An architecture is presented that provides a tennis ball toss and serve training device. The training device comprises a base, a post, a member and a target. Typically, there are castors secured to the base for relatively easy repositioning. The post is preferably comprised of more than one telescoping sections of pipe which connect the member to the base, and a target, such as a tennis ball, can be attached to the member. Ideally, the target is positioned approximately 12-15 inches above a user’s racquet when a user’s arm is extended in an upward direction.
START

600 positioning a base of the tennis training device near a base line of a tennis court

602 adjusting a target ball of the tennis training device such that the target ball is 12 - 15 inches above a user's racquet when user's arm is extended in an upward direction

604 tossing a tennis ball directly under the target ball

END

FIG. 6
practicing serving a tennis ball using the target ball as a guide

collapsing the tennis training device for storage

FIG. 7
TEennis Ball Toss and Serve Training Device

Cross-Reference


Background

[0002] Currently, most tennis players have difficulty with their serve, more specifically the ball toss. The ball toss is an important part of any serve. Tennis players may practice their toss, but without a target to gauge the ball height and position of the toss, the tennis players may never develop a consistent and properly positioned toss. As a result, many tennis players unfortunately fault on their serve. A more efficient training tool is needed.

[0003] Consequently, a need exists for a training device that assists tennis players in mastering the proper way to toss and serve a tennis ball. The device of the present invention provides a target for a tennis player tossing a tennis ball as part of his or her serve, which allows the player to visually determine if his or her toss is adequate. The training device can be used by all tennis players, amateur and professional, regardless of age or physical characteristics such as height, and can be readily and easily transported from storage to practice area and vice versa.

Summary

[0004] The following presents a simplified summary in order to provide a basic understanding of some aspects of the disclosed innovation. This summary is not an extensive overview, and it is not intended to identify key/critical elements or to delineate the scope thereof. Its sole purpose is to present some concepts in a simplified form as a prelude to the more detailed description that is presented later.

[0005] The subject matter disclosed and claimed herein, in one aspect thereof, comprises a tennis ball toss and serve training device. The training device comprises a base with a top and a bottom surface. Typically, there are four castors or wheels secured to the bottom surface of the base and telescoping sections of pipe secured to the top surface of the base. Additionally, a generally horizontal member extends outwardly from at least one of said telescoping sections of pipe, and a tennis ball or other target is secured by a rope or other means to generally horizontal member. Specifically, the target tennis ball is preferably positioned approximately 12-15 inches above a user’s racquet when a user’s arm is fully extended in an upward direction.

[0006] Furthermore, in the preferred embodiment of the present invention, the training device comprises three telescoping sections of pipe secured to the top surface of the base for setting the desired height of the generally horizontal member and the target tennis ball attached thereto. Typically, a slit is cut into the target tennis ball for attachment to the rope, though virtually any target could be used without affecting the overall concept of the invention.

[0007] To the accomplishment of the foregoing and related ends, certain illustrative aspects of the disclosed innovation are described herein in connection with the following description and the annexed drawings. These aspects are indicative, however, of but a few of the various ways in which the principles disclosed herein can be employed and is intended to include all such aspects and their equivalents. Other advantages and novel features will become apparent from the following detailed description when considered in conjunction with the drawings.

Brief Description of the Drawings

[0008] FIG. 1 illustrates a perspective view of a tennis ball toss and serve training device in accordance with the disclosed architecture.

[0009] FIG. 2 illustrates a perspective view of a user using the tennis ball toss and serve training device wherein a tennis ball is tossed within the target zone in accordance with the disclosed architecture.

[0010] FIG. 3 illustrates a perspective view of a user using the tennis ball toss and serve training device wherein a tennis ball is not tossed within the target zone in accordance with the disclosed architecture.

[0011] FIG. 4 illustrates a perspective view of a user using the tennis ball toss and serve training device to practice correct serve formation in accordance with the disclosed architecture.

[0012] FIG. 5 illustrates a perspective view of a user using the tennis ball toss and serve training device to practice serving in accordance with the disclosed architecture.

[0013] FIG. 6 illustrates a method of using a tennis ball toss and serve training device.

