April 14, 1970 G. M. ARRINGTON 3,506,263

GOLF TEE BALL GUARD AND MODIFIED TEE

Filed Nov. 30, 1966

Fig. 1

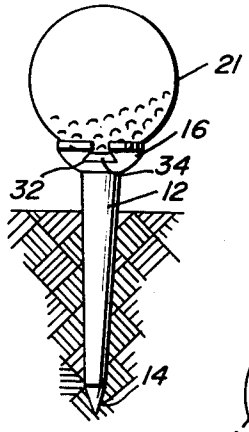


Fig. 2

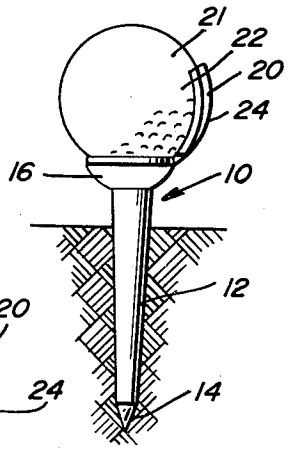


Fig. 3

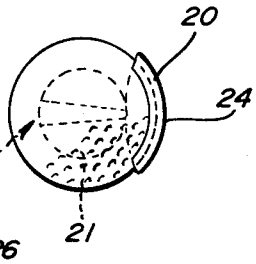


Fig. 5

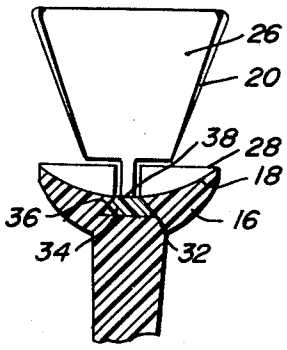


Fig. 4

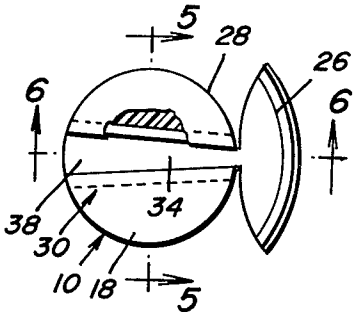


Fig. 7

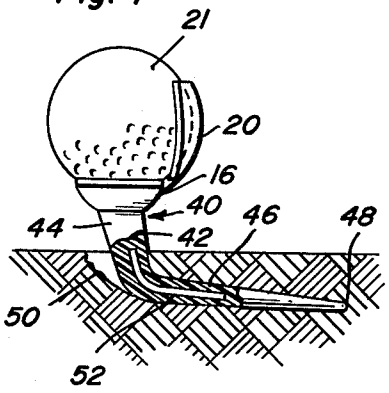
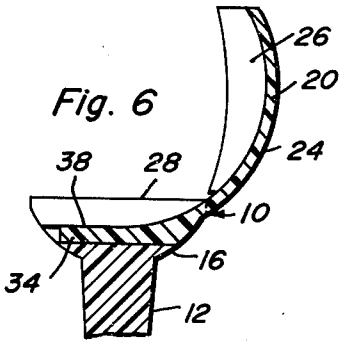


Fig. 6



George M. Arrington
INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson
Attorneys

United States Patent Office 3,506,263
Patented Apr. 14, 1970

3,506,263

GOLF TEE BALL GUARD AND MODIFIED TEE

George M. Arrington, Ashland, Ky., assignor to The Arridge Company, Ashland, Ky., a corporation of Kentucky

Filed Nov. 30, 1966, Ser. No. 597,922
Int. Cl. A63b 57/00
U.S. Cl. 273—33 11 Claims

ABSTRACT OF THE DISCLOSURE

This application discloses a golf tee having a stem with a head portion on the stem and the head portion having a concavity in its upper surface in which a golf ball is adapted to seat and a guard or shield structurally removably associated with the head portion and upstanding therefrom above the concavity and adapted to guard a golf ball seated in the concavity on the golf club head approach portion of the circumference of the ball so that the guard is directly struck by the club head and imparts the impact thereof to the ball to propel the ball off the head portion. The application further discloses an angularly bent stem for easy insertion thereof into hard ground and the provision of metallic reinforcement means for the stem, which metallic means is adapted to cooperate with a magnetic means carried by a nonstriking portion of a golf club head so that the tee can be dislodged and picked up from the ground without the player bending over and manually retrieving the tee.

