

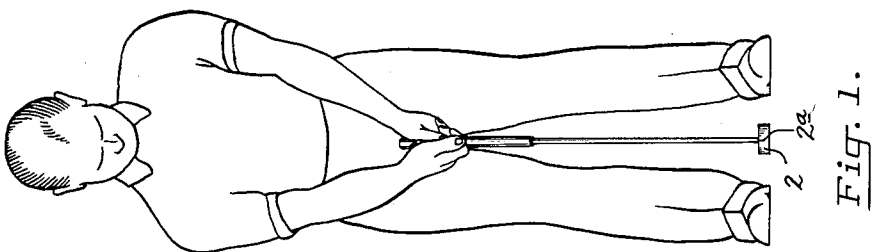
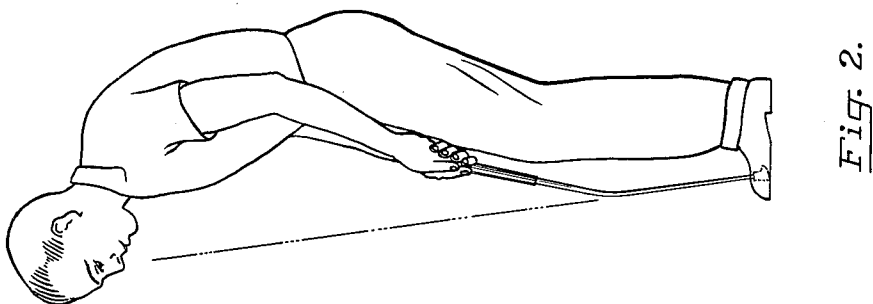
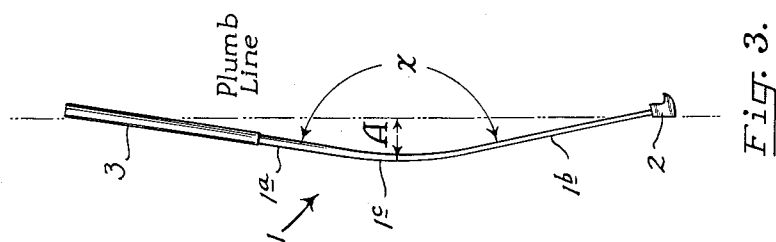
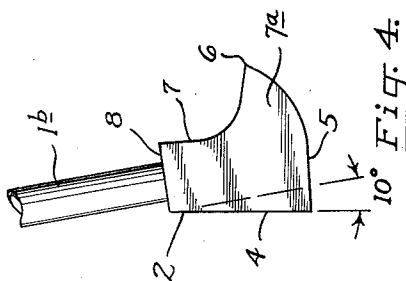
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3,062,549

GOLF PUTTER

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3,062,549 GOLF PUTTER

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My invention relates to golf putters and is directed specifically to that type of putter which is used croquet-mallet-style with the golfer facing the line of the putt and with his feet straddling the projected line. The ball is stroked while lying between the balls of the feet or slightly outwardly towards the toes. Such type of putter has a shaft joined to the putting head substantially at its midline. The putter head is preferably elongated so as to lie in a horizontal plane with the shaft extending upwardly therefrom. Golf putters of this general type have been designed and used in a limited way, but have not been widely accepted. They are legal and authorized under United States Golf Association rules and regulations.

It is my observation that such a putter should hang pendent from a golfer's hands, should be so proportioned and arranged that the golfer may stand with his eyes directly over the ball and its line of flight with his feet arranged square, and astraddle of said line of flight so that the ball may be stroked with a pendulum swing with the elbows lightly touching the sides of the body. If the putter shaft is straight or substantially straight it is possible for the shaft to rotate on the back swing so that the putter head may become out of square with the projected line of flight and out of alignment therewith. I have discovered that if the putter shaft has a decided bend at its midpoint that the putter may hang comfortably in addressing the ball, will not rotate, will remain square with the line of flight and swing in alinement therewith.

It is therefore a principal object of my invention to provide a golf putter which when hanging plumb from a golfer's hands will have the lower portion of the shaft in line with the golfer's eyes and with the back of the golf ball. Said lower half of the shaft will incline rearwardly towards the putter head and, due to said conformation of the putter, may be moved backwardly low upon the ground without rotating and without wavering from a projected line along which the golfer intends the golf ball to roll. A putter thus arranged also puts substantial overspin upon the ball due to the shape of the shaft and the face of the golf club so that a golf ball struck with a putter so constructed will follow the putting line and follow its projected line of flight.