[0014] FIG. 7 illustrates further aspects in the method of FIG. 6.

Detailed Description

[0015] The innovation is now described with reference to the drawings, wherein like reference numerals are used to refer to like elements throughout. In the following description, for purposes of explanation, numerous specific details are set forth in order to provide a thorough understanding thereof. It may be evident, however, that the innovation can be practiced without these specific details. In other instances, well-known structures and devices are shown in block diagram form in order to facilitate a description thereof.

[0016] Most tennis players have difficulty with their serve. Specifically, most tennis players have difficulty with the ball toss used in performing a tennis serve. The ball toss is an important part of any serve. A training device that assists tennis players in mastering the proper way to toss a tennis ball would help improve a tennis player’s overall game and, in particular, the player’s serve.

[0017] Accordingly, the disclosed tennis training device provides a target for tennis players, which allows them to visually determine if their toss is adequate in terms of height and overall ball positioning, and also allows the players to experience the effect of a proper toss. The training device can be used by all tennis players, amateur and professional, regardless of physical characteristics (e.g., height) or age, and can be readily transported from storage to practice area and vice versa. Further, the training device can be positioned at various heights, angles and positions for the tennis players, and can be moved and adjusted to provide the correct target location for any type of serve a tennis player is executing.

[0018] Referring initially to the drawings, FIG. 1 illustrates a tennis ball toss and serve training device 100 (or tennis training aid) for practicing the proper way to toss and serve a tennis ball. The tennis ball toss and serve training device 100
preferably comprises a base 102, a post 110, a member 115 and a target 116 that is preferably suspended from member 115.

[0019] Base 102 further comprises a top surface 104 and a bottom surface 106. The top and bottom surfaces 102, 104 are preferably circular, but could be any suitable shape such as square, rectangle, oval, etc. as is known in the art without affecting the overall concept of the present invention. Typically, base 102 is comprised of polyvinylchloride but could be made of any other suitable weather resistant material as is known in the art, such as wood, metal or plastic without affecting the overall concept of the present invention.

[0020] Furthermore, training device 100 preferably comprises at least one castor 108 secured to the bottom surface 106 of base 102 for easily positioning training device 100 in a desired location. More preferably, training device 100 has four castors 108 or wheels for stability, but the training device 100 could have any number of castors 108 as is needed for stabilizing and easily transporting the training device 100 without affecting the overall concept of the present invention. Typically, the castors 108 have a 360 degree rotation to allow the training device 100 to be easily maneuvered and positioned on the service line of a tennis court or other practice area, or moved to and from storage. The training device 100 can be easily collapsed for storage. Further, the castors 108 are approximately between 4 inches to 6 inches in diameter, and are typically made of rubber. However, any other suitable material could be used as is known in the art without affecting the overall concept of the present invention. Any suitable hardware as is known in the art is used to secure the castors 108 to base 102.

[0021] Post 110 is preferably comprised of multiple telescoping sections of weather resistant pipe (111, 112, 113), and is secured to the top surface 104 of base 102 by any suitable means such as welding, bolt, fasteners or the like. For additional support, bracing 119 of a type commonly known in the art can be used to further secure post 110 to base 102 as shown in FIG. 1. While FIG. 1 depicts three telescoping sections of pipe (111, 112, 113) it should be appreciated that any suitable number of sections of pipe can be used without affecting the overall concept of the present invention. Further, the preferred embodiment of the present invention, the three sections of pipe (111, 112, 113) are each approximately five feet to seven feet long, and are telescoping to provide adjustability to the overall length of training device 100. Specifically, sections of pipe (111, 112, 113) can be telescopically collapsed or extended to position the training device 100 at the proper height and position for the user. Once properly positioned, telescoping sections of pipe (111, 112, 113) can be interlocked in place by any prior art means commonly used to secure telescoping sections of pipe such as spring loaded pins, friction or pressure grip, twist and lock, etc.