An important object of the present invention is to eliminate the different undesirable spins that might be imparted to a teed-up golf ball by a poorly executed golf swing, such absence of undesirable spin on the golf ball eliminating the hooking and slicing of the golf ball and resulting in longer straight drives off the tee.

Another important object of the present invention is to eliminate cuts or scuffs on golf balls that are normally the result of a poorly executed golf swing whereby the face of the head improperly meets the golf ball.

A still further important object of the present invention is to provide a removable guard or shield in structural association with the head portion on the ground engaging stem or spur of a golf tee, with the guard or shield being concavo-convex vertically and transversely so as to embrace the golf club head approach portion of the circumference of a golf ball seated in the concavity in the head portion whereby the guard or shield is directly struck by the club head and imparts the impact thereof to the ball to propel the ball off the head portion with the guard separating from the head portion and following the same line of flight as the propelled ball. In addition, such removable mounting of the guard or shield permits a player to deliberately remove the guard or shield and utilize the tee without the guard or shield as the player's game improves.

Another important object of the present invention is to provide a golf tee having an angularly bent stem with the stem being bent substantially at right angles upon itself and having an inner minor portion to which the head portion is attached with such minor portion depending substantially perpendicularly from the head portion and a major outer portion integral with the inner portion and extending generally at right angles therefrom and tapering to a substantially free distal end, whereby the stem may be easily inserted into hard ground, such as is very commonly found on public courses.

A still further important object of the present invention is to provide a reinforced stem, the stem being reinforced with a metallic reinforcement and also to provide

metallic elements in the stem or in the guard, which are provided for attraction by a magnetic means on the golf club head, such as a magnetized screw inserted into the toe of the club head thereby enabling the player to retrieve the tee after a shot without bending over to manually pick it up.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a front elevational view of a golf tee, constructed in accordance with the present invention, and showing the same in use with the stem embedded or inserted in the ground and a conventional golf ball seated in the concave upper surface of the head portion;

FIGURE 2 is a side elevational view, showing the guard or shield, which is disposed so as to embrace the golf club head approach portion of the circumference of the ball;

FIGURE 3 is a top plan view, illustrating the transverse and vertical concavo-convex configuration of the guard or shield whereby it embraces the golf club head approach portion of the circumference of the ball so that the guard or shield is directly struck by the club head and imparts the impact thereof to the ball to propel the ball off the head portion of the golf tee stem;

FIGURE 4 is a top plan view, illustrating the manner of detachably affixing the guard or shield to the head portion of the tee;

FIGURE 5 is a vertical cross-sectional view, taken substantially on line 5—5 of FIGURE 4;

FIGURE 6 is a vertical longitudinal sectional view, taken substantially on line 6—6 of FIGURE 4; and

FIGURE 7 is a side elevational view of a modified form of stem construction, which is particularly adapted for use when the ground is hard and the insertion into the ground of a straight stem is difficult.

Referring now more particularly to the accompanying drawings, and initially to FIGURES 1–6, the golf tee, generally designated by the reference numeral **10** includes a spur-like stem **12**, which is tapered to a free distal pointed end **14** and which supports a head portion **16**.

The head portion is substantially annular and is provided with an upper surface having a semi-spherical concavity **18** within which a conventional golf ball **21** is adapted to seat so that the golf ball is teed-up on the tee when the stem is inserted into the ground, as shown in FIGURES 1 and 2.

A guard or shield **20** is provided and is preferably formed from suitable commercial plastics, the guard or shield being concavo-convex vertically and transversely and being adapted to embrace the golf club head approach portion **22** of the circumference of the ball **21** so that the guard is directly struck by the head of a golf club and being in contact with the periphery of the ball **21** imparts the impact of the club head directly to the ball to propel the ball off the head portion **16**.

