

[54] **BASKETBALL TRAINING AID**
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 38856
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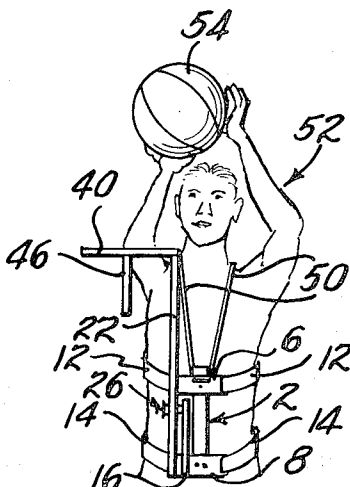
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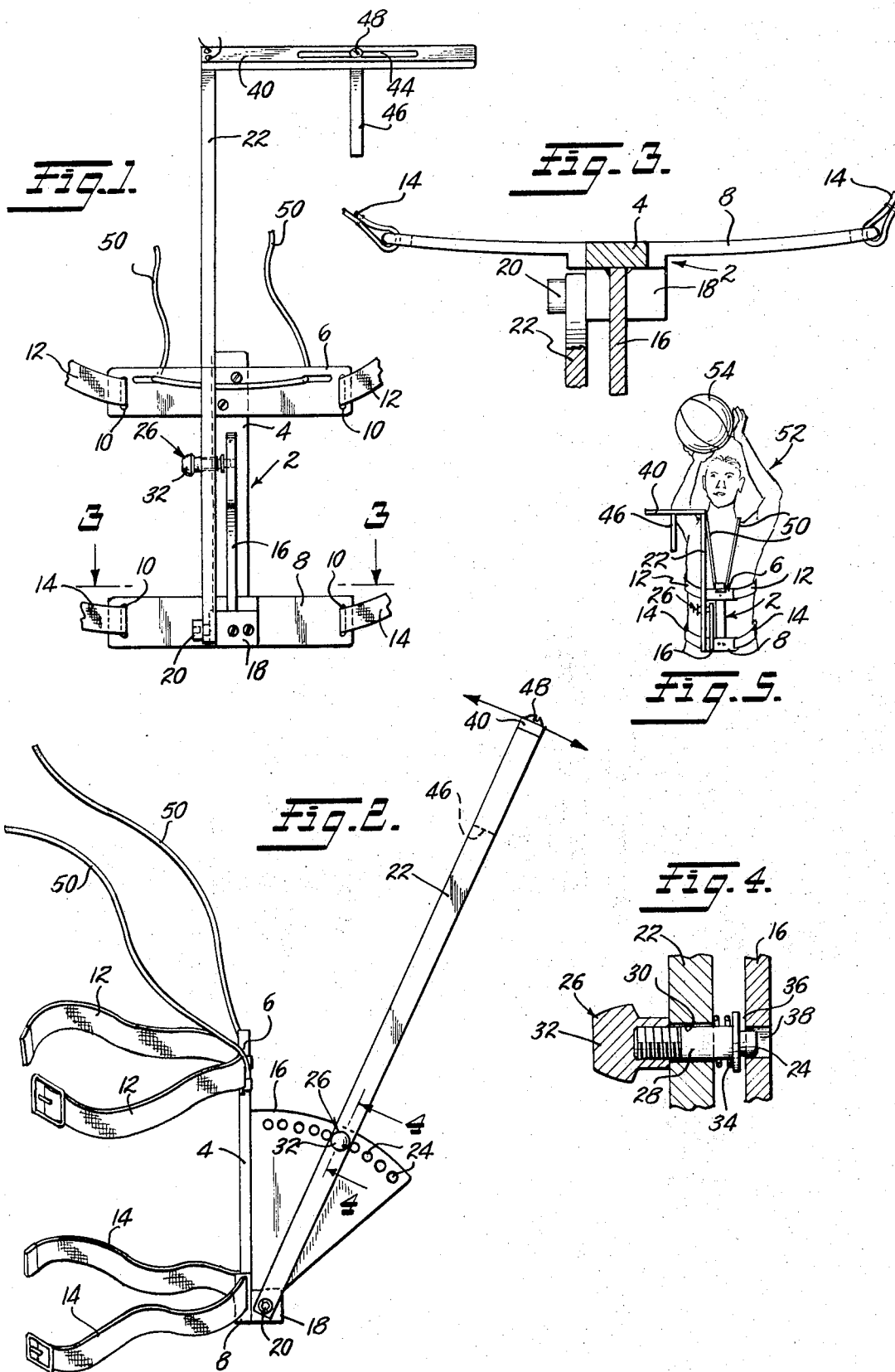
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[57] **ABSTRACT**

