

Feb. 26, 1929.

1,703,199

R. E. McCLURE

GOLF CLUB

Filed July 11, 1928

Fig. 5.

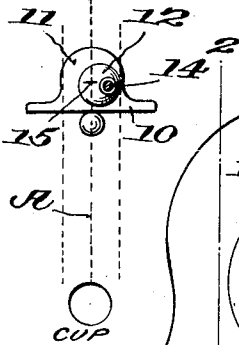


Fig. 1.

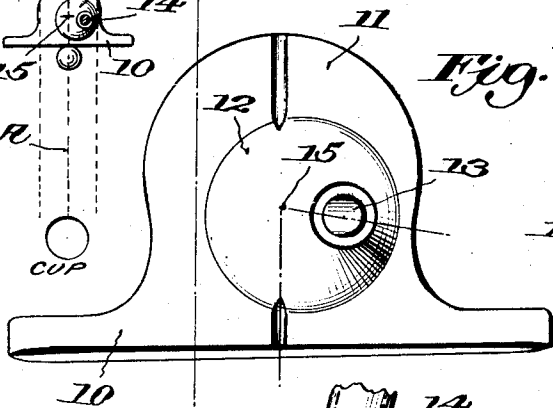


Fig. 2.

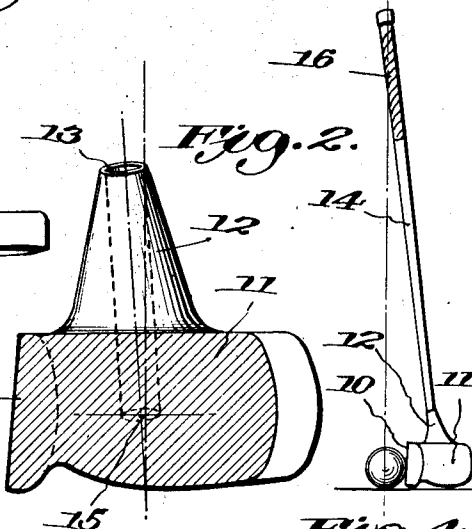


Fig. 3.

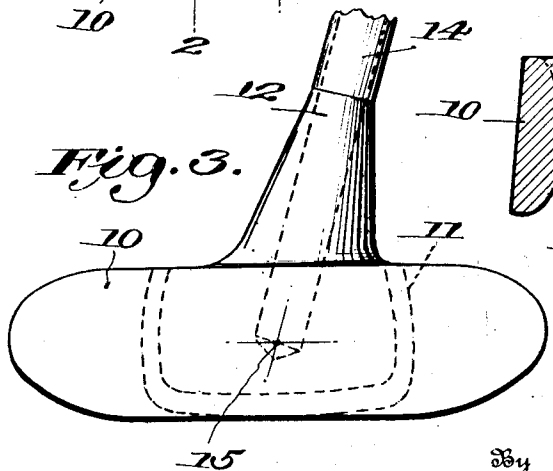


Fig. 4.

Inventor

Robert E. McClure

Chas. Williamson
Attorney

UNITED STATES PATENT OFFICE.

ROBERT E. McCLURE, OF WARREN, OHIO.

GOLF CLUB.

Application filed July 11, 1928. Serial No. 291,711.

The object of my invention is to provide a golf club which will eliminate or reduce to the minimum errors or inaccuracies in playing that result from the club construction itself, my invention being applicable to putting as well as other clubs although being of high utility in putting clubs. Golf clubs with which I am familiar (and my acquaintance with them is extensive both as to the length of time over which it has extended and as to clubs themselves) have as an inherent characteristic constructions which in themselves contribute to or result in poor playing, despite the skill of the golfer.

My invention consists in whatever is described by or is included within the terms or scope of the appended claims.

