

May 18, 1926.

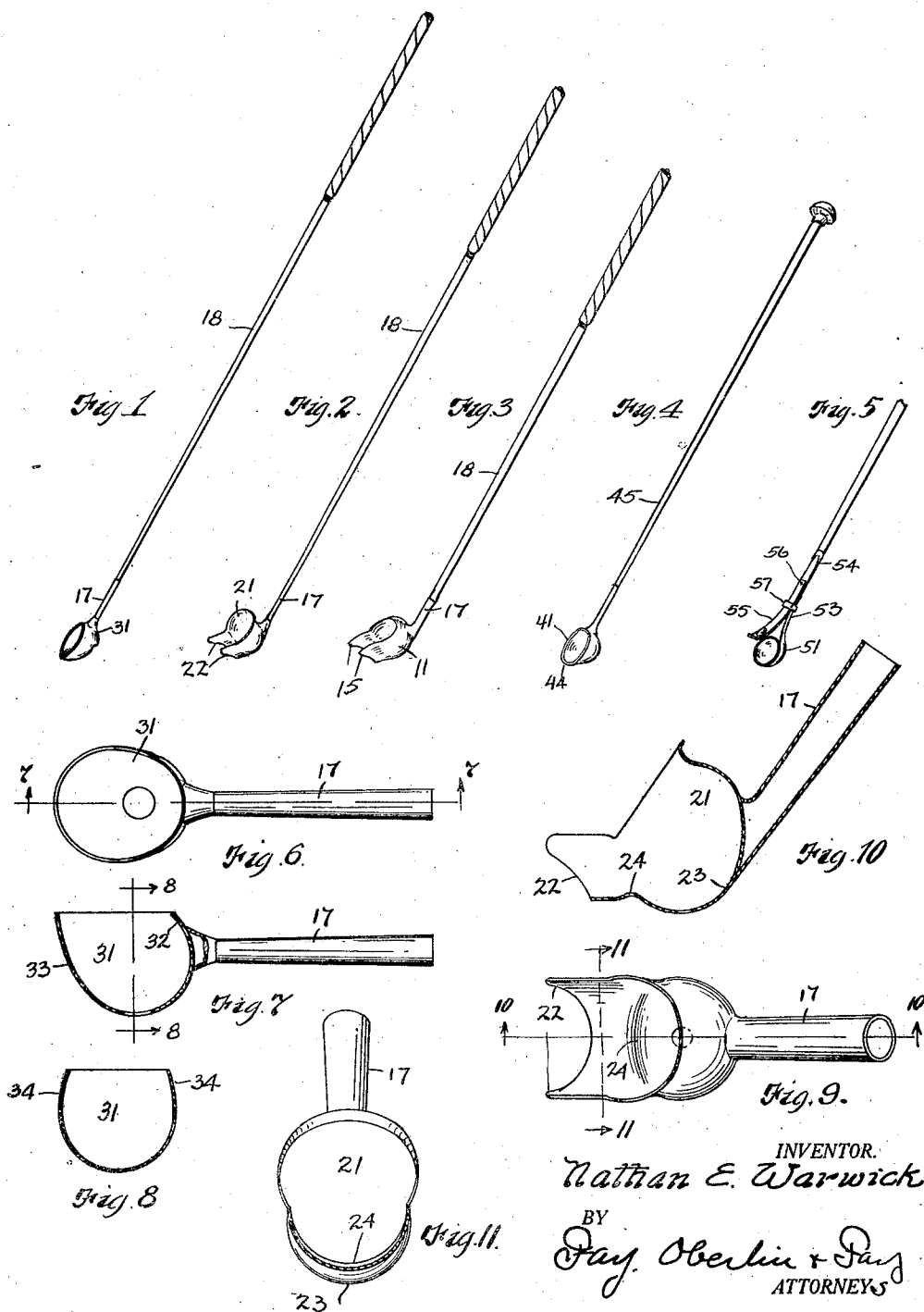
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N. E. WARWICK

