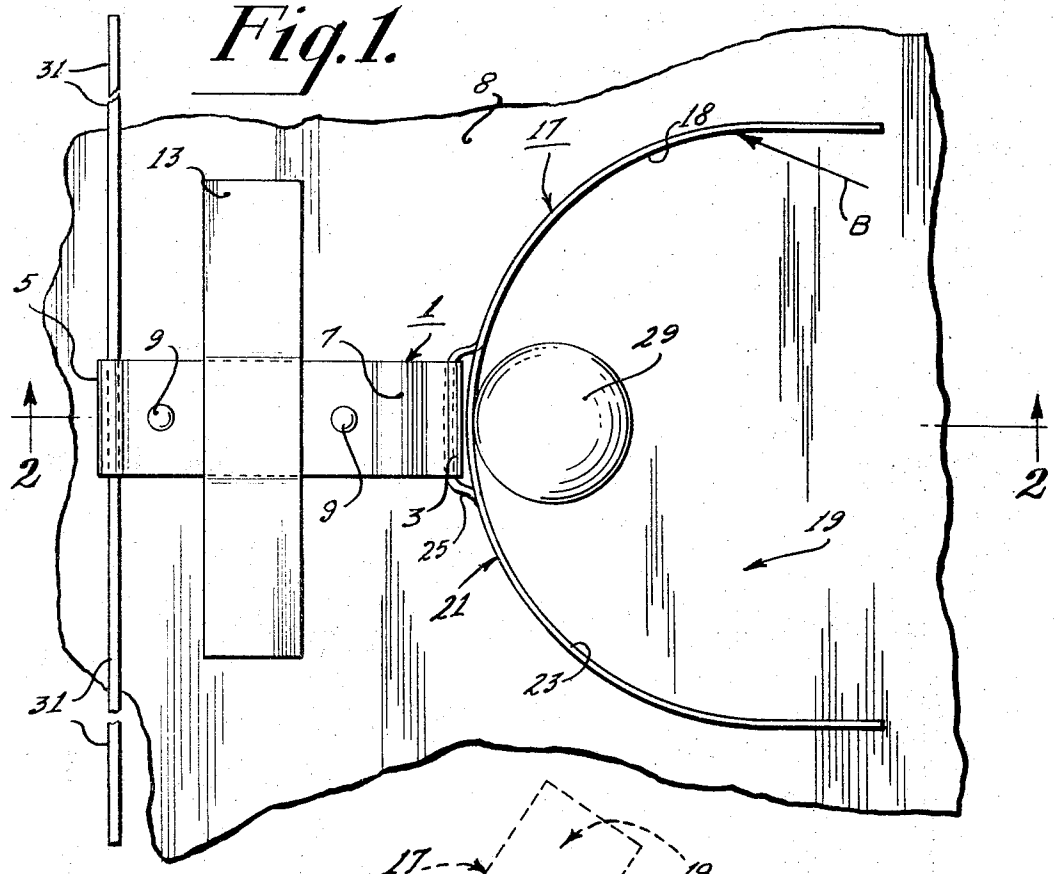
Oct. 3, 1967 F. V. MARTIN 3,345,072

GOLF PUTTING PRACTICE DEVICE

Filed March 5, 1965

Fig. 1.



