A one piece adjustable golf ball tee to be used in conjunction with a golf practice mat. The one piece golf ball tee is made of material such as rubber, synthetic rubber or of thermoplastic material which will endure repeated striking with a golf club.
ONE PIECE ADJUSTABLE GOLF BALL TEE

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BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a golf ball tee and more particularly to a one piece, easy to maintain adjustable golf ball tee which is vertically adjustable to an infinite number of heights within the range of the tee.

2. Background of the Invention

A standard rubber golf tee which is available in a number of fixed heights is used at driving ranges. Height positioning of the tee is usually limited and attempts have been made to accommodate golfers who tee up at different heights both on the golf course and at driving ranges. Adjustable golf ball tees penetrating into the ground (see U.S. Pat Nos. 3,467,390 and 4,516,780) and those with flat-bottom bases (see U.S. Pat Nos. 1,803,907; 2,079,387; 5,248,144; and D306,751) have been developed. Adjustable golf tees have also been incorporated onto larger devices designed for automatic teeing (see U.S. Pat Nos. 5,411,267 and 5,415,409). Still, limitations in height positioning exist in the prior art adjustable golf tee structures due to the impact the tee structures must endure. The present invention attempts to overcome this limitation by incorporating a one piece adjustable golf tee structure utilizing the golf mat base in conjunction with the tee, increasing the flexibility of height adjustment and durability of the present invention.

SUMMARY OF THE INVENTION

The present invention provides a one-piece adjustable golf ball tee for use on driving ranges. The general purpose of the present invention, which will be described subsequently in detail, is to provide a new and simple golf ball tee that is durable and adjustable in height by employing a base which forms a structural arch in conjunction with a cavity in the mat base.

The present invention also provides an adjustable golf ball tee which is durable and is able to endure repeated striking with a golf club.

The present invention further provides an adjustable golf ball tee that is simple in structure and therefore easy to manufacture.

The present invention also provides an adjustable golf ball tee that can be manufactured at low cost with synthetic material such as rubber, synthetic rubber or with thermoplastic material, which will endure repeated striking with a golf club.

The adjustable tee is supported initially by the surface supporting the golf mat and by the sides of the tee column which is manufactured into the base of the mat. The tee is adjusted by either pulling it up from the top which may be flush with the top of the mat or above the top of the mat to the desired height which engages the structural arch action between the tee cylinder and the scalloped tee base. The tee may also be adjusted by pushing it down from the top allowing the arch structure to release and then pulling it up to adjust the height and re-engaging the structural arch.

The present invention resides in the particular combination of these features herein disclosed and claimed. This particular combination distinguishes the present invention from the prior art for the functions specified.

The present invention provides an adjustable tee which has an infinite number of heights available within the normal range desired for supporting a golf ball.

The present invention also provides an adjustable golf ball tee which is durable, reusable and is able to endure repeated striking with a golf club.

The present invention further provides an adjustable golf ball tee that is simple in structure and therefore easy to manufacture.

The present invention also provides an adjustable golf ball tee that can be manufactured at low cost with rubber, synthetic rubber or with thermoplastic material, which will endure repeated striking with a golf club.

Other embodiments of the adjustable golf ball tee will become apparent from the following description with reference to the accompanying drawing herein.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a bottom view of the base of the invention
FIG. 2 is a top view of the invention.
FIG. 3 is a side view of the invention.
FIG. 4 is a section view of the invention in place within the golf mat.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference to the drawings and in particular to FIGS. 1-4 thereof, an adjustable golf ball tee which is vertically adjustable is described.

More specifically the adjustable golf ball tee of the present invention comprises of a base of a predetermined thickness and diameter with scalloped Edges and a round tubular column of predetermined height and thickness with a concave top to support the golf ball.
The base in FIG. 1 is preferable circular but may be other shapes and will have scalloped edges and may have beams or girders to increase the rigidity of the base and the resultant structural strength. These beams or girders may be on the bottom and/or top of the base.

The gripping points may be equally spaced and of the same size. The gripping point may also be of varying sizes or spacing. The number of gripping points may be of a greater or lesser number than shown on the drawing.

The grooves or indentation along the edges may be equally spaced and of the same size. The grooves or indentation may also be of varying sizes or spacing. The number of grooves or indentation may be of a greater or lesser number than shown on the drawing.

FIG. 2 shows the position of the tubular column which supports the golf ball relative to the base which may be centered or offset relative to the base.

FIG. 3 shows the invention in the relaxed position outside the golf mat cavity which is constructed to permit the tee to work in conjunction with the golf mat.

FIG. 4 is a section view showing the relationship between the tee and the golf mat with the tee in place. FIG. 4 shows the structural arch formed by the tee base, supported by the sides of the tee against the tee cavity in the golf mat. The tee hole cavity may be formed or cut into the golf mat base and should have a depth in proportion to the tee adjustment range. The tee hole cavity may have either vertical or tapered sides. The sides of the tee hole cavity may be reinforced with a sleeve which may or may not have a ribbed surface to help support the tee base.

The tee is adjusted by either pulling it up with the tips of the user's fingers or pushing it until the structural arch releases from the sides of the tee hole cavity and the pulling it up to the desired height. No additional tool devices or equipment are required. The tees may be replaced by simply inserting them into the bottom of the tee hole cavity. Thus, the golf ball tee is a simple structure and adjustable in height with no special knowledge.

The dimensional relationships of the structure of the present invention are deemed readily apparent to those skilled in the art. Although not restricted to the following, a preferred dimension of the base is 2.25 inches in diameter. Although not restricted to the following the preferred outside dimensions of the tubular column are 0.625 inches in diameter with a height of 2.75 inches. Although not restricted to the following heights, the adjustable tee can extend in a range of about 0.50 inches to 2.00 inches depending upon the height of the tee hole cavity in the mat and the height of the tees tubular column.

The foregoing descriptions are considered as illustrative only of the principles of the present invention. Thus it will be appreciated that modifications and improvements within the spirit and teachings of the present invention may be made by those in the art upon considering the present disclosure.

The innovations in the development of golf equipment in particular the introduction of the larger sized and unusual shaped golf clubs have made the need for varying tee heights to be used in conjunction with golf mats used for golf practice and golf play.

1. An one piece adjustable golf ball tee, comprising:
   a) A base having scalloped edges;
   b) A vertical tube extending up from the base;
   c) The top of the tube has a concave shape to accommodate a golf ball;

2. The adjustable golf ball tee of claim 1, wherein all elements are made of materials which will endure repeated striking with a golf club.

3. The adjustable golf ball tee of claim 1 is used in conjunction with a golf mat by forming or cutting a support cavity within the base of the golf mat. The support cavity may be lined with a sleeve which may have a ribbed interior.

4. The adjustable golf ball tee of claim 1 has a base with scalloped edges with enable the base to deflex evenly to create a structural arch in conjunction with the golf mat support cavity and maintain various heights for striking the golf ball.

5. The adjustable golf ball tee in claim 1 may have beams in the base which create additional structural strength by increasing the force required to Deflect the scalloped base.

6. The beams in the adjustable base may be formed by thickening the base or by inserting or attaching additional material.

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