A basketball return device (1) for securing to a basketball hoop rim (2), said basketball return device (1) having a circular ring (4), at least one clamp (30) secured to said circular ring (4) wherein said at least one clamp (30) removably secures said circular ring (4) to the basketball hoop rim (2), a directing frame (6) for directing movement of a basketball, O-shaped members (31) located on said directing frame (6) wherein said directing frame (6) is rotatably secured to said circular ring (4) via said O-shaped members (31) and at least one bracket (29) secured to said circular ring (4) wherein said at least one bracket (29) is mounted on the basketball hoop rim (2) when said basketball return device (1) is secured to the basketball hoop rim (4).
BASKETBALL RETURN DEVICE

BACKGROUND OF THE INVENTION

This invention relates to basketball return devices, more particularly, a basketball return device that permits a user to quickly and easily install and uninstall the basketball return device on a basketball hoop rim.

Rather than chasing a basketball after practicing a free throw, basketball return devices are commonly used to redirect the basketball towards the shooter after each shot. Although the use of such devices are helpful in redirecting the basketball to another location on the basketball court, there are several drawbacks in using basketball return devices currently on the market.

First, many basketball return devices are static, meaning that the basketball will be automatically redirected to one location on a basketball court, usually the free throw line, regardless of where the shot is made. Thus, a shooter may end up chasing the ball anyway, even though the use of the basketball return device is supposed to prevent him from needing to do so.

Second, even if using a basketball return device that is adjustable as to redirect the basketball to a variety of locations on the basketball court, many are difficult and cumbersome to install on a basketball hoop and/or backboard.

Finally, many basketball return devices require the use of a ladder in which to install and uninstall the basketball return device. Thus, many individuals are hesitant in using such devices as one must be very cautious in climbing the ladder while holding such a bulky and heavy object such as a basketball return device.

Thus, a need exists for a basketball return device that permits a user to quickly and easily install and uninstall the basketball return device on a basketball hoop rim.

Another object of the present invention is to provide a basketball return device that is easy to use.

The relevant prior art includes the following references:

<table>
<thead>
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SUMMARY OF THE INVENTION

The primary object of the present invention is to provide a basketball return device that permits a user to quickly and easily install and uninstall the basketball return device on a basketball hoop rim.

Another object of the present invention is to provide a basketball return device that returns a basketball to a location where the basketball was originally thrown from.

A further object of the present invention is to provide a basketball return device that is adjustable.

An even further object of the present invention is to provide a basketball return device that is portable.

[0012] Another object of the present invention is to provide a basketball return device that is easy to use.

[0013] The present invention fulfills the above and other objects by providing a basketball return device for securing to a basketball hoop rim, said basketball return device having a circular ring, at least one securing means secured to said circular ring wherein said at least one securing means removably secures said circular ring to the basketball hoop rim, a directing frame for directing movement of a basketball, at least one rotating means located on said directing frame wherein said directing frame is rotatably secured to said circular ring via said at least one rotating means and at least on stabilizing means secured to said circular ring wherein said at least one stabilizing means is mounted on the one basketball hoop rim when said basketball return device is secured to the basketball hoop rim.

To install the basketball return device of the present invention on a basketball hoop rim, a user first opens the securing means, which is preferably a clamp, and positions the at least one stabilizing means, which is preferably a bracket, on the basketball hoop rim. Then, the user closes the clamp or permits the clamp to close on its own, thereby securing the basketball return device to the basketball hoop rim. The user may then rotate the directing frame to a desired position, which is preferably such that the directing frame is pointed at a basketball shooter, so a basketball will be directed to the shooter when the basketball enters the basketball hoop rim and basketball return device.

To uninstall the basketball return device of the present invention, the user opens the clamp, preferably via an opener, and lifts or raises the basketball return device such that the stabilizing means are no longer resting on the basketball hoop rim. In this manner, the basketball return device may be easily installed and uninstalled without the use of a ladder.