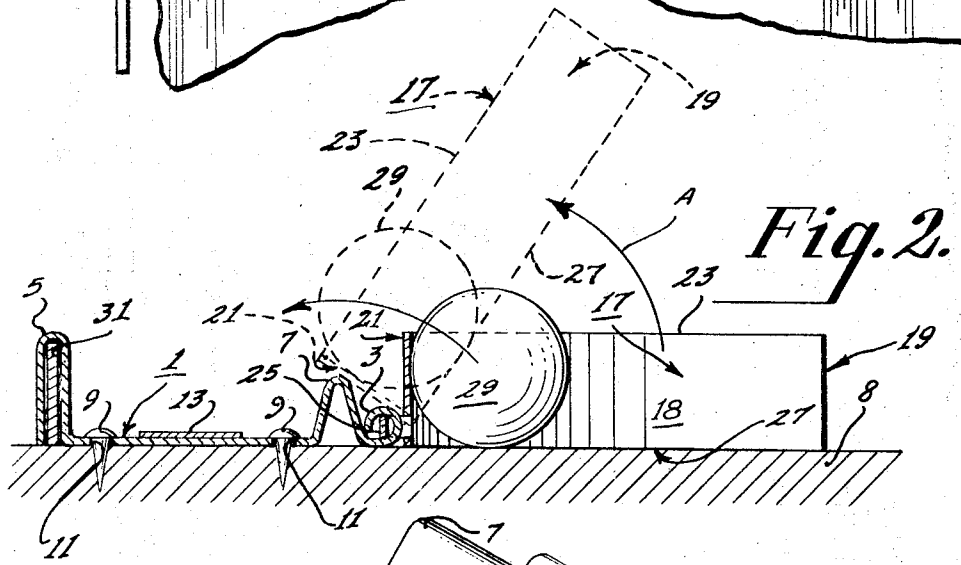


Fig. 2.

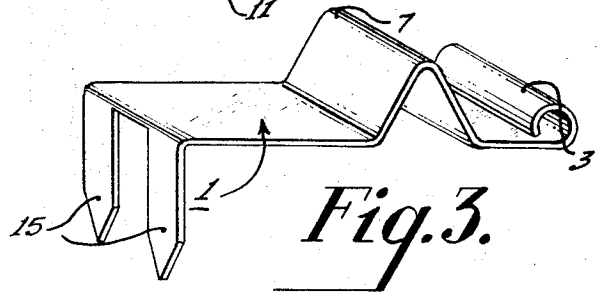


Fig. 3.

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GOLF PUTTING PRACTICE DEVICE

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This invention relates to a golf putting device, and particularly to a device useful in practicing golf putting to enable one to attain skill in putting a golf ball accurately.

Various devices have been proposed heretofore for the purpose of enabling one to practice putting a golf ball elsewhere than on a green of a conventional golf course. In general, such devices have the shortcoming that they act merely as targets toward which the golfer can direct a ball without, however, responding to such factors as the speed of the ball when it has reached the target, the direction of travel of the ball at the target, and the like. These and similar other factors are important in developing skill in putting, and since known putting devices do not take them into account, they necessarily fail in providing the sort of training that develops the skill essential for one to become an accomplished golfer.

The primary object of the present invention is to provide an improved golf putting practice device which takes into account the various factors which are involved in putting on a green and which, therefore, is highly useful as a training aid in developing putting skill.

More particularly, it is an object of this invention to provide an improved golf putting practice device which has value as an analytical instrument to enable one using it to readily determine the accuracy and effectiveness of the speed and direction of a putted ball, and whether, for any particular putt, the ball, if it had been played similarly on a natural green, would have dropped into the cup or whether it would have passed right over and beyond the cup by reason of having been hit too hard so as to cause it to have excessive speed at the cup, or whether it would have rolled along the edge of the cup and beyond it, because of having been directed in a somewhat incorrect direction and at too great a speed.

Another object of this invention is to provide an improved golf putting device as aforesaid which can be used indoors, as well as outdoors.

Still another object of this invention is to provide an improved golf putting device which is useful not only for developing skill in putting, but which can be used for random putting similarly to the conventional cups of greens on natural golf courses.

A further object of this invention is to provide an improved, simulated golf putting cup which affords conditions so similar to those of conventional cups on natural golf courses that it can be readily substituted for conventional cups without having the disadvantage found in conventional cups of having to stoop to remove balls for replay after each hole drop.

Still a further object of this invention is to provide an improved golf putting device as aforesaid which can be used in sets of two or more at spaced locations to enable two or more players to engage in a putting game contest for the purpose of testing the skill of each player, and this without need for any player to remove himself from the location of the particular putting device selected by him.

Yet another object of this invention is to provide an improved golf putting practice device which is readily movable from place to place, and which can be set in place firmly on practically any substantially horizontal surface.