Further features of my invention and the details thereof are hereinafter described with reference to the accompanying drawings, in which:

FIG. 1 is a front view of a golfer using a putter embodying my invention as he stands in making a putting stroke;

FIG. 2 is a side view of such golfer and putter illustrating the manner in which the golfer's eyes sight down the lower half of the putter shaft at the ball lying between his feet, while his hands are arranged substantially rearwardly from said sight line and with the putter hanging pendent from his hands;

FIG. 3 is a side elevation of a putter embodying my invention illustrated in connection with a plumb line, showing the degree of angularity of the shaft of a putter and the vertical alinement of the putter face with said plumb line and its angularity with the lower half of the putter shaft; and

FIG. 4 is an enlarged view of a putter head for a putter embodying my invention illustrating the degree of loft which is formed upon said putter face with respect to the lower portion of the putter shaft so that the putter face

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will be vertical when it is used to address the ball, as the putter is illustrated in FIG. 3.

A golf putter embodying my invention is provided with a shaft 1, having an upper portion 1a and a lower portion 1b. Said portions are substantially of equal length and subtend a substantial oblique angle between them. The point of joinder between said portions presently is rounded upon a smooth sweep 1c. A club head 2 is joined to the lower end of lower portion 1b and a grip 3 is secured to the upper end of the upper portion of the shaft, in the usual manner. Except for the obliquely angular relationship of said shaft with respect to its several portions, said shaft and its grip are of usual conformation but may vary to meet the various styles and needs of putter shafts in the manners well recognized in the art.

The lower portion 1b of the shaft is joined to the club head at substantially its midpoint 2a. Said club head preferably is elongated, massive and has a striking face 4 of rectangular shape, having a width slightly less than the diameter of a golf ball. I have found that a good relationship of width to length of such striking face is one inch by three inches. The sole 5 of the putter head is preferably of sled-runner shape. That is, it terminates at the striking face in a plane substantially normal or at right angles to the striking face and curves upwardly upon a smooth curve towards the trailing edge 6 of the club head.

The back of the club head is preferably provided with a flange 7a so that substantial mass lies directly behind the point of ball impact with the club face. Such disposition of mass provides low swinging weight. Said flange also provides a sole of substantial width, fore and aft, that is, at right angles to the striking face so that the putter does not tend to catch the turf either upon the back swing or upon the forward swing. Although this conformation of the putter head in lateral cross section is preferred, it is not essential.

The lower portion 1b of the shaft extends substantially at right angles to the upper face 8 of the putter head. The striking face is provided with approximately a 10° loft as is illustrated in FIG. 4. This is not true loft which would tend to give back spin to the ball, because when the club is held pendent, as is illustrated in FIG. 2, a plumb line extends from the upper end of the grip in parallelism with the striking face 4 and the lower end of the shaft slopes forwardly down the line of putt at an angle of approximately 10°.

The upper and lower portions of the shaft subtend an included angle x , as is illustrated in FIG. 3, of approximately 150°. That is to say, the upper and lower portions of the shaft are out of alinement with each other approximately 30° from a straight line. In a putter having a shaft approximately thirty-four inches long the deflection A from the plumb line is three and one-half to four inches. This angle and degree of deflection is not critical. It is merely illustrative of a preferred arrangement of parts.

The length of putter shafts vary within limits so that they will conform to the height of a golfer, the degree to which he crouches in addressing his putt and the manner in which he stands. The critical factor is that a golfer should be able to stand with his eyes over the ball when it is placed adjacent the balls or toes of his feet with the putter hanging pendent from his hands in natural putting position and with his line of sight looking down the lower portion of the putter shaft, as is illustrated in FIG. 2. If the shaft is bent at an oblique angle to accommodate this position the putter's elbows may rest lightly or brush against his body and in making his back swing and follow through he may look squarely down upon the back of the ball being putted and when the ball is struck by the putting face the face will be vertical and the ball will be struck

to produce overspin or good rolling effect so as to hold the line to the cup.

