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(54) **SYSTEM AND METHOD FOR PRACTICING GOLF**

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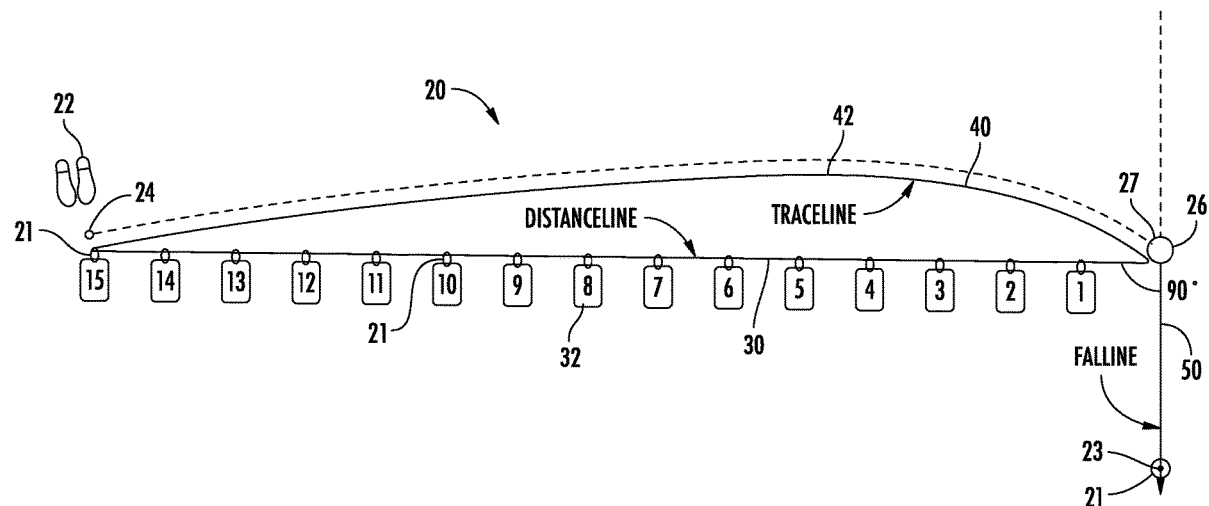
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ABSTRACT

A system and method for practicing golf, specifically for putting and chipping of a golf ball. The system utilizes a plurality of measuring members to determine a fall line and a curved line displaying of the best path of the ball based on the slope and measured distance from the golf ball on a green to the golf cup. Additional devices can be used alone or in coordination with the system to assist with the practicing.

Related U.S. Application Data

(60) Provisional application No. 63/288,937, filed on Dec. 13, 2021.



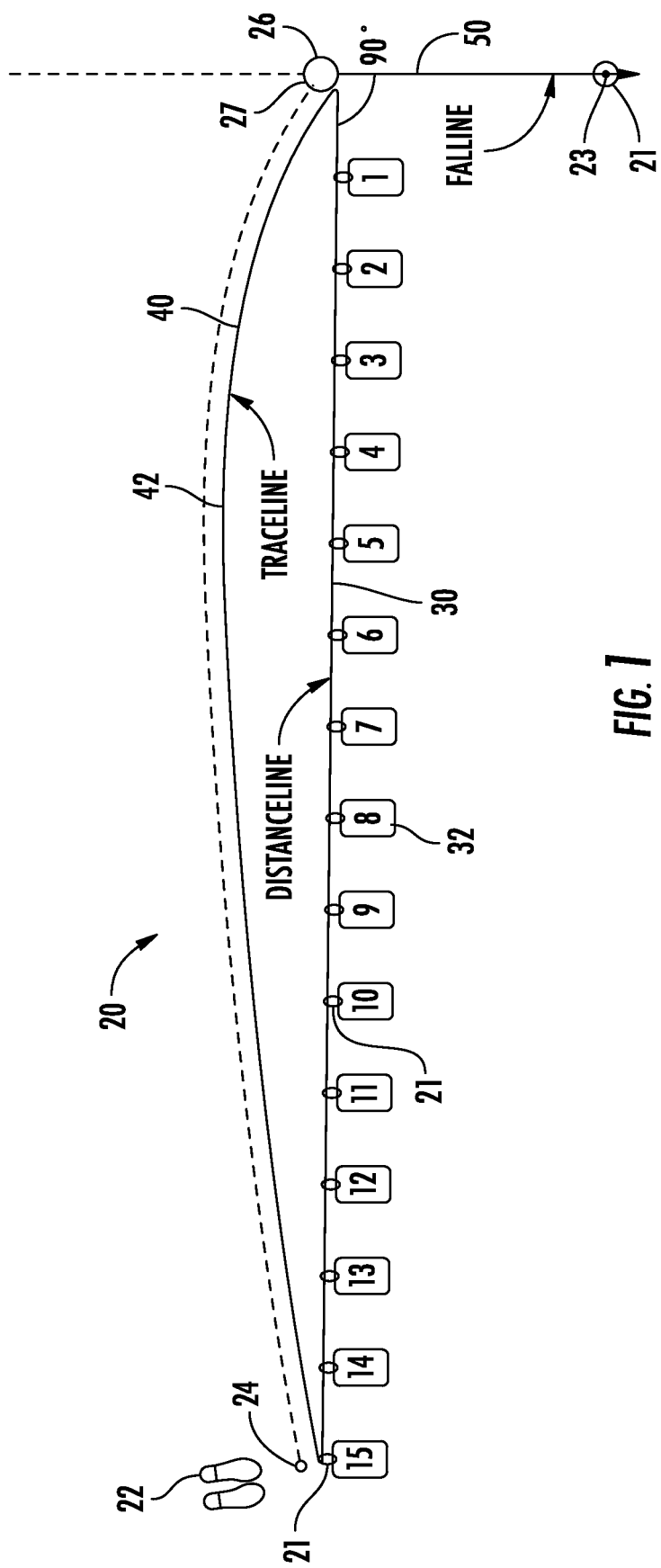
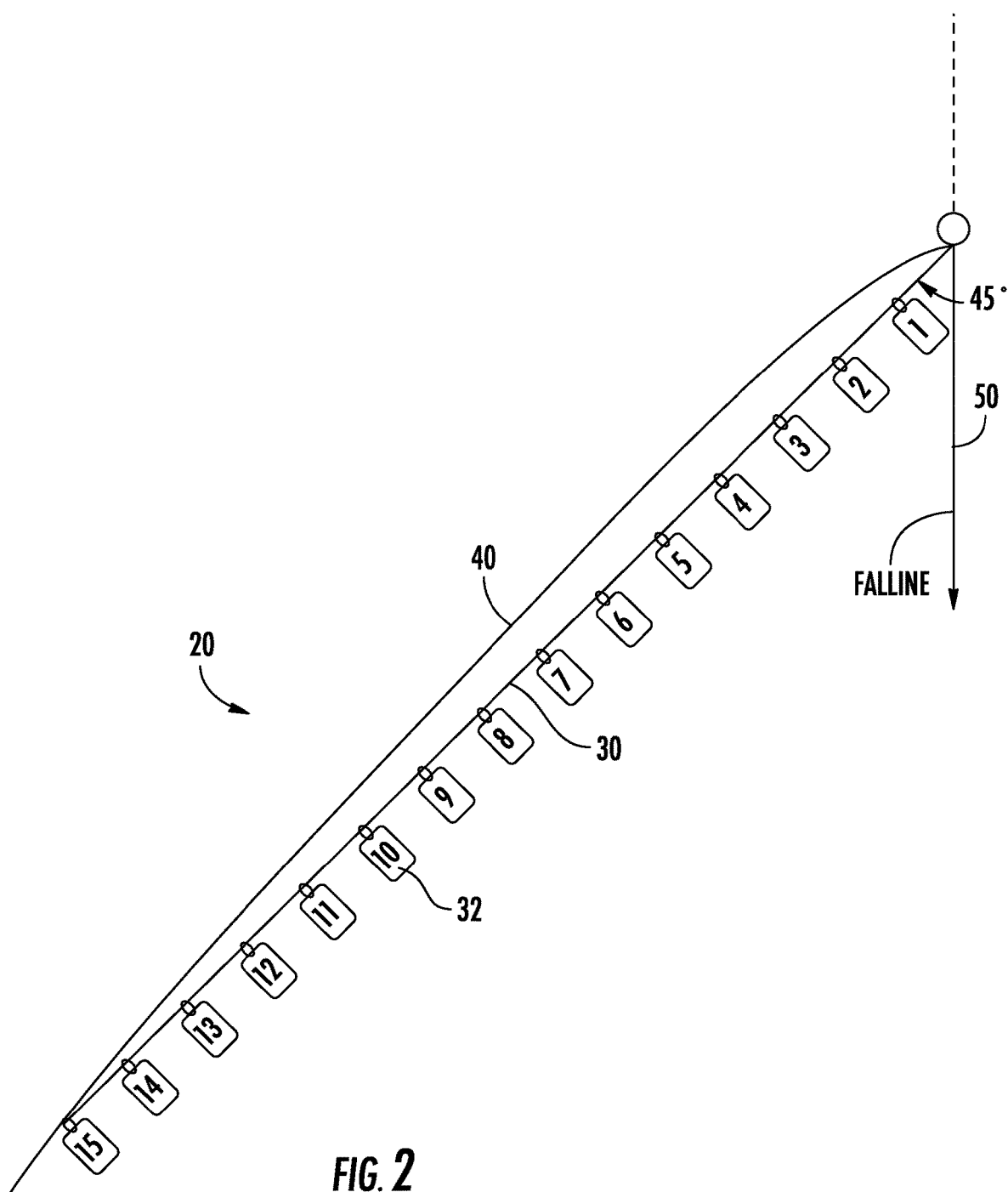


