# United States Patent [19]

**Lersch**

[11] **3,877,697**

[45] **Apr. 15, 1975**


[54] **SELF-UPRIGHTING BASEBALL BATTING PRACTICE TEE**


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[73] Assignee: **A. Evans Lersch Corporation,** Forest Hills, Pa.



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[52] **U.S. Cl.** ..... **273/26 R;** 273/202; 273/195 B; 46/155

[51] **Int. Cl.** ..... **A63b 69/40**

[58] **Field of Search** ..... 273/26 R, 33, 202, 209, 273/184 B, 195 R, 195 B, 195 A, 202, 196, 183 A, 207; 46/155



[56] **References Cited**

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[57] **ABSTRACT**

The tee includes a mat of resilient material. The mat sits freely on a horizontal surface. An upright member carries at the top a seat for the ball and is supported from a stem extending centrally from the mat. The upright member includes tubular parts which are vertically adjustable on a rod or inner tube. The rod or tube is a friction fit in the tubular parts and the tubular parts may be set at different heights to accommodate the person practicing the batting. When the upright member or seat, rather than the ball, is struck, the upright member is thrust towards the surface and the mat is deformed and compressed and, in relaxing and returning to the flat position on the surface, returns the upright member to the upright position. To aid in restoring the mat and upright member to the upright position, the mat is sandwiched between an outer plate and an inner plate.


