May 20, 1930. F. O. FISH 1,759,156

GOLF PRACTICE APPARATUS OR GAME

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Fig. 1

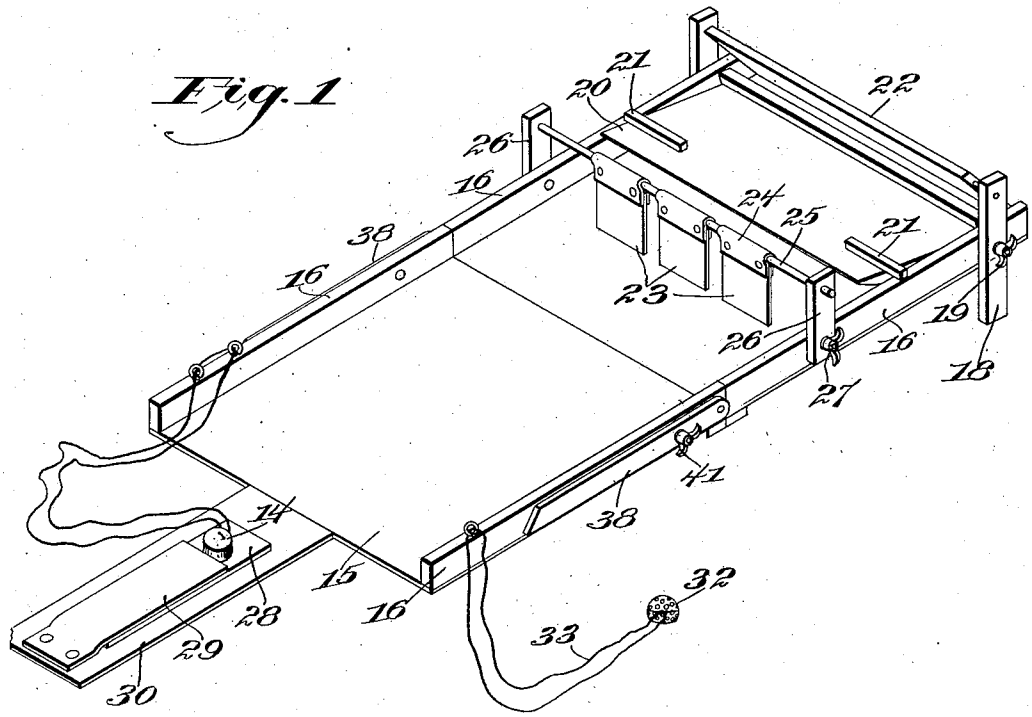


Fig. 2

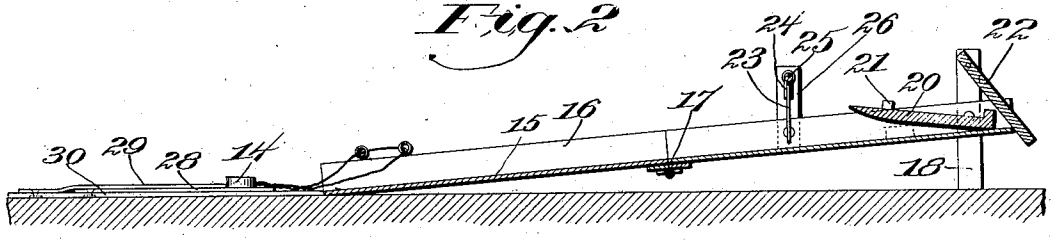
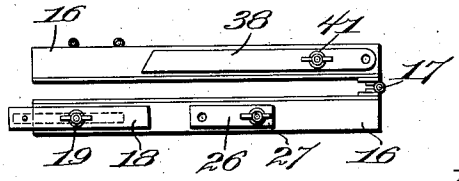


Fig. 3



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GOLF PRACTICE APPARATUS OR GAME