FIG. 1



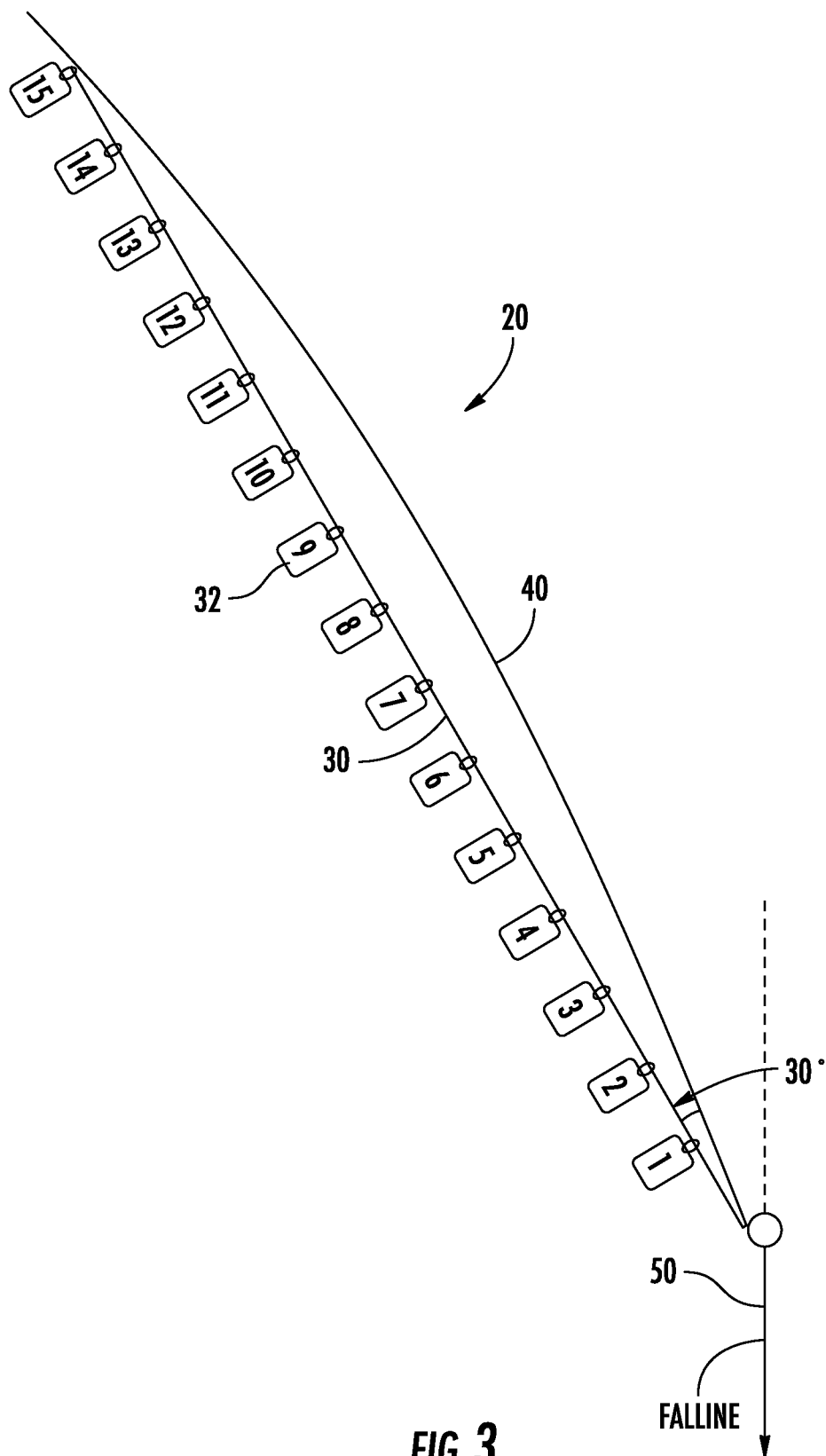


FIG. 3



FIG. 4

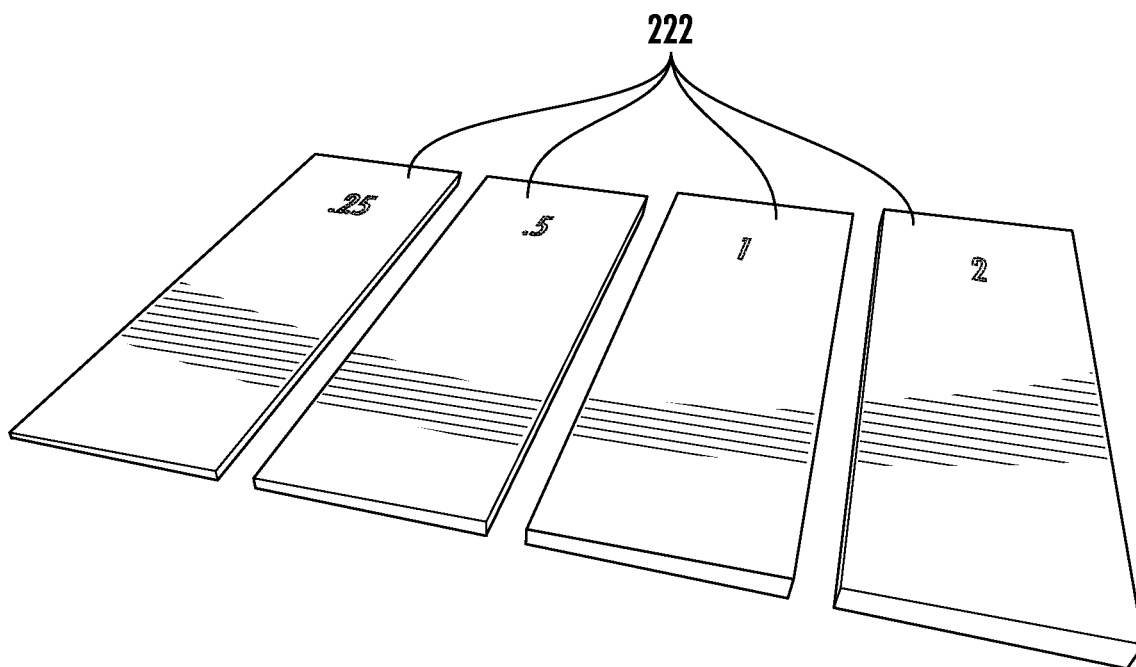


FIG. 5