**4 Claims, 7 Drawing Figures**

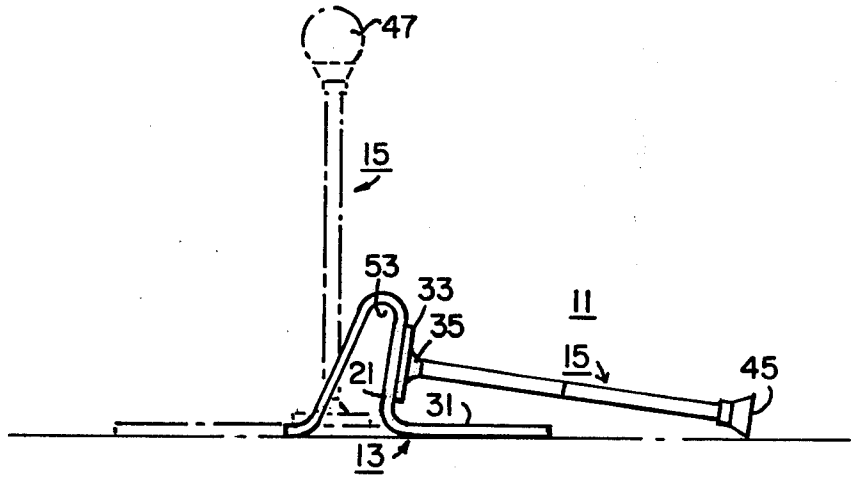


FIG.1

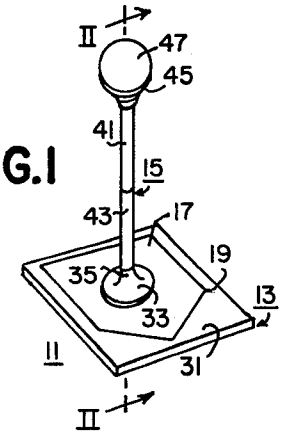



FIG.3

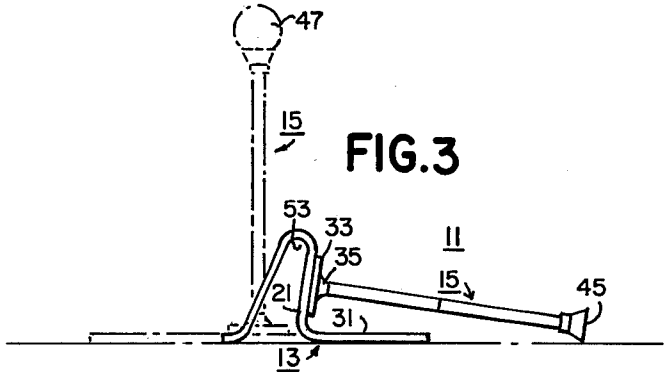



FIG.4

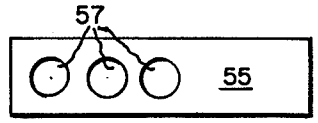



FIG.5

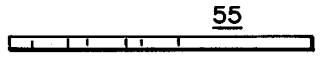



FIG.2

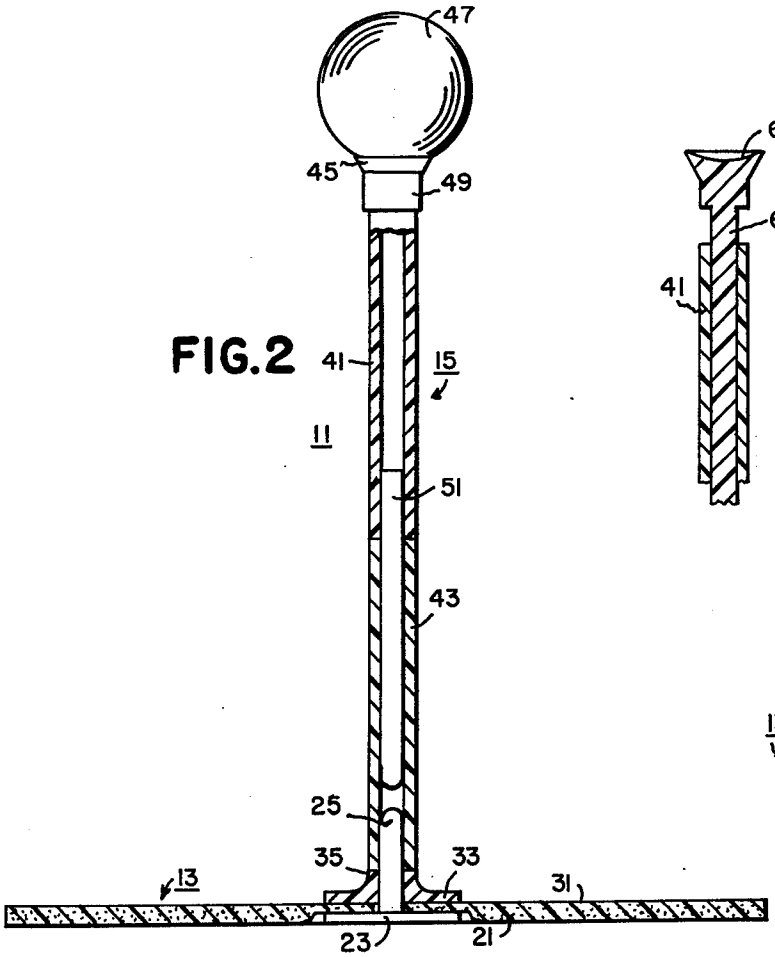
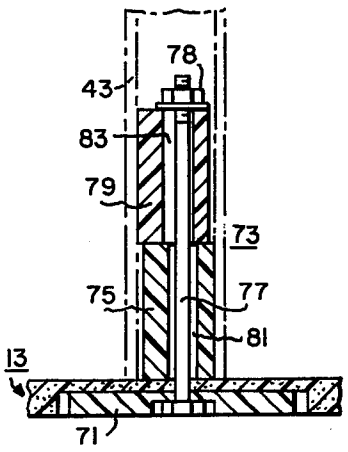



FIG.6




FIG.7



# SELF-UPRIGHTING BASEBALL BATTING PRACTICE TEE

## BACKGROUND OF THE INVENTION

This invention relates to games and has particular relationship to baseball practice tees used for batting practice. The expression "baseball practice tees" is intended to apply not only to baseball but, to the extent that they are within the scope of this invention, to other games in which a ball is batted as for example to softball or wiffle. The teachings of the prior art are typified by the following references, all U.S. Pat. Nos.: Moseley 2,578,313; Bird 2,616,692; Smith 3,118,670; Lande 3,139,282; Dix 3,183,000; Nash 3,397,885; Engle 3,414,267.

A baseball-practice tee typically includes a vertical member, extending from a horizontal plate or from the ground, on which a ball is seated. The person practicing repeatedly attempts to strike the ball with a bat thus developing the habit of "keeping his eye on the ball" and acquiring accuracy in striking the ball on the "fat" part of the bat. When a ball is struck the batting instructor replaces it. The person striking the ball at times misses the ball and strikes the vertical member. Under such circumstances the vertical members of prior-art tees or their connection to the plate are damaged. This is particularly true of Smith, Nash and Engle and is also true of Mosely, Lande and Dix. Such prior art tees as Moseley, Lande, Bird and Dix are complex and costly and Smith, Nash and Engle are not readily moveable from place to place and useable indoors, in a gymnasium for example.

