United States Patent [19]

Williams

[11] **3,858,876**

[45] **Jan. 7, 1975**

[54] **BASKETBALL TRAINING DEVICE**

[76] Inventor: **Roy G. Williams,** Grosrenor Square Apt. 5-B, Greensboro, N.C. 27284

[22] Filed: **Aug. 27, 1973**

[21] Appl. No.: **392,074**

[52] **U.S. Cl.** ..... **273/1.5 A,** 273/58 R

[51] **Int. Cl.** **A63b 43/00**

[58] **Field of Search** ..... 273/1.5 A, 26 R, 55 R, 273/81.4, 75, 65 E, 58 R, 55 B

[56] **References Cited**

UNITED STATES PATENTS

1,664,257	3/1928	McCullough	273/81.4
1,917,236	7/1933	Bloomstrand	273/75 UX
1,931,303	10/1933	Sturgis	273/81.4 UX
2,925,273	2/1960	Pratt	273/26 R
3,110,494	11/1963	Morgan	273/26 R
3,119,618	1/1964	Molitor et al.	273/65 E
3,348,842	10/1967	Stern	273/55 B

FOREIGN PATENTS OR APPLICATIONS

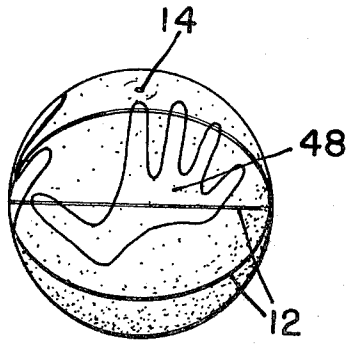
762,059	1/1934	France	273/75

Primary Examiner—Paul E. Shapiro

[57] **ABSTRACT**

A training device for indicating the proper placement of the hands on a basketball to maximize shooting proficiency. The basketball may be provided with markings, lines, recessed areas, etc. for aiding the player in locating the hands and fingers in an exact manner each time before shooting the basketball.