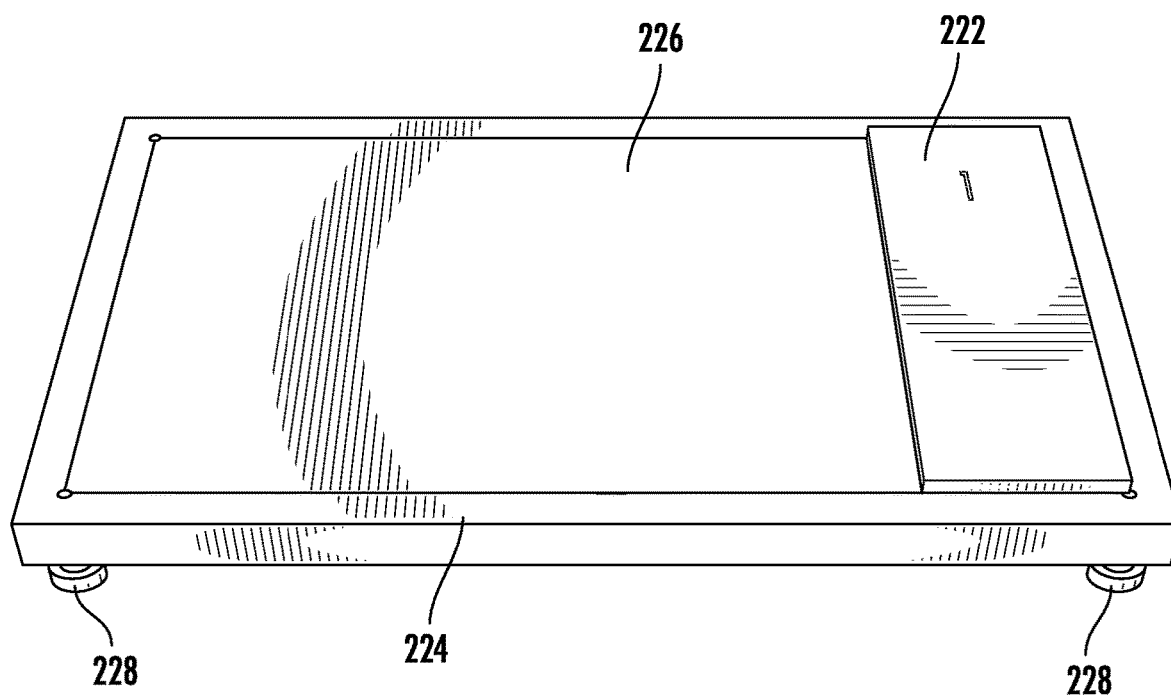


FIG. 6

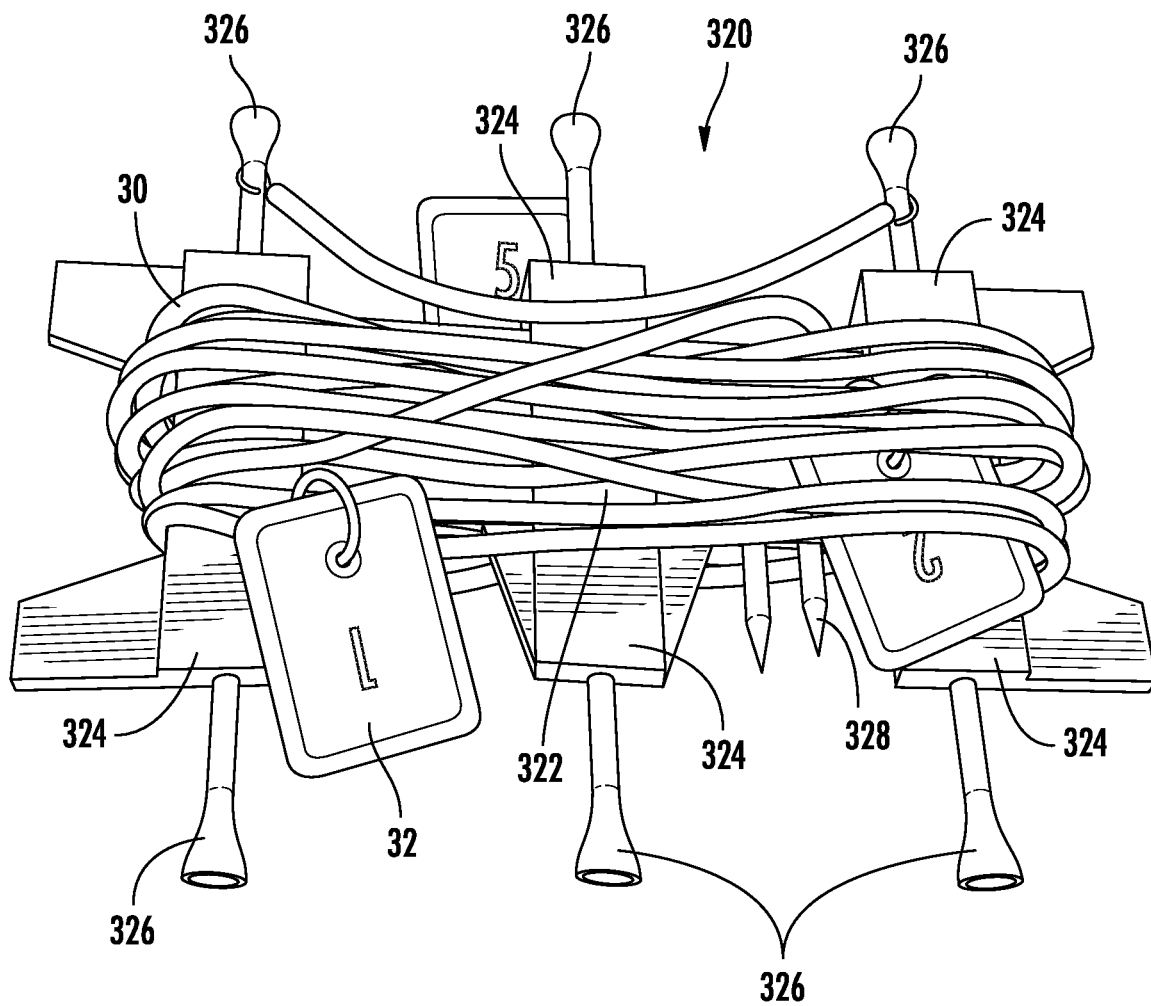
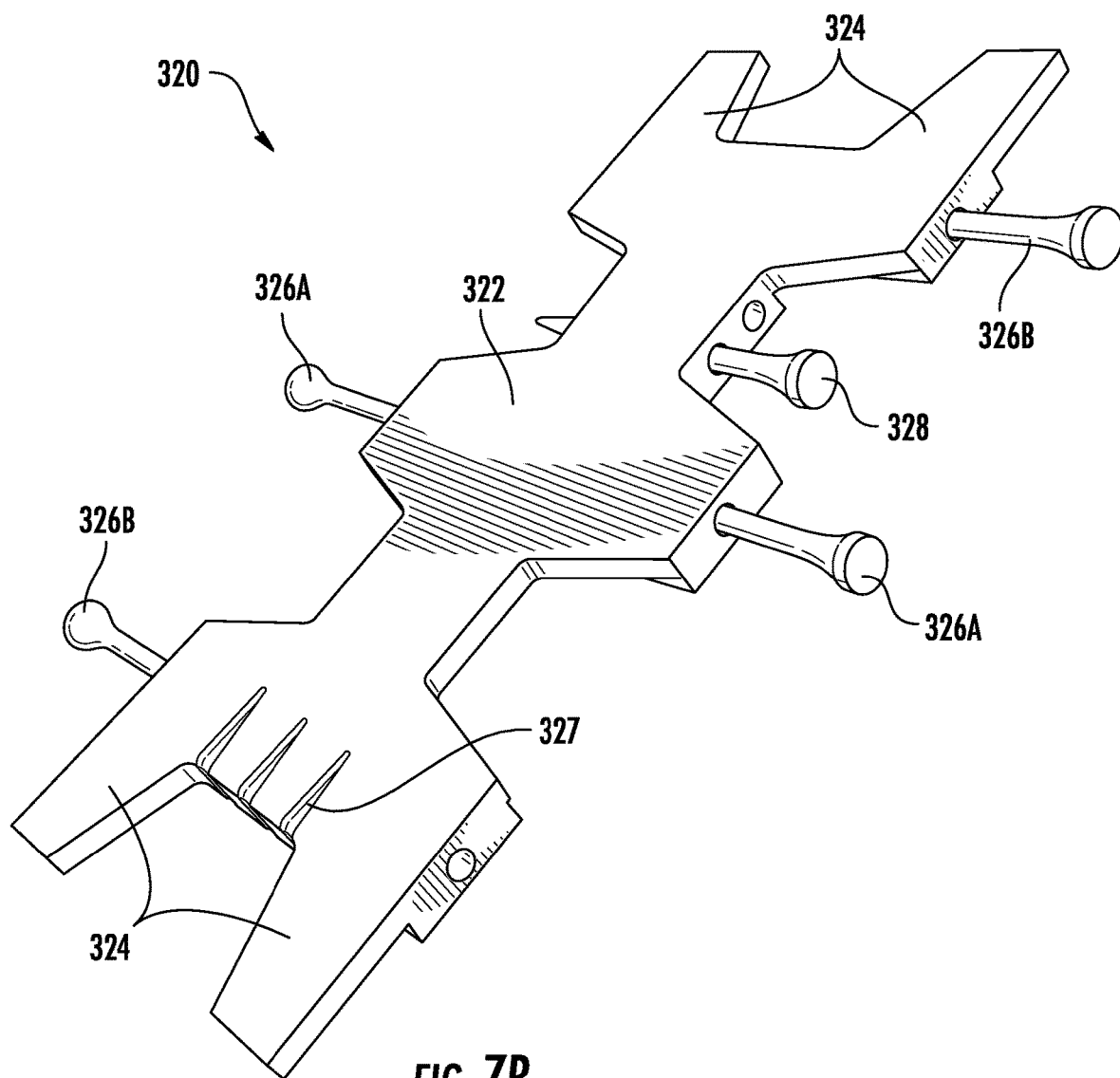