It is also an object of this invention to provide an improved golf putting device as above set forth which is simple in construction, which readily lends itself to large quantity production at low cost, and which is highly efficient and effective in use.

In accordance with one form of this invention, there is provided a bracket-like mounting plate on which is pivotally mounted a generally U-shaped or substantially semi-circular ball receiving member corresponding to, and of about the same diameter as, a conventional cup of a green on a natural golf course. The mounting plate can itself be mounted securely on the ground or green, on the floor of a room, on a carpet, or on any other suitable support. The ball receiving member has an upstanding wall and is pivotally connected at its base, or closed end, to one end of the bracket-like plate to extend therefrom with its mouth or open end facing away from the mounting plate and in the direction of the player or practicer. Carried by the mounting plate, behind the pivotal connection of the ball receiving member therewith, is a stop which is engageable by the ball receiving member when it swings upwardly on the pivot in response to a ball of excessive speed received thereby, the upward swing of the ball receiving member indicating excess speed of the ball by rejecting it in a manner shortly to be set forth, and the stop serving to limit such upward swing of the ball receiving member.

After the device has been mounted at a suitable location on the floor, for example, or some other, preferably flat, horizontal surface, the player takes a position spaced therefrom and places a golf ball on the floor. He then putts the ball along such surface toward the ball receiving member. If the ball has been propelled in the right direction and with correct force, it will enter the ball receiving member between the arms or side walls thereof and will remain there, thus showing that the stroke was correct in terms of force, direction and distance so that, if the ball receiving member were a conventional cup, the ball would have rolled into it. If, however, the ball is driven too hard, although in the right direction, it will strike either the rear or a side of the ball receiving member wall in the vicinity of the pivotal connection of the mounting plate and the ball receiving member and cause the latter to tilt or swing upwardly on its pivot into somewhat overlapping relation with the mounting plate. The ball will then roll on over and beyond the ball receiving member, just as it would roll over the top of and beyond a conventional cup if hit with too great a force. The aforementioned stop on the mounting plate limits the upward swing of the ball receiving member which thus measures or determines proper speed by acceptance, and excess speed by rejection, of the ball. After the ball has rolled on past the ball receiving member, the latter member will swing back down onto the floor to be ready for the next ball to be played or putted.

Sometimes, the putted ball is so directed that it will strike the side of the wall of the ball receiving member near the mouth thereof, and if it has been hit with a certain force, it will climb the wall and roll along the upper edge of and around the cup receiving member wall toward the pivotal connection thereof and then beyond that member, just as it would roll along the edge of a conventional cup under the same conditions. This, of course, indicates improper aim and too hard a stroke. If the ball is directed improperly to one side and outside of the ball receiving member, it will not, of course, enter that member; and if it is also hit with too great a force, it will roll on past the ball receiving member. To prevent it from rolling too far, the mounting plate may be provided at its end remote from the pivotal connection thereof to the ball receiving member with an inverted, vertical U-loop into which is inserted an elongated strip that extends transversely in opposite directions well beyond the side arms of the ball receiving member to act as a backstop. When a misdirected ball strikes this strip, its further movement is arrested. At the same time, the

transverse strip serves to stabilize the entire device on the floor.

A single person can use one such device as described above, or he can place two such devices on the floor or ground at spaced locations and putt balls from one to the other in reverse directions, thereby saving himself needless walking back and forth. Similarly, two or more such devices can be placed at spaced locations, and a like number of players can take putting positions respectively at each such location from which they can putt balls to the putting device at another such location. If desired, score can be kept to determine the putting skills of the various players.

The invention, both as to its organization and manner of use and operation, as well as additional objects and advantages thereof, will be understood more readily from the following description, when read in connection with the accompanying drawing, in which

FIG. 1 is a plan view of one embodiment of golf putting practice device according to the present invention,

FIG. 2 is a sectional view taken along the line **2—2** of FIG. 1 and viewed in the direction of the appended arrows, and

FIG. 3 is a perspective view of a somewhat modified form of mounting plate from that of FIGS. 1 and 2 and forming part of the practice device according to the present invention.

