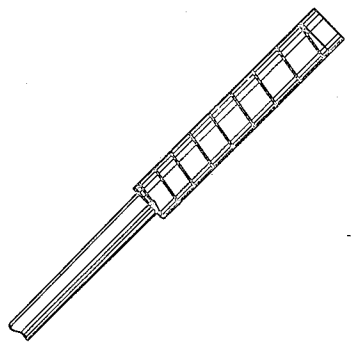
J. L. HUDSON.

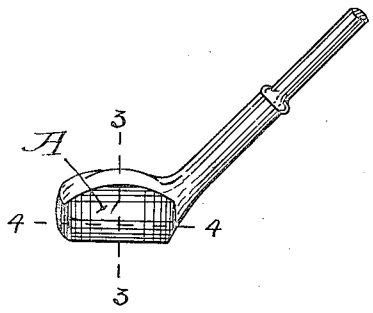
GOLF CLUB.

APPLICATION FILED DEC. 28, 1915.

1,211,708. Patented Jan. 9, 1917.

Fig 1





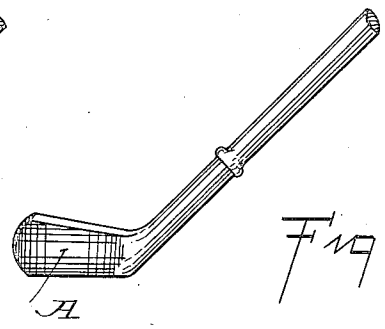


Fig 2

Fig 4

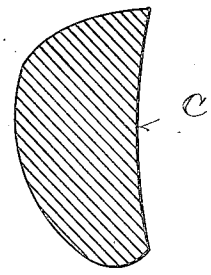
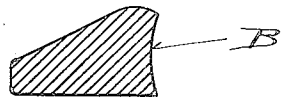


Fig 3



Witnesses.

Richard P. Deane Jr.

John Burns

John L. Hudson INVENTOR

By Samuel E. Darby

ATTORNEY

UNITED STATES PATENT OFFICE.

JOHN L. HUDSON, OF BELLEVILLE, NEW JERSEY.

GOLF-CLUB.

1,211,708. Specification of Letters Patent. Patented Jan. 9, 1917.

Application filed December 28, 1915. Serial No. 68,973.

To all whom it may concern:

Be it known that I, JOHN L. HUDSON, a citizen of the United States of America, residing at the town of Belleville, in the county of Essex and State of New Jersey, have made a certain new and useful Invention in Golf-Clubs, of which the following is a specification.

This invention relates to golf clubs, and more particularly to those known as drivers or brassies, with which the longest strokes are usually made.

The object of the invention is to provide a golf club of such construction as will automatically correct variations in the direction or course and altitude of flight of a ball when driven by a stroke, due to variations in the handling of the club.

The invention consists substantially in the construction, combination, location and relative arrangement, all as will be more fully hereinafter set forth, as shown in the accompanying drawings, and finally pointed out in the appended claims.

As heretofore made, the striking face of a golf club, known as a driver or brassy, has been made a plane surface, usually scored, checked or indented for the purpose of preventing the ball from slipping on the striking face of the club in the act of play. This striking face of the club is sometimes more or less inclined from the perpendicular, rearward, so that when the ball is struck or driven with the club, it will tend to rise from the ground, the inclination of the striking face of the club rearward being different in different clubs, to give to the ball the desired degree of elevation in flight.

In the act of striking the ball, the club is swung in almost a complete circle, from above the shoulder of the player, downward, striking the ball at about the center of the circle of swing, and thereafter continuing forward and upward. The area of the striking face of the club is usually relatively small, being approximately equal to or slightly in excess of that of a half section of the ball. Obviously a very slight variation in the angle of the club, or of the striking face thereof, to the line of direction in which it is desired to drive the ball, will result in wide variation in the line of flight of the ball, it being not uncommon for a ball to be driven two hundred yards at a stroke, and often entirely out of the fairway, or proper course.

The special object of my invention is to provide a structure of club which will reduce this variation, and secure more accurate direction of the flight of the ball, in the desired course. To accomplish this I make the striking face of the club slightly concave in both its horizontal and vertical directions, the angle of inclination in the different clubs being maintained. The effect of this is to present to the ball a striking face that, because of this peculiar construction will not pull or slice the ball out of the proper course. If, in the act of driving, the hands are carried too far ahead, before the club strikes the ball, instead of driving the ball to the right of the course, the concavity in the horizontal direction of the striking face presents the proper angle to the ball to keep it on the course. So, also, if the head of the club be carried ahead of the hands, instead of being pulled to the left, the ball, striking on the inner side of the concave face, is kept in its proper direction. The same principle applies, also, to the angle of elevation, the correction of error, if any, in the stroke being automatically corrected by the vertical concavity in the striking face of the club.

In the act of driving the ball, at the moment of impact the ball, striking on the concave surface of the striking face of the club, the curve of the face of the club being in contact with the curved surface of the ball, the ball receives more driving force because of the increased area of contact with the club, and thereby is driven farther, as well as more accurately.

On the accompanying drawings, Figure 1, illustrates a driver, and Fig. 2, the iron head of a club known as a cleek. Fig. 3 is a cross section of the head of the driver, on the line 3—3 as shown in Fig. 1, and shows the concave face in the vertical direction. Fig. 4 is a cross section of the head of the driver, on the line 4—4 in Fig. 1, and illustrates the concave face in the horizontal direction.

The striking face of the club, indicated by the letter A in Figs. 1 and 2, being, in accordance with my invention, slightly con-

caved in its vertical direction, as indicated by B in Fig. 3, and in its horizontal direction, as indicated by C in Fig. 4.

The drawings correctly illustrate the degree of concavity I preferably apply, but this may vary to meet the requirements of individuals, and I do not limit my invention to any particular degree.

While I have described my invention as applied to a driver or brassy it is to be understood that I do not limit myself to such application, as other kinds or classes of golf clubs may also be concaved in one or both directions on their striking surface, in embodiment of my invention.

Having thus described my invention, I claim as my invention:—

1. A golf club having its striking face concave in the horizontal direction thereof.

2. A golf club having its striking face concave in both the vertical and the horizontay directions thereof.

In testimony whereof I, JOHN L. HUDSON, have signed my name to this specification in the presence of two subscribing witnesses, this second day of December, 1915.

JOHN L. HUDSON.

Witnesses:

RICHARD P. SCAINE, Jr.,

JOHN BURNS.