FIG. 7A



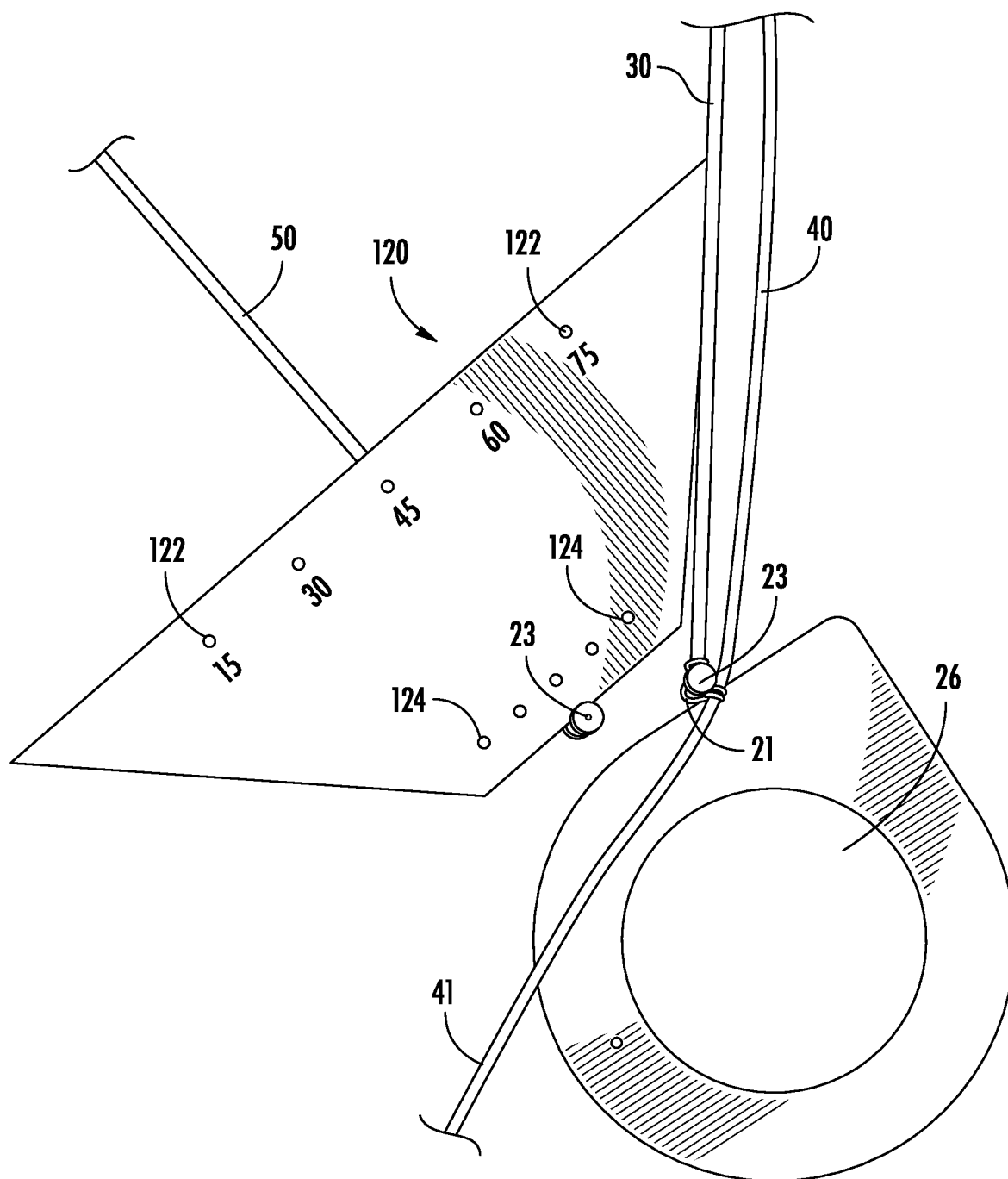


FIG. 8

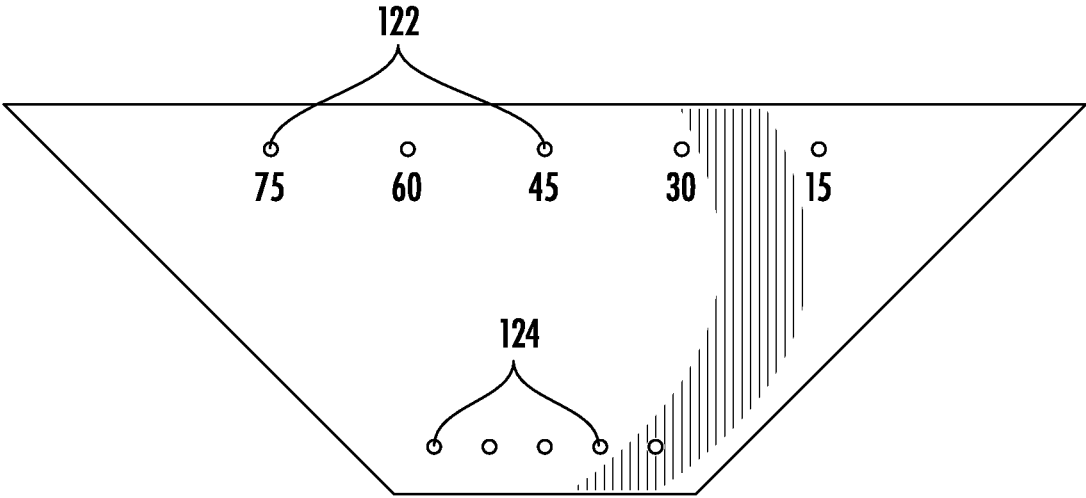