Referring more in detail to the drawing, there is shown, in FIGS. 1 and 2, a bracket-like mounting member or plate **1** formed at its forward end with a hinge socket **3** and at its opposite end with a reversely bent, inverted channel portion **5**. In proximity to the socket **3**, the plate **1** is also formed with an upstanding, inverted V-portion **7** which acts as an abutment or stop for a purpose presently to be set forth. The plate is adapted to rest on the bare ground, on a lawn or sod, on the green of a golf course, on a concrete walk or patio, on the floor of a room or basement, on a carpet or a simulated lawn, or on any other, preferably substantially horizontal supporting surface. To insure against accidental displacement of the plate **1** from its rest position, it may be affixed to a floor or other suitable, preferably flat, horizontal support **8** in any convenient manner, as by small nails or tacks **9** driven into such support through one or more openings **11** in the plate, or by means of a strip of strong adhesive tape **13** which may be adhered to the plate across the upper surface thereof between the channel **5** and the stop **7** and to the supporting surface on which the plate **1** rests for a distance well beyond the side edges of the plate **1**. An adhesive tape affixing strip is especially desirable when the device of this invention is used indoors and it is desired not to drive nails into the floor or through a carpet. Instead of adhesive tape, a heavy weight (not shown) may be placed across the plate **1** to hold it down firmly. For use outdoors on the ground, the plate **1** may be formed at its rear end with one or more downwardly extending prongs or spikes **15**, as shown in FIG. 3, and the spikes driven into the ground to firmly affix the plate **1** thereto against accidental displacement from a selected location.

Pivotally connected to the plate **1** at the forward end thereof is a golf ball receiving member **17**, preferably formed out of a metal band **18** bent into a subtantially semi-circular shape, or into U-shape, on a diameter approximately equal to that of a conventional cup on the green of a natural golf course. Thus, the member **17** is completely open at one (its forward) end **19** to provide an unimpeded entrance opening therethrough for the ball along the plane of the support **8** and is closed at its other (or rear) end **21**. The member **17** is also open at the top (i.e., in the plane of the upper edge **23** of the band **18**) for a reason shortly to become apparent, the band **18** forming an upstanding wall. The pivotal or hinge connection between the mounting plate **1** and the ball receiving member **17** is provided by a hinge pin **25** which may be struck out from, or may be secured to, the rear face of the band **18** at its rear end **21** and which passes through the hinge socket **3**.

When the device is first set up for use, the ball receiving member **17** rests, at its lower edge **27**, on the surface of thet support **8** similarly to the mounting plate **1** and thus normally occupies a position in extension of the mounting plate forwardly thereof with its open end **19** facing away from the mounting plate. A person wishing to practice putting then places a golf ball **29** on the support **8** in front of the ball receiving member **17** at a suitable distance therefrom and putts the ball toward the ball receiving member or "cup" **17**. If the ball has been hit with correct force and in the right direction, it will roll into the "cup" along the plane of the support **8** and stop there within the confines of the wall formed by the band **18**. This will indicate that the stroke was correct both as to aim and force at the selected distance from the "cup." Of course, if insufficient force were applied to the ball, it would stop short of the ball receiving cup, thus indicating to the practicer that the ball should have been hit harder.

Should the ball be aimed correctly but hit with too great a force, so as to have too great a speed at the "cup" **17**, it will enter the ball receiving member **17** and strike the wall **18** thereof in the vicinity of, and above, the hinge connection **3, 25**, as illustrated in FIGS. 1 and 2, for example. The ball will thereupon cause the member **17** to tilt or swing upwardly about the pivot, as shown by the arrow A in FIG. 2, into at least partially overlapping relation with the mounting plate **1**, as shown by the dash-line position of FIG. 2. Since the member **17** is open at the top, the ball will continue to roll over the band or wall **18** and on past the "cup" **17**, just as it would roll over the top of and beyond a natural cup on a green if hit too hard. The stop **7** is located in a position to be engaged by the member **17** in its upward swing and to limit this motion at the set position that determines the point of rejection of any ball exceeding a speed such as would cause it to fall into and remain in a natural, earthen hole, and also to limit the swing to an angle such that, after the ball has rolled over the band **18**, the member **17** will readily swing or tilt back down by gravity to its normal or rest position on the support **8** shown in FIG. 1 and in solid lines in FIG. 2.