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Fig. 4

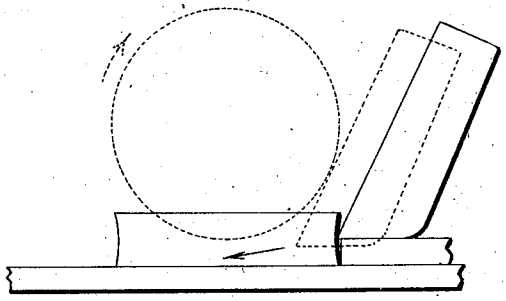


Fig. 5

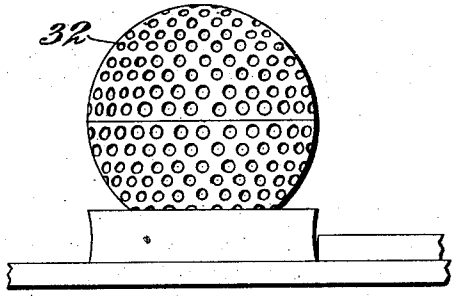


Fig. 6

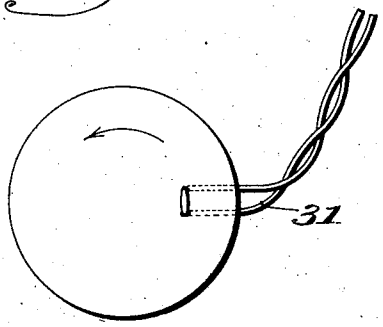


Fig. 7

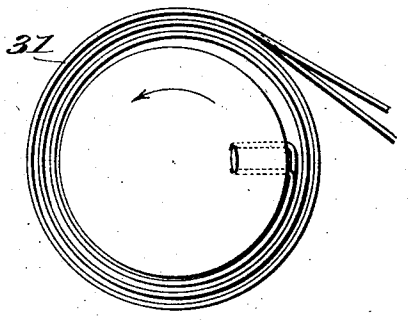


Fig. 8

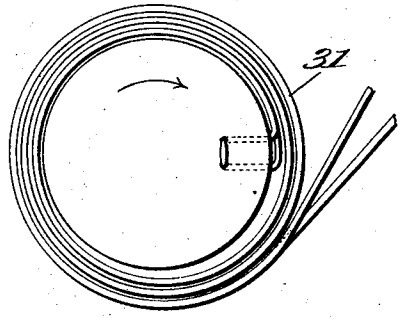


Fig. 9



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Fig. 10

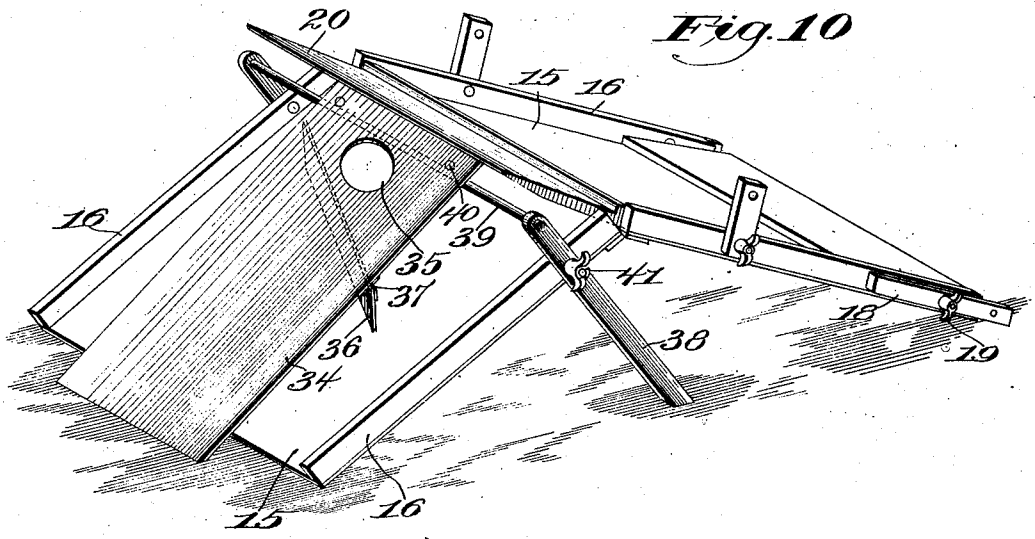


Fig. 11

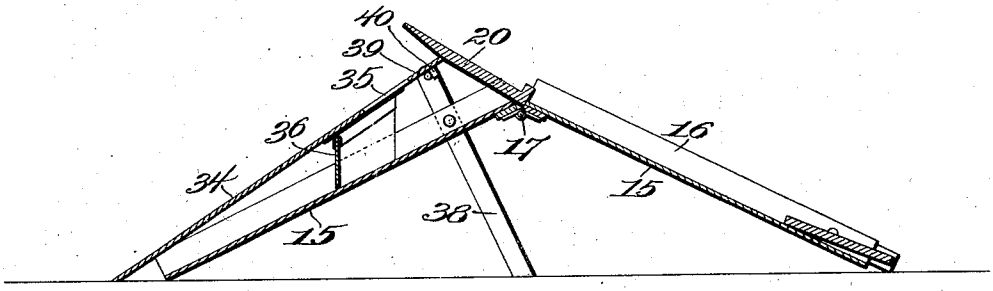


Fig. 12

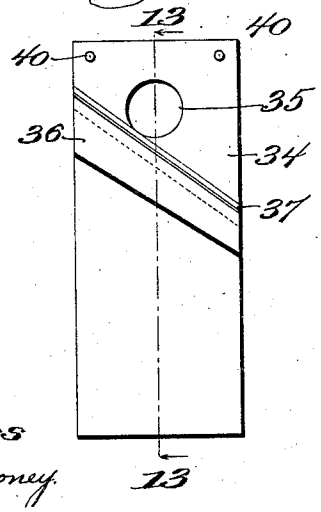
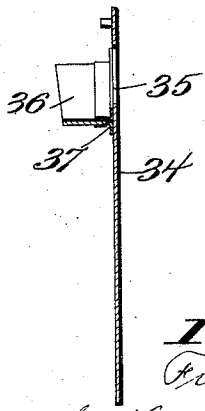


Fig. 13



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UNITED STATES PATENT OFFICE

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GOLF PRACTICE APPARATUS OR GAME

Application filed January 7, 1926. Serial No. 79,769.

The present invention relates to apparatus for the practice of golf away from the golf links in restricted quarters and preferably indoors where the use of a regulation ball requires expensive and elaborate apparatus and in any event is more or less dangerous.

The object of the invention is to provide an apparatus which can be used safely in restricted quarters with any golf club which the player prefers and which will give the desired practice without liability of inducing bad habits.

With the above object in view, the apparatus consists in the devices and arrangement of parts hereinafter described and claimed.

For all golf strokes except putting a disk of suitable material such as vulcanized rubber is used in the place of the regulation ball which disk is substantially the diameter of a golf ball and of a thickness which permits it to be driven from a playing surface or tee for five or six feet without tumbling. A suitable playing surface or tee is provided from which the disk is driven and means are provided by which the disk can be stopped without rebound while in full flight a few feet from the starting point. The means for stopping the disk comprise a receiving surface formed on a base board and a catcher board supported above the receiving surface so as to form a converging throat into which the disk passes. The catcher board is mounted so that it can be lifted to permit the disk or disks which have been played to be removed, and is preferably pivoted so that it can also yield slightly as the disk passes beneath it. To intercept a disk which may pass beyond the throat, a back stop of any suitable character may be provided, the preferred form of back stop being a pivotally mounted board arranged beyond the catcher board.