FIG. 9

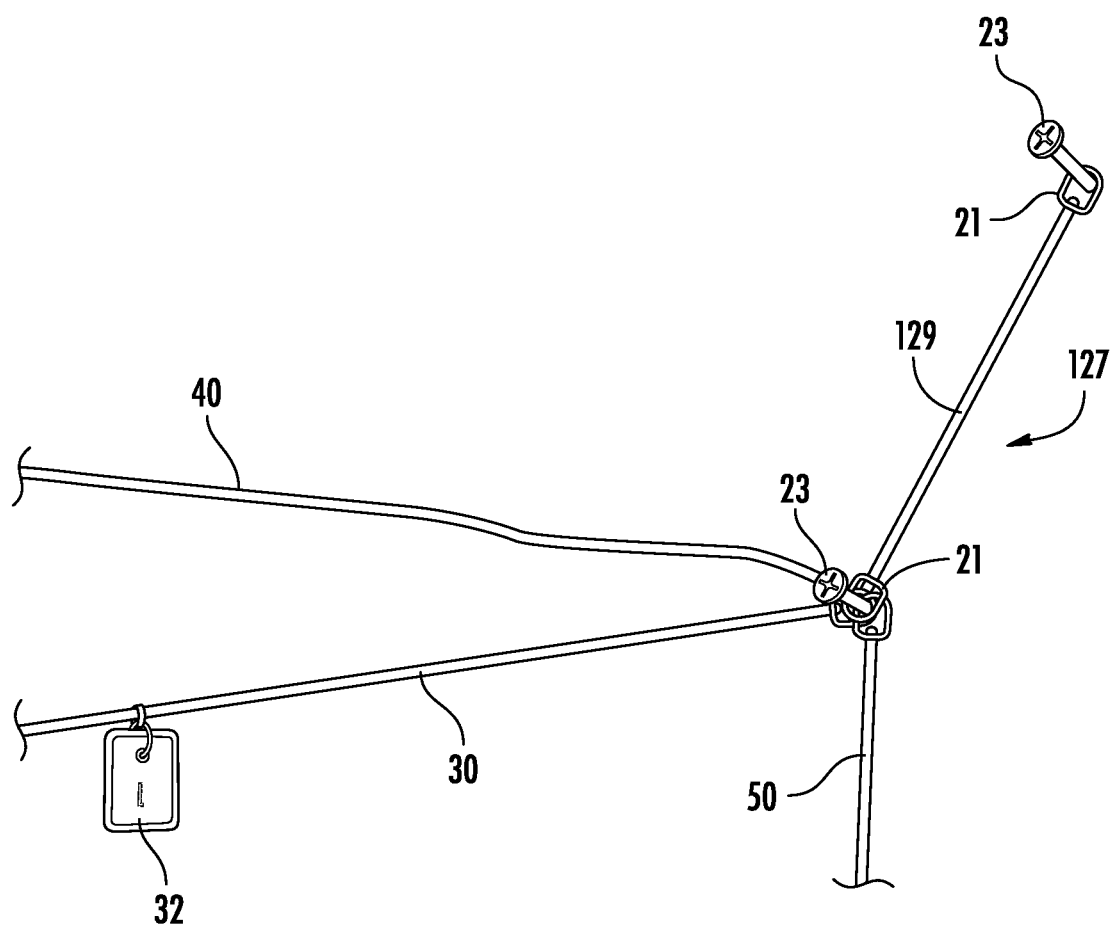
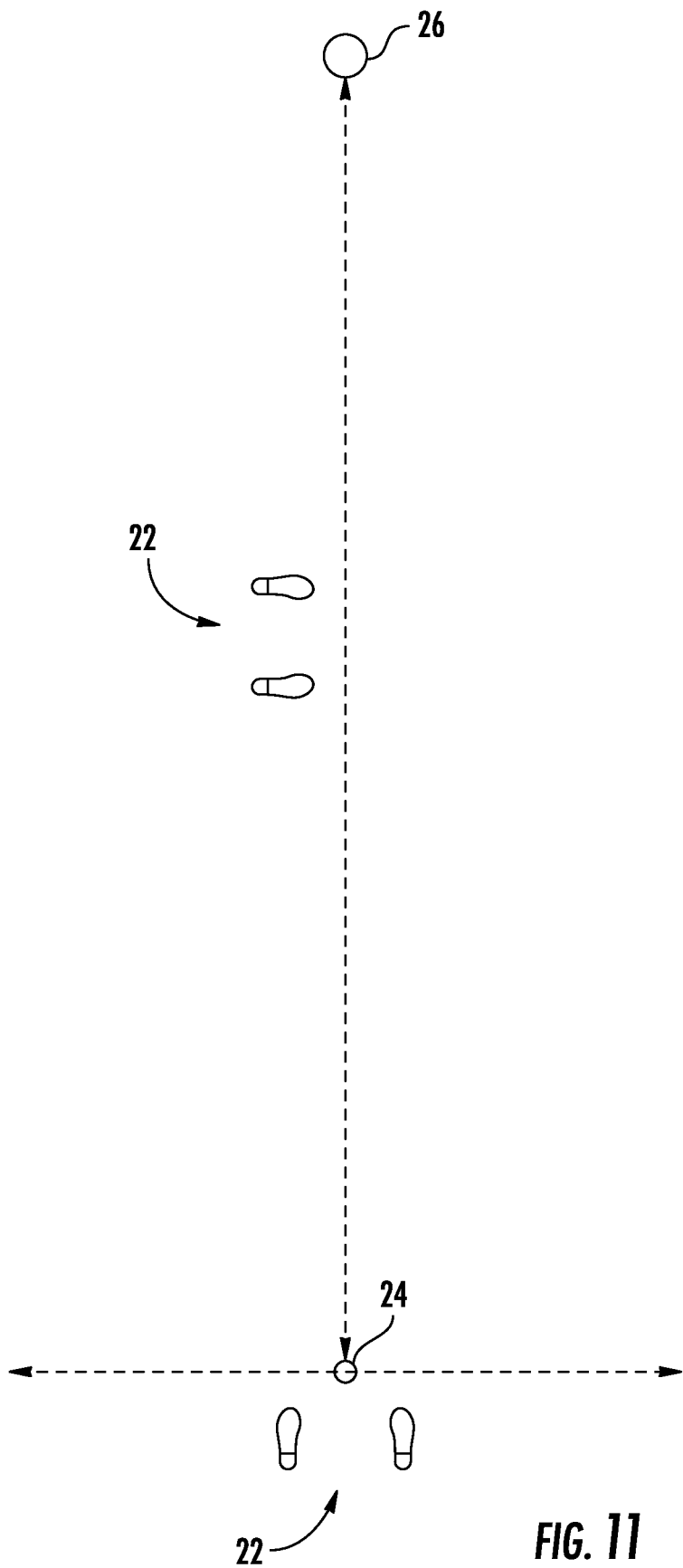