A belt-supported bracket carries an upwardly and forwardly extending arm having a transverse gage bar at its upper end to indicate the height to which a user's elbow should be raised before extending the forearm to "shoot" a basket, in the game of basketball. A guide bar depending from the gage bar indicates the proper lateral position of the user's elbow. The parts are relatively adjustable to adapt the device to users of different sizes or physiques.

7 Claims, 5 Drawing Figures





BASKETBALL TRAINING AID

BACKGROUND OF THE INVENTION

This invention is in the field of training aids, particularly for training basketball players in the proper manner of shooting baskets.

A major fault of many young basketball players is that they start shooting incorrectly. The early tendency of a novice is to shoot too low for proper control of the arch or trajectory of the ball. There has been need for an efficient inexpensive training aid to enable a player to determine whether or not his motions in shooting a basketball are proper, as to both arm height and proper wrist action.

SUMMARY OF THE INVENTION

The present invention comprises generally a device carried by the person of the user which indicates the height to which the player's arm should be raised before extending the forearm to shoot a basket. It comprises generally an arm extending upwardly and forwardly from about the player's abdomen and a transverse arm extending laterally from the upper end thereof. In use, the player should raise his arm until his elbow, with the arm bent, is about the height of the transverse bar and to then extend his forearm to project the ball forwardly. Actually, if the ball is projected too soon, the transverse bar will interfere with forearm motion and indicate conclusively that the player's movements were improper.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a front elevational view of a preferred embodiment of the invention;

FIG. 2 is a side elevational view of the device of FIG. 1;

FIG. 3 is a transverse sectional view on an enlarged scale, taken along the line 3—3 of FIG. 1;

FIG. 4 is an enlarged sectional detail taken on the line 4—4 of FIG. 2; and

FIG. 5 is a schematic illustration showing the training aid of the present invention in use.

DESCRIPTION OF A PREFERRED EMBODIMENT

As seen in the drawings, a support or bracket member 2 is provided with an upstanding central portion 4 and transversely extending members or arms 6 and 8, fixedly secured to the central portion 4 in any suitable manner. The transverse member 6 is provided with slots 10 at its ends in which flexible belt sections 12 are secured. In like manner the lower transverse member 8 is provided with the slots 10 in which lower flexible belt sections 14 are secured. In use, the upper belt sections are strapped around the user in the lower chest region and the lower belt sections gird the user's waist, as indicated in FIG. 5. This positions the central bracket member 4 generally in the region of the user's abdomen. As best seen in FIGS. 2 and 3, a sector plate 16 is secured to the central bracket member 4 and a lower bracket block 18, which in turn is secured to the central bracket member 4, as shown. The sector plate 16 extends forwardly from the user when the device is in use. The bracket member 18 serves as a support for a pivot pin 20 on which an arm 22 is pivoted. In the position of use, the arm 22 extends upwardly and for-

wardly of the user and is pivotally adjustable, in a generally vertical plane, extending outwardly and forwardly from the front of the person.

The sector plate 16 is further provided with a series of openings 24 arranged concentrically about the pivot 20 and the arm 22 is provided with a releasable latching member 26 shown in greater detail in FIG. 4. As shown, the latching member 26 comprises a pin member 28 slidable through a guide opening 30 in the arm 22 and having an enlarged head 32 at its outer end. The pin 28 extends slidably through the opening 30 and a spring 34 bearing against a washer 36 fixed to pin 28 urges the latch member toward the sector plate 16. An end portion 38 of the pin 28 may thus be engaged in any one of the openings 24 to releasably hold the arm 22 in a selected position of angular adjustment about pivot 20. To effect a change in the adjustment it is only necessary to grasp the head 32 and to pull the pin 28 outwardly, then adjust the arm 22 to the desired position and release the latch member, all as will be obvious. Clearly, other equivalent latching means may be used.