The base board is preferably arranged so that the receiving surface inclines upwardly from the playing surface of the tee in a position to intercept the line of flight of the disk, thus insuring that the disk will be flat against the receiving surface when it reaches the throat formed by the receiving surface and catcher board.

The position in which the disk is found beneath the catcher board will indicate the direction of flight of the disk, but in order to give a better indication, and afford an object at which to shoot, a series of tell-tales may be arranged across the receiving surface in front of the catcher board which tell-tales are struck and moved by the disk in its flight along the receiving surface.

For the successful operation of the apparatus, it is necessary that the disk, during its flight, slide along the receiving surface and in order to secure this result, regardless of the character of club used, the tee in addition to the playing surface from which the disk is driven, is provided with a guard in the form of a mat located behind the disk in position to prevent the club head from striking so low on the disk as to lift it above the receiving surface. This guard may be a sheet of yielding material such as vulcanized rubber, and is preferably one-half the thickness of the disk so that the club head is caused to strike the disk substantially at or above the center of the disk. With straight faced wooden clubs the use of the guard will ordinarily be unnecessary, but with iron clubs and particularly those with a face set back as much as a midiron or mashie the use of the guard is necessary.

An objectionable feature of golf practice apparatus which have heretofore been devised is the inability of the player to determine whether his stroke produces a straight ball, a pull, or a slice. A feature of the present invention remedies this defect and indicates to the player with absolute accuracy the effect which his stroke would have on a regulation ball. This feature of the invention consists in the provision of means attached to the golf disk for indicating the direction in which the disk spins during its flight and the amount of such spin from the time the disk leaves the tee until it is caught by the catcher board. As a means for producing this indication, the golf disk is provided with a string or pigtail which during the flight of the disk is wound up upon the disk in one direction or the other, depending on the direction in which the disk is spinning. The number of turns about the disk will, of course, indicate the degree of spin

and consequently the amount of pull or slice which would be imparted to a golf ball by the same stroke. If desired, a double string may be used, one end being attached to the disk and the other end to a portion of the apparatus in such a manner as to prevent that end of the string from twisting. In such case, the amount of spin imparted to the disk and the direction of spin will be indicated by the amount and direction of twist in the double string when the disk is removed from the apparatus.

To secure the desired results as to freedom from tumbling or lifting in its flight above the receiving surface of the base board, the disk is comparatively thin as compared with its diameter, the preferred thickness of the disk being approximately three-eighths of an inch which is somewhat less than one-fourth of its diameter. Such a disk at first does not present to the eye precisely the same appearance as a regulation golf ball, and to present a mark having the appearance of a golf ball at which to swing the club, a light truncated ball of sponge rubber or other suitable material substantially the size of a golf ball and adapted to rest upon the golf disk when in playing position on the tee may be used. This ball, if desired, may be fastened to some portion of the apparatus by a comparatively short piece of elastic. With this arrangement, the truncated ball gives a mark similar to a golf ball at which to swing the club, while the disk offers sufficient resistance to the club head to give substantially the reaction of a regulation ball.

A feature of the present invention also contemplates the use of the apparatus for putting with a regulation ball. To this end a perforated putting board is provided having a ball deflector extending obliquely across its lower surface and extending downwardly therefrom. The base board of the apparatus is provided with legs to support the base board at an inclination to the floor and the upper ends of these legs project above the base board to form supporting standards for a transverse rod upon which one end of the putting board can rest, the other end of the board contacting with the floor beyond the base board.