FIG. 10



SYSTEM AND METHOD FOR PRACTICING GOLF

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] The present application claims priority to provisional patent application 63/288,937 which was filed on Dec. 13, 2021, and is hereby expressly incorporated by reference in its entirety.

BACKGROUND OF THE INVENTION

[0002] The present invention provides a process, and corresponding apparatus and system for practicing golf, specifically for practicing putting and chipping of the golf ball. When professional golfers get to a green, they determine, either consciously or subconsciously, the approximate slope of the putting surface. From that, they find a fall line which is the one specific fall line above and below the cup where the ball rolls straight, unaffected by side slope of the green. Next, they determine the angle of their putt relative to the fall line. Other variables can include the cut of the grass and the wind direction and speed.

[0003] For the non-professional golfer, the current state of the art has golfers putting by looking for putting charts in books or magazines. The learning is passive, but the non-professional golfers hope something will click on the course. Nevertheless, most non-professional golfers frequently fail to account for the direction or amount of deflection due to slope on putts and thus frequently require three or more putting strokes when only two are allowed for making par.

[0004] Similar to putting, the non-professional golfer has several aspects of the golf course to consider when chipping a golf ball from off the green. First and foremost, the distance from the golf ball to the golf hole or cup must be determined. From there a landing zone can be determined that allows the golf ball to land and then roll to close proximity to the cup.

[0005] Therefore it is an object of the invention to provide a system that allows a user to objectively determine certain aspects of the green during practice of chipping and putting of a golf ball.

[0006] It is a further object of the invention to provide a process for measuring certain aspects of the green during regulation chipping and putting of a golf ball using only knowledge and experience gained from the practice with the system and apparatus.

SUMMARY OF THE INVENTION

[0007] The present invention addresses the shortcomings of the current state of technology by providing a system that allows a user to have a mobile system for measuring certain aspects of a practice green for putting and a practice chipping area for chipping practice. A system for putting and a system for chipping and have similar parts.

[0008] The system for putting utilizes a distance line, a trace line, and a fall line to measure certain aspects of a putt in golf. The distance line is represented by a first cord that has measurements along the cord. The trace line is represented by a second cord that shows a path from the golf ball to the golf hole that takes into consideration the slope and distance of the particular practice green. A fall line is represented by a third cord that shows the line wherein a golf ball rolled above or below the hole will roll straight.

[0009] The system for chipping is similar to that of putting. The system for chipping utilizes a chip line, a landing line, and an up/down line. The chipping line is represented by a first cord that has measurements along the cord to measure the distance between the golf ball and the hole. The landing line is represented by a second cord that shows where the ball should first land after chipping. The up/down line is represented by a cord that can be a circle that is at a certain radius from the hole.

[0010] The system can include a plurality of standing members designed to mimic specific slope angles of a putting green. When a user utilizes a particular standing member by placing one foot on the standing member and the other foot on a level surface, a user can get the feel for a particular slope as it would be perceived on a green of similar slope. After using the standing members in various combinations for an extended time, the user develops intrinsic abilities to determine the direction and relative magnitude of slopes on a regulation green. This knowledge and training can be directly applied to regulation greens by the amateur golfer or professional golfer with the goal of reducing strokes during regular play.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] FIG. 1 is a schematic figure of a first embodiment of the system for putting of the golf ball wherein the angle is ninety degrees between a third measuring member and a first measuring member;

[0012] FIG. 2 is a schematic figure of the first embodiment of the system for putting of the golf ball wherein the angle is forty-five degrees between a third measuring member and a first measuring member;

[0013] FIG. 3 is a schematic figure of the first embodiment of the system for putting of the golf ball wherein the angle is thirty degrees between a third measuring member and a first measuring member

[0014] FIG. 4 is a schematic figure of a second embodiment of the system for chipping of the golf ball;

[0015] FIG. 5 is a perspective view of a standing member;

[0016] FIG. 6 is a perspective view of a standing member placed on a platform member;

[0017] FIG. 7A is a perspective view of a reel for a first measuring member;

[0018] FIG. 7B is a perspective view of the reel;

[0019] FIG. 8 is a top view of a protractor that can be added to the system;

[0020] FIG. 9 is a bottom view of the protractor;

[0021] FIG. 10 is a perspective view of a practice gate used to simulate a golf cup;

[0022] FIG. 11 is a schematic figure of a user reading a putt.