7 Claims, 9 Drawing Figures



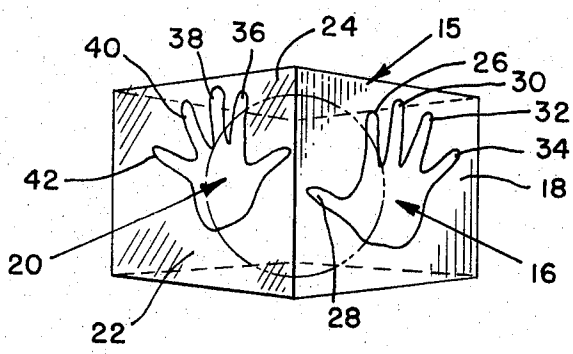


FIG. 4

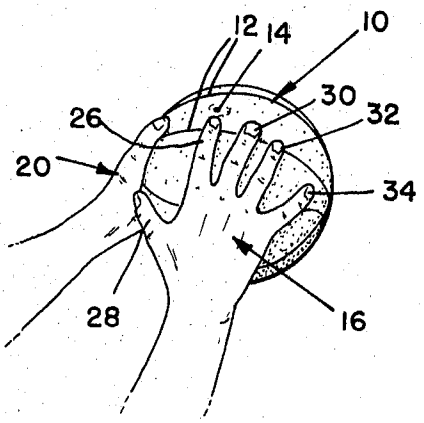


FIG. 1

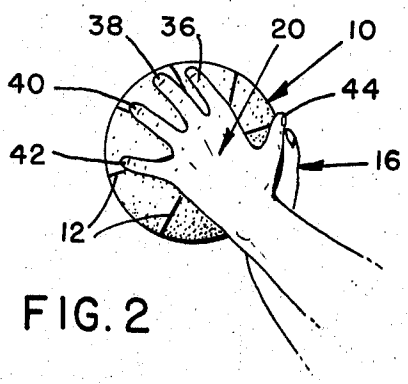


FIG. 2

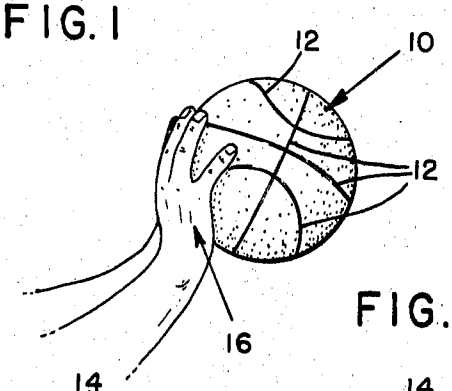


FIG. 3

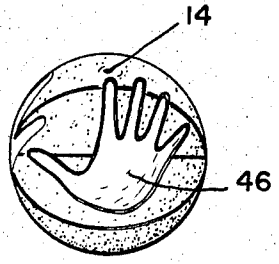


FIG. 5

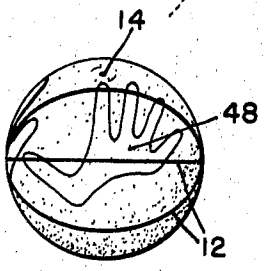


FIG. 6

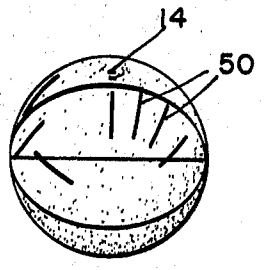


FIG. 7

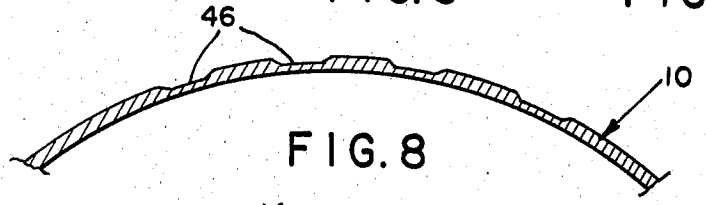


FIG. 8

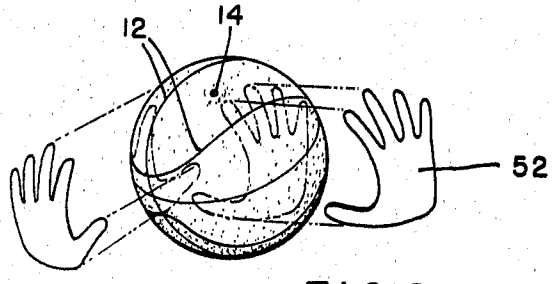


FIG. 9

BASKETBALL TRAINING DEVICE

BRIEF SUMMARY AND OBJECTS OF THE INVENTION

This invention relates generally to the art of shooting a basketball, and more particularly to a training aid consisting of a basketball having indicia thereon at prescribed areas for guiding the shooter in holding the basketball in the same manner each time to develop skill and proficiency in controlling the delivery of the basketball towards the basket.

Conventional basketballs have an outer surface which is generally smooth, with the exception of seam lines formed by moulding or in the sewing together of outer surface sections. There is nothing on conventional basketballs to guide and assist a player in locating his hands on the ball in the same manner before each shot. Providing a basketball with indicia permits the players to practice and develop a "feel" for properly positioning the hands before shooting the ball. The indicia is such that it does not interfere with the normal action, control and characteristics of the ball.

One of the primary objects of the invention is the provision of a basketball with markings or indicia thereon defining the specific areas a player's hands should be located before shooting the basketball.

Another object of the invention is the provision of a basketball having indicia thereon for guidance in practicing and developing skill in shooting the basketball.

Other objects and advantages of the invention will become apparent when considered in view of the following detailed description.

BRIEF DESCRIPTION OF THE DRAWING

FIG. **1** is a perspective view illustrating the proper positioning of the left and right hands upon a basketball;

FIG. **2** is a side elevational view of the basketball illustrating the manner of positioning the left (non-shooting) hand upon the basketball;

FIG. **3** is a side elevational view of the basketball illustrating the proper positioning of the shooting hand;

FIG. **4** is a perspective view of a basketball within a cube and illustrating the relationship of the hands, the thumbs forming a "T";

FIG. **5** is an elevational view of a basketball having recessed portions in the configurations of right and left hands;

FIG. **6** is an elevational view of a basketball having markings in the configuration of hands applied to the basketball outer periphery by paint;

FIG. **7** is an elevational view of a basketball having indicia thereon in the form of lines for indicating the proper placement of the hands and fingers;

FIG. **8** is an enlarged, fragmentary, cross-sectional view of the basketball of FIG. **5** illustrating depressions in the outer periphery for receiving the hands; and

FIG. **9** is an elevational view of a basketball illustrating the manner of applying decals or other suitable indicia to the ball, the decals having configurations generally conforming to the outline of a shooter's hands.

DETAILED DESCRIPTION OF THE INVENTION

Referring to the drawing, the numeral **10** designates a spherical, hollow body which may be formed of leather, plastic or rubber. The body or ball **10** may be a conventional basketball modified with means for imparting to a basketball player the proper manner of grasping the ball to maximize shooting proficiency. The ball **10** may be divided into sections by seam lines **12** formed by sewing the sections together, as in the case of leather balls, or the seam lines **12** may be formed in the outer surface during molding of the ball if constructed of rubber or plastic material. The seam lines **12,** which are not sufficiently deep to affect control of the ball greatly facilitates a player's ability to grip the ball. Preferably, the ball is provided with an air valve **14** located centrally of the sides of the ball, as shown most clearly by FIGS. **5–7.** When shooting the basketball, particularly push shots, free throws and jump shots, the manner in which the ball **10** is held and released is of utmost importance. For example, if the ball was in the form of a cube **15,** FIG. **4,** a right handed shooter would place his right hand **16** on the back side **18** of the cube **15** nearest to him, and the left hand **20** would be on the side **22** of the cube **15** to the left. The fingers of both hands **16** and **20** would be pointing generally upwardly towards the top side **24** and the thumbs of hands **16** and **20** would form a T if connected. The proper relationship of the hands **16** and **20,** and particularly the positioning of the thumbs, when placed upon the ball **10,** is shown by FIGS. **1–3.**