I have found that with a putter having the angular deflection of the two portions of the shaft, the length suggested and the upward angularity of the striking face of the putter will permit comfortable and efficient use by substantially all golfers, both men and women. Of course, a slight adjustment may be made to suit the individual golfer by arranging the hands upon different parts of the grip so as to promote a comfortable stance and putting action. The putter is gripped with the palms of the two hands squarely opposing each other and lying in the plane of the projected line of putt. The outward angle of the upper portion of the shaft is comfortable and corresponds, more or less, to that of a straight shafted putter when used to strike a golf ball with the feet aligned with the line of flight rather than straddling said line. The mass of the putter is supported by the forefingers and the wrists move upon a single axis of articulation. The putter may be swung backward between the feet comfortably for a relatively long back stroke, as with a long putt, and the follow through may be accommodated without setting up tension in the hands or arms and thus a smooth, true putting stroke results. Because the putter hangs pendent when held in the hands in addressing the ball as illustrated in FIG. 2, it is not necessary to exercise a tight grip upon the putter. Upon the follow through the weight of the club is supported by the second joint of the two forefingers. For the foregoing reasons there is no constriction or muscular tension set up in a golfer's hands which would disturb the swing of a putter in making a stroke nor to divert it from a straight line down the line of flight. Due to the fact that the weight of the putter in making the hitting stroke and following through is supported by the two forefingers, the length of the putt may nicely be gauged and the hitting action controlled substantially entirely by the muscles in the hands and forearms.

I claim:

1. A golf putter having an elongated shaft with a club head fixed centrally at one end thereof and with a grip at the other end, the club head having a ball striking surface lying substantially in a plane, said shaft having a lower portion secured to said club head and an upper portion carrying said grip, said shaft portions subtending an oblique angle with respect to each other in a plane normal to the plane of the ball striking surface and at the median line thereof.

2. A golf putter having an elongated shaft with a club head fixed centrally at one end thereof and with a grip at the other end, the club head having a ball striking surface lying substantially in a plane, said shaft having a lower portion secured to said club head and an upper portion carrying said grip, said shaft portions subtending an oblique angle with respect to each other in a plane normal to the plane of the ball striking surface and at the median line thereof, of a magnitude that the shaft is bent from a straight line extending from the tip of the grip to the striking face of the head a distance of approximately four inches.

3. A golf putter having an elongated shaft with a club head fixed centrally at one end thereof and with a grip at the other end, the club head having a ball striking surface

lying substantially in a plane, said shaft having a lower portion secured to said club head and an upper portion carrying said grip, said shaft portions subtending an oblique angle with respect to each other in a plane normal to the plane of the ball striking surface and at the median line thereof, said two shaft portions being of about equal length.

4. A golf putter having an elongated shaft with a club head fixed centrally at one end thereof and with a grip at the other end, the club head having a ball striking surface lying substantially in a plane, said shaft having a lower portion secured to said club head and an upper portion carrying said grip, said shaft portions subtending an oblique angle with respect to each other in a plane normal to the plane of the ball striking surface and at the median line thereof, said two shaft portions being of about equal length, and subtending an included angle of about 150°.

5. A golf putter having an elongated shaft with a club head fixed centrally at one end thereof and with a grip at the other end, the club head having a ball striking surface lying substantially in a plane, said shaft having a lower portion secured to said club head and an upper portion carrying said grip, said shaft portions subtending an oblique angle with respect to each other in a plane normal to the plane of the ball striking surface and at the median line thereof, said two shaft portions being of about equal length, and subtending an included angle of about 150°, the striking surface of said head lying substantially in a vertical plane when the putter is hanging pendent while the golf club is held by the grip.

6. A golf putter having an elongated shaft with a club head fixed centrally at one end thereof and with a grip at the other end, the club head having a ball striking surface lying substantially in a plane, said shaft having a lower portion secured to said club head and an upper portion carrying said grip, said shaft portions subtending an oblique angle with respect to each other in a plane normal to the plane of the ball striking surface and at the median line thereof, the striking surface of said head being at an angle of approximately 10° from a plane parallel with the longitudinal dimension of the lower portion of the shaft.

7. A golf putter having an elongated shaft with a club head fixed centrally at one end thereof and with a grip at the other end, the club head having a sole portion and a ball striking surface portion lying substantially in a plane, an upper portion carrying said grip, said shaft portions subtending an oblique angle with respect to each other in a plane normal to the plane of the ball striking surface and at the median line thereof, the striking surface portion of said head being at an angle of approximately 10° from a plane parallel with the longitudinal dimension of the lower portion of the shaft, the club head having a sole portion of sled-runner shaped periphery, terminating at the striking surface portion in a plane substantially normal to that of the striking surface and curving upwardly and rearwardly from said striking surface.

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