Should the ball be hit relatively hard and propelled in such a direction that it approaches a side of the wall **18** angularly, as shown by the arrow B in FIG. 1, for example, it will roll up onto and along the curved, upper edge **23** of the band **18**, just as it would along the edge of a conventional cup if it were stroked similarly on a green. Again, the aim may be so poor that the ball will not enter the "cup" **17** at all but will roll to one side thereof and past the "cup." To prevent such a ball, or a hard hit ball which rolls over the upwardly tilted member **17**, as in FIG. 2, from rolling too far, an elongated strip **31** of metal, plastic or other suitable material is inserted into the channel **5** to extend beyond the plate **1** and beyond the sides of the member **17** a substantial distance. The band or strip **31** thus acts as a backstop which keeps misdirected balls from rolling out of bounds, so to speak. At the same time, since the strip **31** is disposed in a vertical plane (in which it is relatively stiff), it acts as a stabilizer to reinforce the stability of the device.

From the foregoing description, it will be apparent that there has been provided an improved golf putting practice device which, in use, greatly simulates conventional cups on the usual golf courses, at least functionally. Thus, it can be of great aid in helping one to acquire putting skill without presenting any impediments and disadvantages such as are found in many prior art putting devices. In particular, the improved putting device of the present invention permits free, unimpeded entrance of the ball **29** into the "cup" **17** through the wide, completely open front end or mouth **19** of the member **17** across the entire width of the band **18** from the surface **8** on up, and it rejects

every ball reaching the member **17** with a speed in excess of that required to drop into and stay in a regulation hole or cup on an actual golf course green. The accuracy of the device is built into it when manufactured, and this accuracy is maintained regardless of the surface on which the device is disposed. Moreover, the device can be used for practice by one or more persons, and it can also be used by two or more players in a game of skill to test their respective abilities to putt a golf ball, as indicated hereinbefore.

Although only one embodiment of the invention has been shown and described, it should be apparent that various modifications thereof are possible within the spirit of this invention. For example, instead of making the ball receiving member **17** semicircular in shape, or U-shaped, it can be formed in any other useful shape, such as C-shaped, so long as it has an opening or mouth at the front end that extends up from the lower edge **27** of the band **18** and is of such size and shape that it will readily permit a ball rolling toward the opening in the front end **19** of the member **17** to enter therethrough into the member **17** free of any impediments. Instead of making the stop **7** as shown and described, it can be formed by merely striking a tongue up out of the plane of the plate **1** at a suitable location and bending it up to a suitable height. Instead of forming the hinge pin or pintle **25** as described, it may be made from a rod mounted on a pair of spaced tongues or tabs struck out from the band **18**. Other changes of a similar nature, as well as other embodiments, all coming within the spirit of the present invention, will undoubtedly suggest themselves to those skilled in the art. It is desired, therefore, that the foregoing shall be taken merely as illustrative, and not in a limiting sense.

What is claimed is:

1. A golf putting practice device comprising, in combination, a mounting member adapted to rest on a flat, horizontal support, a ball receiving member closed at one end and having an entrance opening at the opposite end thereof for reception along the plane of said support of a ball directed toward said ball receiving member along said plane, and means connecting said ball receiving member at its said closed end to said mounting member for movement relative thereto from a first, relatively lower position wherein said ball receiving member rests on said support in forward extension of said mounting member to a second, relatively elevated position in angular relation to said mounting member and back to said first position, said ball receiving member opening being of such size and shape and being so located that, when said ball receiving member is in its said first position, said opening rises upwardly from the level of said support whereby the ball, upon reaching said opening while moving along said support in a direction toward said opening can pass directly through said opening and into said ball receiving member free of any impediments.