DETAILED DESCRIPTION OF THE INVENTION

[0023] Now referring to the figures, FIG. 1 shows a system 20 for practicing putting. The system 20 comprises a first measuring member 30, a second measuring member 40 and a third measuring member 50. The measuring members 30, 40 and 50 are preferably made of string or cord. The first measuring member 30 is preferably a first color, the second measuring member 40 is preferably a second color, and the third measuring member 50 is preferably a third color; wherein all the measuring members are different colors from

one another. The first measuring member 30 has a plurality of distance markers 32 equally distanced from one another to indicate certain distances from the golf cup 26. The first measuring member 30 may also be referred to as the distance line. Each measuring member has receiving members 21 at the ends. Preferably the receiving members are circular and a securing member 23 such as a golf tee can be placed in the receiving member to hold the measuring members in place. Preferably, each distance marker 32 has a receiving member 21 capable of receiving a securing member 23 as it may be necessary if space on a practice green does not allow the use of the full length of the first measuring member 30.

[0024] The third measuring member 50 is configured to show a straight line representing a line wherein the golf ball 24 rolls straight when rolled either above or below the golf cup 26. The third measuring member 50 may also be referred to as the fall line. Securing members 23, preferably golf tees, can be utilized to secure the third measuring member 50 in place at each end of the third measuring member.

[0025] FIG. 1 shows the system 20 wherein the angle between the third measuring member 50 and the first measuring member 30 is ninety degrees. In this setup, the first measuring member 30 is pinned using securing members 51 such that the first measuring member 30 is perpendicular to the third measuring member 50. A user 22 selects to place a golf ball 24 a particular distance from the golf cup 26. Accordingly, the first measuring member 30 measures the distance, preferably in feet, from the golf cup 26 to the golf ball 24.

[0026] The second measuring member 40 may also be referred to as the trace line. It will span from the golf cup 26 to the golf ball 24, however, the line will be curved. In order to figure the curvature of the second measuring member 40, first, place the second measuring member approximately an inch above the first measuring member 30. For a fifteen-foot putt shown in FIG. 1 wherein the angle is ninety degrees, at approximately five feet from the golf cup 26, place a marker such as a golf ball about two-inches above the first measuring member 30. The marker indicates the typical high point 42 for a right-angle putt, wherein the high point 42 is the longest distance between the first measuring member 30 and the second measuring member 40. Using a practice putt, putt the golf ball 24 from the high point 42 parallel with the first measuring member 30 toward the golf cup 26. If the golf ball 24 goes below the golf cup 26, extend the golf ball 24 another additional two inches and repeat the process. The user keeps moving the golf ball 24 out until a perfect putt is made that barely makes it to the golf cup 26 in the dead center of the golf cup 26. At this point, the second measuring member 40 at its high point 42 is placed such that it is two inches lower than the found perfect putt measurements. The second measuring member 40 is smoothed out on either side of the high point 42, with just a little more curve on the side nearer the golf cup 26. After putting a few balls, the user 22 can make a few minor adjustments such that a putt that starts parallel to the curved second measuring member 40 at any distance of the second measuring member 40 should go in the golf cup 26 assuming the speed of the putt is correct. To that end, FIG. 8 shows that measuring member 40 has an extension 41 that measures the distance beyond the cup that a missed putt travels. Extension 41 is preferably 3 feet and is marked with distance markers 32. Missed putts of less than 3 feet have a very good chance of being holed thus achieving the desire to avoid three putts.

[0027] FIG. 2 shows a forty-five degree uphill putt while FIG. 3 shows a thirty degree downhill putt. The same process is utilized as described for the ninety degree putt with variations in the position of the high point 42: closer to the cup for uphill putts and closer to the ball for downhill putts.

[0028] Additional devices can be utilized alone or in combination as part of the system 20 to assist in the user 22 becoming better at putting. First, as shown in FIG. 8, a protractor 120 is shown. The protractor 120 indicates various angles. The protractor 120 has a first set of holes 122 and a second set of holes 124. The first measuring member 30 is placed such that it forms a line that encompasses the appropriate first and second hole for a particular angle. In FIG. 8, a forty five degree angle between the first measuring member 30 and the third measuring member 50 is shown. The protractor 120 can be flipped over as shown in FIG. 9 so that angles can be determined whether they are entail uphill or downhill putts.

[0029] As shown in FIG. 10, the system 20 can be utilized even if the golf cup 26 is unavailable. Instead, the user 22 can utilize a gate 127 consisting of a fourth measuring member 129, which can be a cord that is the length of a combined golf cup and golf ball. The fourth measuring member 129 is fixed at both ends with securing members 23, preferably golf tees, placed through receiving members 21. Putts between the tees and not touching the tees with nominal velocity should be considered good putts. Alternatively, a third-party replica golf cup of varying designs, widely available for home use practice can be used in place of the gate 127.

[0030] As shown in FIGS. 5 and 6, a standing member 222 and a platform member 224 are shown. In the golf world, a Stimp meter is a widely used third party device consisting of a simple inclined plane that delivers a golf ball with a consistent speed of 6 feet per second (6 ft/sec). On a flat part of a green of uniform speed, the distance the ball rolls in feet is referred to as the speed of the green. A "speed" of 10 is nominal but many public courses run slower (i.e. have smaller Stimp values) while courses setup for professional tournaments typically run faster (i.e. have higher Stimp values).

[0031] Because we know the starting ball speed of the Stimp meter is 6 ft/sec, there are interesting insights to make if we simplify calculations by only considering a hypothetical green where slope is uniform, and speed is a Stimp 10'.

[0032] When the USGA Green Section Record says a slope of 1.7 degrees or greater on a 10' Stimp meter green is too fast, they mean that a ball started straight down the fall line at 6 ft/sec will roll out to 15'4", which means the equivalent Stimp value is 15.33.

[0033] Here are four examples of slope induced equivalent distances on an Stimp 10' green if a ball is started with a Stimp meter (6 ft/sec): 1) A slope of 0.54 degrees causes the ball to roll 12 feet down the fall line; 2) A slope of 0.92 degrees goes 14 feet (equivalent to a Stimp 14' green, about the highest the pros see in major tournaments); 3) A slope of 2.18 degrees would be like putting on a Stimp 100' surface; 4) a ball putted on a slope of 3.22 degrees on a Stimp 10' green will roll off the green neither gaining or losing speed.

[0034] With these principles in mind, it is beneficial for a golfer to develop a sense for the slope of a green i.e. whether the slope is up or down to the golf cup and whether the break or curve of the ball will be to the left or to the right.

