

No. 835,735.

PATENTED NOV. 13, 1906.

W. ROBERTSON.
GOLF CLUB.

APPLICATION FILED JUNE 20, 1906.

FIG. 2

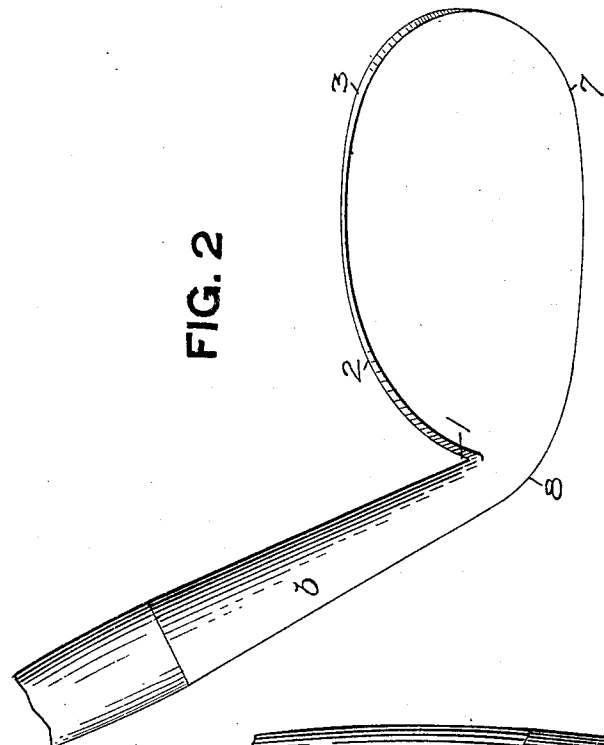


FIG. 1

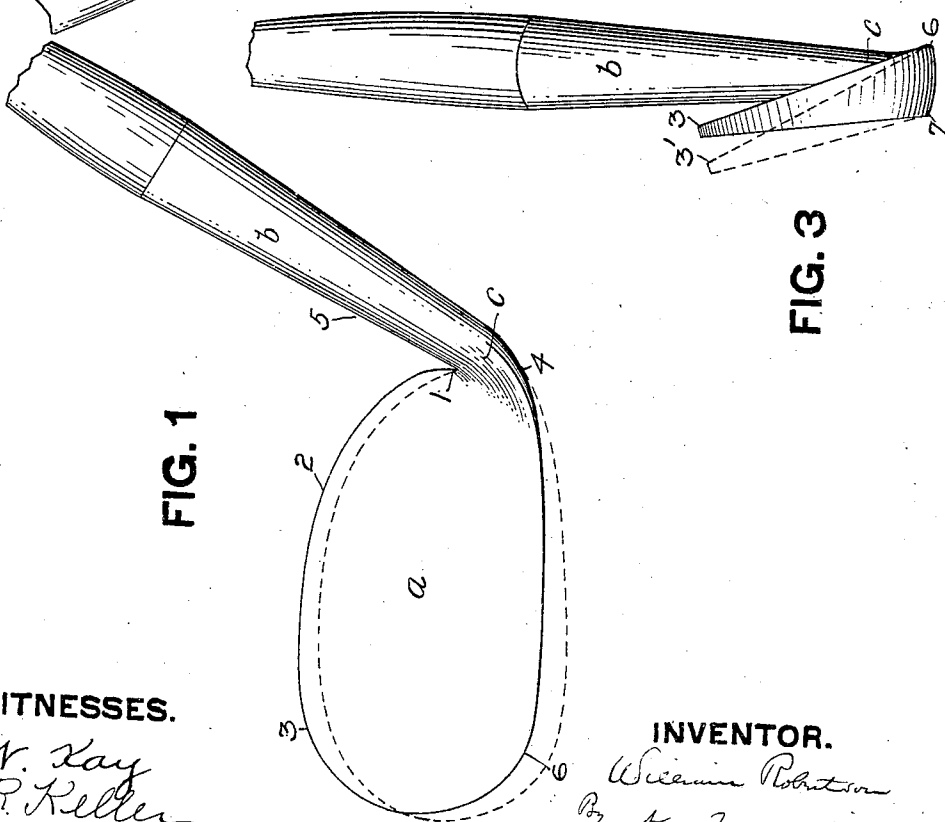
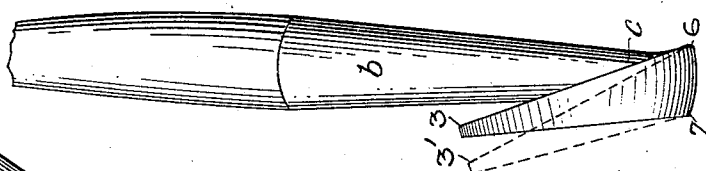


FIG. 3



WITNESSES.