It is an object of this invention to overcome the above described disadvantages of the prior art and to provide a baseball practice tee of simple and low-cost structure which shall not be damaged when the ball is missed and the vertical member struck and shall be readily moveable from place to place and shall be useable indoors as well as outside.

## SUMMARY OF THE INVENTION

According to this invention a tee is provided which includes a mat of resilient material such as rubber from which a member extends at right angle. The mat is placed on a generally horizontal surface with the member in a vertical upright position. The upright member has a seat on which a ball is seated. The person practicing tries to strike the ball. If he misses the ball and strikes the vertical member, the member, rather than taking the full force of the stroke, is thrust downwardly at an angle deflecting the mat so that it is compressed assuming the bowed form of a crease of a compressed bellows. The mat being resilient exerts a restoring force resetting the vertical member in the vertical position where the batting instructor may replace the ball. Because of the resilience of the mat the vertical member is not damaged.

## BRIEF DESCRIPTION OF THE DRAWING

For a better understanding of this invention, both as to its organization and as to its method of operation, together with additional objects and advantages thereof, reference is made to the following description, taken in connection with the accompanying drawings, in which:

FIG. 1 is an isometric view of a tee in accordance with this invention;



FIG. 2 is a view in section taken along line II—II of FIG. 1;

FIG. 3 is a view in side elevation showing the position assumed by the tee shown in FIG. 1 when the vertical member is struck;

FIG. 4 is a plan view of a plate used in a modification of this invention;

FIG. 5 is an end view of the plate shown in FIG. 4;

FIG. 6 is a fragmental view in section showing a modification of this invention; and

FIG. 7 shows a stem and disc in accordance with a further modification of this invention.

## DETAILED DESCRIPTION OF EMBODIMENTS

The apparatus shown in FIGS. 1, 2, 3 is a baseball-practice tee 11 including a mat 13 and a vertical or upright member 15.

The mat is a parallelapiped of square cross-section, typically 20 inches by 20 inches, and having a thickness of about 1 inch. The mat 13 is composed of a resilient material, typically soft rubber. On one face of the mat a home plate 17 of standard dimensions is outlined by a border 19. The mat has a central hole terminating in a countersunk region in the lower face 21 of the mat. There is also a disc 23 from whose center a stem 25 extends. The disc 23 is seated in the countersunk region with the stem 25 extending through the hole. The disc 23 may be secured to the mat 13 but in the interest of safety and packaging the mat 13 and the disc 23 and stem 25 may be separate parts which are assembled prior to use. The lower face of the disc 23 should be flush with the lower face 21 of the mat 13 or recessed into the countersunk region. Typically the disc 23 has a diameter of about 6 inches and the stem 25 has a diameter of about ¾ inch. The stem fits snugly in the hole in the mat 13. On the outer face 31 of the mat 13 another plate 33, from whose center a sleeve 35 extends, is seated. The sleeve 35 engages, and is a snug fit on, the stem 25.

The upright member 15 includes a plurality of coextensive tubes 41 and 43. Tube 43 engages, and is a snug fit on, stem 25 and is coextensive with the sleeve 35. The tubes 41 and 43 are typically about an inch in outside diameter. Tube 41 carries on its outer end a dish-shaped seat 45 for the ball 47. A sleeve 49 extends from the seat 45 and is secured to the outer end of the tube 41. A rod 51 (FIG. 2) extends through the tubes 41, 43 and is a friction fit in these tubes. The member 15 is shown with the ball 47 in the lowermost position in FIG. 2. The seat 45 may be raised by raising tube 41 on rod 51. The disc 23 and stem 25, the disc 33 and sleeve 35, and the tubes 41, 43, may be composed of plastic, wood or a metal such as aluminum sheet or steel sheet. The disc 33 may be composed of a soft plastic but preferably should be of a rigid material. Typically the disc 23 is composed of steel and stem 25 of wood or plastic while the other above-listed parts are composed of plastic or latex. The seat 45 and stem 49 should be composed of soft rubber or soft plastic in the interest of safety. Where the stem 25 is composed of plastic it may be provided with dimples to assure a snug fit of the mat 13, the sleeve 35 and the tube 43.