Referring now to the accompanying drawings in which is illustrated an apparatus embodying the invention, Fig. 1 is a perspective view of the complete apparatus set up for use with a golf disk or disks. Fig. 2 is a longitudinal sectional elevation of the apparatus illustrated in Fig. 1. Fig. 3 is a view in side elevation of the apparatus folded up for convenience in storing away or in shipment. Fig. 4 is a view in side elevation showing somewhat diagrammatically the tee with its guard, a golf disk in playing position, and also indicating the action of a golf club in striking the disk, and the action which the same stroke would have upon a regulation golf ball. Fig. 5 is a view in side elevation of the tee with its guard, a golf disk and a superimposed truncated sponge rubber ball. Fig. 6 is a plan view of a golf disk provided with a pigtail consisting of a double string shown as being twisted by the spinning of the disk in the direction indicated by the arrow. Fig. 7 is a view similar to Fig. 6, but showing the manner in which the string may be wound about the disk before it is removed from the apparatus, the direction in which the string is wound in this figure indicating that the disk during its flight was spinning in a direction to produce a pull. Fig. 8 is a view similar to Fig. 7, but showing a string wound about the disk in a direction indicating that the stroke would have produced a slice. Fig. 9 is a view in side elevation of the disk illustrated in Fig. 8. Fig. 10 is a perspective view of the apparatus set up for putting. Fig. 11 is a longitudinal sectional elevation of the apparatus illustrated in Fig. 10. Fig. 12 is a detail underneath plan view of the putting board with the ball deflector folded flat against the board, and Fig. 13 is a longitudinal sectional view taken on the line 13—13 of Fig. 12, but showing the ball deflector standing at right angles to the board.

In Fig. 1, the golf disk is indicated at 14, and the base board with the receiving surface at 15. This base board is provided with side rails 16, and for convenience in storing away or in shipping is divided into two parts which are hinged together, indicated at 17, to permit the board to be folded as indicated in Fig. 3. At its forward end, the base board rests against the floor of the room in which the apparatus is to be used, and its rear end is supported at the desired distance from the floor by legs 18. These legs are pivotally mounted upon the side rails 16 by means of bolts and wing nuts 19 which permit the legs to be folded down into alignment with the side rails when the apparatus is to be folded up as indicated in Fig. 3.

The catcher board is indicated at 20 and is arranged with its rear edge in contact with the receiving surface 15 near the rear edge of the base board. The forward edge of the catcher board is beveled on its under surface and is supported by bearing blocks 21 which are secured to the upper surface of the catcher board and project over the side rails 16. The under surface of the catcher board and the receiving surface 15 thus form a throat to receive, stop, and hold the golf disk as it travels up the receiving surface. The manner in which the disk is stopped and held in the throat is indicated in Fig. 2 in which a disk is shown in dotted lines held in the throat.

A number of disks may be played one after

the other, if desired, before any of them are removed from beneath the catcher board. In such case the board will be lifted by the disks more or less, and it may happen that a disk will pass completely through the throat beyond the board. To provide a stop for such a disk, the back stop 22 is provided consisting of a board pivotally mounted in the upwardly projecting ends of the legs 18, and extending downwardly across the rear edge of the base board.

It will be noted that the arrangement of the catcher board and base board permits any desired number of golf disks to be played before removing any of them from the apparatus and permits either or both boards to be lifted readily when the disks are to be removed.

The tell-tales which serve as marks at which to shoot and which also indicate the direction of flight of the disk are illustrated at 23. As shown, these tell-tales consist of small sheets of material such as vulcanized sheet rubber held in metallic clips 24 which are pivotally mounted upon a supporting rod 25. This rod extends across the base board of the apparatus and is supported in the upper ends of standards 26 secured to the side rails 16, the securing means being bolts and wing nuts 27 which permit the standards to be folded down into alignment with the side rails 16 when the apparatus is folded up as indicated in Fig. 3.

The tee from which the golf disks are driven comprises a mat 28 provided with a playing surface upon which the disk is placed and a guard mat 29 overlapping the mat 28 and of substantially one-half the thickness of the disk. Both of these mats, as illustrated, are secured to a board 30 adapted to rest on the floor and having its forward edge arranged to contact with the edge of the base board 15.