DEVICE FOR THROWING BALLS

Filed Nov. 16, 1923

2 Sheets-Sheet 1



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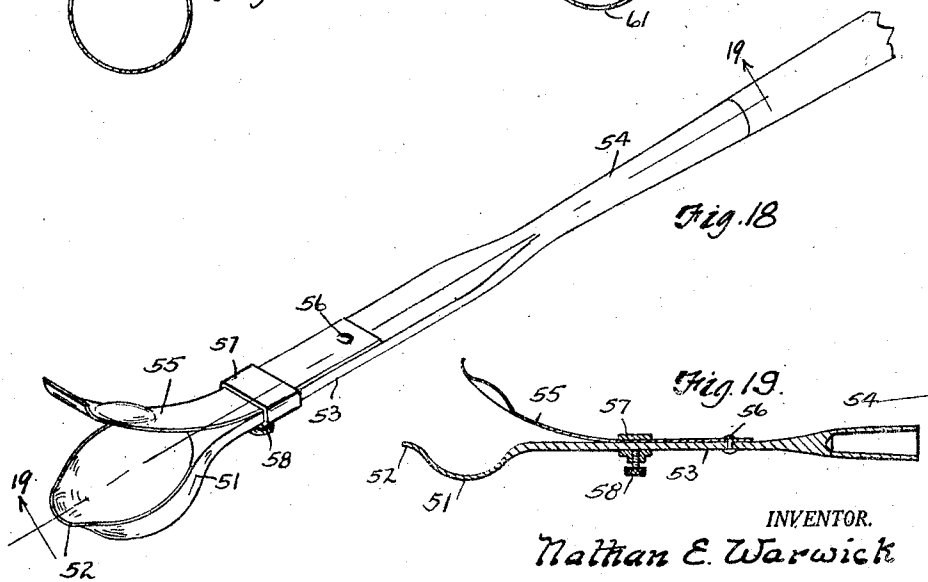
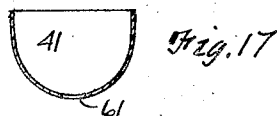
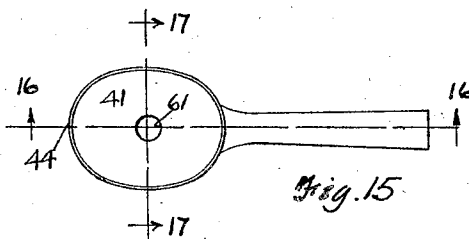
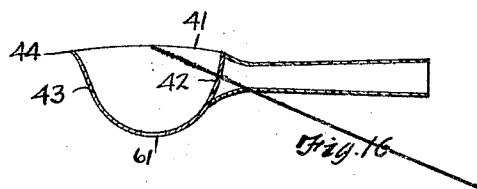
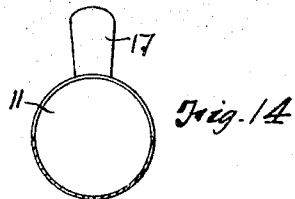
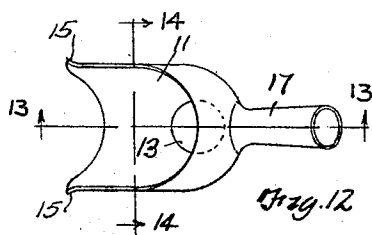
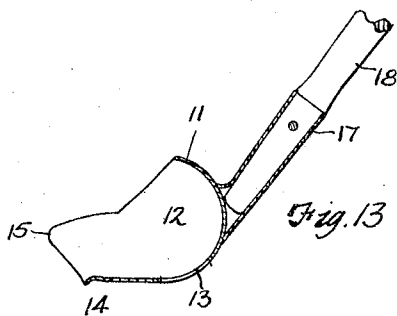
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UNITED STATES PATENT OFFICE.

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DEVICE FOR THROWING BALLS.

Application filed November 16, 1923. Serial No. 675,071.

The present invention relates to games played with a ball, and more particularly to an outdoor game similar in general respects to golf, but also may be adapted to indoor ball games. The game is best adapted for open fields or golf courses and, as shown, the appliances are of such a construction as to readily handle the usual golf ball.

The object of the invention is to provide a series of appliances by which a golf ball or balls of other sizes and construction may be picked up and thrown or hurled accurately and to distances corresponding to such distances as are usually obtained in playing golf or other ball games. The appliances are so arranged or constructed that the ball may be thrown either overhand, underhand or from the side, and a set of appliances is herein illustrated, the several devices being adapted to throws of varying distances and also to picking up from the ground or goal cups the balls, or retrieving same from water or places not easily accessible.

The appliances and the game or games to which they may be adapted are of general utility and benefit, being more especially suited to inexperienced persons, to persons of advanced age, or others who for various reasons cannot successfully wield heavy clubs or indulge in strenuous games. To the accomplishment of the foregoing and related ends, said invention, then, consists of the means hereinafter fully described and particularly pointed out in the claims.

