A flexible football tee for supporting a football at a selected elevation above the ground. The football tee provides a steady base resistant to movement, and provides uniformity in the football placement. The football tee provides virtually no resistance to movement of the foot of a kicker as the football is struck, thereby reducing variables in the transfer of momentum from the foot to the football. The football tee is reusable and provides a surface for presentation of printed matter.
FLEXIBLE FOOTBALL TEE

BACKGROUND OF THE INVENTION

[0001] The invention relates to the field of football tees. More particularly, the invention relates to an improved football tee which provides flexible support for a football.

[0002] The function of football tees is simple. A football tee provides support to elevate a football above the ground to facilitate impact between a football and a kicker’s foot. Numerous football tee concepts have been developed to accomplish this seemingly simple function.

[0003] A conventional football tee was disclosed in U.S. Pat. No. 3,309,087 to Cullity (1964), and an adjustable football tee was described in U.S. Pat. No. 3,481,002 to Tatter (1969).

[0004] The unique requirements of soccer style kickers were addressed by Jan Stenerud of the Kansas City Chiefs in his patent U.S. Pat. No. 4,418,910 (1983), wherein the back of a football tee was configured to the foot orientation of a soccer style kicker. An improvement to football tees for soccer style kickers was noted in U.S. Pat. No. 4,537,397 to Kopp (1985), wherein a flexible cone shaped football tee had a cutout for permitting passage of the football after impact from the kicker’s foot.

[0005] Various tripod style football tees were disclosed in U.S. Pat. No. 4,634,122 to Kline (1987), in U.S. Pat. No. 4,807,880 to Deal (1989), in U.S. Pat. No. 4,946,165 to Rambucher (1990), and in U.S. Pat. No. 5,505,445 to Treadwell et al. (1996). A similar approach was disclosed in U.S. Pat. No. 5,100,135 to Bourgeois (1992).


[0007] Although numerous football tees have been developed, existing football tees interfere with the impact to the football and provide a potential risk to players on the field. A need exists for an improved football tee which provides stability for football support, permits unique placements of the football, and provides limited resistance to movement of a foot contacting the football.

SUMMARY OF THE INVENTION

[0008] The invention provides an apparatus for supporting a football on the ground as the football is contact with a foot. The apparatus comprises a pedestal base formed with a flexible material, wherein said base has a lower end for contacting the ground, and wherein said base has an upper end for supporting the football at a selected elevation above the ground. In different embodiments of the invention, the base can be cylindrical or can be shaped as an oval or in other configurations.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] FIG. 1 illustrates a flexible base for supporting a ball such as a football.

[0100] FIGS. 2 and 3 illustrate the orientation of a base and football vertical to the ground.

[0101] FIGS. 4 and 5 illustrate the orientation of a base and football 15 degrees from vertical.

[0102] FIGS. 6 and 7 illustrate the orientation of a base and football 45 degrees from vertical.

[0103] FIGS. 8 and 9 illustrate the orientation of a base and football 90 degrees from vertical.

[0104] FIG. 10 illustrates the position of a flexible tee after use.

[0105] FIG. 11 illustrates a base upper end angled to the ground surface.

[0106] FIG. 12 illustrates a base having a varying wall thickness.

[0107] FIG. 13 illustrates a base formed from a mesh material.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0018] The invention provides a superior football tee which does not interfere with the transfer of momentum from a kicker’s foot to a football. The invention facilitates orientation of the football toward a target such as a goal post or distal position on the football field.

[0019] FIG. 1 illustrates on embodiment of the invention wherein flexible base 10 supports a ball such as football 12. Base 10 comprises a light weight material formed as a structure to rest on ground 14, with sufficient strength to support football at a selected elevation and orientation above ground 14. Base 10 has lower end 16 in contact with ground 14 and has upper end 18 for contacting and supporting ball 12. Base 10 provides sufficient stability for ball 12 without penetrating the surface of ground 14, and such stability resists ball movement during high winds.

[0020] Base 10 is formed with a flexible material such as rubber, plastic, nylon, or other material offering properties of durability, flexibility, and minimal mass. When contacted with a kicker’s foot as shown in FIG. 2, base 10 elastically deforms to provide virtually no resistance to the movement of the kicker’s foot. Such minimal resistance permits the momentum of the kicker’s foot to be more nearly completely transferred to ball 12 without deflecting or otherwise interfering with the dynamic contact between the kicker’s foot and ball 12.

[0021] Base 10 provides sufficient strength to support ball 12 at a selected elevation above ground 14. The configuration of base 16 provides sufficient strength while permitting use of a material capable of providing minimal resistance to the side impact created by the kicker’s foot. The support provided by base 10 is superior to the small contact provided by conventional three prong football tees because a larger surface area of upper end 18 can contact ball 12, thereby providing superior ball stability in high wind conditions. The lower end 16 of base 10 does not have to be larger in diameter or circumference than upper end 18 to provide the requisite stability for ball 12.