I illustrate in the drawings my invention as embodied in a putting club and also in a club that may be used as mid iron, mashie, mashie iron, mashie niblick and niblick and in such drawings:—

Fig. 1 is a top plan view of a putting club with the handle omitted;

Fig. 2 is a vertical section on the line 2—2 of Fig. 1;

Fig. 3 is a front view or a view looking at the striking face of the club;

Fig. 4 is a side elevation of the complete club illustrating the relative position to a ball at the instant of striking the ball;

Fig. 5 is a plan view thereof with a portion of the handle broken away, and illustrating the action of the club with reference to the cup.

Referring to the embodiment of my invention in a putting club, it will be found to have the following characteristics. First, the mass or material of the head is distributed with reference to the striking face so that it is symmetrical or balanced with the result that tendency to turn or twist as a center or fulcrum on the struck ball at the instant of impact therewith is obviated or eliminated. Second, the line of the handle extended through the head passes through the center of gravity of the head, and thereby tendency to turn during a stroke is obviated and a pendulum effect is secured. Third, the handle connection with the head is centered at the rear of the ball striking face and is in direct line with the ball when the latter is accurately struck or substantially so when the ball is struck at one side, and this assures direct movement of the ball to the cup. Fourth, the handle extends from its center connection

with the head at an angle sidewise and towards a vertical plane passing through the striking face of the head to an extent which will place the grip of the handle in or substantially in the vertical plane passing through the center of the ball at the instant of impact of the striking face therewith, so that the eye of the putter, the point of grip of his hands upon the handle and the ball are in the same or substantially the same vertical plane which obviously contribute in a most important way to accuracy of stroke.

Referring with some detail to what is shown in Figs. 1 to 5, the putter comprises a head which may be described as having a blade-like portion, 10, of elongated form and substantially elliptical contour with a plane or flat striking face and a substantial body, 11, at the rear considerably narrower than the length of the blade, and with its center in line with the center of the blade so that the head is of symmetrical and balanced form from side to side and with the center of gravity of the mass a substantial distance in rear of the plane of the striking face. The body 11, in its lateral dimensions is such as to provide a mass of material in rear of and substantially coextensive with that portion of the striking face which in play will have impact with the ball, it being intended, of course, that the ball will be struck (as it will with an accurate shot) at the transverse center of the blade and in a direct line passing through the center of gravity of the head. This assures that at no time will there be an unbalanced rocking, speaking with reference to the point of contact of the striking face with the ball as an axis or a fulcrum on which the head may rock. The end portions of the blade which project on opposite sides of said body, 11, are of such diminished weight that they do not injuriously affect the balance even though the point of impact of the club face on the ball is somewhat to one side of the line or plane perpendicular to the plane of the striking face, and passing through the center of gravity of the club head.

On the upper side of the body, 11, is an upwardly tapering projection, 12, which has a socket, 13, for the handle, 14, the longitudinal axis of the socket and the handle when therein passing through the center of gravity, 15, of the club head and inclining at two angles, one being upwardly and laterally, as clearly indicated in Figs. 2, 3 and 5, and also upwardly and forwardly as best indicated in

Fig. 4, this second angle of inclination being such that as clearly shown in Fig. 4 the handle grip, 16, is in a position where a vertical plane passing through it will pass through the ball when in contact with the striking face of the putter, and that vertical plane also passes through the eye of the golfer.

Referring to Fig. 5, the relative position of handle to head and head to ball at the time of impact of the striking face of the head with the ball is shown and it will be seen by the dotted line A, passing through the center of gravity of the head and through the ball, that the line of the putt runs directly to the cup.

It is a characteristic of my club, due to the balanced and symmetrical form thereof and the center connection of the handle therewith, that the club when placed upon the ground for soling so that when placed in position for putting it has no tendency to twist or turn, but it remains where it is placed. Thus it is assured that when the club is soled for putting with the striking face of the blade normal or at right angles to the line or path of the ball to the cup, it will automatically or itself remain in that position. It is also a feature of my club that though there is a small amount of loft to the striking face, nevertheless, the golfer will compensate for that, so that when the ball is struck, there will be no inclination of the striking face that will tend to lift the ball when struck and thus the ball will strike the green without bounding and it will roll along the green revolving on its vertical axis so as to diminish the danger of striking the edge of the cup in a position to cause its rebound from the cup.