[0022] In a preferred embodiment, sections of pipe (111, 112, 113) are anodized aluminum pipe, however the sections of pipe can be comprised of any other suitable weather resistant material as is known in the art, such as wood, plastic and the like, without affecting the overall concept of the present invention. Further, the sections of pipe measure approximately ⅝ of an inch to 2⅛ inches in diameter, and rubber caps (not shown) can be used to close any open ends of the sections of pipe (111, 112, 113).

[0023] Member 115 is also preferably constructed of anodized aluminum pipe, however, member 115 can be comprised of any other suitable weather resistant material as is known in the art, such as clamps, bolts, etc., and extends outwardly from post 110 as shown in FIG. 1.

[0024] Target 116, which is preferably a tennis ball, can be suspended from member 115 by any suitable means such as a rope 118. Rope 118 is typically a braided nylon rope but could be comprised of any suitable material as is known in the art without affecting the overall concept of the present invention. Rope 118 preferably measures approximately 18 inches to 24 inches in length and approximately ⅜ of an inch to ⅝ inches in diameter. Typically, the target ball 116 has a slit 122 cut into it to secure the target ball 116 to the rope 118. The training device 100 can then be adjusted by telescoping one or more of sections of pipe (111, 112, 113) to position the target ball 116 to be approximately 12 inches to 15 inches above a user’s racquet when the user’s arm is fully extended in an upward direction. The user then practices tossing a standard tennis ball (not shown) up towards the target ball 116 to position the tennis ball in a target zone 201 directly under the target ball 116 or within 12 inches to 15 inches beneath the target ball 116. After a user has learned the proper toss technique, a user can then practice his or her serve using a tennis ball that is visually in the proper target zone 201, i.e. directly under the target ball 116 or within 12 to 15 inches beneath the target ball 116. The training device 100 can be moved and adjusted to provide the correct target zone 201 for any type of serve a user is executing.

[0025] FIG. 2 illustrates a user 200 using the tennis ball toss and serve training device 100 wherein a tennis ball 202 is tossed within the target zone 201. FIG. 3 illustrates a user 200 using the tennis ball toss and serve training device 100 wherein a tennis ball 202 is not tossed within the target zone. The training device 100 comprises post 110 which is further comprised of sections of pipe (111, 112, 113) that can be telescopedly collapsed or extended to position the training target 116 to be approximately 12 inches to 15 inches above a user’s racquet when the user’s arm is fully extended in an upward direction. The user 200 then practices tossing a tennis ball 202 up towards the target ball 116 and into target zone 201 within 12 inches to 15 inches beneath the target ball 116.

[0026] FIG. 4 illustrates a user 200 using the tennis ball toss and serve training device 100 to practice correct server formation. FIG. 5 illustrates a user 200 using the tennis ball toss and serve training device 100 to practice serving. After a user 200 has learned the proper toss technique, a user 200 can then practice his or her serve using a tennis ball 202 that is visually in the proper target zone 201, i.e. directly under the target ball 116 or within 12 to 15 inches beneath the target ball 116. Specifically, the training device 100 can be moved and adjusted to provide the correct target location for any type of serve a user 200 is executing.

[0027] FIGS. 6-7 illustrate methodologies of using a tennis training device, according to various aspects of the innovation. While, for purposes of simplicity of explanation, the one or more methodologies shown herein (e.g., in the form of a flow chart or flow diagram) are shown and described as a series of acts, it is to be understood and appreciated that the subject innovation is not limited by the order of acts, as some acts may, in accordance therewith, occur in a different order and/or concurrently with other acts from that shown and described herein. For example, those skilled in the art will understand and appreciate that a methodology could alternatively be represented as a series of interrelated states or
events, such as in a state diagram. Moreover, not all illustrated acts may be required to implement a methodology in accordance with the innovation.

Referring to FIG. 6, a method of using a tennis training device is illustrated. At 600, the base of the tennis training device 100 is positioned near a base line of a tennis court. The training device 110 comprises castors or wheels 108 secured to the bottom surface 106 of the base 102 for stabilizing the training device. The castors 108 have a 360 degree rotation to allow training device 100 to be easily maneuvered and positioned on the base line of a tennis court or other practice area, or moved to storage.