The annexed drawing and the following description, set forth in detail, certain mechanism embodying the invention, such disclosed means constituting, however, but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawing:—

Figs. 1 to 4, respectively, are perspective views of different types of ball-throwing devices or clubs; Fig. 5 is a perspective view of another form; Fig. 6 is a top plan view of the club head shown in Fig. 1; Fig. 7 is a section on the line 7—7 of Fig. 6; Fig. 8 is a section on line 8—8 of Fig. 7; Fig. 9 is a top plan view of the club head shown in Fig. 2; Fig. 10 is a section on the line 10—10 of Fig. 9; Fig. 11 is a section on the line 11—11 of Fig. 9; Fig. 12 is a top plan view of the club head shown in Fig. 3; Fig. 13 is a section on the line 13—13 of Fig. 12; Fig. 14 is a section on line 14—14 of Fig. 12; Fig. 15 is a top plan view of the club

head shown in Fig. 4; Fig. 16 is a section on line 16—16 of Fig. 15; Fig. 17 is a section on the line 17—17 of Fig. 15; Fig. 18 is an enlarged perspective view of the club head shown in Fig. 5, and Fig. 19 is a section on the line 19—19 of Fig. 18.

Of the clubs or throwing devices, the form illustrated in Figs. 3, 12, 13 and 14 takes the place of the usual putter in golf. This club comprises a head 11 having a substantially cup-shaped receptacle 12 with an aperture 13 in the bottom forming a seat for the ball and providing passage for water, sand, etc. Forwardly of the receptacle is a trough portion comprising a bottom 14 slightly raised forward of the aperture to secure forward rolling motion of balls and two slightly flaring walls 15 which extend beyond the forward edge 16 of the bottom, the forward end of the trough being preferably of concave contour, as illustrated, to more easily control the putting of the ball as well as to facilitate the picking up of balls. The head is also provided with a shaft socket 17 and a suitably stiff shaft 18 is mounted therein.

The club shown in Figs. 2, 9, 10 and 11 is for short distance throwing similar to the golf mashie or mashie-niblic and this club is similar in general aspects to the putter, the head having the cup-shaped receptacle 21 with the forwardly extending trough 22 with end curved as in Fig. 3, but in this form the bottom 23 of the receptacle is below the level of the trough with a slightly raised portion 24 between the two which tends to throw the ball upwardly and with forward rolling motion when used underhand. The receptacle is deep at the back terminating in an overhanging lip, projecting slightly inwardly, the edge being turned outwardly to aid in throwing the ball upwardly with a forward rolling motion when used overhead. This club also has the shaft socket 17 and shaft 18 of general golf club type.

The form shown in Figs. 1, 6, 7 and 8 is a club for hurling long distance and the head provides a cup-shaped ball-receiving receptacle 31 of general egg shape with aperture as in Fig. 3, with the rear wall 32 extending slightly forwardly over a portion of the receptacle and with the front wall 33 curving upwardly to the rim of the cup. The sides 34 likewise curve inwardly slightly, as best shown in Fig. 8. A shaft socket 17 and shaft 18 are likewise provided,

the shaft being longer than those of the previously described clubs, the grip end being stiff and the cup end very flexible and made of any suitable material.

5 The club illustrated in Figs. 4, 15, 16 and 17 is a modification of the club shown in Fig. 1, the head being similar in general shape but having the receptacle 41 more truly elliptical in form and with the rear
10 wall 42 curving outwardly. The front wall 43 flares particularly at the lip 44 and has an aperture in the center of the cup for the passage of water, sand, etc. A shaft socket 17 is provided and a very resilient flexible
15 shaft 45 is used, the shaft preferably having a gripping handle 46 at the extreme end. With this club considerable distance may be obtained using an underhand or overhand throw with a short swing resembling casting.

20 In Figs. 5, 18 and 19 I have illustrated another form of club with which long distance may be obtained. In this form the club head provides a ball-receiving receptacle 51 more nearly the shape of a round spoon with its
25 forward rim 52 turned back slightly. This receptacle is preferably formed at the end of a club head having a highly resilient flexible portion 53 between the receptacle and the shaft socket 54, such portion being
30 illustrated as a flat spring member. A retaining spring 55 is employed which is attached to the portion 53 at one end by a rivet 56 or the like, and is adjustably positioned by a ferrule 57 having a set screw 58
35 which may be moved along the portion 53. The forward end of the spring is curved the shape of the ball to hold the ball in the receptacle and the end is extended to provide a friction finger over which the ball rolls in
40 leaving the club head to give forward rolling motion to the ball when an overhand throw is employed. Other types of holding springs are contemplated, such springs being used to hold the ball in the club head during
45 the swing and being so arranged as to allow the ball to leave the club readily.