The above and other objects, features and advantages of the present invention should become even more readily apparent to those skilled in the art upon a reading of the following detailed description in conjunction with the drawings wherein there is shown and described illustrative embodiments of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

In the following detailed description, reference will be made to the attached drawings in which:

FIG. 1 is a side perspective view of a basketball return device of the present invention installed on a basketball hoop rim;

FIG. 2 is a top view of the basketball return device of the present invention;

FIG. 3 is a side view of the basketball return device of the present invention;

FIG. 4 is a side view of a stabilizing means of the basketball return device of the present invention;

FIG. 5 is a side view of an alternate stabilizing means of the basketball return device of the present invention;

FIG. 6 is a side view of an alternate stabilizing means of the basketball return device of the present invention;

FIG. 7 is a side view of a securing means of the basketball return device of the present invention;

FIG. 8 is a side view of an alternate securing means of the basketball return device of the present invention;

FIG. 9 is a side view of an alternate securing means of the basketball return device of the present invention;
FIG. 10 is a top view of an extension of the basketball return device of the present invention; and FIG. 11 is a side view of a rotating means of the basketball return device of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

For purposes of describing the preferred embodiment, the terminology used in reference to the numbered components in the drawings is as follows:

1. basketball return device, generally
2. basketball hoop rim
3. backboard
4. circular ring
5. securing means
6. directing frame
7. knob
8. opner
9. aperture
10. rotating means
11. stabilizing means
12. cap
13. extension
14. directing rail
15. connecting bar
16. arm
17. support bar
18. end bar
19. extension end bar
20. extension head bar
21. knob connector
22. extension support bar
23. stabilizing means first arm
24. stabilizing means second arm
25. stabilizing means attachment
26. securing means first arm
27. securing means second arm
28. securing means hinge
29. bracket
30. clamp
31. O-shaped member
32. basketball hoop rim top surface
33. basketball hoop rim bottom surface
34. extension arm

With reference to FIG. 1, a side perspective view of a basketball return device of the present invention installed on a basketball hoop rim is shown. The basketball return device, generically 1 of the present invention is removably secured to a basketball hoop rim 2 that is preferably secured to a backboard 3. Although the basketball hoop rim 2 is shown having one ring, which is commonly found on professional and amateur basketball courts, as well as on basketball courts located on school grounds, city parks and county parks, the basketball return device 1 may also be used on a basketball hoop rim 2 having two rings as shown in FIGS. 6 and 9, which are used to provide additional strength so as to prevent breakage of the basketball hoop rim 2. The basketball return device 1 includes a circular ring 4, which is preferably equal to or greater in size than the basketball hoop rim 2, having a securing means 5 located therein. The securing means 5 preferably includes a knob 7 extending a predetermined distance from the securing means 5. When the securing means 5 is secured to the basketball hoop rim 2, the circular ring 4 is located beneath the basketball hoop rim 2. At least one stabilizing means 11 is located on the circular ring 4 to assist in stabilizing and maintaining the circular ring 4 on the basketball hoop rim 2. Rotatably connected to the circular ring 4 is a directing frame 6 that directs movement of a basketball that has entered through the basketball hoop rim 2 and circular ring 4 to a predetermined location. The predetermined location is preferably where a shooter originally throws a basketball; however, the predetermined location may be anywhere else on a basketball court or ground surface.

An optional opener 8 having at least one aperture 9 is provided to permit a user to easily open the securing means 5. Once the securing means 5 is opened, a user lifts, raises or otherwise moves the basketball return device 1 such that the stabilizing means 11 are no longer resting on the basketball hoop rim 2 and lowers basketball return device 1 to remove the basketball return device 1 of the present invention from a basketball hoop rim 2.

Next, FIG. 2 shows a top view of the basketball return device of the present invention. Located on the directing frame 6 is at least one rotating means 10 that permits a user to rotate the directing frame 6 on the circular ring 4. As shown in FIG. 11, the rotating means 10 are preferably O-shaped members 31 that circumvent the circular ring 4. However, rotating means 10 of varying shapes and sizes may also be used.

The directing frame 6 includes at least two directing rails 14 that act as guides for directing the return of a basketball to a predetermined location on a basketball court or ground surface. An optional extension 13 may be secured, in a removable, collapsible, foldable or permanent manner, to the directing frame 6, preferably to an end bar 18 of the directing frame 6, wherein the extension 13 also includes at least two directing rails 14. The extension 13 preferably terminates at an extension end bar 19.

The directing frame 6 also preferably includes at least two support bars 17 that connect the directing rails 14 to the rotating means 10. In addition, the directing frame 6 also preferably includes a connecting bar 15 that connects the directing rails 14 to one another and at least one arm 16 that connects the ends of the connecting bar 15 to the support bars 17. The inclusion of the connecting bar 15, arms 16 and support bars 17 are to increase the stability and durability of the directing frame 6.