[0022] FIGS. 2 and 3 illustrate the orientation of ball 12 in a vertical orientation and the relative deformation of base 10 as a substantial circle in plan view.
FIGS. 4 and 5 show the orientation of ball 12 in a position angled fifteen degrees from vertical. The invention provides consistent stability to ball 12 regardless of the direction of ball 12 angle relative to the goal post or other target. Whereas a conventional style kicker would lean ball 12 back toward the kicker, a soccer style kicker might place ball 12 at a forty-five degree angle sideways as shown in FIGS. 6 and 7. When ball 12 is vertical the center of mass for ball 12 is in the center of base 10, and base 10 will retain a substantially circular plan view configuration as illustrated in FIG. 3. When ball 12 is angled away from vertical, the center of mass for ball 12 shifts and base 12 elastically deforms to form an oval or elliptoid in plan view as illustrated in FIGS. 5 and 7. The unique configuration of base 10 permits such automatic adjustment as the ball is moved, without requiring special movement or orientation of base 10 to compensate for such movement of ball 12. Throughout the different movement of ball 12 relative to base 10, upper base end 18 remains in continuous contact with ball 12 to provide exceptional stability for different field and climatic conditions.

If the maximum elevation allowable for ball 12 is two inches, the height of base 10 can be selected to provide the maximum elevation in view of the flexible nature of base 10. When ball 12 is placed in a horizontal or flat orientation for the initiation of an onside kick as shown in FIGS. 8 and 9, upper end 18 of base 10 will deform to the exterior surface of ball 12, thereby reducing the effective elevation above ground 14.

After ball 12 has been kicked away from base 10 the loose base 10 does not present a tripping or impact threat to players on the playing field. If base 10 is sufficiently thin and flexible, base 10 will fold to lie substantially flat on the playing field as illustrated in FIG. 10, further reducing the possibility that such base 10 would interfere with play.

As shown in FIG. 1, the exterior surface of base 10 provides one or more surfaces for displaying printed matter such as letters, names, or logos. This feature of the invention is not practical on conventional football tees because of the configuration of such devices. By permitting a larger, flexible base to be used in support of ball 12, printed matter can be added to base 10 without interfering with contact between the kicker’s foot and ball 12. Such printed matter can include directional marks to facilitate the kicker in lining up to ball 12 in relative to goalposts or other targets, and can include marks or words accomplishing additional functions.

The invention provides other useful features toward improving kicking accuracy and distance. As shown in FIG. 11, upper base end 18 can be angled relative to ground 14 to facilitate placement of ball 12 on base 10, or upper base end 18 can be substantially in a plane parallel to ground 14 as illustrated in the preferred embodiments. FIG. 12 shows that the wall thickness of base 10 can be varied in different ways to accomplish different performance characteristics, and FIG. 13 shows that one or more holes or apertures can be placed in base 10, or that base 10 can be configured from a mesh material to further accomplish the desired performance characteristics.

The invention provides numerous advantages over prior art football tees. The invention provides superior stability for the football, particularly in gusty wind conditions. The flexible base is sufficiently light and flexible to provide virtually no resistance to the kicker’s foot, and removes hazards presented by the possibility of a player stepping on the tee later in play.

Although the invention has been described in terms of certain preferred embodiments, it will become apparent to those of ordinary skill in the art that modifications and improvements can be made to the inventive concepts herein without departing from the scope of the invention. The embodiments shown herein are merely illustrative of the inventive concepts and should not be interpreted as limiting the scope of the invention.

What is claimed is:

1. An apparatus for supporting a football on the ground as the football is contacted by the foot of a kicker, comprising:
   a. a pedestal base formed with a flexible material, wherein said base has a lower end for contacting the ground, and wherein said base has an upper end for supporting the football at a selected elevation and orientation above the ground.

2. An apparatus as recited in claim 1, wherein said base is substantially shaped as a cylinder.

3. An apparatus as recited in claim 1, wherein said base is substantially shaped as an oval.

4. An apparatus as recited in claim 4, wherein said flexible material provides substantially no resistance to the foot of the kicker upon impact.

5. An apparatus as recited in claim 1, wherein said base presents a surface for displaying printed matter.

6. An apparatus as recited in claim 5, wherein said printed matter comprises at least one mark for orienting the placement of said base relative to another object.

7. An apparatus as recited in claim 1, wherein the height of said base upper end is adjustable to modify the selected elevation of the football above the ground.

8. An apparatus as recited in claim 1, wherein said base upper end is configured to provide continuous contact with the football.

9. An apparatus as recited in claim 1, wherein said base material is sufficiently elastic to regain an initial configuration following impact between the foot of the kicker and the football.

10. An apparatus as recited in claim 1, wherein said base upper end lies in a plane substantially parallel to the ground.

11. An apparatus as recited in claim 1, wherein said base upper end lies in a plane angled to the ground.

12. An apparatus as recited in claim 1, wherein said base flexible material substantially comprises the same thickness throughout.

13. An apparatus as recited in claim 1, wherein said base flexible material varies in thickness between said base upper end and said base lower end.

14. An apparatus as recited in claim 1, further comprising at least one aperture in said base.

15. An apparatus as recited in claim 14, wherein said base comprises a flexible mesh material.

16. An apparatus for supporting a football on the ground as the football is contacted by the foot of a kicker, comprising:
   a. a cylindrical pedestal base formed with a flexible material, wherein said base has a lower end for contacting the ground, and wherein said base has an upper end for
supporting the football at a selected elevation and orientation above the ground.

17. An apparatus as recited in claim 16, wherein said flexible material provides substantially no resistance to the foot of the kicker upon impact.

18. An apparatus as recited in claim 16, wherein said base upper end is configured to provide continuous contact with the football.

19. An apparatus as recited in claim 16, wherein said base material is sufficiently elastic to regain an initial configuration following impact between the foot of the kicker and the football.

20. An apparatus as recited in claim 16, wherein said base upper end lies in a plane substantially parallel to the ground.