A transverse gage arm 40 (see FIG. 1) is affixed to the upper end of the arm 22 to extend laterally therefrom generally perpendicular to the plane in which the arm 22 is pivotally adjustable. As shown, the gage arm 40 extends only to one side of the arm 22 but it is secured to the upper end thereof by a pair of screws 42, whereby the screws may be released and the gage arm 40 repositioned thereon to extend toward the opposite side of the arm 22. This adjustment is to accommodate the device for use by either a right-handed or left-handed player.

An alternate manner of adjusting the device for a right or left-handed player, is to remove the pivot pin 20, reverse the arm 22 and remount it on the other side of lower bracket 18 with gage arm 40 extending in the opposite direction. The gage arm 40 is provided with an elongated longitudinal slot 44 and a guide bar 46 is secured by a screw or the like 48 to extend downwardly from the gage arm 40, the screw 48 passing through the slot 44 and thereby rendering the guide bar 46 adjustable along the length of the slot 44.

Preferably, the device is made of aluminum or other light but strong materials and may be in several sizes to accommodate players of different sizes. It is to be understood, however, that any one size is usable by a number of different players of different heights, this being made possible by the various adjustments described.

A pair of flexible cords 50 is also secured to the support member 2 in any suitable manner and in use the cords are passed upwardly around the back of the neck of the user and releasably tied to thereby hold the device at the desired elevation on the person's abdomen. It will be apparent that during the activity of training with this device, it is quite likely that the support member 2 and belts 12 and 14 will slip downwardly to an undesirably low position. The cords 50 thus prevent such unwanted displacement.

FIG. 5 illustrates schematically the manner in which the present training aid is used. It is shown secured to the person of a user 52 in the manner already described and it is assumed that the angle of the arm 22 and the position of guide bar 46 have been adjusted to accommodate the particular individual depicted. As shown, the gage arm 40 extends to the right hand side of the arm 22 (viewed by the user 52) to thus adapt the device

for use by the right-handed player shown. The guide bar **46** is intended to indicate to the player the general plane in which his right elbow rises from a lower position, not shown, to the proper position shown in FIG. 5 for release of the ball **54**. The player thus grasps the ball with his arms bent but in a somewhat lowered position, raises his hand so that his right elbow follows generally along the line defined by guide bar **46** until his right elbow reaches the height of the gage bar **40** and when that position, shown in the drawings, is reached, he may straighten his right arm by extending his forearm forwardly and thus project the ball **54** on the proper and desired arc.

While a single specific embodiment of the invention has been shown and described herein, it is to be understood that many modifications will become apparent to those skilled in the art and it is intended that such modifications will fall within the scope of the appended claims.

I claim:

1. A basketball training aid comprising:

a support member having belt means for securing the same on the person of a user at the front of the user's person and in the region of the user's abdomen;

an upwardly extending arm mounted on said support member to extend upwardly and forwardly centrally of the user, in a plane generally perpendicular to the front of said support means and of such length to extend upwardly to about the level of the user's shoulder and spaced forwardly therefrom; and

a straight gage bar at the upper end of said arm and extending laterally to one side thereof transverse to a generally vertical plane extending forwardly from the user and laterally of said arm at least as far as the user's shoulder.

2. A training aid as defined in claim 1 including a guide bar extending downwardly from said gage bar and adjustable to selected positions therealong.

3. A training aid as defined in claim 2 wherein said gage bar extends laterally to one side of said arm, and releasable means permitting said gage bar to be selectively positioned to extend to a selected side of said arm.

4. A basketball training aid as defined in claim 1 wherein said arm is pivotally mounted on said support member for pivotal adjustment in said generally vertical plane.

5. A basketball training aid as defined in claim 4 including releasable means for holding said arm in selected positions of pivotal adjustment in said plane.

6. A basketball training aid as defined in claim 1 wherein said holding means includes lower and upper flexible belt members adapted to extend around the waist and lower chest regions, respectively, of a user.

7. A basketball training aid as defined in claim 6 including flexible means secured to said support member and adapted to extend upwardly and around the neck of a user to maintain said support at a selected elevation in the region of the user's abdomen.

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