By concentration of the mass of the club body about the center of gravity, the handle may be held with the desirable loose grip in making the stroke because no effort of the hands is required to place and keep the head in proper position for hitting the ball.

It will be evident that while one club may embody all of the features of my invention, and will embody them all in what I consider the best embodiment of my invention, nevertheless, a club may be entirely satisfactory that embodies less than all of such features of my invention.

This application is filed as a continuation in part of my application No. 258,078 filed February 29, 1928, and which will hereafter be duly abandoned in favor of this application.

What I claim is:

1. A golf club comprising a head and a handle, the head having its mass balanced laterally of the striking face center, and its center of gravity in rear of the striking face center and the head having on opposite sides balanced lateral extensions that extend in a direction perpendicular to the direction of movement of the head in striking the ball,

the head being thus made up of a central body that gives the weight for propelling the ball and duplicate lateral extensions from opposite sides of said body.

2. A golf club comprising a head and a handle, the head having its mass balanced laterally of the striking face center, and its center of gravity in rear of the striking face center and the head having on opposite sides balanced lateral extensions that extend in a direction perpendicular to the direction of movement of the head in striking the ball, the head being thus made up of a central body that gives the weight for propelling the ball and duplicate lateral extensions from opposite sides of said body, the outer face of said extensions being in the plane of the ball-striking face of the head.

3. A golf club having a head and a handle, the head comprising a blade-like portion with a striking face that extends perpendicular to the direction of stroke and a body in the rear of the blade-like portion substantially less in width than the blade-like portion with its mass balanced on opposite sides of a perpendicular plane passing rearwardly from the striking face substantially at the transverse center thereof, said body having a weight that determines the force of the blow applied to the ball, said handle extending from the top of the head.

4. A golf club having a head and a handle, the head comprising a blade-like portion with a striking face that extends perpendicular to the direction of stroke and a body in rear substantially less in width than the blade-like portion with its mass balanced on opposite sides of a plane passing rearwardly from the striking face substantially at the transverse center thereof, said body having a weight that determines the force of the blow applied to the ball, said handle extending from the top of the head, the longitudinal axis of the handle intersecting the center of gravity of said head and the center of gravity being located symmetrically of the striking face and at a point above the sole of said head a distance substantially equal to the radius of the standard golf ball.

5. A golf club comprising a head that has a striking face perpendicular to the direction of movement of the club in striking a ball and a handle that extends from the head from a point in rear of the striking face with its hand grip situated in a vertical plane that passes substantially through the plane of the striking face, the handle extending at an incline upwardly and forwardly from the head to said grip and also at an incline laterally.

6. A golf club comprising a head that has a striking face perpendicular to the direction of movement of the club in striking a ball and a handle that extends from the head from a point in rear of the striking face with its hand

grip situated in a vertical plane that passes substantially through the plane of the striking face, the handle extending at an incline upwardly and forwardly from the head to
5 said grip and also at an incline laterally, the longitudinal axis of the handle intersecting the center of gravity of the head, the center of gravity being located symmetrically of the striking face and at a point above the sole of
10 the head a distance substantially equal to the radius of the standard golf ball.

7. A putting club comprising a head having a blade of elongated and symmetrical form and having a body of balancing material that
15 supplies the weight for imparting the blow to the ball, said body being symmetrically distributed upon opposite sides of a vertical

plane passing through the blade at its transverse center, and being substantially concentrated around the center of gravity of the
20 head.

8. A golf club comprising a head and a handle, the head having its mass balanced laterally of the striking face center and its
25 center of gravity in rear of the striking face and horizontally in line with a point above the sole of the head a distance substantially equal to the radius of the standard golf ball, and the longitudinal axis of the handle passing through the center of gravity of the head. 30

In testimony whereof I hereunto affix my signature.

ROBERT E. McCLURE.