Preferably located on the stabilizing means 11 are caps 12 that are preferably made of a plastic material. The caps 12 are used to not only protect the user from injuring him/herself from the ends of the stabilizing means 11, but also provide greater resistance between the stabilizing means 11 and the basketball hoop rim 2, thereby preventing slippage of the basketball return device 1 from a basketball hoop rim 2.

FIG. 3 shows a side view of the basketball return device of the present invention. The basketball hoop rim 2 includes a top surface 32 and a bottom surface 33. When the basketball return device 1 of the present invention is installed on a basketball hoop rim 2, the circular ring 4 is located below the basketball hoop rim 2. The securing means 5 secures the basketball return device 1 to the basketball hoop rim 2 while the stabilizing means 11 stabilize the basketball return device 1 on the basketball hoop rim 2. The stabilizing means 11 preferably includes caps 12. When the basketball return device 1 is installed on a basketball hoop rim 2, the stabilizing means is mounted on the basketball hoop rim 2.

An optional extension support bar 22 is located on a foldable extension 13 wherein a cap 12 is preferably located...
on the end of the extension support bar 22. The extension support bar 22 permits the extension 13 to remain in an unfolded, substantially horizontal position in relation to a ground surface. [0072] With reference to FIG. 4, a side view of a stabilizing means of the basketball return device of the present invention is shown. The stabilizing means 11 is preferably a bracket 29 having a first arm 23 and a second arm 24 wherein each arm 23 and 24 has a cap 12 located thereon. When the basketball return device 1 having these brackets 29 are utilized, the first arm 23 is mounted on the basketball hoop rim top surface 32 and the second arm 24 rests below the basketball hoop rim bottom surface 33. In this manner, the movement of the basketball return device 1 in an upward or downward direction is restricted. [0073] Next, FIG. 5 shows a side view of an alternate stabilizing means of the basketball return device of the present invention. The stabilizing means 11 is preferably a bracket 29 having a first arm 23 wherein the first arm 23 is substantially U-shaped. In this manner, a user simply lifts or raises the basketball return device 1 when the securing means 5 is opened to remove the basketball return device 1 from a basketball hoop rim 2. [0074] FIG. 6 shows a side view of an alternate stabilizing means of the basketball return device of the present invention. The stabilizing means 11 is preferably a bracket 29 wherein the first arm 23 and second arm 24 wherein a predetermined amount of space is located between the arms 23 and 24 to permit a user to use the stabilizing means 11 on a two basketball hoop rims 2. A stabilizing means attachment 25 is also provided to permit a user to secure the stabilizing means 11 to the circular ring 4. [0075] With reference to FIGS. 7-9, varying views of a securing means of the basketball return device of the present invention are shown. The securing means 5, which is preferably a clamp 30, is secured to the circular ring 4 and is used to secure the circular ring 4 to at least one basketball hoop rim 2. The clamp 30 preferably includes a first arm 26 and a second arm 27 connected via a hinge 28 to permit a user to open the clamp 30. The clamp 30 may close automatically or, in the alternative, close manually via the user. A knob connector 21 is preferably located between the knob 7 and the first arm 26 to permit a user to secure the aperture 9 of the opener 8 about the knob connector 21 in order to open the clamp 30 via the opener 8. [0076] FIG. 10 shows a top view of an extension of the basketball return device of the present invention. The extension 13 includes at least two directing rails 14 for directing movement of a basketball. Extension arms 34 extending from an extension head bar 20 are preferably provided for interlocking the extension 13 to the directing frame 6 in a foldable manner. [0077] Finally, FIG. 11 shows a side view of a rotating means of the basketball return device of the present invention. The rotating means 10 is preferably an O-shaped member 31 wherein the O-shaped member 31 is sized and shaped to wrap around the circular ring 4. [0078] To install the basketball return device 1 on a basketball hoop rim 2, a user first opens the securing means 5 and positions the at least one stabilizing means 11 on the basketball hoop rim 2. Then, the securing means 5 is closed on/about the basketball hoop rim 2, thereby securing the basketball return device 1 to the basketball hoop rim 2. The user may then rotate the directing frame 6 to a desired position, which is preferably such that the directing frame 6 is pointed at a basketball shooter, so a basketball will be directed to the shooter when the basketball enters the basketball hoop rim 2 and basketball return device 1. [0079] To uninstall the basketball return device 1, the user opens the securing means 11, preferably via an opener 8, and lifts or raises the basketball return device 1 such that the stabilizing means 11 are no longer resting on the basketball hoop rim 2. In this manner, the basketball return device 1 may be easily installed and uninstalled without the use of a ladder. [0080] The use of the present invention permits a user to quickly and easily install and uninstall the basketball return device on at least one basketball hoop rim. [0081] It is to be understood that while a preferred embodiment of the invention is illustrated, it is not to be limited to the specific form or arrangement of parts herein described and shown. It will be apparent to those skilled in the art that various changes may be made without departing from the scope of the invention and the invention is not be considered limited to what is shown and described in the specification and drawings.