J. W. Kay
J. R. Keller

INVENTOR.

William Robertson
Per Kay, Zottman & Winter
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM ROBERTSON, OF OAKMONT, PENNSYLVANIA.

GOLF-CLUB.

No. 835,735.

Specification of Letters Patent.

Patented Nov. 13, 1906.

Application filed June 20, 1906. Serial No. 322,586.

To all whom it may concern:

Be it known that I, WILLIAM ROBERTSON, a resident of Oakmont, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Golf-Clubs; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to improvements in golf-clubs in which the golf-ball is struck by the face of metal forged in one piece with the metal socket, into which the end of the wooden shaft enters and is secured.

The objects of my improvement are, first, to provide a head so formed as to furnish the greatest possible amount of metal directly behind the golf-ball at the moment of impact, so as to increase the distance attainable in its flight, and, second, to so connect the head to the neck as to make it possible without reheating the club to alter the loft—i. e., the angle at which it is set back from the vertical—or in deep-faced clubs to alter the lie—i. e., the angle the bottom of the face makes with the axis of the socket—by these means making possible an alteration in the actual type of club. Thereby a player who has secured a complete club, including the shaft, to suit him in weight, balance, length, and grip may, if desired, alter it to perform another function, as that of a mashie-iron, or vice versa. I attain these objects by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a face or front view of the head. Fig. 2 is a back view, and Fig. 3 is an end or edge view, these views showing in dotted lines the alterations that can be made in the club.

The figures illustrate the type of head ordinarily known as the "mashie;" but my invention is applicable to all types of forged iron or steel or metal heads which by their thick or broad connection between the face and the socket or neck have made any alteration in the loft of the face impossible. The metal portion of the club is formed of the head *a* and the neck or socket *b*. The head *a* has a shallow joint or connection *c* with the cylindrical neck *b* along the base-line of the club—that is, at a point very low down relative to both head and neck—so that the distance from the point 1 to the heel 8 of the club-head or from 1 to 4 is very short, sufficient metal being present, however, to perfectly and permanently withstand the

impact of the club with the ball or with the ground.

The thickest portion of the head is along the base-line, as between 6 and 7, the blade tapering from this base-line upwardly to the top edge 3, thus by its own bulk at the bottom giving sufficient thickness to the connecting-joint *c*, though a wide-faced blade is employed. I thereby eliminate unnecessary metal which has heretofore been employed between the points 5 and 2 in similar types of club, making it practicable to alter the angle of the face of the club with relation to the neck, so increasing or decreasing the same to increase or decrease the loft thereof or increase or decrease the angle between the head and neck, so as to change the lie. This can be accomplished by means of a hammer and vise. The metal eliminated in reducing the joint between the head and neck can be placed within the head or blade of the club, thereby increasing for a given weight of club-head the available amount of metal in the blade portion and the amount of metal directly behind the golf-ball, so as to increase the distance obtainable in its flight. In providing the shoulder joint or connection between the head and neck, as shown in the drawings, I curve or round off the metal between the points 1 and 2, and in order to give the club a more perfect balance I also round off the upper part of the toe of the club, as shown at 3, and the metal so removed for a given weight of club can be placed within the head, so further increasing the efficiency of the club in its stroke and giving a more perfect balance of the head. For the same weight of club I am also enabled to increase the height of the face.

What I claim is—

1. A metal golf-club having an imperforate head, and a neck or socket integrally joined to the head by a shallow connection at the base-line of the head, thereby forming a deep recess or angle between the neck or socket and the upper edge of the head.

2. A metal golf-club having a broad-faced imperforate head, and a neck or socket integrally joined to the head by a shallow connection at the base-line of the head, the upper inner edge of the head being rounded off and forming a sharp deep angle with the neck or socket.

3. A metal golf-club having a broad-faced imperforate head, and a neck or socket in-

tegrally joined to the head by a shallow connection at the base-line of the head, the upper inner edge of the head being rounded off and forming a sharp deep angle with the neck
5 or socket, and the upper outer edge of the head being correspondingly rounded off to give balance to the club.

In testimony whereof I, the said WILLIAM ROBERTSON, have hereunto set my hand.

WILLIAM ROBERTSON.

Witnesses:

F. W. KAY,
ROBERT C. TOTTEN.