At 602, a target ball 116 of the tennis training device 100 is adjusted such that target ball 116 is 12-15 inches above a user’s racquet when the user’s arm is extended in an upward direction. The training device 100 also comprises a post 110 that further comprises sections of pipe (111, 112, 113) that can be telescopically collapsed or extended to position the training device at the proper height, angle and position for the user. Training device 100 can then be adjusted to position the target ball to be approximately between 12 to 15 inches above a user’s racquet when the user’s arm is extended in an upward direction. And at 604, a tennis ball is tossed directly under target ball 116. The user then practices tossing a tennis ball up towards target ball 116 to consistently position the tennis ball directly under the target ball 116 or within 12 to 15 inches beneath the target ball 116. Thus, the training device 100 provides a target for the user. Specifically, the device allows a user to visually determine if their toss is adequate and allows the user to experience the effect of a proper toss.

FIG. 7 illustrates further aspects in the method of FIG. 6. At 700, a user practices serving a tennis ball using target ball 116 as a guide. After a user has learned the proper toss technique, a user can then practice their serve using a tennis ball that is visually in the proper target zone 201, i.e. directly under the target ball or within 12 to 15 inches beneath target ball 116. The training device can be moved and adjusted to provide the correct target location for any type of serve a user is executing. And, at 702, the tennis training device is collapsed for storage. The training device can be easily collapsed by the user and stored away until needed.

What has been described above includes examples of the claimed subject matter. It is, of course, not possible to describe every conceivable combination of components or methodologies for purposes of describing the claimed subject matter, but one of ordinary skill in the art may recognize that many further combinations and permutations of the claimed subject matter are possible. Accordingly, the claimed subject matter is intended to embrace all such alterations, modifications and variations that fall within the spirit and scope of the appended claims. Furthermore, to the extent that the term “includes” is used in either the detailed description or the claims, such term is intended to be inclusive in a manner similar to the term “comprising” as “comprising” is interpreted when employed as a transitional word in a claim.

What is claimed is:

1. A tennis training device comprising:
a base;
a post attached to said base;
a member attached to said post; and
a target attached to said member.

2. The tennis training device of claim 1, wherein the tennis training device is adjustable such that the target can be positioned at a desired height above a user.

3. The tennis training device of claim 2, wherein the desired height is 12-15 inches above a user’s racquet when a user’s arm is extended in an upward direction.

4. The tennis training device of claim 1, wherein the target is a tennis ball.

5. The tennis training device of claim 1, wherein the post is comprised of more than one telescoping sections of pipe.

6. The tennis training device of claim 1, wherein the base further comprises at least one castor.

7. The tennis training device of claim 1, wherein the base is comprised of aluminum.

8. The tennis training device of claim 1, wherein the base is comprised of polyvinylchloride.

9. The tennis training device of claim 1, wherein the target is attached to the member by a rope.

10. The tennis training device of claim 5, wherein the tennis training device is collapsible for storage.

11. A method of using a tennis training device comprising:
positioning a base of the tennis training device in a desired location;
adjusting a target of the tennis training device such that the target is positioned above a user’s racquet when a user’s arm is extended in an upward direction; and
tossing a tennis ball in the direction of the target.

12. The method of claim 11, wherein the target is positioned 12-15 inches above a user’s racquet when a user’s arm is extended in an upward direction.

13. The method of claim 11, further comprising:
practicing serving a tennis ball using the target as a guide.

14. The method of claim 11, further comprising:
collapsing the tennis training device for storage.

15. A tennis training device comprising:
 a base comprising a top and a bottom surface; more than one castor attached to the base; a post attached to the top surface of the base; a member attached to said post; and a target attached to said member, wherein the target is positioned above a user’s racquet when a user’s arm is extended in an upward direction.

16. The tennis training device of claim 15, wherein said post is comprised of more than one telescoping sections of pipe.

17. The tennis training device of claim 15, wherein the target is positioned between 12 and 15 inches above a user’s racquet when a user’s arm is extended in an upward direction.

18. The tennis training device of claim 15, wherein the target is a tennis ball.

19. The tennis training device of claim 15, wherein the target is attached to the member with a rope.

20. The tennis training device of claim 15, wherein the tennis training device is collapsed for storage.

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