Furthermore, the magnitude or amount of slope affects the amount of curve in the putt. Indeed, fall line determination through knowledge of the slope direction and magnitude along the line between the ball and cup and perpendicular to that line at the ball position allows the golfer to make simple (and intuitive) estimates of the position of the fall line based on simple Pythagorean trigonometry and thus about the amount and direction of the curvature of the impending putt. The standing members **222** shown in FIG. **5** have varying degrees of thickness, to simulate slopes from .25 degree up to two degrees. The numbers on the standing members **222** in FIG. **5** designate the thickness of a particular standing member **222**. A user will place one foot on a particular standing member **222** with the other foot on a level surface approximately twenty inches separating the feet of the user. Depending on the thickness and whether the left foot or right foot is on the standing member **222**, the user can practice raising one heel or the other some varying amount, thus leveling his or her shoulders as a way of perceiving the direction and magnitude of the slope. If no level surface can be found for this practice, a particular standing member **222** can be placed in the platform member **224**. The platform member **224** has a top surface **226** which is elevated by legs **228**. Each leg **228** is adjustable to obtain a level surface. Once the top surface **226** is level, a user places a particular standing member **222** on the surface. FIG. **11** shows the position of the only two measurements necessary for user **22** to make during regular play to determine the direction of the curve and the approximate degree of deflection due to gravity of a putt on a typical green surface. With sufficient practice these two orthogonal measurements can allow the golfer to estimate the position of the fall line and visualize the trace of a putt, i.e., the position and magnitude of the high point of a putt.

[0035] Now referring to FIGS. **7a** and **7b**, a reel **320** is shown that can hold one or more of the components of the system **20**. Preferably, the reel **320** holds one or more of the measuring members **30**, **40** and/or **50**, as well as measuring members **430**, **440**, and/or **450**. The reel **320** has a main body **322**. The reel **320** has a plurality of linkages **324** extending away from the main body **322**. Preferably each linkage **324** has selectively removable and repositionable a handle **326** extending away from the linkages **324**. In the preferred embodiment, the handles **326** are a typical golf tee. By holding particular handles **326B**, a user of the reel **320** can wind (handles **326B** positioned at opposite corners) and unwind (handles **326A** positioned on both sides in the middle) one or more of the measuring members **30**, **40**, and/or **50** from the reel **320**. In FIG. **7B**, a user would hold onto the upper right and lower left handles **326B** to wind measuring members **30**, **40**, and/or **50** onto the reel **320** by a simple hand over hand motion. Also, in FIG. **7B**, a user would hold onto the middle handles **326A** to and unwind measuring members from the reel **320** by letting gravity spin reel **320** as the user stands or walks backwards. Additionally, the main body **322** can hold one or more securing members **328**. The securing members **328** can secure an end of one of the measuring members to assist the user in the winding and unwinding process. One or more slits **327** of the reel **320** help hold the measuring members **30**, **40**, and/or **50** in place during the winding and unwinding of said measuring members.

[0036] FIG. **4** shows a second embodiment of the invention wherein a system **420** is used for practicing golf,

specifically chipping of the golf ball. Line **421** shows the separation of the practice green and the practice fairway. The system **420** has a first measuring member **430** configured to measure a first distance from a golf cup **426** to a golf ball **424**. A second measuring member **440** is configured to define a landing area for the golf ball **424**. A third measuring member **450** is configured to show a specified radius around the golf cup **426**. Typically, the third measuring member **450** forms a circle around the golf cup **426** with the circle having a radius of three feet.

[0037] The measuring members **430**, **440** and **450** are preferably made of string or cord. The first measuring member **430** is preferably a first color, the second measuring member **440** is preferably a second color, and the third measuring member **450** is preferably a third color; wherein all the measuring members are different colors from one another. The first measuring member **430** has a plurality of distance markers **432** equally distanced from one another to indicate certain distances from the golf cup **426**.

[0038] In using the system **420**, a user can place the third measuring member **450** to form a circle around the golf cup **426**. Next, using the first measuring member **430**, the golf ball **424** is placed a certain selected distance from the golf cup **426**. The user then determines a landing zone for the golf ball **424**. The landing zone location is dependent on factors such as the slope of the green. Once the landing zone is determined after a few practice chips, the user places the second measuring member **440** to mark the landing area. Measuring member **440** preferably forms a half circle with extensions opening toward the golf cup **426** and measuring member **450**. The user then chips the golf ball **424** such that it hits the landing zone and then rolls out into the circle formed by the third measuring member **450**.

[0039] Similar to the putting system **20**, the measuring members of the chipping system **420** can be wound and unwound utilizing the reel **320**.

[0040] Having thus described the invention in connection with the several embodiments thereof, it will be evident to those skilled in the art that various revisions can be made to the several embodiments described herein without departing from the spirit and scope of the invention. It is my intention, however, that all such revisions and modifications that are evident to those skilled in the art will be included within the scope of the following claims. Any elements of any embodiments disclosed herein can be used in combination with any elements of other embodiments disclosed herein in any manner to create different embodiments.

What is claimed is:

1. A system for practicing golf putting, comprising:
 - a first measuring member;
 - the first measuring member configured to measure a first distance from a golf cup to a golf ball;
 - a second measuring member;
 - the second measuring member configured to show a curved line from the golf ball to the golf cup;
 - a third measuring member;
 - the third measuring member configured to show a straight line representing a line wherein a golf ball rolls straight.
2. The system for practicing golf putting of claim 1, wherein:

The first measuring member comprises a plurality of markers configured to indicate a specific distance from the golf cup.

3. The system for practicing golf putting of claim 1, wherein:

the first measuring member is a first color.

4. The system for practicing golf putting of claim 3, wherein:

the second measuring member is a second color.

5. The system for practicing golf putting of claim 4, wherein:

the third measuring member is a third color.

6. The system for practicing golf putting of claim 1, further comprising:

a reel;

the reel selectively holding at least one of the measuring members.

7. A system for practicing golf chipping, comprising:

a first measuring member;

the first measuring member configured to measure a first distance from a golf cup to a golf ball;

a second measuring member;

the second measuring member configured to show a landing area for the golf ball;

a third measuring member;

the third measuring member configured to show a specified radius around the golf cup.

8. The system for practicing golf chipping of claim 7, wherein:

the first measuring member comprises a plurality of markers configured to indicate a specific distance from the golf cup.

9. The system for practicing golf chipping of claim 7, wherein:

the first measuring member is a first color.

10. The system for practicing golf chipping of claim 9, wherein:

the second measuring member is a second color.

11. The system for practicing golf chipping of claim 10, wherein:

the third measuring member is a third color.

12. The system for practicing golf chipping of claim 1, further comprising:

a reel;

the reel selectively holding at least one of the measuring members.

13. A method for practicing putting of a golf ball toward a golf cup with the use of a first measuring member, a second measuring member and a third measuring member, comprising the steps of:

placing the third measuring member within one inch of the golf cup;

wherein the third measuring member configured to show a straight line representing a line wherein a golf ball rolls straight;

placing a first measuring member configured to span the distance between the golf cup and the golf ball, wherein the first measuring member is at a particular angle to the third measuring member;

placing a second measuring member that forms a curved line;

putting the golf ball.

14. The method of claim 13, wherein:

the first measuring member comprises a plurality of markers configured to indicate a specific distance from the golf cup.

15. The method of claim 13, wherein:

the first measuring member is a first color.

16. The method of claim 15, wherein:

the second measuring member is a second color.

17. The method of claim 16, wherein:

the third measuring member is a third color.

18. The method of claim 1, further comprising the step of: utilizing a golf tee to secure one or more of the measuring members.

19. The system for practicing golf putting of claim 1, further comprising:

a gate configured to represent the golf cup;

the gate comprising a line.

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