Thus, the golf club strikes the convex face **24** of the guard, which extends vertically up to at least the center and preferably above the center of the seated ball **21** and extends transversely or cross-wise a distance having relation to the striking face of the golf club head. The striking face of the club head directly hits the convex face **24** of the shield or guard while the concave face **26** is in contact with the portion **22** of the circumference of the ball **21** so that the club strikes the guard and not the golf ball **21**. This eliminates the different undesirable spins that might be put on the golf ball by a poorly executed golf swing and, thereby, eliminates the hooking and slicing of

golf balls and results in longer straighter golf drives. Further, this eliminates the cutting or scuffing of golf balls which is caused as a result of a poorly executed golf swing.

The guard **20** upstands from the head **16** above the rim **28** and is removable attached to the head portion in such a way that upon impact of the club head, the guard will become detached from the head portion and will follow for a short distance the projected line of flight of the ball **21**. Such detachable mounting of the guard **20** is effected by a tapered dovetail arrangement **30** which includes an undercut groove **32** formed diametrically in the head portion **16** between diametrically opposed points thereof, the groove extending through the diametrically opposite portions of the rim and being formed so as to lie below the surface of the concavity **18**, as shown in FIGURE 5. The groove **32** is flared outwardly in the direction of impact of the club head on the guard and proposed direction of flight of the ball **21** seated in a concavity or, otherwise stated, the groove is tapered inwardly toward the guard, as shown clearly in FIGURE 4. The guard **26** is provided with a tongue **34** which has flared sides **36** so that the tongue is free for sliding movement only in the direction of impact as indicated by the arrow in FIGURE 4.

The tongue **34** is formed with an upper surface **38** which is curved transversely so as to complement the curvature of the semi-spherical curvature surface of the concavity **18**, thereby not interfering with the proper, free seating of the ball **21** in the concavity.

The guard **20** may be deliberately removed by a player, as the player's game improves, and the removal of the tongue **34** will not have any effect upon the usefulness of the tee, since the ball **21** will still freely seat in the concavity **18**, as can be appreciated from a consideration of FIGURES 3 and 5.

It is proposed that the guard will have embedded therein metallic elements that will cooperate with magnetic means on the non-striking surface or face of a club head. For example, a magnetized screw may be inserted into the toe of the club head and thus permit the club head to engage the guard and enable the player to retrieve the tee **10** after a shot without bending over to manually pick it up.

Attention is now directed to FIGURE 7, wherein the golf tee **40** is shown, the same having a head portion **16** and a shield or guard **20**, identical to the golf tee **10**. The tee **40** is designed for use where the ground is very hard and it is found difficult to insert the usual vertical stem **12** of a tee **10** perpendicularly into the ground. The golf tee **40** includes a stem **42**, which has a short inner minor portion **44** that depends substantially perpendicularly from the head **16**. The stem further includes an elongated major shank portion **46**, which is integral with the inner minor portion **44** and which is bent at substantially right angles thereto. The major stem portion **46** is tapered and terminates in a pointed distal end **48**.

From a consideration of FIGURE 7, it can be appreciated that when the ground is very hard, as is common on public courses, the stem is inserted by creating a slight trough **50** and then inserting the stem into the ground with the major outer shank portion **46** lying almost parallel to the surface of the ground and yet being sufficiently embedded in the ground to support the head portion **16** firmly and securely above the ground level so that the ball **21** is properly teed-up.