Golf disks without any attachment for indicating direction of spin may be used, but when the direction of spin is to be indicated, a disk similar to that illustrated in Figs. 6 to 9 is used. This disk is provided with a string indicated at 31. This string enters the side of the disk near its lower surface, passes upwardly through the upper surface, then downwardly again to emerge from the side near the place of entrance. The string is thus securely attached to the disk and does not form a projection on the smooth under side of the disk. The ends of the string remote from the disk may be left free or they may be threaded through screw eyes on one of the side rails 16 as indicated in Figs. 1 and 2. In such case the length of the string should be longer than the distance from the screw eye to the receiving throat formed by the catcher board 20 and base board 15. The manner in which the string indicates the direction and amount of spin to produce either a slice or a pull will be obvious from inspection of Figs. 6 to 9 and from the description already given.

The truncated light ball of sponge rubber which may be used in connection with the golf disk is indicated at 32 in Figs. 1 and 5. Preferably this ball will be attached by means of an elastic string 33 to a screw eye on one of the side rails 16.

When the apparatus is to be used for putting, it is set up as indicated in Figs. 10 and 11, and the putting board, shown separately in Figs. 12 and 13, is also used. The putting board, indicated at 34, is provided with a perforation 35 through which a properly played ball will drop and with a ball deflector 36 consisting of a sheet of stiff material pivotally mounted on the under side of the putting board by means of a hinge 37 which permits the ball deflector to be folded down against the putting board in either direction. The ball deflector extends obliquely across the putting board so that the ball which has dropped through the perforation in the board will be deflected to one side of the board.

To form a support for the putting board and also to provide a surface for returning to the player a ball which drops through the perforation in the putting board, the forward section of the base board 15 is provided with supporting legs 38 which extend upwardly above the base board in position to support a rod 39 which extends transversely across the base board. The putting board at its perforated end is adapted to rest upon the supporting rod 39 as indicated in Figs. 10 and 11, and its front edge is arranged to rest upon the floor beyond the front edge of the base board 15. Projections 40 on the putting board may be provided to contact with the rod 39 and prevent the board from being displaced. To form a back stop for balls which would otherwise pass beyond the upper end of the putting board, the catcher board 20 may be placed as indicated in Figs. 10 and 11 with its lower face resting against the rear edge of the putting board.

The legs 38 are mounted on the side rails 16 of the base board by means of bolts and wing nuts 41 which permit the legs to be folded into alignment with the side rails when the putting board is not in use as indicated in Figs. 1 and 3. This construction also permits the lower section of the base board 15 and the putting board 34 to be supported at any desired inclination, the putting board being always at a greater inclination than the base board, but in all cases the base board having a sufficient inclination to cause a ball which has dropped into the perforation 35 to be returned towards the player. It will be noted that the pivotal arrangement of the ball deflector 36 permits the de-

flector to contact with the base board regardless of the particular inclination at which the apparatus is set up.

The manner in which the apparatus can be folded into a compact arrangement for storage or shipment will be clearly apparent from inspection of the drawings and from the preceding description. As has been stated, the legs and standards which are attached to the side rails can be folded down into alignment with the rails. Also, the back stop 22 can be turned down against the base board so that it is flush with or below the rails 16.

The nature and scope of the present invention having been indicated and an apparatus embodying the invention in its preferred form having been specifically described what is claimed is:

1. A golf practice apparatus comprising a disk having substantially the diameter of a golf ball and a thickness which adapts it to be driven from a playing surface by a golf club without tumbling, an inclined receiving surface intercepting the line of flight of the disk and means for stopping the disk after being intercepted by said receiving surface.

2. A golf practice apparatus comprising a disk having a diameter substantially that of a golf ball and a thickness which adapts it to be driven from a playing surface by a golf club without tumbling, a receiving surface and a catcher board cooperating with the receiving surface to form a throat to stop and hold the disk.

3. A golf practice apparatus comprising a disk having a diameter substantially that of a golf ball and a thickness which adapts it to be driven from a playing surface by a golf club without tumbling, a receiving surface, a pivoted catcher board cooperating with the receiving surface to form a throat to stop and hold the disk, and a back stop to intercept a disk passing beyond the throat.