The proper placement of the hands will be described with respect to a right handed shooter. The right hand **16** is totally responsible for shooting the basketball. With the fingers of the right hand extending across the seam lines **12,** the index finger **26** points toward the air valve **14,** assuming the valve is in the center of the ball. As the ball **10** leaves the hand **16** the index finger **26** is the last contact point on the ball. It serves both as a trigger and provides proper rotation of the ball back towards the shooter as the ball proceeds towards the basket. As the ball is released and proceeds toward the basket, the shooter should see the ball through the "V" sight formed by the thumb **28** and index finger **26.**

The middle finger **30** and the third finger **32** serve to aid the index finger **26** in its function in a subordinate capacity. The thumb **28** and the little finger **34** serve as a track for the three shooting fingers **26, 30, 32.** They guide and control the rotation and thrust. If the right hand is theoretically extended to the basket upon shooting the ball, it would touch the front of the basket rim.

The sole function of the left hand **20** is that of acting as a clamp. The left hand **20** is placed upon the left side of the ball **10** with all four fingers **36, 38, 40, 42** being spaced and all pointing generally towards the top of the ball, as shown by FIG. **2,** and with the thumb **44** forming a "T" with the right thumb **28.** Positioning the left hand **20** on the left side of the ball provides better vision to the shooter and avoids hindering the function of the right hand **16.** If the left hand is under, in front of or on top of the ball it has a tendency to block the vision and pull on the ball thus affecting the proper rotation and thrust of the ball. Theoretically, if extended to the basket, the left hand **20** should touch the left side of the rim.

To assist and guide the player in achieving a high degree of accuracy when shooting the basketball, indicia has been provided on the ball **10.** The indicia may be in the form of slight depressions or projections at the outer surface of the ball, paint, decals, etc. applied to the outer surface of the ball, color variations in the ball, lines or grooves on the surface, and areas having a dif-

ferent feel or texture from the normal outer surface of the ball. The indicia is provided in a prescribed, selected manner and may guide in placement of the entire hand, all fingers or only designated fingers.

In the embodiment of FIG. **5,** depressions **46** for receiving the hands have been provided in the outer surface. As shown by FIG. **8,** the depressions **46** are slight, preferably having a depth generally corresponding to the depth of the seam lines **12.** It is to be understood that depressions may be provided only for the fingers. Note that the index finger depression is pointing to the air valve **14** and the depressions for the thumbs generally define a "T".

In the FIG. **6** embodiment, the indicia is in the form of painted pattern **48** illustrating partially a hand, and in FIG. **7,** the indicia is in the form of grooves **50** for the fingers only. FIG. **9** illustrates the manner of applying decals **52** having the configuration of hands to a basketball.

I claim:

1. A basketball training device for imparting to a player the proper manner of grasping a basketball prior to shooting comprising, a hollow, inflatable body of spherical form, said body being selectively provided on the outer surface with gripping indicia designating the ball support positions of the thumb and fingers of both the shooting and clamping hands of a player when shooting the basketball, said indicia disposing the thumb and fingers of a player's shooting hand in a predetermined spaced pattern with the index finger indicia bisecting said spherical body, and with the indicia for the thumb and little finger of the shooting hand spaced on either side of the index finger indicia for positioning the thumb and little finger to serve as tracks for guiding and controlling the rotation and thrust of said body, said indicia for the thumb of the clamping hand being spaced from and perpendicular to the indicia for the thumb of the shooting hand and the indicia for all fingers extending toward the top of said spherical body when positioned for shooting.

2. A basketball training device as recited in claim **1,** wherein said indicia is in the form of depressions in the outer surface of said spherical body for receiving at least portions of the fingers and thumb.

3. A basketball training device as recited in claim **2** wherein the depressions are in a configuration to accommodate completely, at least one open hand with fingers and thumb separated, said depressions being of such slight depth that normal control action and characteristics of the spherical body are not altered.

4. A basketball training device as recited in claim **1,** wherein said indicia is in the form of means applied directly to the outer surface of said spherical body.

5. A basketball training device as recited in claim **1,** wherein means having a texture which differentiates from the texture of said spherical body defines said indicia.

6. A basketball training device as recited in claim **1** wherein said indicia is in a predetermined pattern to position one hand of the player at one side of said spherical body and spaced approximately 90° with respect to the other hand.

7. A basketball training device as recited in claim **6,** wherein a hand properly positioned at one side of the spherical body serves as a clamp, while the hand having the index finger positioned to bisect the spherical body serves as the shooting hand.

* * * * *