In the use of the tee shown in FIGS. 1, 2, 3, the upright member 15 is set properly to accommodate the practice batter. The batting instructor places balls 47 in seat 45 and the practice batter tries to strike the ball 47. If the batter strikes the member 15, the member 15

is thrust towards the surface on which the mat sits to the position shown in full lines in FIG. 3, the mat 13 assuming the position shown in full lines and forming a bow 53. The mat 13 is in this position compressed and the restoring force exerted by the mat 13, by reason of its resilience, acts to reset the mat 13 in, and upright 15 to, the position shown in broken lines. The discs 23 and 33 exert a torque tending to reset the mat 13.

The resetting torque exerted by the disc 33 may be increased by replacing the disc 33 by a plate 55 as shown in FIGS. 4 and 5. The plate 55 has holes 57. The stem 25 may be inserted in any of these holes 57 to optimize the torque exerted by the plate 55. It is desirable that the plate 55 should be composed of rigid material so as to effectively restore the mat 13 and upright 15 to upright position.

Alternatively the disc 33 may be omitted and the tube 43 may be provided with a flange which engages the mat 13.

In the modification shown in FIG. 6 a rod 61 passing through the tubes 41 and 43 carries the seat 63 at its upper end. The rod 61 is a friction fit on the tubes 41, 43 and may be raised to any desired setting. For this modification the tubes 41, 43 may be replaced by a single tube.

In accordance with a further modification of this invention the tube 41 may be of larger diameter, for example 1½ inches, and the seat 45 may be omitted. In this case the wall thickness of the tube 41 should remain about 1/32 inch or 1/16 inch and the diameter of the stem 23 should be increased so that the tube 43 is a snug fit.

The modification shown in FIG. 7 includes a disc 71 to which a composite stem 73 is bolted. The stem 71 includes a lower cylindrical part 75 and an upper cylindrical part 79 on a bolt 77 which is secured by a nut 78. The bolt 77 is eccentric with respect to the parts 75 and 79 and the holes 81 and 83 have clearance with respect to the bolt 77. The part 79 may be set to accommodate tubes 43 of different diameter by loosening the nut 78, rotating part 79 with respect to part 75 and tightening the nut 78. Snug fit of tube 43 on stem 73 can thus be achieved regardless of variations in tolerances of the inner diameter of tube 43.

While preferred embodiments of this invention have been disclosed herein, many modifications thereof are feasible. This invention is not to be restricted except insofar as is necessitated by the spirit of the prior art.

I claim:

1. A tee for baseball batting practice including a resilient mat to be disposed freely on a generally horizontal surface, and a vertical member supported by said mat and extending vertically therefrom when said mat is on said horizontal surface, said member including, at the top thereof, means for holding a baseball in a position where it may be struck during batting practice, said mat being of such thickness and engaging said surface over such large area that when said member is undesirably struck and displaced from its vertical position, said mat is deformed and by its resilience exerts a restoring force to restore said member to its vertical position, the said tee also including a first plate and a second plate, said first plate being disposed on the mat at the junction of the vertical member and the mat about the region from which the member extends from said mat and being penetrated by the vertical member, said second plate being interposed, about the region from which the member extends, between the under side of the mat and the surface, generally parallel to the first plate, the said first and second plates cooperating with said mat and with each other to restore said member to the vertical position on undesirable displacement of said member from said vertical position.

2. The baseball tee of claim 1 wherein the junction of the vertical member and the mat, in the region where the vertical member extends from the mat, is a snug fit so that the mat effectively reacts on the member to restore the member to the vertical position when the member is undesirably displaced from the vertical position.

3. A tee for baseball batting practice including a resilient mat to be disposed freely on a generally horizontal surface and a vertical member supported by said mat and extending vertically therefrom when said mat is on said horizontal surface, said member including, at the top thereof, means for holding a baseball, and said member extending to a height above said mat such as to accommodate the person practicing the batting whereby the holding means positions a baseball in a position where it may be struck during baseball batting practice, said mat being of such thickness and engaging said surface over such large area that when said member is undesirably struck and displaced from its vertical position, said mat is deformed and by its resilience exerts a restoring force to restore said member to its vertical position, the said tee also including a plate disposed on said mat at the junction of said vertical member and said mat about the region from which said member extends from said mat and being penetrated by said vertical member, said plate cooperating with said mat to restore said member to the vertical position on undesirable displacement of said member from the vertical position.

4. The baseball tee of claim 3 wherein the junction of the vertical member and the mat in the region where the vertical member extends from the mat is a snug fit so that the mat effectively reacts on the member to restore the member to the vertical position when the member is undesirably displaced from the vertical position.

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