The stem **42** is preferably reinforced with an embedded metallic wire **52** that will increase its durability, the wire being preferably disposed at the bend between the minor and major shank portions of the stem, as shown in FIGURE 7. The metallic wire may be embedded in the stem, when the stem, which is formed from commercial plastics, is molded. Further, the metallic reinforcing element **52**, by itself or with other metal fillings, can be used in conjunction with a magnetized screw or other magnetic means carried by the club head to enable the player to retrieve the tee after a shot without bending over to pick it up.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

What is claimed as new is as follows:

1. A golf tee comprising a ground engaging stem, a head portion on said stem, said head portion having a shallow substantially semi-spherical concavity in its upper surface in which a golf ball is adapted to seat and a guard structurally associated with the head portion and upstanding therefrom above the concavity and adapted to guard a golf ball seated in the concavity on the golf club head approach portion of the circumference of the ball so that the guard is directly struck by the club head and imparts the impact thereof to the ball to propel the ball off the head portion, and means for removably attaching the guard to the head portion in a manner so that when the guard is struck by a club head it will separate from the head portion following for a short distance the projected line of flight of the ball.

2. The invention of claim **1**, wherein the guard is formed from plastic.

3. The invention of claim **1**, wherein metallic elements are embedded in the stem for attraction by a magnetic means carried by a non-striking portion golf club head so that the tee can be dislodged and picked up from the ground by magnetic means.

4. The invention of claim **1**, wherein said guard is provided with embedded metallic elements for attraction by a magnetic means carried by a non-striking face of the head of a golf club.

5. A golf tee comprising a ground engaging spur-like stem, a head portion on said stem having a substantially annular upper surface formed with a substantially semi-spherical concavity to accommodate a portion of the circumferential periphery of a golf ball, a guard upstanding from a portion of the rim and being crosswise concavo-convex along a portion of the rim and being vertically-wise concavo-convex and extending to a point at least up to the center of a golf ball seated in the concavity, said guard having its concave face adapted to embrace the ball horizontally and vertically, the horizontal and vertical extent being sufficient so that the convex face of the guard receives directly the force of a golf club head and imparts such impact to the ball to propel the ball off the head portion of the tee, means being provided for detachably attaching the guard to the head portion in a manner so that when the guard is struck by a club head it will separate from the head portion following the same line of flight as the propelled ball.

6. The invention of claim **5**, wherein said attaching means includes an undercut groove formed diametrically in the head portion and passing through diametrically opposing points of the rim and through the concavity and an integral laterally offset tongue on the guard having outwardly flaring sides and slidably fitted in the slot in a dovetail tongue and groove arrangement.

7. The invention of claim **6**, wherein said tongue and slot taper outwardly from the point of the rim above which the guard upstands to the diametrically opposing point of the rim.

8. The invention of claim **6**, wherein said tongue has an upper face which complements the curvature of the concavity with the tongue passing through substantially the center of the concavity.

9. A golf tee comprising a ground engaging stem, a head portion on said stem, said head portion having a shallow substantially semi-spherical concavity in its upper surface in which a golf ball is adapted to seat and

a guard structurally associated with the head portion and upstanding therefrom above the concavity and adapted to guard a golf ball seated in the concavity on the golf club head approach portion of the circumference of the ball so that the guard is directly struck by the club head and imparts the impact thereof to the ball to propel the ball off the head portion, said stem being bent substantially at right angles upon itself.

10. A golf tee comprising a ground engaging stem, a head portion on said stem, said head portion having a shallow substantially semi-spherical concavity in its upper surface in which a golf ball is adapted to seat and a guard structurally associated with the head portion and upstanding therefrom above the concavity and adapted to guard a golf ball seated in the concavity on the golf club head approach portion of the circumference of the ball so that the guard is directly struck by the club head and imparts the impact thereof to the ball to propel the ball off the head portion, said stem including an inner

minor portion to which the head portion is attached with such inner portion depending substantially perpendicularly from the head portion and including a major outer portion integral with the inner portion and extending generally at right angles from said inner portion and tapering to a substantially free distal end.

11. The invention of claim **10**, wherein a metallic reinforcement is embedded in the stem for increasing its durability.

References Cited

UNITED STATES PATENTS

1,542,505	6/1925	Jacobus	273—212
1,959,347	5/1934	Czichos	273—206 X
2,033,269	3/1936	Williams	273—33 X
2,723,126	11/1955	Spluvak	273—212

ANTON O. OECHSLE, Primary Examiner

T. BROWN, Assistant Examiner