2. A golf putting practice device comprising, in combination, a mounting member adapted to rest on a flat, horizontal support, a ball receiving member closed at one end and having an entrance opening at the opposite end thereof for reception along the plane of said support of a ball directed toward said ball receiving member along said plane, and means pivotally connecting said ball receiving member at its said closed end to said mounting member for swinging movement of said ball receiving member to and from a first position wherein said ball receiving member rests on said support in forward extension of said mounting member and a second position in at least partially overlapping relation with said mounting member, said ball receiving member opening being of such size and shape and being so located that, when said ball receiving member is in its said first position, said opening rises upwardly from the level of said support whereby the ball, upon reaching said opening while moving along said support in a direction toward said opening can pass directly through said opening and into said ball receiving member free of any impediments.

3. A golf putting practice device comprising, in combination, a mounting member adapted to rest on a flat, horizontal support, a ball receiving member closed at one end and having an entrance opening at the opposite end thereof for reception along the plane of said support of a ball directed toward said ball receiving member along said plane, hinge means pivotally connecting said ball receiving member at its said closed end to one end of said mounting member so that said ball receiving member can normally rest on said support in a first position in forward extension of said mounting member and said ball receiving member can be tilted upwardly about said hinge means to swing from said first position to a second position in at least partially overlapping relation with said mounting member, and means on said mounting member for limiting the angle through which said ball receiving member can swing over said mounting member, said ball receiving member opening being of such size and shape and being so located that, when said ball receiving member is in its said first position, said opening rises upwardly from the level of said support whereby the ball, upon reaching said opening while moving along said support in a direction toward said opening can pass directly through said opening and into said ball receiving member free of any impediments.

4. A golf putting practice device comprising, in combination, a mounting plate adapted to rest on a flat, horizontal support, a ball receiving member having an upstanding, continuous, substantially arcuate wall closed at one end and having an entrance opening at the opposite end thereof for reception along the plane of said support of a ball directed toward said ball receiving member along said plane, means pivotally connecting said member at its said closed end to one end of said plate so that said member can rest on said support along the bottom edge of said wall thereof in a first position in forward extension of said plate, said member being tiltable upwardly about said means to swing from said first position to a second, angular position in at least partially overlapping relation with said plate, and means on said plate for limiting the angle through which said member can swing over said plate, said ball receiving member opening being of such size and shape and being so located that, when said ball receiving member is in its said first position, said opening rises upwardly from the level of said support whereby the ball, upon reaching said opening while moving along said support in a direction toward said opening can pass directly through said opening and into said ball receiving member free of any impediments.

5. A golf putting practice device according to claim **4** wherein said ball receiving member comprises a band of substantially semi-circular form providing said wall, said member being open at the top whereby a ball rolling into said member through said opening with relatively high speed, upon striking said wall in the vicinity of and above said pivotal connection, will cause said member to swing upwardly to said angular position and will roll over said wall beyond said member.

6. A golf putting practice device according to claim **5** with the addition of means on said mounting plate comprising a backstop for balls which pass beyond said ball receiving member.

7. A golf putting practice device according to claim **5** wherein said mounting plate is provided with a backstop holder in spaced relation to said ball receiving member, said device including an elongated backstop carried by said holder and extending transversely across said mounting plate to serve as a backstop for balls which pass beyond said ball receiving member.

8. A golf putting practice device according to claim **5** wherein said mounting plate has a transverse channel at the end thereof remote from said ball receiving member, and an elongated member in said channel extending transversely across said mounting plate beyond the sides of

said ball receiving member whereby said elongated member can act as a backstop for balls which pass beyond said ball receiving member.

9. A golf putting practice device according to claim **4** wherein said means for limiting the angle through which said ball receiving member can swing comprises a portion of said plate extending upwardly out of the plane thereof.

10. A golf putting practice device according to claim **4** with the addition of means for affixing said mounting plate to said support against accidental displacement.

11. A golf putting practice device according to claim **10** wherein said affixing means comprises spike members

extending down from said mounting plate and adapted to be driven into said support for anchoring said mounting plate firmly on said support.

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