop, said flexible means being adapted to pass through the split in said hoop.

2. The device set forth in claim 1 wherein a gate member is provided for said hoop and being adapted to open outwardly only to prevent said flexible means from passing from the outside into said hoop while permitting said flexible means to pass from inside said hoop to the outside thereof.

3. In a basketball practice device, a hollow elongated vertical support, a hollow horizontal arm extending outwardly from the top of said support, a weight slidably contained within said vertical support, a cord member extending through said support and through said arm to the forward end thereof and connected at one end to said weight, a ball attached to the other end of said cord in spaced relation to the end of said arm, a backboard mounted on said vertical support beneath said arm, a basketball hoop mounted on the front face of said backboard, the end of said arm being disposed forwardly of said hoop, said hoop being split on its front surface to permit cord member to pass therethrough, and means extending across the split in said hoop operable to permit said cord member to pass therethrough from one direction only.

4. The device described in claim 3 wherein said means includes a gate member pivotally secured to said hoop adjacent to and extending across the split therein, and spring means for normally biasing said gate member into a closed position with respect to the split in said hoop whereby to prevent said cord member from entering said hoop from the outside thereof while permitting said cord to leave said hoop from the inside thereof.

5. In a basketball practice device, a hollow elongated vertical support, a hollow horizontal arm extending outwardly from the top of said support, a weight slidably mounted in said vertical support, a cord passing through said support and said arm to the forward end thereof and connected at its inner end to said weight, a basketball connected to the outer end of said cord, vertically adjustable stop means attached to said vertical support for limiting the downward travel of said weight, a backboard mounted on said vertical support between said stop means and said horizontal arm, and a basketball hoop secured to the front face of said backboard, the end of said arm being disposed forwardly of said hoop, said hoop having an opening on the forward edge thereof to permit said cord to pass therethrough when said basketball is shot into said hoop.

6. The structure defined in claim 5 wherein resiliently compressible bumper means are secured to the lower surface of said weight.

7. The structure defined in claim 5 wherein said hoop is provided with means for preventing said cord from entering said hoop through its opening while permitting said cord to leave said hoop through its opening.

8. The structure defined in claim 5 wherein a vertically split net is attached to said hoop, said net having a vertical separation throughout its length in substantial register with the opening in said hoop.

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