4. A golf practice apparatus comprising a disk having a diameter substantially that of a golf ball and a thickness which adapts it to be driven from a playing surface by a golf club without tumbling, a receiving surface, a pivoted catcher board cooperating with the receiving surface to form a throat to stop the disk, and a board pivotally mounted beyond the catcher board and forming a back stop to intercept a disk passing beyond the throat.

5. A golf practice apparatus comprising a disk having a diameter substantially that of a golf ball and a thickness which adapts it to be driven from a playing surface by a golf club without tumbling, a receiving surface, a series of tell-tales arranged to be moved by the disk passing along the receiving surface and indicate the path of the disk, and means for stopping the disk after passing the tell-tales.

6. A golf practice apparatus comprising a disk having a diameter substantially that of a golf ball and a thickness which adapts it to be driven from a playing surface by a golf club without tumbling, and a tee comprising a playing surface from which the disk is driven, and a guard to insure impact of the club above the lower surface of the disk.

7. A golf practice apparatus comprising a disk having a diameter substantially that of a golf ball and a thickness which adapts it to be driven from a playing surface by a golf club without tumbling, and a tee comprising a playing surface from which the disk is driven and a guard consisting of a yielding mat projecting above the playing surface substantially one-half the diameter of the disk to insure impact of the club head substantially at or above the center of the disk.

8. A golf disk of vulcanized gum such as rubber having a diameter substantially that of a golf ball and a thickness which adapts it to be driven from a playing surface by a golf club without tumbling, and being provided with means for indicating the direction in which the disk spins during its flight.

9. A golf disk of vulcanized gum such as rubber having a diameter substantially that of a golf ball and a thickness which adapts the disk to be driven from a playing surface without tumbling, and having attached thereto a string to indicate the direction in which the disk spins during its flight.

10. A golf practice apparatus comprising a disk having a diameter substantially that of a golf ball and a thickness which adapts it to be driven from a playing surface by a golf club without tumbling, a receiving surface, means for stopping the disk and holding it against the receiving surface, and means attached to the disk for indicating the direction in which the disk spins during its flight.

11. A golf practice apparatus comprising a disk having a diameter substantially that of a golf ball and a thickness which adapts it to be driven from a playing surface by a golf club without tumbling, means for stopping the disk while in full flight, and a double string held from twisting at one end and attached at its other end to the disk to indicate by its twist the direction in which the disk spins during its flight.

12. A golf practice apparatus comprising a base board adapted to be supported at an inclination to the horizontal with one edge in contact with the floor, standards rising from the side edges of the base board, a rod connecting the standards, and a perforated putting board arranged to rest at one end on the rod and at the other end on the floor whereby the putting board is supported above the base board, but at a greater inclination to the horizontal, and a ball deflector extending obliquely across the lower surface of the putting

board and projecting downwardly towards the base board.

13. A golf practice apparatus comprising a base board, legs pivotally mounted at the sides of the base board to support the board at an inclination to the horizontal with one edge in contact with the floor, said legs rising above the base board to form rod supporting standards, a rod connecting the standards, a perforated putting board arranged to rest at one end on the rod and at the other end on the floor whereby the putting board is supported above the base board, but at a greater inclination to the horizontal, and a ball deflector extending obliquely across the lower surface of the putting board and projecting downwardly towards the base board.

14. A golf practice apparatus comprising a base board adapted to be supported at an inclination to the horizontal with one edge in contact with the floor, a perforated putting board, means for supporting the putting board above the base board with one edge in contact with the floor so that the putting board is at a greater inclination to the horizontal than the base board, and a ball deflector extending obliquely across the putting board pivotally connected to the under surface of the putting board and projecting downwardly towards the base board.

In testimony whereof I have signed my name to this specification.

FRED O. FISH.