In playing a game similar to golf with these clubs, it has been found that clubs such as shown in Figs. 1, 4 and 5 may be
50 used overhand to the best advantage, although they may also be swung underhand or from the side. The two clubs shown in Figs. 2 and 3 are adapted to underhand swings and it will be noticed that the shaft
55 socket is at the rear and at such an angle to the head as to allow the ball-directly trough to approximately parallel the ground. The club shown in Fig. 2 is also well adapted for overhead throwing, provision being
60 made in this club so as to adapt it equally well for such use. The shafts of the first three clubs are provided with handle windings 60, as in the usual golf clubs and the shafts of Figs. 2 and 3 are substantially the
65 same as golf club shafts. The shafts in

Figs. 1 and 5 are stiff at the grip ends and longer than the usual golf club drivers or brassies and the ends of the shafts are very flexible and resilient.

In all of the club heads the receptacle is 70 provided with one or more small apertures 61 in the bottom, except in the case of the clubs shown in Figs. 1 and 3, which are provided with the single larger aperture which provides a seat for the ball. In this way
75 water, or other liquid, or sand, may readily drain out of the club heads. To pick up a ball with the clubs it is only necessary to scoop it up with the club head and into the receptacle so that it is unnecessary to stoop
80 and pick up the ball by hand. It is very handy to pick the ball out of the putting cup with the club. With the club shown in Fig. 5 the ball may be picked up by pressing the club down over the ball until it is
85 forced into the receptacle, the spring member holding it in place.

While the use of such clubs is primarily adapted to the playing of a modified form of golf on the usual golf course or similar courses, they can be adapted to playing many similar games where it is desirable to propel a ball from a starting point to any desired finishing point. They are particularly adapted for use by people who cannot participate in strenuous games or sports, as stooping over is completely eliminated and the ball is propelled or thrown by an easy swinging motion. In the case of the
90 putter or club shown in Fig. 3, and the club shown in Fig. 2, the direction of the ball is partially controlled by the trough with the flaring sides out of which the ball must run. In the other clubs 1 and 4, the receptacle is larger than the ball and of
95 such a shape that a given amount of travel is obtained in the receptacle itself and direction and height of throw is controlled by the player. In the club shown in Fig. 5 the direction must be controlled by the
100 manner of swinging the club, but the spring member tends to give the ball a down spin which aids materially in gaining distance on the roll of the ball.

The exact method of swinging the clubs 115 is obviously left to the player, but the best results are obtained, as have been indicated, the two short clubs, Figs. 3 and 4, may be also swung overhead and the others with either a long overhand swing or from the
120 side. It is also found advantageous to throw the ball overhand from the club shown in Fig. 2, it being used for short relatively high throws or pitches to the putting green, but this is to be left to the player's de-
125 termination and ability.

Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the mechanism herein disclosed, pro- 130

vided the means stated by any of the following claims or the equivalent of such stated means be employed.

I therefore particularly point out and distinctly claim as my invention:—

1. A device for throwing balls of the character described, comprising a club head having a shaft socket, a handled shaft therein, said head being provided with a substantially cup-shaped ball-receiving receptacle providing a definite seat for the ball, and a forwardly extending portion in front of said receptacle adapted to control the direction of the ball as thrown from the club head.

2. A device for throwing balls of the character described, comprising a club head having a shaft socket, a handled shaft therein, said head being provided with a substantially cup-shaped ball-receiving receptacle providing a definite seat for the ball, and a forwardly extending portion forming a trough adapted to assist in controlling the direction and elevation of the ball as it is thrown from the club.

3. A device for throwing balls of the character described, comprising a club head having a shaft socket, a handled shaft therein, said head being provided with a substantially cup-shaped ball-receiving receptacle providing a definite seat for the ball, and a forwardly extending portion forming a trough adapted to assist in controlling the direction and elevation of the ball as it is thrown from the club, the forward end of

said trough being formed of concave contour.

4. A device for throwing balls of the character described, comprising a club head having a shaft socket, a handled shaft therein, said head being provided with a substantially cup-shaped ball-receiving receptacle providing a definite seat for the ball, and a forwardly extending portion forming a trough adapted to assist in controlling the direction and elevation of the ball as it is thrown from the club, the trough merging into the receptacle with a raised portion therebetween.

5. A device for throwing balls of the character described, comprising a club head having a shaft socket, a handled shaft therein, said head being provided with a substantially cup-shaped ball receiving receptacle, said receptacle having its rear and sides curved upwardly and overhanging the receptacle and its forward portion curved upwardly and outwardly.

6. A device for throwing balls of the character described, comprising a club head having a shaft socket, a handled shaft therein, said head being provided with a substantially cup-shaped ball-receiving receptacle, said shaft having a relatively stiff handle portion and a relatively resilient flexible portion adjacent the club head.

Signed by me, this 14th day of November, 1923.

NATHAN E. WARWICK.