Having thus described my invention, I claim:

1. A basketball return device for securing to a basketball hoop rim having a top surface and a bottom surface, said basketball return device comprising:
   a. a circular ring;
   at least one securing means secured to said circular ring wherein said at least one securing means removably secures said circular ring to the basketball hoop rim;
   b. a directing frame for directing movement of a basketball;
   at least one rotating means located on said directing frame wherein said directing frame is rotatably secured to said circular ring via said at least one rotating means; and
   at least on stabilizing means secured to said circular ring wherein said at least one stabilizing means is mounted on said basketball hoop rim when said basketball return device is secured to said basketball hoop rim.
2. The basketball return device of claim 1 wherein:
   a. said at least one securing means is a clamp.
3. The basketball return device of claim 2 wherein:
   a. clamp has a first arm and a second arm hingedly joined to each other.
4. The basketball return device of claim 3 further comprising:
   a. at least one knob connector extending from said first arm; and
   b. at least one knob located on said at least one knob connector.
5. The basketball return device of claim 1 wherein:
   a. said directing frame has at least two directing rails.
6. The basketball return device of claim 2 wherein:
   a. said directing frame has at least two directing rails.
7. The basketball return device of claim 1 wherein:
   a. said at least one rotating means is an O-shaped member.
8. The basketball return device of claim 2 wherein:
   a. said at least one rotating means is an O-shaped member.
9. The basketball return device of claim 3 wherein:
   a. said at least one rotating means is an O-shaped member.
10. The basketball return device of claim 1 wherein:
   a. said at least on stabilizing means is a bracket.
11. The basketball return device of claim 10 further comprising: a first arm located on said bracket wherein said first arm rests on a top surface of said basketball hoop rim when said basketball return device is secured to said basketball hoop rim.

12. The basketball return device of claim 11 further comprising: a second arm located on said bracket wherein said second arm rests below a bottom surface of said basketball hoop rim.

13. The basketball return device of claim 1 further comprising: at least one opener having at least one aperture for opening said at least one securing means.

14. The basketball return device of claim 1 further comprising: at least one extension secured to said directing frame.

15. The basketball return device of claim 14 wherein: said at least one extension is removably secured to said directing frame.

16. A basketball return device for securing to a basketball hoop rim having a top surface and a bottom surface, said basketball return device comprising: a circular ring; at least one clamp secured to said circular ring wherein said at least one clamp removably secures said circular ring to the basketball hoop rim; a directing frame for directing movement of a basketball; said directing frame having at least two directing rails; at least O-shaped member located on said directing frame wherein said directing frame is rotatably secured to said circular ring via said at least one O-shaped member; and at least on bracket secured to said circular ring; and a first arm located on said at least one bracket wherein said first arm rests on a top surface of said basketball hoop rim when said basketball return device is secured to said basketball hoop rim.

17. A basketball return device of claim 16 further comprising: a second arm located on said bracket wherein said second arm is located below a bottom surface of said basketball hoop rim.

18. The basketball return device of claim 16 further comprising: at least one extension secured to said directing frame.

19. The basketball return device of claim 16 further comprising: at least one opener having at least one aperture for opening said at least one securing means.

20. A basketball return device for securing to a basketball hoop rim having a top surface and a bottom surface, said basketball return device comprising: a circular ring; at least one clamp secured to said circular ring wherein said at least one clamp removably secures said circular ring to the basketball hoop rim; a directing frame for directing movement of a basketball; said directing frame having at least two directing rails; at extension removably secured to said directing frame; at least O-shaped member located on said directing frame wherein said directing frame is rotatably secured to said circular ring via said at least one O-shaped member; and at least on bracket secured to said circular ring; a first arm located on said at least one bracket wherein said first arm rests on a top surface of said basketball hoop rim when said basketball return device is secured to said basketball hoop rim; and a second arm located on said at least one bracket wherein said second arm is located below a bottom surface of said basketball hoop rim.

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